#### STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

# SITE PERMIT FOR CONSTRUCTION AND OPERATION OF A DISTRIBUTED PHOTOVOLTAIC SOLAR ENERGY GENERATING SYSTEM CONSISTING OF MULTIPLE SITES

## IN MULTIPLE COUNTIES

## ISSUED TO AURORA DISTRIBUTED SOLAR, LLC

#### PUC DOCKET NO. E-6928/GS-14-515

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850, this site permit is hereby issued to:

## Aurora Distributed Solar, LLC

The Permittee is authorized by this site permit to construct and operate distributed photovoltaic solar energy generating systems and associated facilities totaling up to 100 megawatts alternating current nameplate capacity, to be located at up to 21 facilities in 15 counties.

The distributed photovoltaic solar energy generating systems and associated facilities shall be built within the site boundaries identified in this permit and as portrayed on the official site maps, and in compliance with the conditions specified in this permit.

This site permit shall expire 30 years from the date of this approval.

Approved and adopted this 30<sup>th</sup> day of June, 2015

BY ORDER OF THE COMMISSION



DANIEL P. WULF

**Executive Secretary** 

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## **ATTACHMENTS**

Attachment 1 – Site Permit Boundaries and Preliminary Solar Panels Layout

Attachment 2 - Complaint Handling Procedures

Attachment 3 - Compliance Filing Procedures for Permitted Energy Facilities
Attachment 4 - Permit Compliance Filings

Attachment 5 – Blanding's Turtle Fact Sheet

#### 1.0 SITE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this site permit to Aurora Distributed Solar, LLC (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes Permittee to construct distributed photovoltaic (PV) solar energy generating systems and associated facilities totaling up to 100 megawatts (MW) alternating current (AC) nameplate capacity, to be located at up to 21 facilities (each a Facility, together, Facilities or the Project) on up to 21 sites interconnected to Northern States Power Company d/b/a Xcel Energy (Xcel Energy) distribution systems, and as identified in the attached site permit maps, hereby incorporated into this document. The number, combination, and capacity of the individual Facilities which the Permittee selects for construction will depend on a number of factors, including site-specific conditions, engineering studies, environmental survey results, and interconnection details. The photovoltaic solar energy generating systems and associated facilities shall be built within the sites identified in this permit and as portrayed on the official site maps, and in compliance with the conditions specified in this permit.

#### 2.0 PROJECT DESCRIPTION

The Project consists of distributed PV power plants to be located at up to 21 Facilities on up to 21 solar sites serving Xcel Energy loads. The distributed solar Facilities range in size from 1.5 MW to 10.0 MW with a combined nominal nameplate capacity of approximately100 MW alternating current. The Project's primary components include PV modules mounted on a linear axis tracking system and a centralized inverter(s). Associated facilities include electrical cables, conduit, electrical cabinets, switchgears, step-up transformers, SCADA systems, metering equipment, operations and maintenance (O&M) areas and internal access roads. Each Facility will be fenced around the components and gated at the access point.

## 2.1 Project Ownership

The Permittee is expected to continue to own the Project after commercial operation. However, due to the distributed locations of the Project solar facilities and need to satisfy the requirements of the investment tax credit, a federal tax credit available to taxpayers pursuant to the Internal Revenue Code, the Permittee has organized a separate limited liability company (special purpose vehicle or SPV) for each solar facility, which will serve as the investment entity for the tax equity investor. Aurora Distributed Solar, LLC, acting on behalf of itself and each SPV, is the permittee for the Project. The SPVs and related solar sites are listed below.

Name	Related solar site
Albany Solar, LLC	Albany
Annandale Solar, LLC	Annandale
Atwater Solar, LLC	Atwater
Brooten Solar, LLC	Brooten
Chisago Solar, LLC	Chisago

Dodge Center Distributed Solar, LLC	Dodge
Eastwood Solar, LLC	Eastwood
Fiesta City Solar, LLC	Fiesta City
Hastings Solar, LLC	Hastings
Lake Emily Solar, LLC	Lake Emily
Lake Pulaski Solar, LLC	Lake Pulaski
Lawrence Creek Solar, LLC	Lawrence Creek
Lester Prairie Solar, LLC	Lester Prairie
Mayhew Lake Solar, LLC	Mayhew Lake
Montrose Solar, LLC	Montrose
Paynesville Solar, LLC	Paynesville
Pine Island Distributed Solar, LLC	Pine Island
Scandia Solar, LLC	Scandia
Waseca Solar, LLC	Waseca
West Faribault Solar, LLC	West Faribault
West Waconia Solar, LLC	West Waconia

## 3.0 DESIGNATED SITES

The Project includes construction of up to 21 Facilities on up to 21 sites within 15 counties across Minnesota, as set forth in more detail below:

Facility	County	Township/Range/Section	Facility Land Control	Preliminary Development Area	MW- AC*
Albany	Stearns	Sections 8 & 17, T 125N, R 31W	230.6	107.4	10.0
Annandale	Wright	Section 32, T 121N, R 27W	70.6	70.6	6.0
Atwater	Kandiyohi	Section 1, T 119N, R 33W	40.1	36.3	4.0
Brooten	Stearns	Section 31, T 124N, R 35W	13.0	13.0	1.5
Chisago County	Chisago	Section 12, T 34N, R 21W	62.4	60.6	7.5
Dodge Center	Dodge	Section 32, T 107N, R 17W	68.5	60.0	6.5

Facility	County	Township/Range/Section	Facility Land Control	Preliminary Development Area	MW- AC*
Eastwood	Blue Earth	Section 14, T 108N, R 66W	49.7	49.7	5.5
Fiesta City	Chippewa	Section 9, T 117N, R 40 W	25.6	25.6	2.5
Hastings	Washington	Section 8, T 26N, R 20W	40.6	40.6	5.0
Lake Emily	Le Sueur	Section 24, T 110N, R 26W	46.9	42.4	5.0
Lake Pulaski	Wright	Section 15, T 120N, R 25W	75.8	63.2	8.5
Lawrence Creek	Chisago	Section 27, T 34N, R 19W	74.3	39.4	4.0
Lester Prairie	McLeod	Section 25, T 117N, R 27W	29.9	26.0	3.5
Mayhew Lake	Benton	Section 12, T 36N, R 31W	36.0	21.8	4.0
Montrose	Wright	Section 2, T 118N, R 26W	37.7	34.8	4.0
Paynesville	Stearns	Section 8 & 9, T 122N, R 32W	223.6	108.4	10.0
Pine Island	Goodhue	Section 31, T109N, R 15W	46.9	42.2	4.0
Scandia	Chisago	Section 35, T 33N, R 20W	24.4	23.3	2.5
Waseca	Waseca	Section 12, T 17N, R 23W	89.2	85.2	10.0
West Faribault	Rice	Section 2, T 109N, R 21W	85.5	59.4	5.5
West Waconia**	Carver	Section 1, T 115N, R 26W	75.7	78.1	8.5

<sup>\*</sup> The final MW AC nameplate capacity of each solar energy generating system may vary based on the technology selected and final design.

Each Facility is more specifically described in the permit application and is shown in the attached Site Location maps.

## 3.1 Project Boundary

The preliminary solar arrays and associated facility layouts are shown on the maps at **Attachment** [1]. The preliminary layout represents the approximate location of the solar arrays

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

and associated facilities at each proposed site and identifies a layout that minimizes the overall potential human and environmental impacts of the Project, which were evaluated in the permitting process. The final layout depicting the final arrangement of the solar panels and associated facilities shall be located within the Facility Site Control for each facility location associated with this Project. The Facility Site Control boundaries (i.e., site boundaries) serve to provide the Permittee with the flexibility to make minor adjustments to the preliminary layout to accommodate landowner requests, unforeseen conditions encountered during the detailed engineering and design process and federal and state agency requirements. Any modification of the solar arrays and associated facilities depicted in the preliminary layout shall be done in such a manner to have comparable overall human and environmental impacts and shall be specifically identified in the site plan pursuant to Section 6.1. The Permittee shall submit the final site layouts in the site plans pursuant to Section 6.1.

## 4.0 APPLICATION COMPLIANCE

The Permittee shall follow those specific construction practices and material specifications described in the Aurora Distributed Solar, LLC Application to the Commission for a Site Permit for the Aurora Distributed Solar Project, dated July 9, 2014, and the record of this proceeding unless this permit establishes different requirements, in which case this permit shall prevail.

**Attachment** [4] contains a summary of compliance filings, which is provided solely for the convenience of the Permittee. If this permit conflicts or is not consistent with **Attachment** [4] the conditions in this permit will control.

#### 5.0 SETBACKS AND SITE LAYOUT RESTRICTIONS

#### 5.1 Public Lands

In no case shall solar panels and associated facilities including foundations, access roads, underground cable, and transformers, be located in the public lands identified in Minnesota Rules 7850.4400 Subpart 1 or federal Waterfowl Production Areas. Solar panels and associated facilities shall not be located in the public lands identified in Minnesota Rules 7850.4400 Subpart 3 unless there is no feasible and prudent alternative.

#### 5.2 Wetlands and Shoreland

Solar panels and associated facilities including foundations, access roads, underground cable and transformers, shall not be placed in public waters wetlands as shown on the public water inventory maps prescribed by Minnesota Statute 103G except that electric collector or feeder lines may cross or be placed in public waters or public waters wetlands subject to permits and approvals by the Minnesota Department of Natural Resources (DNR) and the United States Army Corps of Engineers (USACE), and local units of government as implementers of the Minnesota Wetlands Conservation Act. Solar panels and associated facilities including foundations, access roads, underground cable and transformers, shall be located in compliance with the standards for development of the shorelands of public waters as identified in Minnesota

Rules 6120.3300 and as adopted pursuant to Minnesota Rules 6120.2800 unless there is no feasible and prudent alternative. <sup>1</sup>

#### **5.3** Native Prairie

The Permittee, in consultation with the Commission, Department of Commerce and DNR, shall prepare a prairie protection and management plan and file it with the Commission and DNR at least 30 days prior to the pre-construction meeting if native prairie, as defined in Minnesota Statutes, section 84.02, subdivision 5, is identified in any biological and natural resource inventories conducted pursuant to Section 7.1. The plan shall address steps that will be taken to avoid impacts to native prairie and mitigation to unavoidable impacts to native prairie by restoration or management of other native prairie areas that are in degraded condition, by conveyance of conservation easements, or by other means agreed to by the Permittee, DNR and the Commission.

Solar panels and associated facilities including foundations, access roads, collector and feeder lines, underground cable, and transformers shall not be placed in native prairie unless addressed in a prairie protection and management plan and shall not be located in areas enrolled in the Native Prairie Bank Program. Construction activities, as defined in Minnesota Statutes, section 216E.01, shall not impact native prairie unless addressed in a prairie protection and management plan.

#### 5.4 Feeder Lines

Feeder lines that carry power from an internal project interconnection point to the Project substation or interconnection point on the electrical grid may be overhead or underground. Any overhead or underground feeder lines that parallel public roads shall be placed within the public rights-of-way or on private land immediately adjacent to public roads. If the Permittee's overhead feeder lines are located within public rights-of-way, the Permittee shall obtain approval from the governmental unit responsible for the affected right-of-way.

Feeder line locations shall be located in such a manner as to minimize interference with agricultural operations including, but not limited to, existing drainage patterns, drain tile, future tiling plans, and ditches. Safety shields shall be placed on all guy wires associated with overhead feeder lines. The Permittee shall submit the engineering drawings of all collector and feeder lines in the site plans pursuant to Section 6.1.

The Permittee must fulfill, comply with, and satisfy all Institute of Electrical and Electronics Engineers, Inc. (IEEE) standards applicable to this Project including, but not limited to, IEEE 776 (Recommended Practice for Inductive Coordination of Electric Supply and Communication Lines), IEEE 519 (Harmonic Control in Electric Power Systems), IEEE 367 (Recommended Practice for Determining the Electric Power Station Ground Potential Rise and Induced Voltage from a Power Fault), and IEEE 820 (Standard Telephone Loop Performance Characteristics)

<sup>&</sup>lt;sup>1</sup> The definitions in Minn. Rule 6120.2500 are also hereby incorporated by reference, and are applicable to the Project.

provided the telephone service provider has complied with any obligations imposed on it pursuant to these standards. Upon request by the Commission, the Permittee shall report to the Commission on compliance with these standards.

#### 6.0 ADMINISTRATIVE COMPLIANCE PROCEDURES

The following administrative compliance procedures shall be executed in accordance with the Permit Compliance Filings at **Attachments** [3] **and** [4]. Submissions to the Commission must be made by electronic filing (eFiling).

The following conditions shall apply to the construction of the Facilities on the designated sites.

#### 6.1 Site Plan

At least fourteen (14) days prior to the pre-construction meeting for each Facility, the Permittee shall submit to the Commission:

- (a) a ready-for-construction site plan for each Facility to include the solar panel layouts, access roads, electrical equipment, collector and feeder lines, and other associated facilities to be constructed;
- (b) engineering drawings for site preparation and construction of each of the Facilities;
- (c) a landscaping plan that describes adjacent land uses and identifies any site-specific strategies to minimize the visual impact of the Facility to adjacent land uses; and
- (d) plans for restoration of the Facility following construction.

Construction is defined under Minnesota Statutes, section 216E.01, subdivision 3. The Permittee may submit a site plan and engineering drawings for one or more Facilities if the Permittee intends to commence construction on certain Facilities before completing the site plan and engineering drawings for other Facilities. The Permittee shall document, through GIS mapping, compliance with the setbacks and site layout restrictions required by this permit, including compliance with the noise standards pursuant to Minnesota Rules, chapter 7030. The Permittee shall describe its considerations in determining the location of any fencing.

## **6.2** Notice to Local Government Agencies

Within fourteen (14) days of issuance of this permit, the Permittee shall send a copy of the permit to the office of the auditor of each county in which a Project Facility is located and to the clerk of each city and township where a Project Facility is located. As applicable, the Permittee shall, within fourteen (14) days of permit issuance, send a printed copy of this permit to each regional development commission, local fire district, soil and water conservation district, watershed district, and watershed management district office with jurisdiction in the county where a Project Facility is located.

#### 6.3 Notice of Permit Conditions

Prior to the start of construction, the Permittee shall inform all employees, contractors, and other persons involved in the construction and ongoing operation of the Project of the terms and conditions of this permit.

## 6.4 Agricultural Impact Mitigation Plan

The Permittee shall, with the cooperation of the Minnesota Department of Agriculture, develop an Agricultural Impact Mitigation Plan (AIMP). The purpose of the AIMP shall be to identify measures to minimize potential impacts to agricultural uses of the land upon the decommissioning of the Project. The Permittee shall submit the AIMP to the Commission fourteen (14) days prior to submitting the first site plan for any portion of the Project. The AIMP shall include:

- (a) Measures that will be taken to segregate topsoil from subsoil during grading activities and the removal of topsoil during construction of the Project to the extent that such actions do not violate sound engineering principles or system reliability criteria.
- (b) Measures that will be taken to minimize impacts to and repair drainage tiles damaged during construction of the Project.
- (c) Measures that will be taken to prevent the introduction of non-native and invasive species.
- (d) Measures that will be taken to re-vegetate disturbed areas\_with appropriate low-growing vegetation to the extent that such actions do not violate sound engineering principles or system reliability criteria.
- (e) Measures that will be taken to maintain established vegetation at the facilities throughout the operational life of the facility.

## 6.5 Vegetation Management Plan

The Permittee shall, in cooperation with the Minnesota Department of Commerce and the DNR, develop a Vegetation Management Plan for the Project and submit it to the Commission fourteen (14) days prior to submitting the first Site Plan required by Section 6.1 of this permit. The purpose of the Vegetation Management Plan is to minimize tree clearing, prevent the introduction of noxious weeds and invasive species, revegetate disturbed areas at each Facility with appropriate low-growing species, and maintain appropriate vegetation at each Facility throughout the operating life of the Project. The Vegetation Management Plan shall:

- (a) Identify measures taken to minimize tree removal and minimize ground disturbance.
- (b) Identify a comprehensive re-vegetation plan for disturbed areas.

- (c) Identify methods to maintain appropriate vegetation throughout the operating life of the Project.
- (d) Identify vegetation control methods to be used during the operation and maintenance of the Project.
- (e) Identify measures to prevent the introduction of noxious weeds and invasive species on lands disturbed by construction activities.

## **6.6** Field Representative

At least fourteen (14) days prior to the pre-construction meeting and continuously throughout construction, including site restoration, the Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this permit during the construction phase of this Project. This person shall be accessible by telephone during normal working hours throughout preparation, construction, cleanup, and restoration. This person's address, email, phone number, and emergency phone number shall be filed with the Commission, which may make the contact information available to affected landowners, local residents, public officials and other interested persons. The Permittee may change the field representative by notification to the Commission by eFiling.

## 6.7 Site Manager

The Permittee shall designate a Site Manager responsible for overseeing compliance with the conditions of this permit during the commercial operation and decommissioning phases of this Project. The Site Manager shall be responsible for giving and receiving all notices, addressing compliance issues, addressing complaints, and for all other communications with the Commission and Department of Commerce for the Project, including all of the Facilities. The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the site manager fourteen (14) days prior to placing any Facility into commercial operation. This information shall be maintained current by informing the Commission of any changes by eFiling, as they become effective.

## **6.8** Pre-Construction Meeting

Prior to the start of any construction, representatives of the Permittee, the Field Representative, Department of Commerce, and Commission shall participate in a preconstruction meeting to review pre-construction filing requirements, scheduling, and to coordinate monitoring of construction and site restoration activities. The Permittee shall file with the Commission within fourteen (14) days following the pre-construction meeting a summary of the topics reviewed and discussed and a list of attendees. The Permittee shall indicate in the filing the Project's construction start date.

## **6.9** Pre-Operation Compliance Meeting

At least fourteen days (14) prior to commercial operation of one or more Facilities, the Permittee shall participate in a pre-operation compliance meeting with the Department of Commerce and

Commission staff to coordinate field monitoring of operation activities for the Project. The Permittee shall file with the Commission within fourteen (14) days following the pre-operation meeting a summary of the topics reviewed and discussed and a list of attendees.

## 6.10 Complaints

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall file with the Commission the company's procedures that will be used to receive and respond to complaints. The Permittee shall report to the Commission all complaints received concerning any part of the Project in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures provided in **Attachments** [2] of this permit.

#### 7.0 SURVEYS AND REPORTING

#### 7.1 Biological and Natural Resource Inventories

The Permittee, in consultation with the Commission and DNR, shall design and conduct preconstruction desktop and field inventories of existing wildlife management areas, scientific and natural areas, recreation areas, native prairies and forests, wetlands, existing wildlife corridors, and any other biologically sensitive areas within the Project sites and assess the presence of state- or federally-listed or threatened species. The results of the inventories shall be filed with the Commission at least thirty (30) days prior to the pre-construction meeting to confirm compliance of conditions in this permit.

The Permittee shall file with the Commission, any biological surveys or studies conducted on this Project, including those not required under this permit.

## 7.2 Archaeological Resources

The Permittee shall work with the State Historic Preservation Office (SHPO) and the State Archaeologist. The Permittee shall carry out a phase 1 or 1A archaeological survey for all proposed solar sites, access roads, and other areas of Project construction impact to determine whether additional archaeological work is necessary for any part of the proposed Project. The Permittee shall contract with a qualified archaeologist to complete such surveys, and shall submit the results to the Commission, the SHPO, and the State Archaeologist at least fourteen (14) days prior to the pre-construction meeting.

The SHPO and the State Archaeologist will make recommendations for the treatment of any significant archaeological sites which are identified. Any issues in the implementation of these recommendations will be resolved by the Commission in consultation with SHPO and the State Archaeologist. In addition, the Permittee shall mark and preserve any previously unrecorded archaeological sites that are found during construction and shall promptly notify the SHPO, the State Archaeologist, and the Commission of such discovery. The Permittee shall not excavate at such locations until so authorized by the Commission in consultation with the SHPO and the State Archaeologist.

If human remains are encountered during construction, the Permittee shall immediately halt construction at that Facility and promptly notify local law enforcement authorities and the State

Archaeologist. Construction at the human remains location shall not proceed until authorized by local law enforcement authorities or the State Archaeologist.

If any federal funding, permit, or license is involved or required, the Permittee shall notify the SHPO as soon as possible in the planning process to coordinate section 106 (36 C.F.R. part 800) review.

Prior to construction, construction workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If any archaeological sites are found during construction, the Permittee shall immediately stop work at the Facility where the archaeological site or sites were found and shall mark and preserve the archaeological site and notify the Commission the SHPO about the discovery. The Commission and the SHPO shall have three (3) working days from the time the agency is notified to conduct an inspection of the archaeological site if either agency shall choose to do so. On the fourth day after notification, the Permittee may begin work at the Facility unless the SHPO has directed that work shall cease. In such event, work shall not continue until the SHPO determines that construction can proceed.

## 7.3 Project Energy Production

The Permittee shall, by February 1st following each complete or partial year of Project operation, file a report with the Commission on the monthly energy production of the Project (each Facility individually and in the aggregate for the Project) including:

- (a) the installed nameplate capacity of each permitted Facility;
- (b) the total monthly energy generated by each Facility in MW hours;
- (c) the monthly capacity factor of each Facility;
- (d) yearly energy production and capacity factor for each Facility;
- (e) the operational status of each Facility and any major outages, major repairs, or solar installation performance improvements occurring in the previous year; and
- (f) any other information reasonably requested by the Commission.

The permittee may submit such information it deems to be non-public pursuant to Section 12.8 of this permit.

#### 7.4 Photovoltaic Resource Use

The Permittee shall, by February 1st following each complete or partial calendar year of operation, file with the Commission the average monthly and average annual solar strength gradient measured in (kWh/m²)/Day observed at each solar Facility during the preceding year or partial year of operation. This information shall be considered public and must be filed electronically.

## 7.5 Extraordinary Events

Within twenty-four (24) hours of discovery of an occurrence, the Permittee shall notify the Commission of any extraordinary event. Extraordinary events include but shall not be limited to: fires, solar panel collapse, acts of sabotage, collector or feeder line failure, wildlife injuries and fatalities, and injured worker or private person. The Permittee shall, within thirty (30) days of the occurrence, file a report with the Commission describing the cause of the occurrence and the steps taken to avoid future occurrences. Wildlife injuries and fatalities shall also be reported on a quarterly basis.

#### 8.0 CONSTRUCTION AND OPERATION PRACTICES

#### 8.1 Site Clearance

The Permittee shall disturb or clear the Facility lands only to the extent necessary to assure suitable access for construction, safe operation, and maintenance of the Project.

## **8.2** Topsoil Protection

The Permittee shall implement measures to protect and segregate topsoil from subsoil on all Facility lands unless otherwise negotiated with the affected landowner.

## 8.3 Soil Compaction

The Permittee shall implement measures to minimize soil compaction of all Facility lands during all phases of the Project's life and shall confine compaction to as small an area as practicable.

## **8.4** Livestock Protection

The Permittee shall take precautions to protect livestock during all phases of the Project's life.

#### 8.5 Fences

The Permittee shall promptly replace or repair all fences and gates removed or damaged during all phases of the Project's life unless otherwise negotiated with the affected landowner. When the Permittee installs a gate where electric fences are present, the Permittee shall provide for continuity in the electric fence circuit.

## 8.6 Drainage Tiles

The Permittee shall take into account, avoid, promptly repair or replace all drainage tiles broken or damaged during all phases of Project's life unless otherwise negotiated with affected landowner.

## 8.7 Equipment Storage

The Permittee shall not locate temporary equipment staging areas on lands not under its control unless negotiated with affected landowner. Temporary equipment staging areas shall not be located in wetlands or native prairie as defined in Sections 5.2 and 5.3. Temporary equipment staging areas shall be sited to comply with standards for development of the shorelands of public waters as identified in Section 5.2.

#### 8.8 Noise

Construction and routine maintenance activities shall be limited to daytime working hours, as defined in Minn. R. 7030.0020, to ensure nighttime noise level standards will not be exceeded.

#### 8.9 Interference with Communication Devices

The Permittee shall not operate the Project so as to cause microwave, television, radio, telecommunications, or navigation interference in violation of Federal Communications Commission regulations or other law. If interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the Project, the Permittee shall take whatever action is feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the Project.

#### **8.10** Roads

#### 8.10.1 Public Roads

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall identify all state, county, or township roads that will be used for the Project and shall notify the Commission and the state, county, or township governing body having jurisdiction over the roads to determine if the governmental body needs to inspect the roads prior to use of these roads. Where practical, existing roadways shall be used for all activities associated with the Project. Oversize or overweight loads associated with the Project shall not be hauled across public roads without required permits and approvals.

The Permittee shall locate all perimeter fencing and vegetative screening in a manner that does not interfere with routine road maintenance activities and allows for continued safe travel on public roads.

## 8.10.2 Solar Site Access Roads

The Permittee shall construct the least number of site access roads it can. Access roads shall not be constructed across streams and drainage ways without required permits and approvals. When access roads are constructed across streams and drainage ways, the access roads shall be designed in a manner so runoff from the upper portions of the watershed can readily flow to the lower portion of the watershed. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

#### 8.10.3 Private Roads

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the sites, unless otherwise negotiated with the affected landowner.

## **8.11** Private Infrastructure

The Permittee shall replace or repair all fences and gates removed or damaged as a result of preparation, construction, and restoration activities, unless otherwise negotiated with the affected landowner.

## 8.12 Cleanup

The Permittee shall remove all waste and scrap that is the product of construction, operation, restoration, and maintenance from all sites and properly dispose of it upon completion of each task. Personal litter, bottles, and paper deposited by site personnel shall be removed on a daily basis.

#### 8.13 Tree Removal

The Permittee shall minimize the removal of trees and the Permittee shall not remove groves of trees or shelter belts without notification to the Commission and the approval of the affected landowner.

#### 8.14 Soil Erosion and Sediment Control

The Permittee shall develop a Soil Erosion and Sediment Control Plan for each Facility prior to construction and submit the Plan to the Commission at least fourteen (14) days prior to the preconstruction meeting. This Plan may be the same as the Storm Water Pollution Prevention Plan (SWPPP) submitted to the MPCA as part of the National Pollutant Discharge Elimination System (NPDES) permit application.

The Soil Erosion and Sediment Control Plan shall address what types of erosion control measures will be implemented during each Project phase and shall at a minimum identify: plans for grading, construction, and drainage of roads and solar sites; necessary soil information; detailed design features to maintain downstream water quality; a comprehensive re-vegetation plan to maintain and ensure adequate erosion control and slope stability and to restore the site after temporary project activities; and measures to minimize the area of surface disturbance. Other practices shall include containing excavated material, protecting exposed soil, and stabilizing restored material and removal of silt fences or barriers when the area is stabilized. The Plan shall identify methods for disposal or storage of excavated material. Erosion and sedimentation control measures shall be implemented prior to construction and maintained throughout the Project's life.

#### 8.15 Restoration

The Permittee shall, as soon as practical following construction of each site, considering the weather and preferences of the affected landowner, stabilize the area affected by any Project

activities to the post-construction prescribed in the Site Plans filed pursuant to Section 6.1, condition that existed immediately before construction began to the extent possible. The time period may be no longer than twelve (12) months after completion of the construction, unless otherwise negotiated with the affected landowner. Restoration shall be compatible with the safe operation, maintenance and inspection of the Project.

#### 8.16 Hazardous Waste

The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean-up, and disposal of hazardous wastes generated during any phase of the Project's life.

## 8.17 Application of Herbicides

The Permittee shall restrict herbicide use to those herbicides and methods of application approved by the Minnesota Department of Agriculture and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. All herbicides shall be applied in a safe and cautious manner so as to not damage adjacent properties, including crops, orchards, tree farms, or gardens. The Permittee shall also, at least fourteen (14) days prior to the application, notify beekeepers known to Permittee to have an active apiary within one mile of the proposed application site of the day the Permittee intends to apply herbicide so that precautionary measures may be taken by the beekeeper.

## 8.18 Public Safety

The Permittee shall provide educational materials to landowners adjacent to each Facility Site Control Boundary and, upon request, to interested persons about the Project and any restrictions or dangers associated with the Project. The Permittee shall also provide any necessary safety measures, such as warning signs and gates for traffic control or to restrict public access. The Permittee shall submit the location of all underground facilities, as defined in Minnesota Statutes, section 216D.01, subdivision 11, to Gopher State One Call following the completion of construction at each site.

## 8.19 Emergency Response

The Permittee shall prepare an Emergency Response Plan (fire protection and medical emergency) in consultation with the emergency responders having jurisdiction over each Facility prior to Project construction. The Permittee shall submit a copy of the Plan(s) to the Commission at least fourteen (14) days prior to the pre-construction meeting and a revised plan(s), if any, at least fourteen (14) days prior to the pre-operation compliance meeting.

The Permittee shall also obtain and register the address or other location indicators acceptable to the emergency responders and Public Safety Answering Points (PSAP) having jurisdiction over each of the separate facilities of the Project. As part of the compliance filings required by this Site Permit, the Permittee shall show that prior to beginning work on the site the Permittee provided a copy of the Emergency Response Plan to the emergency responders and the PSAP with jurisdiction over each of the separate facilities of the Project.

#### 8.20 Solar Site Identification

All solar sites shall be marked with a visible identification number and or street address.

#### 9.0 FINAL CONSTRUCTION

## 9.1 As-Built Plans and Specifications

Within sixty (60) days after completion of construction of the entire Project, the Permittee shall file with the Commission a copy of the as-built plans and specifications for the Project. The Permittee must also file this data in a GIS compatible format so that the Commission can place it into the Minnesota Geospatial Information Office's geographic data clearinghouse located in the Office of Enterprise Technology.

## 9.2 Final Boundaries

After completion of construction, the Commission shall determine the need to adjust the final Facility boundaries required for this Project. If done, this permit may be modified, after notice and opportunity for public hearing, to represent the actual sites required by the Permittee to operate the Project authorized by this permit.

#### 9.3 Expansion of Site Boundaries

No expansion of the site boundaries described in this permit shall be authorized without the approval of the Commission. The Permittee may submit to the Commission a request for a change in the boundaries of the sites for the Project. The Commission will respond to the requested change in accordance with applicable statutes and rules.

#### 9.4 Notification to the Commission

At least three (3) days before each Facility is to commence commercial operation, the Permittee shall file with the Commission the date on which the Facility will commence commercial operation and the date on which construction was completed for the Facility.

## 10.0 DECOMMISSIONING, RESTORATION, AND ABANDONMENT

## 10.1 Decommissioning Plan

At least fourteen (14) days prior to the pre-operation compliance meeting, the Permittee shall submit to the Commission a Decommissioning Plan documenting the manner in which the Permittee anticipates decommissioning the Project. The Permittee shall ensure that it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the Project at the appropriate time. The Commission may at any time request the

Permittee to file a report with the Commission describing how the Permittee is fulfilling this obligation.

#### **10.2** Site Restoration

Upon expiration of this permit or upon earlier termination of operation of the Project, or any solar Facilities within the Project, the Permittee shall have the obligation to dismantle and remove from the sites all solar panels, mounting steel posts and beams, inverters, transformers, overhead and underground cables and lines, foundations, buildings, and ancillary equipment to a depth of four feet. To the extent feasible, the Permittee shall restore and reclaim the sites to preproject topography and topsoil quality. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. Any agreement for removal to a lesser depth or no removal shall be recorded with the county and shall show the locations of all such foundations. All such agreements between the Permittee and the affected landowner shall be submitted to the Commission prior to completion of restoration activities. The sites shall be restored in accordance with the requirements of this condition within eighteen (18) months after expiration.

#### 10.3 Abandoned Solar Installations

The Permittee shall advise the Commission of any solar arrays or facilities that are abandoned prior to termination of operation of the Project. The Project, or any equipment within the Project, shall be considered abandoned after one (1) year without energy production and the land restored pursuant to Section 10.2 unless a plan is developed and submitted to the Commission outlining the steps and schedule for returning the Project, or any equipment within the Project, to service.

## 11.0 AUTHORITY TO CONSTRUCT DISTRIBUTED PHOTOVOLTAIC SOLAR ENERGY GENERATING SYSTEM

#### 11.1 Power Purchase Agreement

In the event the Permittee does not have a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the Project at the time this permit is issued, the Permittee shall provide notice to the Commission when it obtains a commitment for sale of the power pursuant to a power purchase agreement, or some other enforceable mechanism. This permit does not authorize construction of the Project until the Permittee has obtained a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the Project. In the event the Permittee does not obtain a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the Project within four years of the issuance of this permit, the Permittee must advise the Commission of the reason for not having such commitment. In such event, the Commission may determine whether this permit should be amended or revoked. No amendment or revocation of this permit may be undertaken except in accordance with applicable statutes and rules, including Minnesota Rules, parts 7850.4900 and 7850.5100.

#### 11.2 Failure to Commence Construction

If the Permittee has not completed the pre-construction surveys required under this permit and commenced construction of the Project within four years of the issuance of this permit, the Permittee must advise the Commission of the reason construction has not commenced. In such event, the Commission shall make a determination as to whether this permit should be amended or revoked. No revocation of this permit may be undertaken except in accordance with applicable statutes and rules, including Minnesota Rules, part 7850.5100.

## 11.3 Preemption of Other Laws

Pursuant to Minnesota Statutes, section 216E.10, this permit shall be the only site approval required for the location of this Project, and this permit shall supersede and preempt all zoning, building, and land use rules, regulations, and ordinances adopted by regional, county, local, and special purpose governments. Nothing in this permit shall release the Permittee from any obligation imposed by law that is not superseded or preempted by law.

#### 11.4 Other Permits

The Permittee shall be responsible for acquiring any other federal, state, or local permits or authorizations that may be required to construct and operate a Distributed Photovoltaic Solar Energy Generating System within the authorized sites. The Permittee shall submit a copy of such permits and authorizations to the Commission upon request.

## 11.4.1 Compliance with Federal and State Agency Permits

The Permittee shall comply with all terms and conditions of permits or licenses issued by federal, state, or tribal authorities including but not limited to the requirements of the MPCA (Section 401 Water Quality Certification, NPDES/State Disposal System (SDS) stormwater permit for construction activity, and other site specific discharge approvals), DNR (License to Cross Public Lands and Water, Public Water Works Permit, and state protected species consultation), SHPO (Section 106 National Historic Preservation Act), FAA determinations, and Mn/DOT (Utility Access Permit, Highway Access Permit, Oversize and Overweight).

## 11.4.2 Compliance with County, City, or Municipal Permits

The Permittee shall comply with all terms and conditions of permits or licenses issued by the counties, cities, and municipalities affected by the Project that do not conflict with or are not preempted by federal or state permits and regulations.

#### 12.0 COMMISSION POST-ISSUANCE AUTHORITIES

#### 12.1 Periodic Review

The Commission shall initiate a review of this permit and the applicable conditions at least once every five (5) years. The purpose of the periodic review is to allow the Commission, the Permittee, and other interested persons an opportunity to consider modifications in the conditions

of this permit. No modification may be made except in accordance with applicable statutes and rules.

#### 12.2 Modification of Conditions

After notice and opportunity for hearing, this permit may be modified or amended, for cause, including but not limited to the following:

- (a) violation of any condition in this permit;
- (b) endangerment of human health or the environment by operation of the Project; or
- (c) existence of other grounds established by rule.

## 12.3 Revocation or Suspension of Permit

The Commission may take action to suspend or revoke this permit upon the grounds that:

- (a) a false statement was knowingly made in the application or in accompanying statements or studies required of the Permittee, and a true statement would have warranted a change in the Commission's findings;
- (b) there has been a failure to comply with material conditions of this permit, or there has been a failure to maintain health and safety standards; or
- (c) there has been a material violation of a provision of an applicable statute, rule, or an order of the Commission.

In the event the Commission determines that it is appropriate to consider revocation or suspension of this permit, the Commission shall proceed in accordance with the requirements of Minnesota Rules, part 7850.5100 to determine the appropriate action. Upon a finding of any of the above, the Commission may require the Permittee to undertake corrective measures in lieu of having this permit suspended or revoked.

#### **12.4** More Stringent Rules

The Commission's issuance of this permit does not prevent the future adoption by the Commission of rules or orders more stringent than those now in existence and does not prevent the enforcement of these more stringent rules and orders against the Permittee.

#### 12.5 Transfer of Permit

The Permittee may not transfer this permit without the approval of the Commission. If the Permittee desires to transfer this permit, the holder shall advise the Commission in writing of such desire. The Permittee shall provide the Commission with such information about the transfer as the Commission requires reaching a decision. The Commission may impose additional conditions on any new Permittee as part of the approval of the transfer.

## 12.6 Notice of Ownership

Within 20 days after the date of the last Facility notice provided in Section 9.4, the Permittee shall file a notice describing its ownership structure, identifying, as applicable:

- (a) the owner(s) of the financial and governance interests of the Permittee;
- (b) the owner(s) of the majority financial and governance interests of the Permittee's owners; and
- (c) the Permittee's ultimate parent entity (meaning the entity which is not controlled by any other entity).

The Permittee shall notify the Commission of:

- (a) A change in owner(s) of the majority financial or governance interests in the Permittee;
- (b) A change in owner(s) of the majority interest financial or governance interests of the Permittee's owners; or
- (c) A sale which changes the parent entity of the Permittee.

\*\* When there are only co-equal 50/50 percent interests, any change shall be considered a change in majority interest.

## 12.7 Right of Entry

Upon reasonable notice, presentation of credentials and at all times in compliance with the Permittee's site safety standards, the Permittee shall allow representatives of the Commission to perform the following:

- (a) to enter upon the site property for the purpose of obtaining information, examining records, and conducting surveys or investigations;
- (b) to bring such equipment upon the site property as is necessary to conduct such surveys and investigations;
- (c) to sample and monitor upon the site property; and
- (d) to examine and copy any documents pertaining to compliance with the conditions of this permit.

## 12.8 Proprietary Information

Certain information required to be filed with the Commission under this permit may constitute trade secret information or other type of proprietary information under the Data Practices Act or other law. The Permittee must satisfy requirements of applicable law to obtain the protection afforded by the law.

#### 13.0 EXPIRATION DATE

This permit shall expire 30 years after the date this permit was approved and adopted.

#### 14.0 SPECIAL CONDITIONS

Special conditions shall take precedence over any of the other conditions of this permit if there should be a conflict between the two.

## 14.1 Blanding's Turtle

The Permittee shall follow the fact sheet of recommendations for avoiding and minimizing impacts to the Blanding's turtle at the Chisago County and Scandia Facilities. The summary of recommendations for avoiding and minimizing impacts to Blanding's turtle populations, including the attached colored photocopies of the Blanding's turtles, shall be made available to all contractors and its employees. **Attachment** [5] contains the fact sheet recommendations and summary. The Permittee shall use wildlife friendly erosion mesh during construction at the Chisago County and Scandia Facilities.

## **14.2** Rare and Unique Natural Resources

The Permittee shall use the information in the biological surveys required by Section 7.1 of this permit to ensure that facility designs avoids impacts to the following identified rare and unique natural communities:

Dodge Center Facility: The facility shall be designed and operated in a manner that avoids impacts to the Southern Wet-Mesic Hardwood Forest located at or adjacent to this site;

Paynesville Facility: The facility shall be designed and operated in a manner that avoids impacts to the floodplain forest located at or adjacent to this site; and

Pine Island Facility: The facility shall be designed and operated in a manner that avoids impacts to the Elm-Ash-Basswood Terrace Forest located at or adjacent to this site.

## 14.3 Demonstration of Compliance with Shoreland Standards

The Permittee shall demonstrate compliance with the standards for development of shoreland areas as specified in section 5.2 of this permit, in the site plans filed in accordance with Section 6.1 of this permit, for the following facilities: Annandale, Chisago, Lake Emily, Lake Pulaski, Pine Island, and West Waconia.

## 14.4 Security Fence Design

The security fence surrounding each Facility shall be comprised of a chain link fence of up to seven (7) feet, topped by a 1- to 2-foot extension, tilted 45 degrees outward from the vertical plane of the chain link portion, carrying monofilament cables or barbless wire.