In the Matter of the Site Permit Application for the 100 MW Aurora Distributed Solar Energy Project at Multiple Facilities in Minnesota

ENVIRONMENTAL ASSESSMENT SCOPING DECISION
PUC DOCKET NO. E-6928/GS-14-515

The above matter has come before the deputy commissioner of the Department of Commerce (Department) for a decision on the scope of the environmental assessment (EA) to be prepared for the Aurora Distributed Solar Energy Project (Project) proposed by Aurora Distributed Solar, LLC (Aurora) at up to 24 locations in 16 counties.

Project Description

Aurora proposes to construct 100 MW of distributed photovoltaic (PV) solar generation at up to 24 facilities in 16 counties in order to provide distributed solar energy to meet Xcel Energy's needs for additional capacity in the 2017 – 2019 timeframe. Nameplate capacity at each facility ranges from 1.5 to 10 megawatts (MW). Preliminary estimates of developed area at each facility range from approximately 13 to 108 acres. The Project is located in Benton, Blue Earth, Carver, Chippewa, Chisago, Dodge, Goodhue, Kandiyohi, Le Sueur, McLeod, Pipestone, Rice, Stearns, Waseca, Washington and Wright counties.

The Project as proposed would install PV modules mounted on a linear axis tracking system and a centralized inverter or inverters at each facility. Other components required to construct and operate the facilities include electrical cables, conduit, electrical cabinets, switchgears, step-up transformers, SCADA systems and metering equipment.

Each facility would connect to a separate Xcel Energy substation at the distribution level. During the development of the Project, Aurora identified Xcel Energy substations with available capacity. The Project has been developed to interconnect at the distribution level to increase reliability, minimize generation losses associated with longer transmission interconnections, and minimize lead-times and interconnection costs compared to transmission interconnections.

Aurora has identified 24 facility locations, shown in Table 1, where the necessary PV equipment and associated facilities would potentially be installed.

TABLE 1: PROPOSED FACILITY LOCATIONS

Facility Name	County	Approximate Acreage		Preliminary MW (Alternating Current)*
		Facility Land Control	Preliminary Development Area	
Albany	Stearns	231	107	10.0
Annandale	Wright	71	71	6.0
Atwater	Kandiyohi	40	36	4.0
Brooten	Stearns	13	13	1.5
Chisago County	Chisago	62	61	7.5
Dodge Center	Dodge	69	60	6.5
Eastwood	Blue Earth	50	50	5.5
Fiesta City	Chippewa	26	26	2.5
Hastings	Washington	41	41	5.0
Lake Emily	Le Sueur	47	42	5.0
Lake Pulaski	Wright	76	63	8.5
Lawrence Creek	Chisago	74	39	4.0
Lester Prairie	McLeod	30	26	3.5
Mayhew Lake	Benton	36	22	4.0
Montrose	Wright	38	35	4.0
Paynesville	Stearns	224	108	10.0
Pine Island	Goodhue	47	42	4.0
Pipestone	Pipestone	16	15	2.0
Scandia	Chisago	24	23	2.5
Waseca	Waseca	89	85	10.0
West Faribault	Rice	86	59	5.5
West Waconia**	Carver	76	78	8.5
Wyoming	Chisago	67	62	7.0
Zumbrota	Goodhue	36	32	3.5
Total Under Consideration		**1606**	**1194**	**130.5**

* Final MW- nameplate capacity of each solar energy generating system may vary based on technology selected and final design

** Preliminary Development Area boundary is larger than the Facility Land Control Boundary in this particular instance to accommodate possible interconnections in the public right-of-way on the north side of Highway 5/25.

As shown in the table above, the total nameplate capacity (in MW-Alternating Current) of all the proposed facilities is 130.5 MW. Aurora states that it does not anticipate constructing all 24 proposed facilities, but will determine the number and combination of facilities constructed during final design. Final design will be informed by permit conditions and site-specific conditions determined through engineering studies, environmental survey results, and interconnections details.

Regulatory Background

A site permit application for the Project was filed by Aurora on July 9, 2014, and accepted as complete by the Commission on September 24, 2014. The site permit application will be reviewed under the alternative permitting process, pursuant to the Power Plant Siting Act (Minnesota Statues 216E) and Minnesota Rules 7850.2800 to 7850.3900.

Scoping Process

Scoping is the first step in the alternative permitting process after application acceptance. The scoping process has two primary purposes: (1) to ensure that the public has a chance to participate

in determining what sites and issues are studied in the EA, and (2) to help focus the EA on impacts and issues important to a reasoned site permit decision. This scope identifies potential human and environmental issues that will be addressed in the EA. The scope also presents an anticipated schedule of the environmental review process.

Public Scoping Meetings

On August 22, 2014, Commission staff sent notice of the place, date and times of the Public Information and Scoping meetings to those persons on the General List maintained by the Commission, the agency technical representatives list and the project contact list. Notice of the public meetings was also published in the local newspapers.

Commission staff and Department Energy Environmental Review and Analysis (EERA) staff jointly held six public information and scoping meetings at locations proximate to the 24 potential facility locations identified by Aurora. The purpose of the meetings was to provide information to the public about the proposed project, to answer questions, and to allow the public an opportunity to suggest alternatives and impacts (i.e., scope) that should be considered during preparation of the environmental review document. A court reporter was present at all of the meetings to document oral statements.

Table 2 provides a summary of meeting locations, approximate attendance and number of speakers.

Table 2: Public Meeting Summary

City	Meeting Location	Date and Time	Approximate Attendance	Speakers
Montrose	Montrose Community Center	Tuesday, September 9, 2014 11:00am – 2:00pm	12	9
Lindstrom	Chisago Lakes High School Performance Arts Center	Tuesday, September 9, 2014 6:00pm – 9:00pm	10	4
Marshall	YMCA	Wednesday, September 10, 2014 11:00am – 2:00pm	4	1
St. Paul	Public Utilities Commission	Tuesday September 16, 2014 11:00am – 2:00pm	2	0
Paynesville	Paynesville High School - Auditorium	Tuesday, September 16, 2014 6:00pm – 9:00pm	6	2
Faribault	Washington Recreation Center	Wednesday, September 17, 2014 11:00am – 2:00pm	7	1

In addition to the mailed and published notices of the public information and scoping meetings, EERA staff surveyed 67 local governmental units (cities, townships, counties) and the 7 regional development commissions where facility locations were proposed.

Public Comments

Forty-three written comments were received by the end of the scoping comment period on September 30, 2014. EERA staff received responses from 30 governmental units.

Scoping comments addressed a variety of topics including: compatibility with local zoning and planning; input of local governments into siting; appearance and materials used to fence the facilities; impacts of the proposed facilities on property values of adjacent properties; impacts to wildlife, specifically to birds; overall appearance of the solar installations and the potential for glare; noise during construction and operation of the facilities; impacts to agriculture; impacts to surface waters and stormwater runoff; and impacts to wetlands.

The Minnesota Department of Natural Resources identified issues related to vegetation management, rare and unique natural resources and wildlife to be included in the EA.

The Minnesota Department of Transportation (MnDOT) clarified that MnDOT does not consider a solar generating project to be a public utility for transportation purposes and consequently would not allow Aurora to place connecting lines along trunk highways, although electric lines are permitted to cross trunk highways. MnDOT also identified that several proposed locations abut state trunk highways and would raise concerns about the placement of access roads, storm water retention pond drainage and noxious weed control.

The Minnesota Department of Agriculture requested that the EA identify the potential duration of the land-use conversion from agricultural land at the proposed locations, information on agricultural suitability and productivity of soils, methods or locations that would minimize agricultural impacts, trends for loss of agricultural lands, and impacts of agricultural land conversion to local economies.

Scoping comments are available for viewing on the Department's energy facilities permitting website http://mn.gov/commerce/energyfacilities/Docket.html?Id=33924 and on eDockets: https://www.edockets.state.mn.us/EFiling/search.jsp (enter "14" for year and "515" for number).

Commission Review

On October 14, 2014, EERA staff provided the Commission with a summary of the EA scoping process. The summary indicated that EERA staff would be recommending to the deputy commissioner of the Department that the scoping decision for the Project include only those facility locations proposed by Aurora in its site permit application for evaluation in the EA. On November 24, 2014, the Commission voted to take no action with respect to the site alternatives to be considered in the EA.

HAVING REVIEWED THE MATTER, consulted with Department staff, and in accordance with Minnesota Rule 7850.3700, I hereby make the following scoping decision:

MATTERS TO BE ADDRESSED

The issues outlined below will be identified and described in the environmental assessment (EA) for the proposed Aurora Distributed Solar Project (Project). The EA will describe the Project and the human and environmental resources at each facility location. The EA will also provide information on the potential impacts of the proposed Project as they relate to the topics outlined in this scoping decision, including possible mitigation for identified impacts, identification of irretrievable commitment of resources, and permits from other government entities that may be required. Potential impacts will be discussed for the proposed 100 MW Project as a whole and for each proposed facility location. Analysis of a potential development area within two miles of each interconnection substation will be included in the EA.

The EA on the Project will address and provide information on the following matters:

I. Project Description
II. Project Purpose
III. Regulatory Framework
    a. Certificate of Need
    b. Site Permit
    c. Scoping Process
    d. Public Hearing
    e. Other Permits
    f. Issues outside the EA
IV. Proposed Project
    a. Proposed Facility Locations
    b. Alternative Sites Considered and Rejected
    c. Site Requirements
    d. Project Design
    e. Project Construction
    f. Project Operation and Maintenance
V. Potential Impacts of Proposed Project
    a. Human Settlement
        i. Public Health and Safety
        ii. Displacement
        iii. Noise
        iv. Aesthetics
        v. Socioeconomics (including property values)
        vi. Cultural Values
        vii. Recreation
        viii. Public Services and Infrastructure
        ix. Land Use and Zoning
    b. Land Based Economies
        i. Agriculture
        ii. Forestry
        iii. Tourism
        iv. Mining
    c. Archaeological and Cultural Resources
    d. Natural Environment
        i. Air
        ii. Geology, Soils and Groundwater
        iii. Surface Water
        iv. Wetlands
        v. Vegetation
        vi. Wildlife
        vii. Rare and Unique Natural Resources
VI. Unavoidable Impacts
VII. Irreversible and Irretrievable Commitments of Resources
VIII. Relative Merits of Facility Locations

SITES TO BE EVALUATED IN THE ENVIRONMENTAL ASSESSMENT

The EA will evaluate the 24 facility locations proposed by Aurora in its Site Permit Application (see attached maps). No other locations will be evaluated in the EA.

IDENTIFICATION OF PERMITS

The EA will include a list and description of permits from other government entities that may be required for the proposed project.

ISSUES OUTSIDE THE SCOPE OF THE ENVIRONMENTAL ASSESSMENT

The EA for the Aurora Distributed Solar Project will not consider the following:

A. No-build alternative.
B. Issues related to Project need, size, type, or timing.
C. Any site alternative not specifically identified in this scoping decision.
D. The manner in which land owners are compensated for the sites, as that is outside the jurisdiction of the Commission.

SCHEDULE

The environmental assessment is anticipated to be completed and available in January 2015. A public hearing will be held in the Project area after the environmental assessment has been issued and notice served.

Signed this 4th day of December, 2014

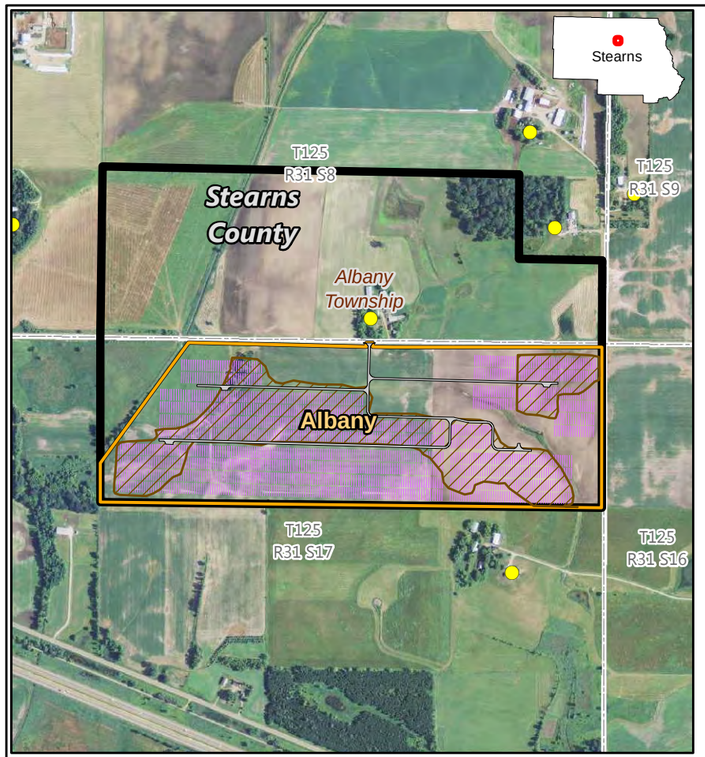
STATE OF MINNESOTA
DEPARTMENT OF COMMERCE

William Grant, Deputy Commissioner

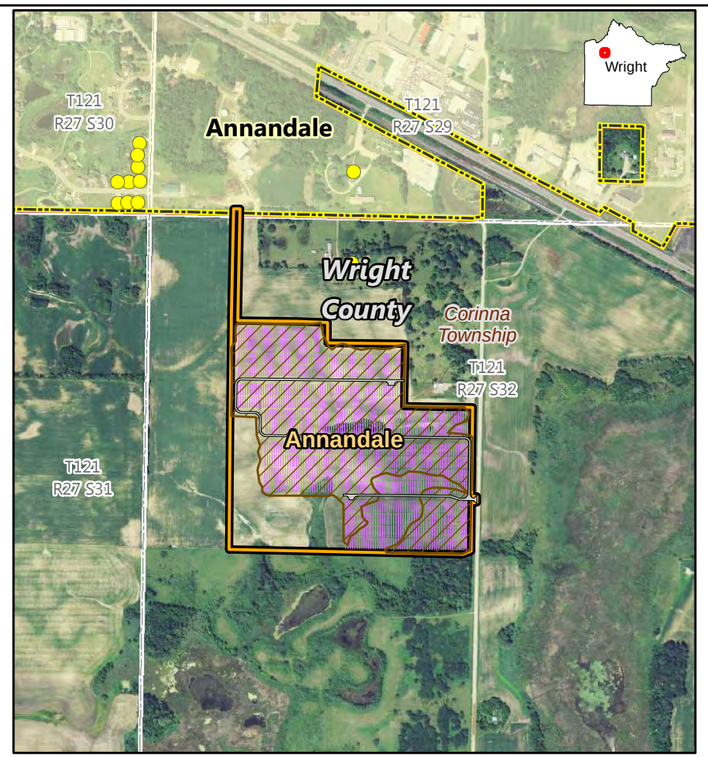
MINNESOTA DEPARTMENT OF COMMERCE

Figure 1
Aurora Distributed Solar Project:
Facilities to be Evaluated in the Environmental Assessment

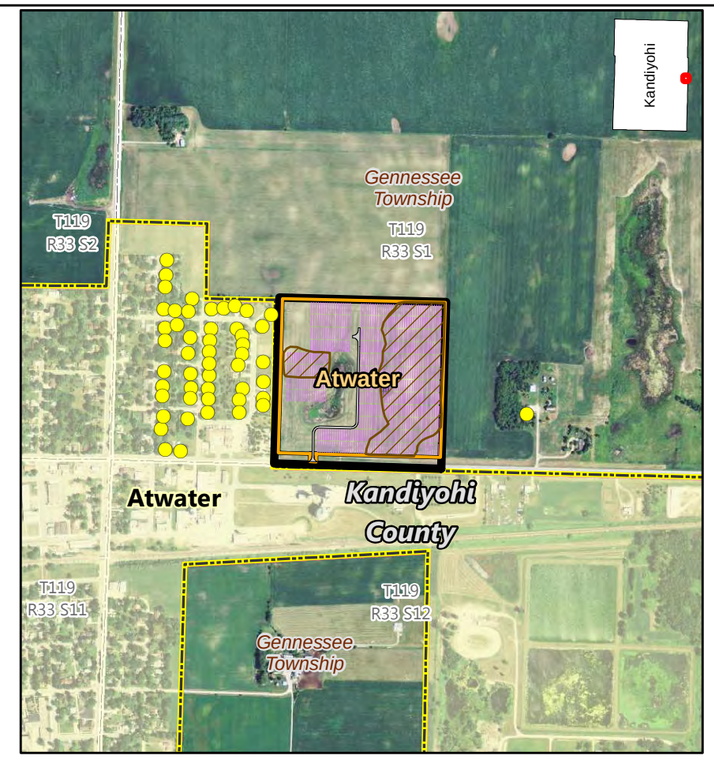
Albany, Annandale, Atwater, Brooten, Chisago, Dodge Center



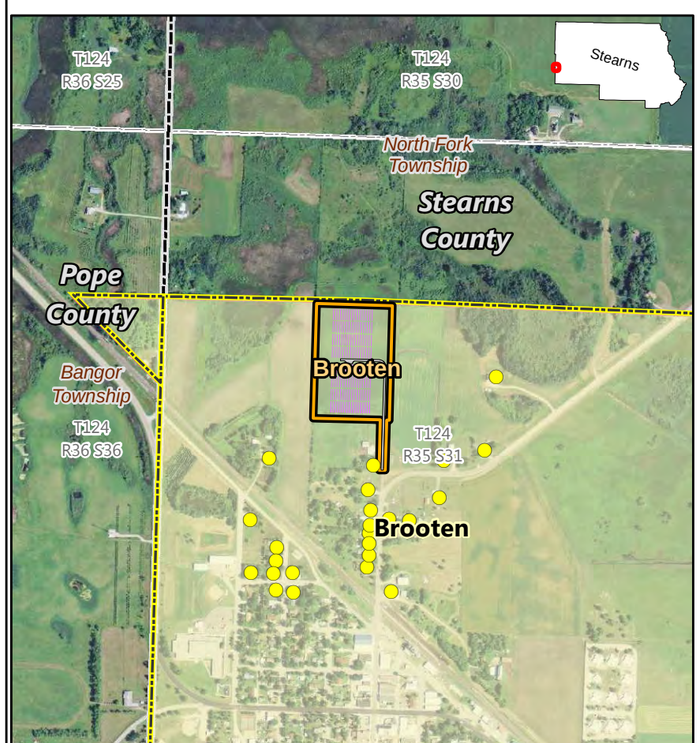
ALBANY FACILITY



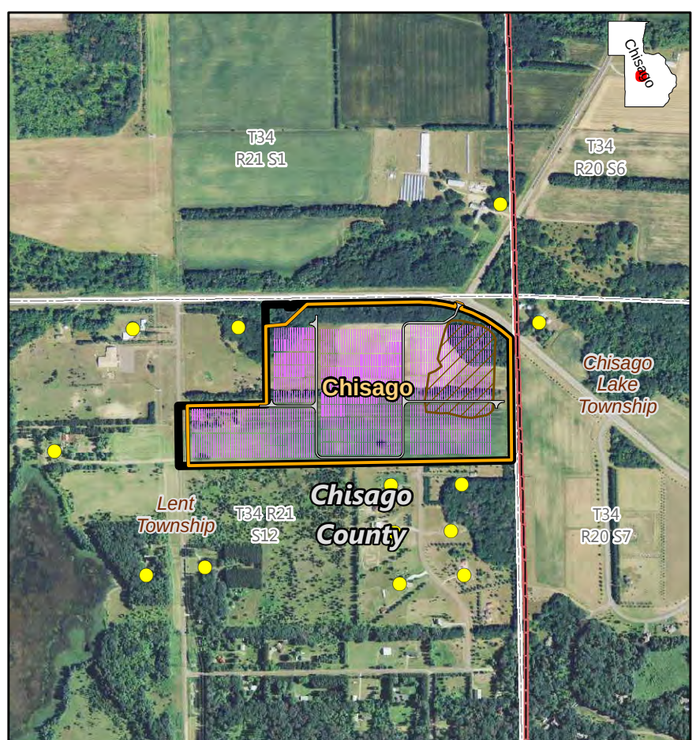
ANNANDALE FACILITY



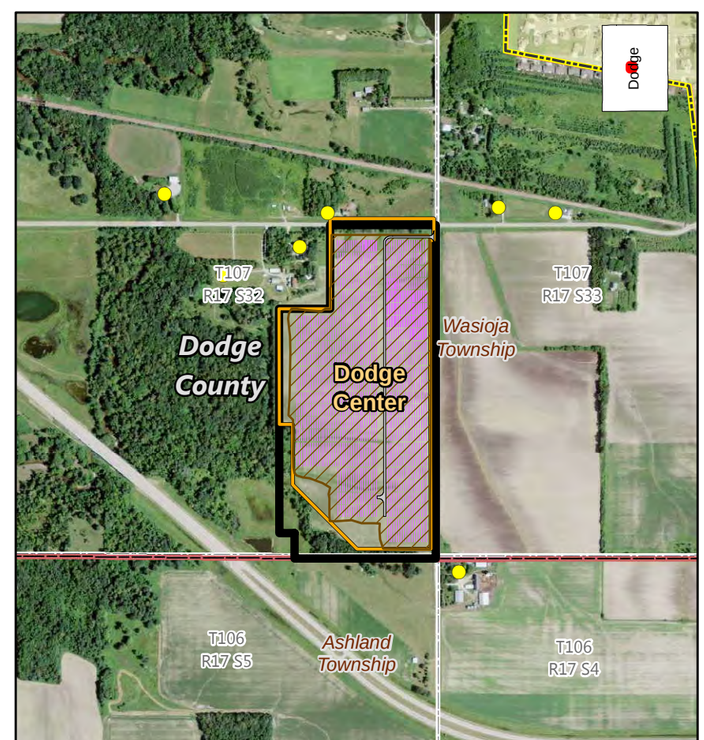
ATWATER FACILITY



BROOTEN FACILITY



CHISAGO FACILITY



DODGE CENTER FACILITY

LEGEND

- Residence Location
- Proposed Road
- Proposed Grading Area
- Proposed Arrays
- Preliminary Development Area
- Facility Land Control
- Municipal Boundary
- County Boundary
- Civil Township Boundary
- Public Land Survey Section

0 600 1,200 2,400
Feet

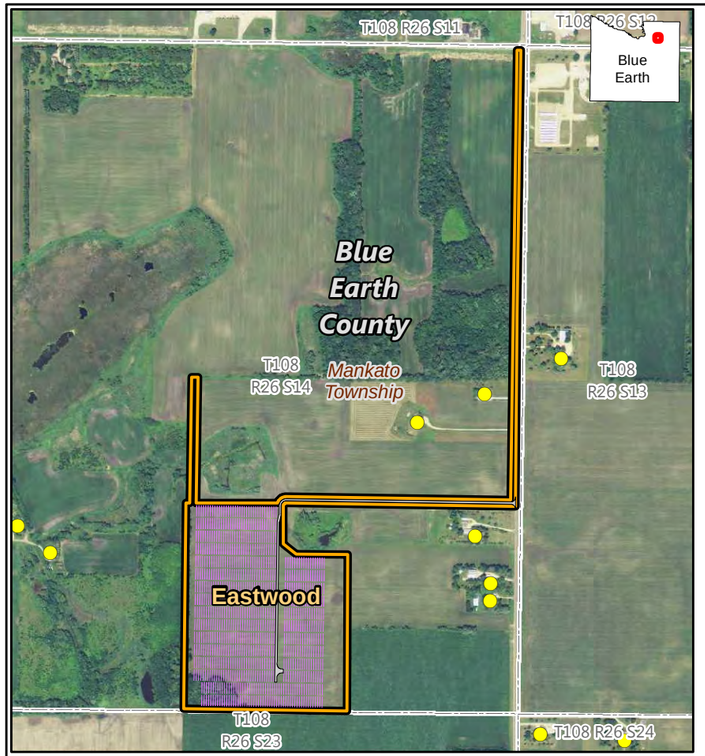
SOURCES: Geronimo Energy, Westwood

Barr Footer: ArcGIS 10.2.1, 2014-12-01 15:35 File: I:\Projects\23\86\1030\Maps\Reports\Fact Sheets\November_2014_Updates\Fig01 Overview of Albany through Dodge Center Facilities.mxd User: mbs2 mbs2 Date: 12/1/2014

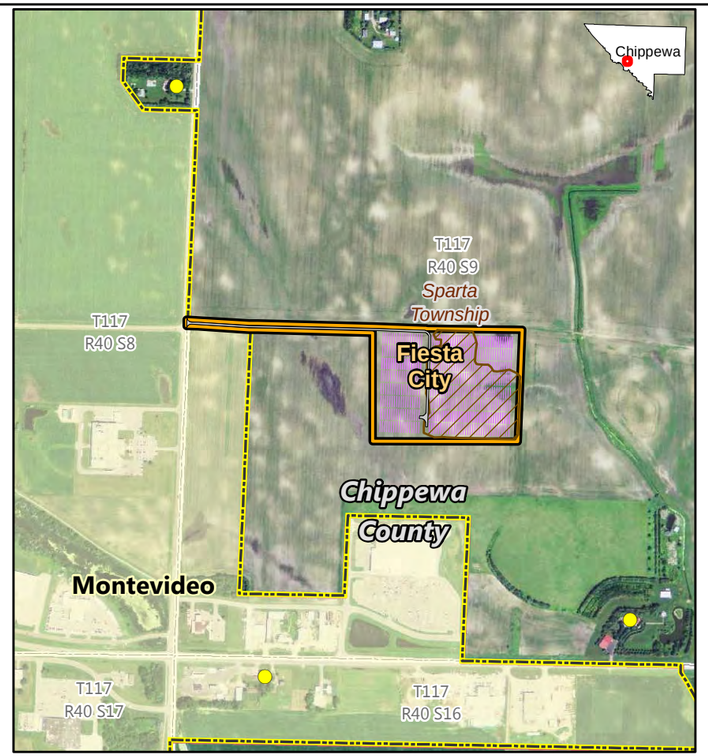
MINNESOTA DEPARTMENT OF COMMERCE

Figure 2
Aurora Distributed Solar Project:
Facilities to be Evaluated in the Environmental Assessment

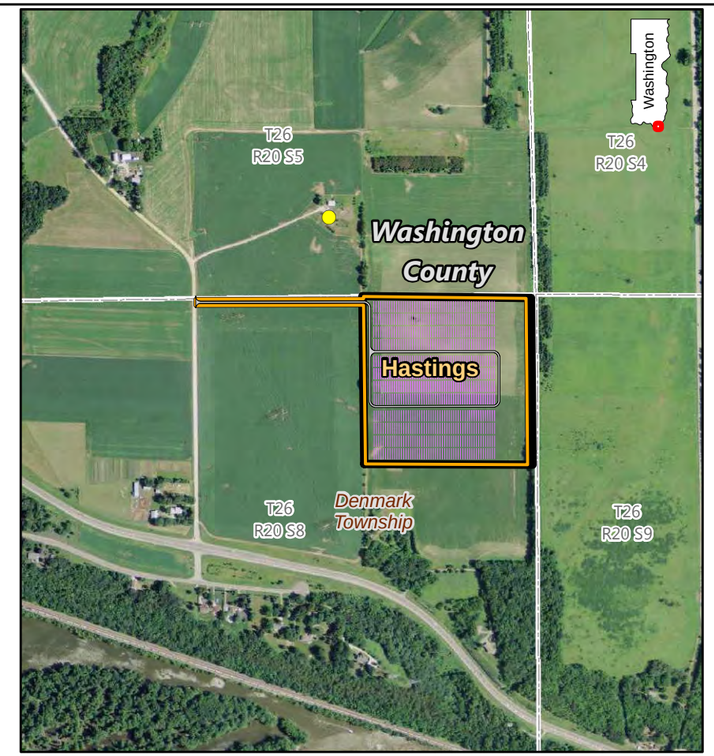
Eastwood, Fiesta City, Hastings, Lake Emily, Lake Pulaski, Lawrence Creek



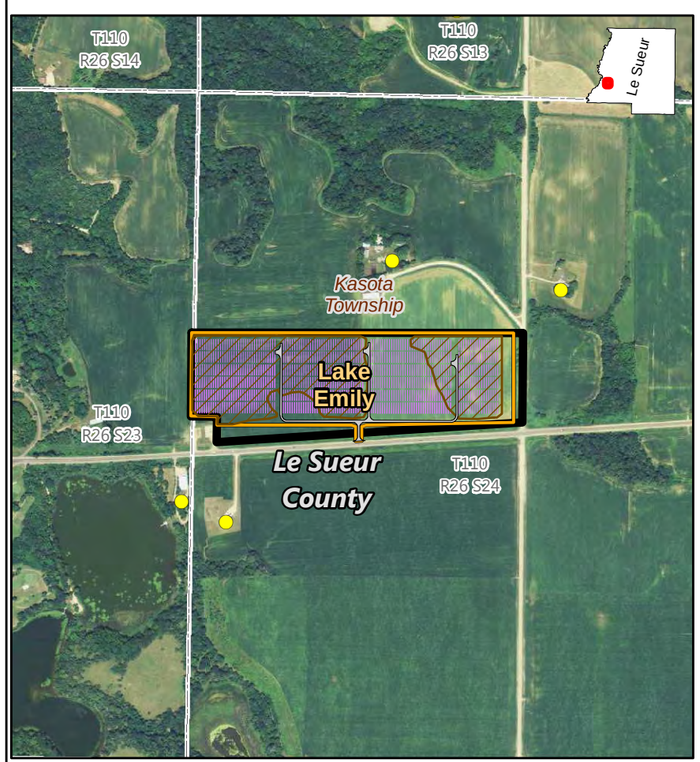
EASTWOOD FACILITY



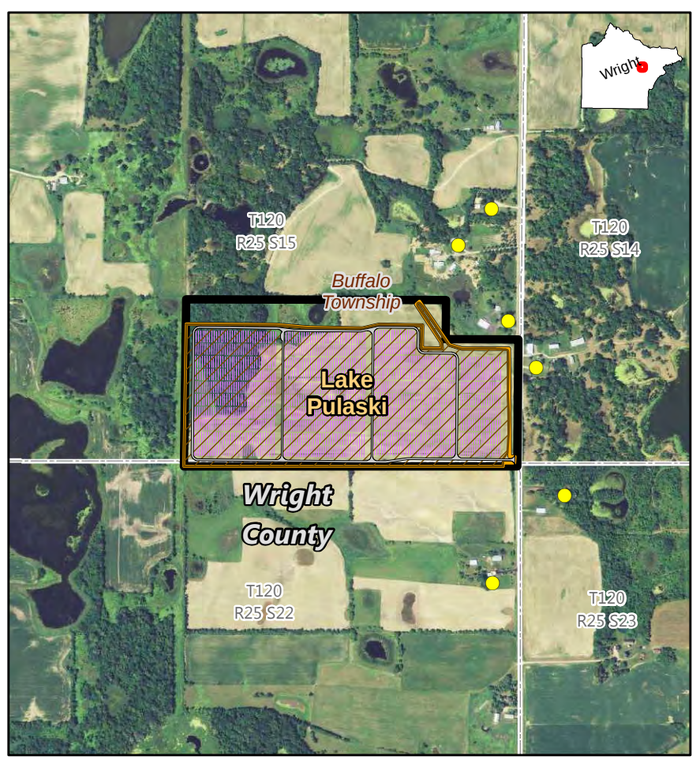
FIESTA CITY FACILITY



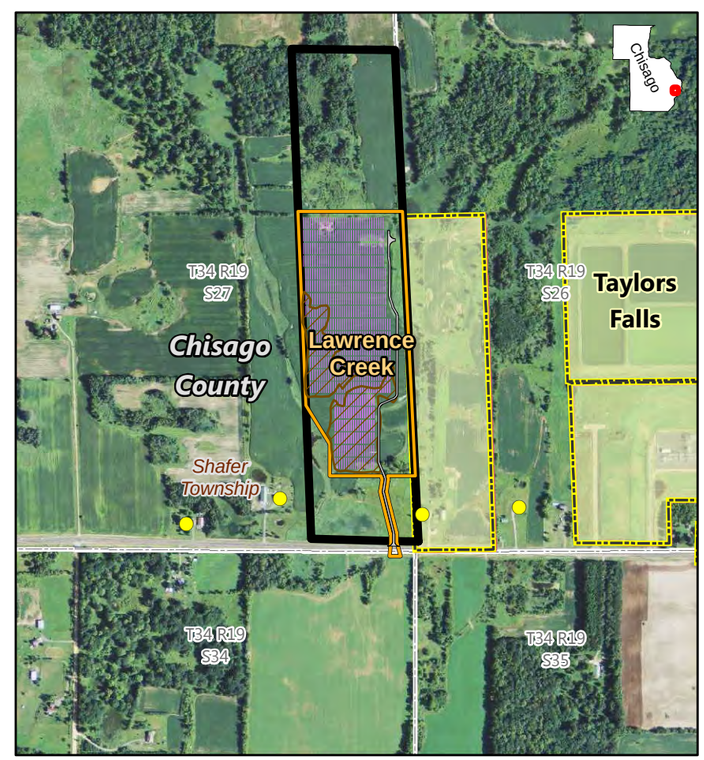
HASTINGS FACILITY



LAKE EMILY FACILITY



LAKE PULASKI FACILITY



LAWRENCE CREEK FACILITY

LEGEND

- Residence Location
- Proposed Road
- Proposed Grading Area
- Proposed Arrays
- Preliminary Development Area
- Facility Land Control
- Municipal Boundary
- County Boundary
- Civil Township Boundary
- Public Land Survey Section

0 600 1,200 2,400
Feet

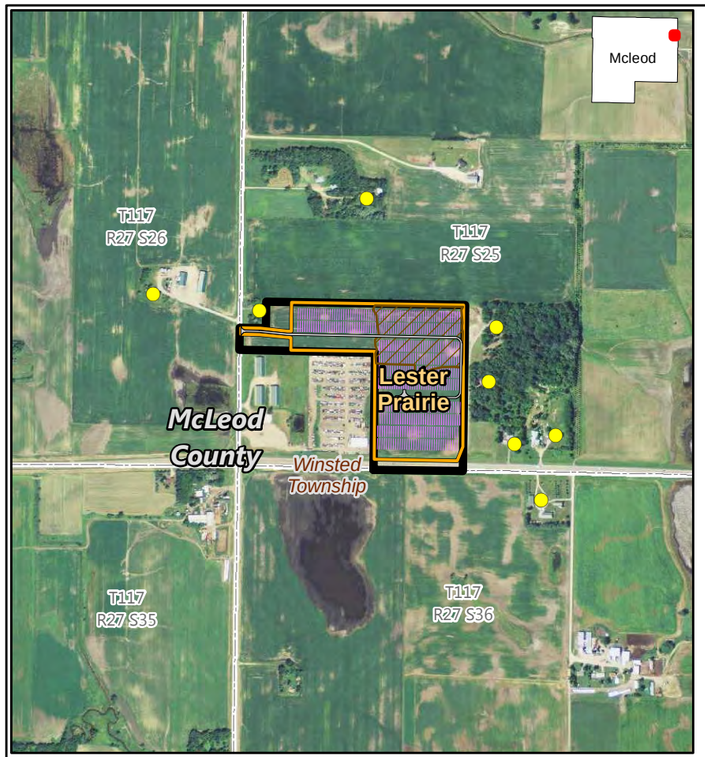
SOURCES: Geronimo Energy, Westwood

Barr Footer: ArcGIS 10.2.1, 2014-11-18 12:06 File: I:\Projects\23\86\1030\Maps\Reports\Fact Sheets\November_2014_Updates\Fig02 Overview of Eastwood through Lawrence Creek Facilities.mxd User: mbs2 mbs2 Date: 12/1/2014

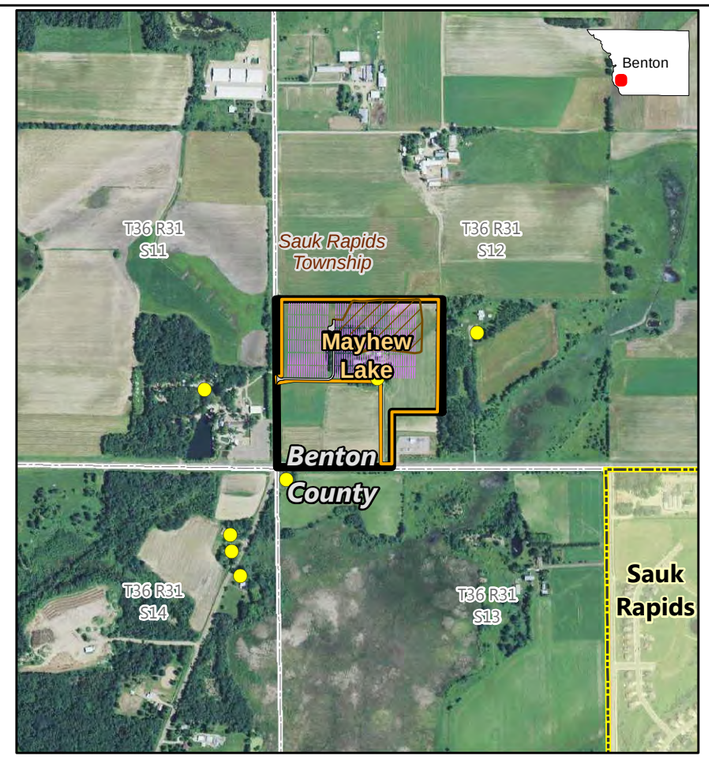
MINNESOTA DEPARTMENT OF COMMERCE

Figure 3
Aurora Distributed Solar Project:
Facilities to be Evaluated in the Environmental Assessment

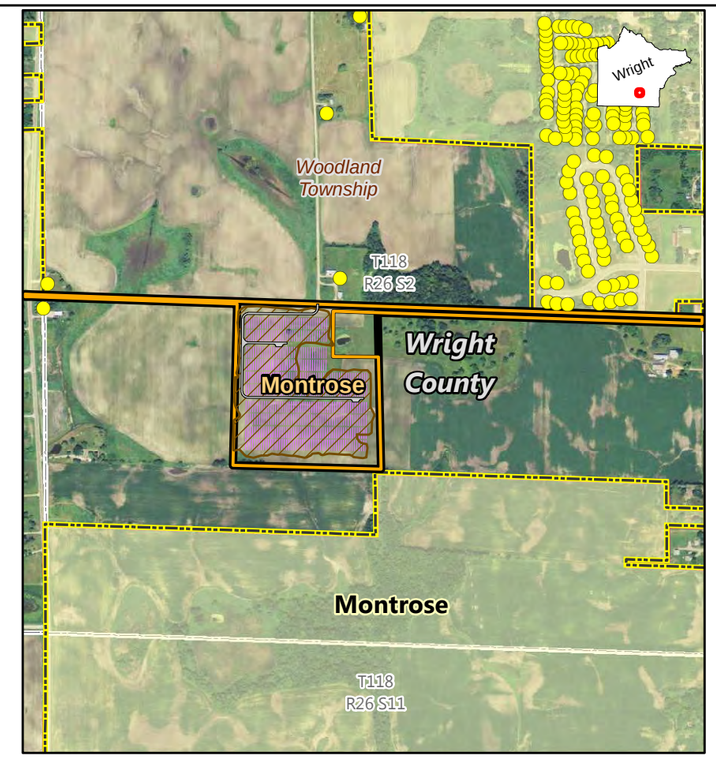
Lester Prairie, Mayhew Lake, Montrose, Paynesville, Pine Island, Pipestone



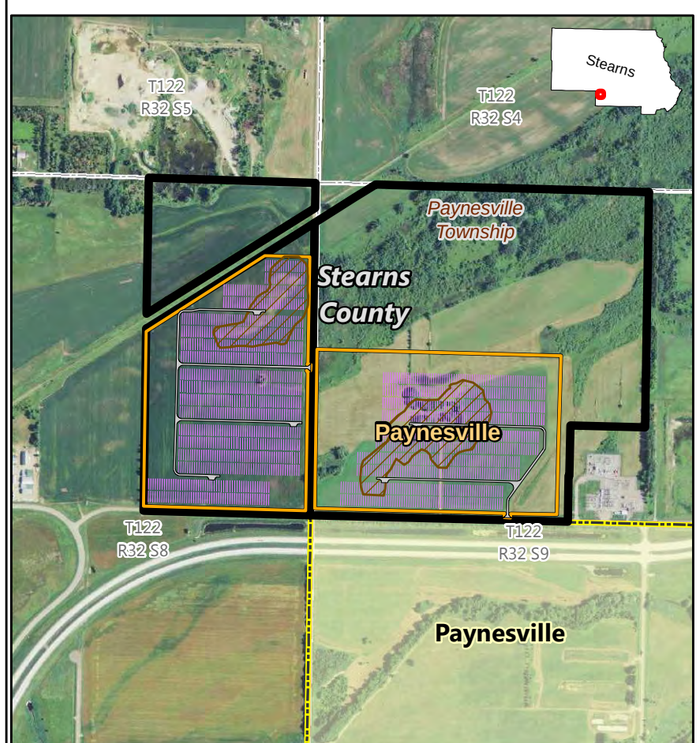
LESTER PRAIRIE FACILITY



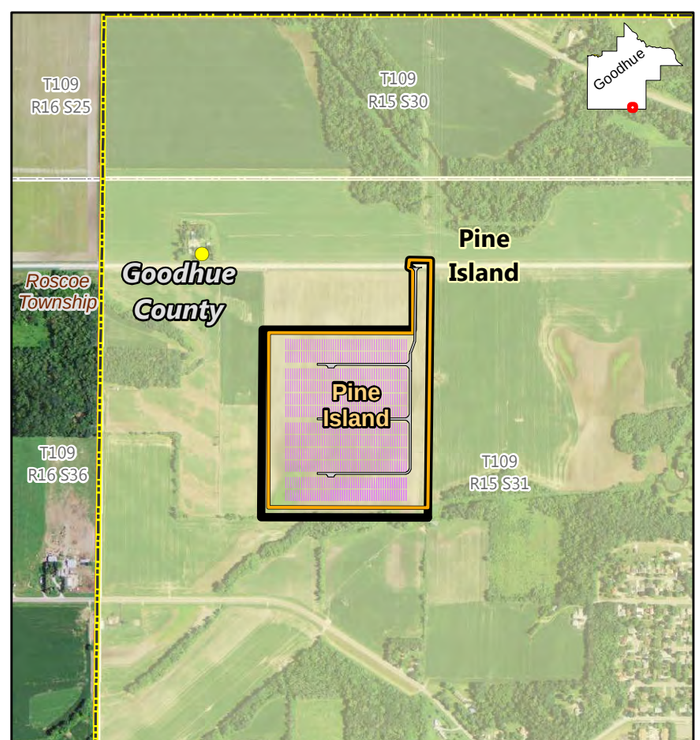
MAYHEW LAKE FACILITY



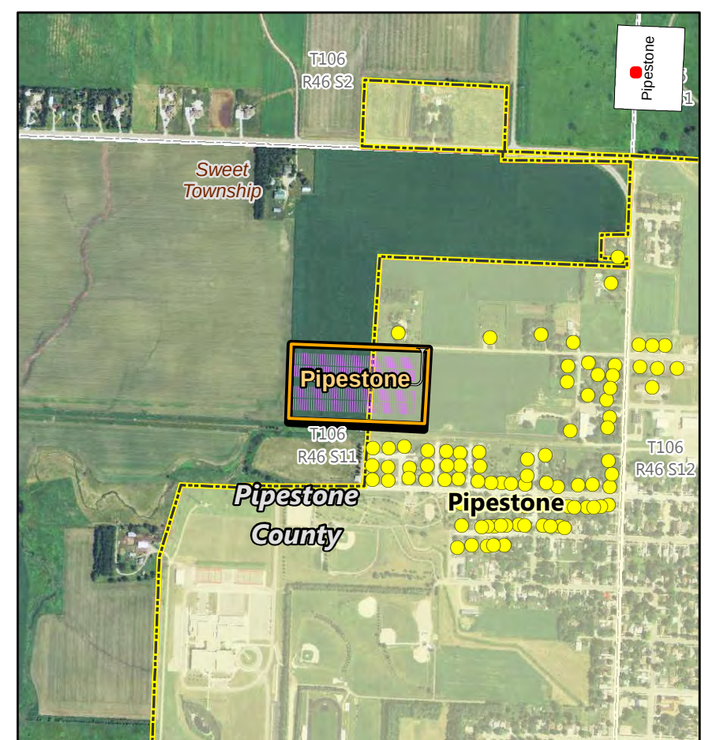
MONTROSE FACILITY



PAYNESVILLE FACILITY



PINE ISLAND FACILITY



PIPESTONE FACILITY

LEGEND

- Residence Location
- Proposed Road
- Proposed Grading Area
- Proposed Arrays
- Preliminary Development Area
- Facility Land Control
- Municipal Boundary
- County Boundary
- Civil Township Boundary
- Public Land Survey Section

0 600 1,200 2,400
Feet

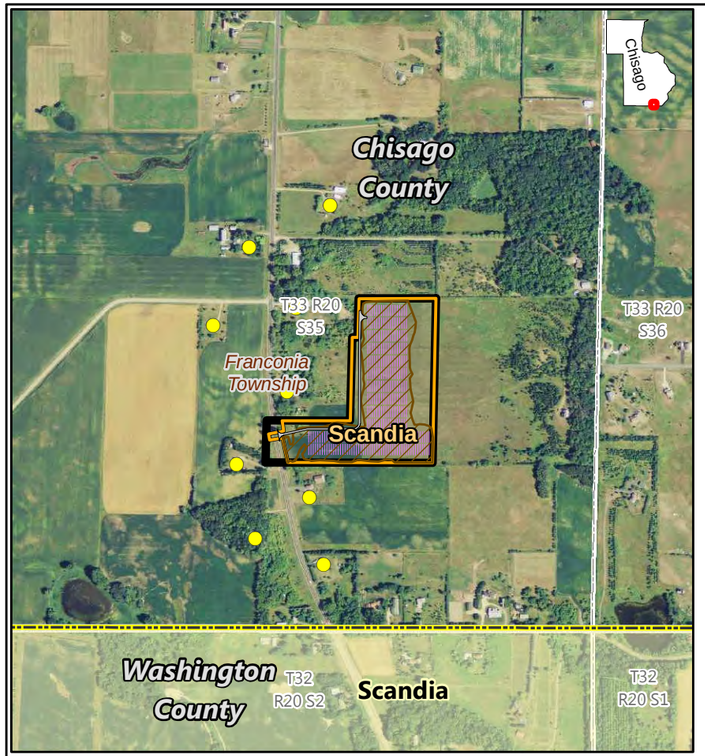
SOURCES: Geronimo Energy, Westwood

Barr Footer: ArcGIS 10.2.1, 2014-12-01 15:59 File: I:\Projects\23\86\1030\Maps\Reports\Fact Sheets\November_2014_Updates\Fig03 Overview of Lester Prairie through Pipestone Facilities.mxd User: mbs2 mbs2 Date: 12/1/2014

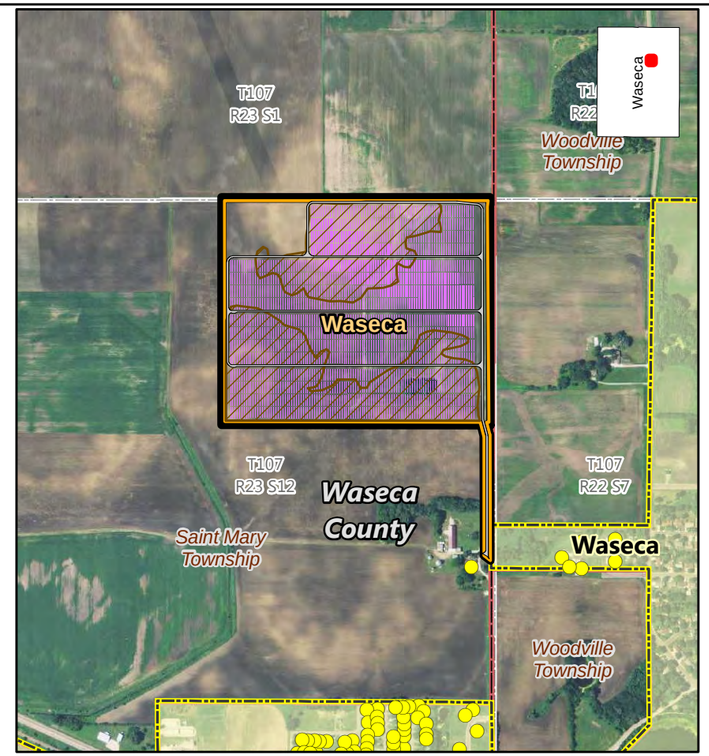
MINNESOTA DEPARTMENT OF COMMERCE

Figure 4
Aurora Distributed Solar Project:
Facilities to be Evaluated in the Environmental Assessment

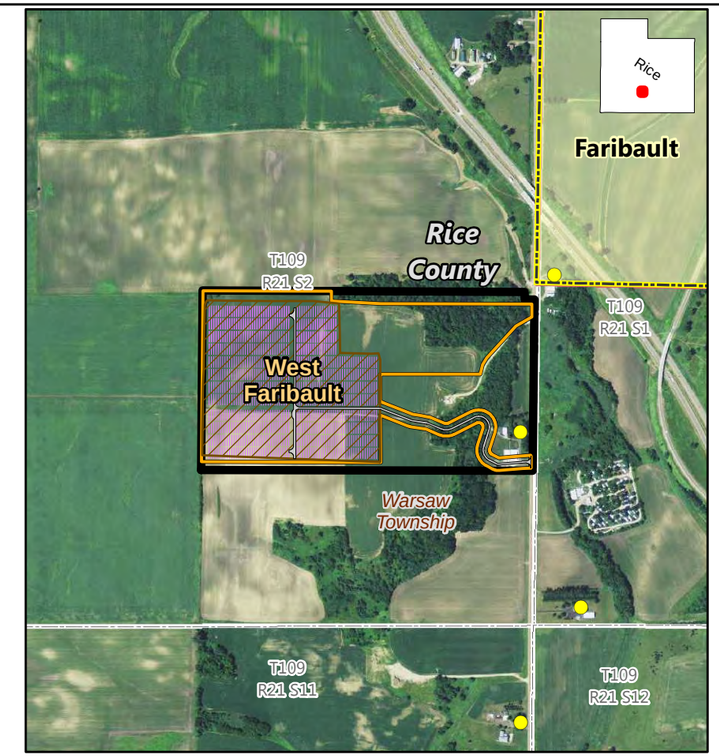
Scandia, Waseca, West Faribault, West Waconia, Wyoming, Zumbrota



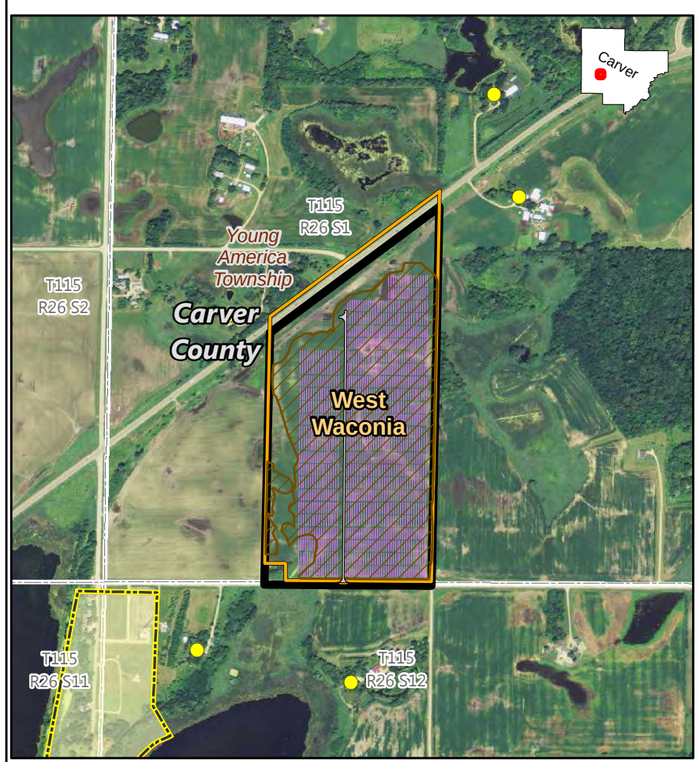
SCANDIA FACILITY



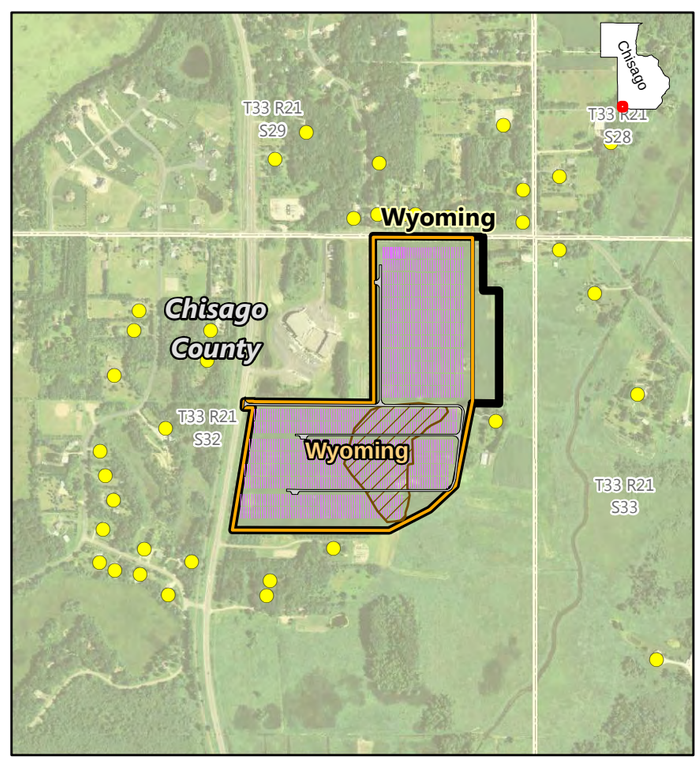
WASECA FACILITY



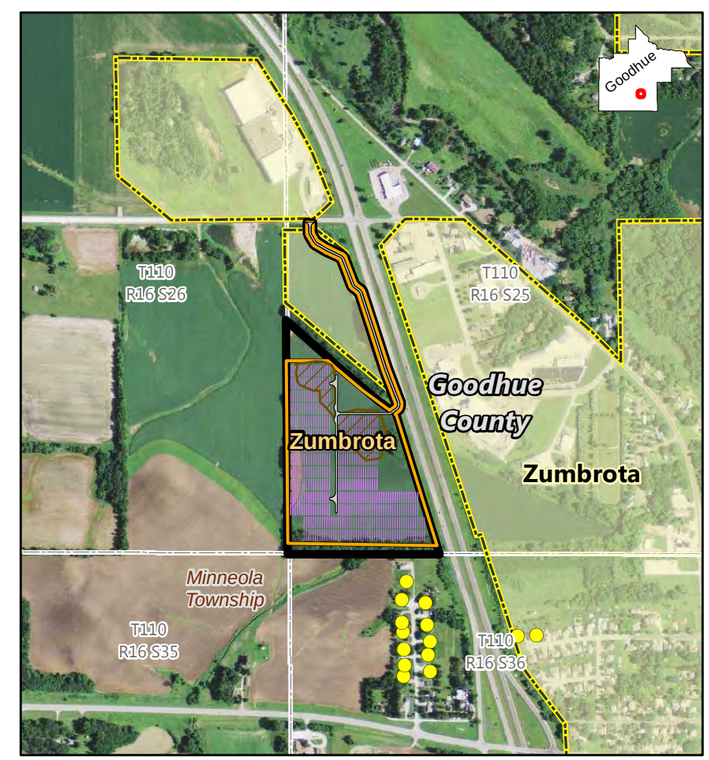
WEST FARIBAULT FACILITY



WEST WACONIA FACILITY



WYOMING FACILITY



ZUMBROTA FACILITY

LEGEND

- Residence Location
- Proposed Road
- Proposed Grading Area
- Proposed Arrays
- Preliminary Development Area
- Facility Land Control
- Municipal Boundary
- County Boundary
- Civil Township Boundary
- Public Land Survey Section

0 600 1,200 2,400
Feet

SOURCES: Geronimo Energy, Westwood

Barr Footer: ArcGIS 10.2.1, 2014-11-18 16:00 File: I:\Projects\23\86\1030\Maps\Reports\Fact Sheets\November_2014_Updates\Fig04 Overview of Scandia through Zumbrota Facilities.mxd User: mbs2 mbs2 Date: 12/1/2014