Draft Project Description Report

Perth Solar Development Project

Sitka Power & Good Energy Partners

April 29, 2025

Revision	Date	Description	Updated By

Contents

1. Executive Summary

Sitka Power Inc. (Sitka) is preparing a Project Description Report (PDR) in accordance with Ontario Regulation 359/09 – Renewable Energy Approvals under Part V.0.1 of the Environmental Protection Act and in alignment with the Ministry of the Environment, Conservation and Parks' (MECP, 2024) Technical Guide to Renewable Energy Approvals.

The purpose of the PDR is to outline the key aspects of the proposed project, including its nature, scope and potential environmental impacts. This document supports early engagement by providing stakeholders, including the public and Indigenous communities, with clear and accessible information to facilitate transparency, collaboration and meaningful consultation.

The Perth Solar Development Project (hereinafter referred to as "the Project") is a proposed 10-megawatt (MW) solar energy generation facility that Sitka intends to develop, construct and operate in the Township of Drummond/North Elmsley, Lanark County. The Project qualifies as a Class III solar facility as defined under O. Reg. 359/09.

2. General Information

2.1. Name of the project:

The name of the project is "Perth Solar Development Project."

2.2. Applicant name and Contact information:

Sitka Power Inc. is the proponent of the Project.

Contact information:

Cory St.Croix
Chief Commercial and Legal Officer
Sitka Power Inc.
Address: Suite 1050, 639 5th Ave SW Calgary, AB T2P 0M9
Phone: (866) 467-4852
Email: cstcroix@sitka-power.ca

With copy:

Justin Woodward or Patrick Gossage
Good Energy Partners
Phone: (416) 834-3083
justin@goodenergypartners.ca
patrick@goodenergypartners.ca

2.3. Project Location and Area

The project is located on privately owned land in the Township of Drummond/North Elmsley on Part Lots 14, 15 Con 10 North Elmsley and a municipal address of 908 Churchill Road, Perth, Ontario.

The site spans approximately 180.3 acres. See site map in section 6.

2.4. Energy Source, Capacity, and Facility Classification

2.4.3. Energy Source

The energy source for this Project is solar power, utilizing ground mounted photovoltaic (PV) modules.

2.4.4. Capacity:

The proposed capacity is 12.54 MW DC and 10 MW AC.

2.4.5. Class of solar facility (if applicable)

The Project qualifies as a Class III solar facility as defined under O. Reg. 359/09. Class III is a facility at any location other than mounted on the roof or wall of a building with a name plate capacity of >10 MW.

2.5. Approvals Required

2.5.3. Municipal Approval

All Municipal approvals required will be determined in consultation with the Township of Township of Drummond/North Elmsley and Lanark County. The following table is a list of expected approvals for the project:

Issuing Body	Regulatory Approvals / Authorization	Description
Township of Drummond/North Elmsley	Zoning By-law	Zoning By-Law will be needed to ensure computability with zoning requirements.
	Site Plan Approval	Any renewable energy generation facility requires a Site Plan Control approval to ensure developments meet standards for safety, functionality and compatibility.
	Building Permits	Ground-mounted solar collector systems are subject to building permit requirements under the Ontario Building Code.

2.5.4. Provincial Approval

All provincial approvals required will be determined in support of the REA from the Ministry of the Environment, Conservation and Parks. Additional authorizations may be required at the provincial level to facilitate development of the Project.
The following table is a list of expected approvals for the project:

Issuing Body	Approvals / Authorization	Description
Ministry of the Environment, Conservation and Parks	Renewable Energy Approval	In accordance with O. Reg. 359/09 for Class III solar projects.
Ontario Energy Board	Generator License	A license is required to generate electricity.

2.5.5. Other Authorizations

Issuing Body	Regulatory Approvals / Authorization	Description
Conservation Authority	Development permits	A permit from a Conservation authority may be required when any proposed development occurs within regulated areas.

2.5.6. Federal Involvement

This Project is currently under consideration for funding through Natural Resources Canada's Energy Innovation Program – Renewable Energy Demonstrations Call. It has advanced to the due diligence phase of the evaluation process. If approved, the Project would receive federal funding. Participation in this program will subject the project proponents to engage in on-going reporting with the program.

This project does not involve federal lands, or watercourses as part of the project scope. As such, no federal environmental assessments are anticipated to be triggered under the Impact Assessment Act or other applicable federal legislation.

3. Project Details

3.1. Energy Sources to Generate Electricity

The energy source for this Project is solar power, utilizing ground mounted photovoltaic (PV) modules. When exposed to sunlight, panels will generate direct current (DC) electricity. The DC electricity will be conveyed through underground cabling to an inverter that converts DC electricity to alternating current (AC) electricity.

3.2. Facility, Equipment and Technology

The facility proposes to install a combination of PV modules and a single-axis tracker system to optimize energy generations. The current draft site plans consist of 10 MW AC capacity, support by 12.54 MW DC capacity, using 10,374 Heliene 156HC M10 NYTP SL panels, each rated at 605W. These panels will be installed on NX Horizon 120 single-axis trackers, each supporting 78 panels per tracker. The energy generated will go through two inverters (Sungrow SG 2500U, 2 x 5 MVA) that convert the DC energy into AC energy for integration to the local distribution grid.

Photovoltaic Modules: Heliene 156HC M10 NTYP SL, 605W per panel. The total number of panels is 10,374, grouped into strings on a single axis tracking system.

Tracking System: The system will use NX Horizon 120 trackers with a ±60° range of motion, which will maximize energy production by adjusting the panels' orientation relative to the sun.

Inverters: Two Sungrow SG 2500U inverters, each with a nominal power rating of 2500 kVA, will convert the DC output from the solar panels into usable AC electricity for the grid.

Agrivoltaics Integration: The Project is being designed to allow for crop farming operations with the facility. This design maximized land use efficiency.

Site layout: The solar panels will be arranged in two main blocks within the site, with adequate setbacks from the parcel line and other infrastructure to comply with municipal regulations. The site will include internal access roads for maintenance, as well as fencing for security.

3.3. Nameplate Capacity

The Project's total nameplate capacity is 12.54 MW DC. This represents the maximum output the facility is designed to generate and deliver under optimal operation conditions.

3.4. Project Activities

The project construction, operation and decommissioning phases are outlined in this section. Following the necessary confirmations and approvals, construction is likely to begin in Spring/Summer of 2028 to 2029.

3.4.3. Access Road Construction

Existing provincial and local roads will be used to transport Project-related components and equipment to the Project location. The construction of internal access roads will be necessary for access to the facility for maintenance, and serviceability of the solar installation and for the farm operations. The internal roads will be constructed following the layout indicated in the site plan with appropriate grading and surfacing to ensure ease of access.

3.4.4. Site Preparation

Site preparation activities will include clearing the land of vegetation or debris, following by grading to create a level foundation for the installation of the foundation, racking and panel components. The planned third-party Environmental Desktop Constraints Analysis and Land Use Planning Review, based on publicly available data, will determine if additional environmental risk studies are required and guide site preparation activities. The geotechnical investigation and topographic survey will determine the racking foundation design and the construction of the proposed PV solar arrays.

3.4.5. Installation of Support Structures

PV racking system foundations generally consist of steel columnar foundations to support the structures including the solar panels, racking, concrete foundations for inverters, transformers and substation equipment. Single-axis trackers will be anchored into the ground using piles. The installation process will involve positioning of tracker to ensure proper orientation and functionality.

3.4.6. Underground Cable Installation

Installation of underground electrical lines between solar panels, inverters and substation.

3.4.7. Distribution Line Erection

Distribution line erection will involve the installation of overhead and underground electrical to connect the facility's substation to the local distribution grid.

3.4.8. Site Security

The project site will include perimeter fencing, construction warning signage, publicly contact information for Sitka Power, and site security protocols.

3.4.9. Operation

Once operational the Project solar facility will generate electricity to the local distribution grid. Periodic onsite inspections and monitoring will be conducted. Sitka Power will act as operator.

3.4.10. Maintenance and Inspection

Maintenance of the solar facility will include both scheduled and as-needed activities. These can include scheduled equipment maintenance, preventative measures, unplanned maintenance and equipment replacement, panel washing, and site/ground maintenance.

Planned maintenance will follow a pre-set schedule, with additional checks as needed. Any maintenance personnel will be trained to work in accordance with health and safety protocols.

3.4.11. Decommissioning

Project activities during the decommissioning phase will include removal of solar panel infrastructure, removal of inverters, substations, and transformers, solar panel recycling, removal of any fencing and roads, site grading and site restoration. A detailed decommissioning plan will be completed.

3.5. Ownership of the Land

The project is located on privately owned land by an institutional landowner, Area One Farms Inc. The Project proponents are in the process of finalizing a long-term lease agreement, with the landowner to secure site access and development rights for the duration of the project lifecycle.

4. Assessment of Potential Environmental Effects

4.1. Heritage and Archaeological Resources

An Archaeological Assessment will be completed in Spring of 2025. It is not currently anticipated that Project excavations will determine significant archaeological activity including investigations.

4.2. Natural Heritage

An Environmental Impact Study will be completed in Spring/Summer of 2025.

4.3. Water Bodies

The nearest water bodies and watercourses are 3-4 kilometers south-west from the proposed site location. There are no other known water bodies within 50 meters of the assessment area. It is not currently anticipated that the Project will intersect groundwater; however, a detailed water assessment will be completed and confirmed to identify water bodies in the area. If identified, impacts on aquatic resource will be surveyed.

4.4. Air, Odour, Dust

The completed Project will not introduce new emission sources of air contaminants, including odour or dust. Any potential negative environmental effects would occur during construction and maintenance phases of the Project. Any dust and combustion exhaust will be associated with the use and movement of construction vehicles. Air emissions are not expected to pose a significant health risk to local population and would be characterized as a nuisance.

4.5. Noise

The completed facility will not introduce any significant sources of noise from the Project. Any construction noise will follow municipal development planning guidelines.

4.6. Land Use and Resources

The proposed Project is located on privately owned rural land currently used for agricultural activities. The Project has been sited to minimize disruption to existing land uses, and to incorporate agrivolatic principles to maintain the agricultural productivity. This dual land use approach supports continued agricultural operations and enhances local land use efficiency. No residential or commercial uses are directly impacted by the Project. The proposed development is anticipated to require rezoning at the county level to ensure compatibility with rural land uses. The project will not affect mineral or aggregate resources, forestry operations or recreational uses.

4.7. Provincial and Local Infrastructure

The Project is not anticipated to have potential negative effects on provincial or local infrastructure. Temporary impacts to municipal roadways may occur during construction due to delivery of materials and equipment.

No public utilities (such as water or wastewater) are anticipated to be disrupted by the Project. The project will connect to the local distribution grid through a new point of interconnection, which will be planned in collaboration with the local utility to meet interconnection requirements standards and capacity.

4.8. Public Health and Safety

The project poses minimal risk to public health and safety. Once operation, solar facilities are non-emitting, low-noise and do not involve hazardous substances. Safety measures will be in place during construction, operation and decommissioning phases including, permitter fencing, signage, and compliance with all applicable health and safety regulations.

4.9. Areas Protected under Provincial Plans and Policies

The project has been designed to avoid negative effects on areas protected under provincial plans and policies. The currently known land designations relevant to the Project site are "Rural" in the Drummond/North Elmsley Official Plan. No provincially designated features—such as Natural Heritage Systems, Provincially Significant Wetlands, or Areas of Natural and Scientific Interest—are identified within or adjacent to the Project area. A third-party Environmental Desktop Study will be conducted to confirm. Although no additional environmental designations apply to the site, the Project will be developed in a manner that aligns with the Ontario Provincial Policy Statement (2024) and local land use policies.

5. Stakeholder Consultation and Timelines

5.1. Consultation

5.1.3. First Nation

As part of the Renewable Energy Approval (REA) process, the Project proponent recognizes the importance of early, transparent and meaningful engagement with Indigenous communities. A draft version of the PDR will be prepared and made available for review and comment prior to finalization. This draft will form the basis for initiating formal consultation with First Nations, the public and the municipality. In-person consultation meetings will be held with First Nations to share the Project and determine First Nation's consultation expectations. Third-party Consultants or Mediators will be procured to ensure transparent and equitable engagement to receive approval.

At this time, the Project proponent has identified the Algonquins of Pikwakanagan First Nation that may have interest in the Project, either through asserted or established rights, proximity and shared stewardship interest. The First Nation and any other potential communities identified throughout the process will be contacted at the draft PDR stage to share project information and explore potential partnerships.

Furthermore, Sitka Power Inc. and Good Energy Partners are members of Ontario First Nations Economic Developers Association. The reasoning is to utilize a neutral party to facilitate First Nation engagement, inform First Nations about the organizations, and access educational material to support First Nations economic reconciliation.

5.1.4. Municipality Name Consultation

The Project proponent has initiated consultation with the host municipality, the Township of Drummond/North Elmsley. Further consultation will be undertaken as the Project advances, including sharing the draft Project Description Report (PDR), obtaining a Municipal Support Resolution and permitting requirements. Sitka Power will host at least two Municipal Engagement Townhall meetings to inform the public about the development project.

5.2. Project Description Report Timeline

Stage	Stakeholders Involved	Description	Milestone
Draft PDR Preparation	Internal	Preparation of the draft PDR including preliminary technical details and site layout plans.	Prior to formal consultation
Circulation of Draft PDR	Municipalities, Public, First Nations	Share draft PDR with identified stakeholders.	Spring/Summer 2025
Initial Consultation	Municipalities, Public, First Nations	Initiate discussions, receive feedback and concerns on the draft PDR and other consultation engagement.	Spring 2025
Public Meeting Notice	General public	Notification issued for the mandatory public meeting	At least 30 days before Public Meeting
Public Meeting	General public, municipality, First Nations	Host meeting to present project details, discuss PDR findings, and obtain public feedback.	TBD (at least 60 days before REA submission)
Finalization of PDR	Internal	Review consultation feedback, revise PDR and finalize supporting documentation	Following public meeting.
Final PDR Submission	Ministry of Environment, Conservation and Parks	Submit final PDR as part of the full REA package.	TBD (REA submission date)
Ongoing Engagement including Public Meetings	Municipalities, Public, First Nations	Continued communication post-submission.	Ongoing through permitting and construction.

6. Project Location Map

Project location and Land within 300 metres of the project location.

7. Appendices

7.1. Technical specifications of solar PV modules

To be provided post-recommendation from third-party Engineering Consultants.

7.2. Supporting studies or reports (e.g., environmental, archaeological)

The following is a list of supporting studies and documents to be submitted:

- Cultural Heritage & Archaeological Assessment Report
- Natural Heritage Assessment Report
- Water Assessment Report
- Consultation Plan Report
- Design and Operations Report
- Decommissioning Plan Report
- Environmental Impact Study

7.3. Copies of permissions or land agreements

Land agreements and permissions to be provided once executed.

7.4. Additional maps or figures

To be provided if required.