

Solar Energy Generating System Size Determination Form



Minnesota Statute § 216E.021 requires combining proposed solar energy generating systems for permitting purposes when certain conditions exist. The Department of Commerce requires the information requested below to determine 1) whether proposed solar energy generating systems meet the definition of a large electric power generating plant and, therefore, are subject to the Public Utilities Commission's siting authority; or 2) whether large electric power generating plants that are solar energy generating systems should be combined for permitting purposes. Based on the information provided, Commerce staff may require additional information to make a determination.

Instructions: Answer each question completely. Each question and answer must be clearly identified. Attach maps and supporting information as necessary. Return the signed and dated information to:

Ray Kirsch Minnesota Department of Commerce 85 Seventh Place East, Suite 280 Saint Paul, MN 55101-2198

Fax: (651) 539-0109 Email: raymond.kirsch@state.mn.us

Phone: (651) 539-1841

Note: This form can be made available electronically, and submitted as an electronic document.

A. Project Description

Briefly describe the proposed project or projects, including name(s); need for the project(s); number of solar energy generating systems; alternating current nameplate capacity of the individual solar energy generating systems identified; and the combined alternating current nameplate capacity.

Birch Coulee Solar LLC (Birch Coulee Solar), an affiliate of AES Clean Energy Development, LLC (AES Clean Energy or AES), is proposing to construct and operate an up to 125-megawatt alternating current (MWac) photovoltaic (PV) solar energy generating facility and associated infrastructure in Renville County, Minnesota (Project). Birch Coulee Solar will be submitting an application to the Minnesota Public Utilities Commission (Commission or PUC) for up to 125 MWac of nameplate solar-energy capacity and supporting infrastructure.

The Project will be located in Renville County and the Project area spans approximately 1,042 acres, approximately 768 acres of which will be the Anticipated Development Area. Birch Coulee Solar proposes to interconnect the Project at the existing Franklin 115-kilovolt (kV) Substation in Renville County, Minnesota.

The Project is adjacent to the Franklin 115-kV Substation, which will be the Point of Connection (POI) for the Project. Connecting the Project to the POI will require a less than 500-foot-long overhead highvoltage gen-tie line between the proposed new Project substation and the transmission owner's facilities.

The Project is necessary to meet the growing demand for additional renewable resources required to meet the Carbon-free Energy and Renewable Energy Standards set forth in Minnesota Statutes and other clean energy requirements in Minnesota.

B. Project Design and Location

Provide the following information regarding each solar energy generating system:

B-1. Describe the 1) solar generating equipment and associated facilities; 2) project boundary location(s) (county, township, and sections); 3) the area within the project boundary (acres); and 4) area within the project boundary that will be developed for the solar project (acres).

The Project's primary components include PV panels mounted on a single-axis tracker racking system installed in linear arrays, centralized inverters, a Project substation, and a 115-kV generation tie line.

Associated facilities include electrical cables, conduit, switchgears, step-up transformers, SCADA systems, operation and maintenance (O&M) building, and metering equipment. The Project will include temporary and permanent laydown yards, internal Project access roads, and fencing.

The Project is planned in the following sections in Renville County, Minnesota:

Location	Township	Range	Section(s)
Camp Township	112N	33W	6
Birch Cooley Township and city of Franklin	112N	34W	1, 2
Bandon Township	113N	33W	31
Birch Cooley Township	113N	34W	36

The Project Area is comprised of approximately 1,042 acres of agricultural land located within Camp, Birch Cooley, Bandon Townships and the City of Franklin in Renville County, Minnesota. Birch Coulee Solar has secured site control for the proposed Project. The development area is anticipated to occupy approximately 768 acres, with the additional acreage allowing for required buffers and flexibility in design.

B-2. Describe the anticipated point of electrical interconnection. Describe interconnection requests and the status of each request. Provide any assigned project or queue interconnection numbers.

The Project is adjacent to the Franklin 115-kV Substation, which will be the Project's POI. Connecting the Project to the POI will require a less than 500-foot-long overhead high-voltage gen-tie line between the proposed new Project substation and the transmission owner's facilities.

Birch Coulee Solar requested a Network Resource Interconnection Service with Midcontinent Independent System Operator (MISO) identified as J2087 for 125 MWs. Birch Coulee Solar entered the Interconnection Request into the MISO Queue in 2021. It is anticipated that Birch Coulee Solar will execute a Generator Interconnection Agreement (GIA) with MISO for 125 MW in September 2024. Birch Coulee Solar will notify the Commission when the GIA has been executed. This interconnection will provide sufficient outlet to accommodate all of the solar energy generation from the Project.

B-3. Provide a map showing the proposed facility boundary, the interconnection site, anticipated solar module layout, and associated facilities. "Associated facilities" includes access roads, operation and maintenance facilities, collector and feeder lines, and substations. Maps should be at 1:24,000 scale using an imagery basemap. The map must include a legend and scale bar.

The attached map shows the Project Area, proposed solar array layout, proposed access roads, gen-tie line, and proposed substation. The O&M building may be located within the Anticipated Development Area or in an existing building in proximity to the Project Area. Further revisions may occur as the Project advances towards filing.

C. Project Characteristics

Provide the following information regarding each solar energy generating system:

C-1. List and describe the entity responsible for constructing the project.

Birch Coulee Solar is responsible for construction of the project. Birch Coulee Solar intends to hire an engineering, procurement, and construction contractor to complete the construction.

C-2. List and describe the entity responsible for operating and maintaining the project.

Birch Coulee Solar will be responsible for operating and maintaining the Project.

C-3. Describe the ownership structure, sales agreement(s), interconnection(s), revenue sharing, debt or equity financing, and any other characteristics of the solar energy generating system. Include a statement indicating whether these characteristics are "independent" or "shared." If shared, indicate with what existing or proposed project.

Birch Coulee Solar, a Delaware limited liability company, will own the Project. Birch Coulee Solar is an independent power producer and is an affiliate of AES Clean Energy. AES Clean Energy is owned 75% by The AES Corporation (NYSE: AES) and 25% by Alberta Investment Management Corporation. AES Clean Energy owns and operates solar, battery, wind, and green hydrogen projects across the United States. The Project will be the first utility-scale solar project developed in Minnesota for AES Clean Energy.

AES Clean Energy will utilize equity and outside construction debt to finance the project during construction. Financing arrangements have not yet been made specific to construction of this project. In line with AES' experience financing its US portfolio, this project is expected to have a financial structure

of back-leveraged debt, tax equity, and internal AES equity. AES will bring in a tax equity investor to monetize relevant investment tax credits, including those that may become available as part of the Inflation Reduction Act. AES has not yet identified or confirmed the tax equity partners for this project, but AES Clean Energy has long standing relationships with tax equity investors and has raised over \$2 billion of third-party tax equity financing with since 2016.

Additionally, AES Clean Energy has successfully raised billions of dollars of long-term debt financing. Debt will come from a syndicate of back-leveraged lenders. AES has working relationships with several large financial institutions that have financed projects who will make up our list of preferred partners to be considered for the Project. Birch Coulee Solar does not currently have or anticipate sharing revenue, debt or equity financing with any other project.

It is possible that the Project could be sold to another entity in which case, Birch Coulee Solar and the buyer would request a transfer of the Site Permit. The Project does not currently anticipate sharing any interconnection facilities prior to the point of interconnection with another project. It is anticipated that the Project will enter into a power purchase agreement with either a utility or a corporate offtaker.

C-4. Provide the anticipated schedule for completion, including dates for permitting, construction (start and end dates), and commercial operation.

Birch Coulee Solar plans to file a site permit application in the second quarter of 2024 so that it receives Commission approval for the Project in the second quarter of 2025. Construction is anticipated to begin in 2027 with commercial operation expected in 2028.

D. Applicant Information

D-1. Provide the name, address, email, and telephone number of the applicant and any authorized representative.

The permittee for the Site Permit will be:

Birch Coulee Solar LLC 2180 South 1300 East Suite 500 Salt Lake City, Utah 84106

Birch Coulee Solar authorizes the following individuals to receive communications related to this application:

The AES Corporation: Jordan Levin

2180 S 1300 E Suite 500 Salt Lake City, Utah 84106 Telephone: 800-579-7734 Email: jordan.levin@aes.com

Birch Coulee Solar: Lauren Colwell

2180 S 1300 E Suite 500

Salt Lake City, Utah 84106 Telephone: 800-579-7734 Email: lauren.colwell@aes.com

Birch Coulee Solar: Scott Groux

2180 S 1300 E Suite 500 Salt Lake City, Utah 84106 Telephone: 801-696-5981 Email: scott.groux@aes.com

Fredrikson & Byron: Lisa Agrimonti

60 South Sixth Street, Suite 1500 Minneapolis, Minnesota 55402 Telephone: 612-414-8271

Email: LAgrimonti@fredlaw.com

D-2. Provide the name, address, e-mail, and telephone number of the person or persons who would prepare the application to the Public Utilities Commission or to a Minnesota county or local unit of government, if such an application would be prepared by an agent or consultant of the applicant.

Sarah L. Johnson
Barr Engineering, Co.
325 South Lake Avenue
Suite 700, Duluth, MN 55802
Telephone: (218) 529-7119
Email: sjohnson@barr.com

D-3. Briefly describe the applicant's business entity including its ownership and financial structure.

The project is owned by a special purpose limited liability company, Birch Coulee Solar LLC, which is owned by ACE DevCo NC, LLC. ACE DevCo NC, LLC is ultimately owned by AES Clean Energy. AES Clean Energy is owned 75% by The AES Corporation (NYSE: AES) and 25% by Alberta Investment Management Corporation.

D-4. Provide the Minnesota Secretary of State organizational ID number for the applicant business entity, all subordinate entities, and all solar developer entities involved with the project.

Birch Coulee Solar's Minnesota Secretary of State organizational identification number is 1164077800025. Birch Coulee Solar does not have any subordinate entities.

D-5. Identify and provide contact information for the person or persons who would be the permittees, if different than the applicant, if the solar energy generating systems were permitted by the Public Utilities Commission or a Minnesota county.

The permittee is Birch Coulee Solar LLC, who is also the applicant.

Representatives:

Scott Groux 2180 S 1300 E Suite 500 Salt Lake City, Utah 84106 Telephone: 801-696-5981 Email: scott.groux@aes.com

Lauren Colwell 2180 S 1300 E Suite 500

Salt Lake City, Utah 84106 Telephone: 800-579-7734

Email: <u>lauren.colwell@aes.com</u>

E. Other Projects in Minnesota

E-1. Identify any planned or existing solar energy generating system(s) in Minnesota in which the applicant, or a principal, partner, or affiliate of the applicant, has an ownership or other financial interest. Describe any facilities identified, including their location, alternating current nameplate capacity, and their interconnection requests.

Birch Coulee Solar does not have any planned or existing solar energy generating systems in Minnesota. AES Clean Energy, parent company of Birch Coulee Solar, is also parent company of Ahern Pipestone Solar, LLC. The Ahern Pipestone Solar project is a planned 200 MWac solar project in Pipestone County, Minnesota and is associated with filing J2065 in the 2021 filing cycle.

Birch Coulee Solar's parent company, AES Clean Energy, is also owner of the Tall Tale Solar Project in Minnesota. The Tall Tale Solar Project is a planned 68 MWac solar and storage project in Hubbard County, Minnesota and is associated with filing J2760 in the 2022 filing cycle. The expected date of commercial operation for Ahern Pipestone Solar, LLC and Tall Tale Solar is in 2029.

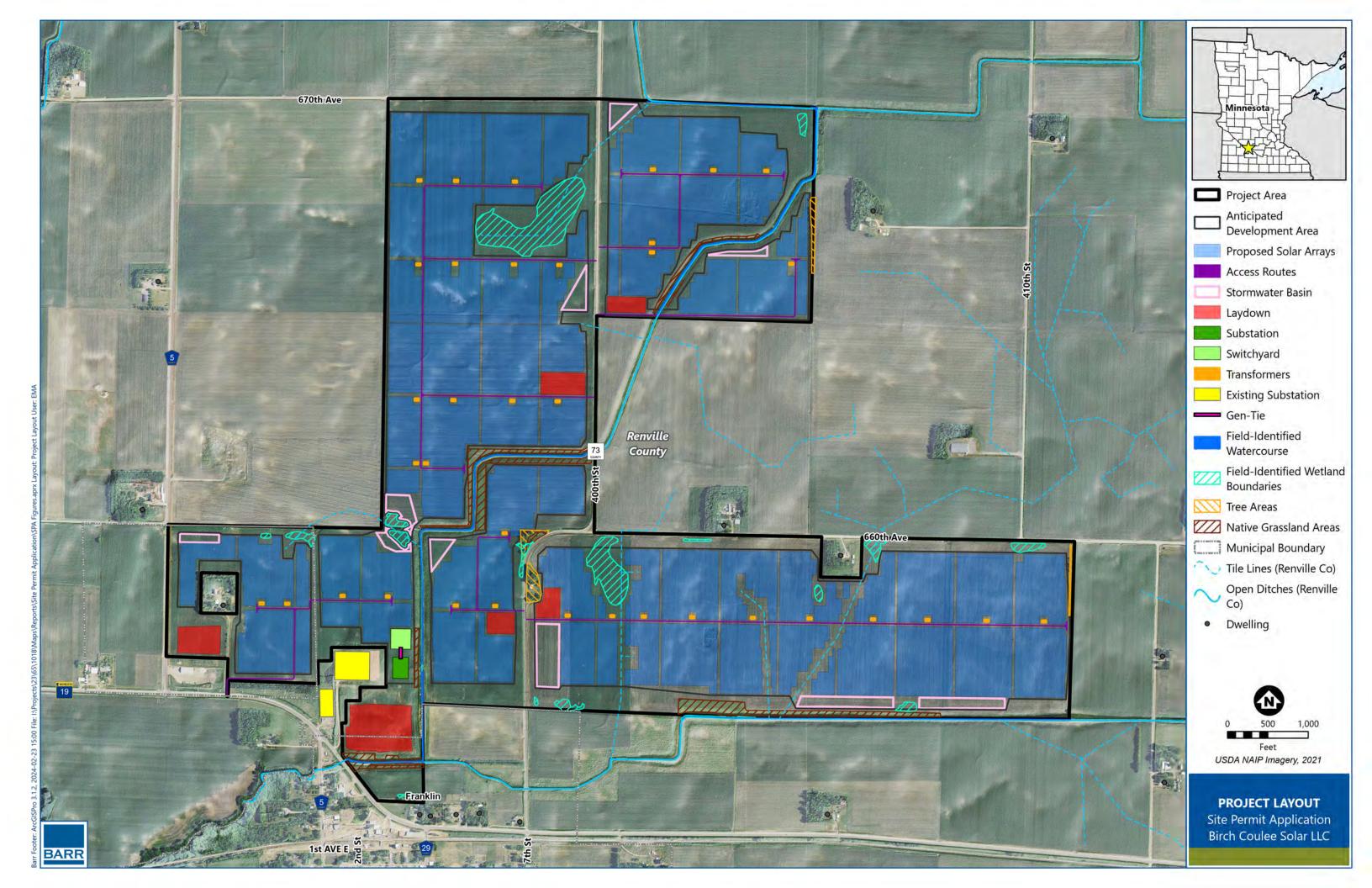
E-2. Identify any additional solar energy generating system(s) in Minnesota in which the applicant, or principal, partner, or affiliate of the applicant, has an ownership or other financial interest and is currently under construction or construction is planned to begin within 12 months of the proposed project(s) estimated completion date. Describe any facilities identified, including their location, alternating current nameplate capacity, and their interconnection requests.

See response to E-1 above.

E-3. Identify any planned or existing solar energy generating system(s) in Minnesota which that shares any of the following with the proposed project: power purchase agreement, interconnection, sales,

revenues, debt or equity financing, or other ownership or financial interests. Describe any facilities identified, including their location, alternating current nameplate capacity, and their interconnection requests.

None.





April 12, 2024

Lauren Colwell Birch Coulee Solar LLC 2180 South 1300 East, Suite 500 Salt Lake City, Utah 84106

Dear Ms. Colwell,

Thank you for submitting a solar size determination request for Birch Coulee Solar LLC's proposed 125 megawatt (MW) Birch Coulee solar project in Renville County.

The Department is responsible for reviewing such requests to determine whether a combination of solar energy generating systems meets the definition of large electric power generating plant such that a proposed project is subject to the siting authority of the Minnesota Public Utilities Commission (Commission).

Based on information provided by Birch Coulee Solar LLC, and based on criteria established in Minn. Statute 216E.021, the Department has determined that the Birch Coulee solar project is not associated with other planned solar projects in a way that would require them to be combined into a single project. However, given that the project on its own has a generating capacity of up to 125 MW, the Department determines that the project is subject to the Commission's siting authority and must submit an application for a site permit under the Power Plant Siting Act (Minnesota Statute 216E).

Per Minn. Statute 216E.021, Birch Coulee Solar LLC has the right to dispute this determination with the Chair of the Commission.

Please contact me with any questions.

Sincerely,

Ray Kirsch

Energy Environmental Review and Analysis

cc: Bret Eknes, Public Utilities Commission