

**FrontCounterBC Cranbrook
1902 Theatre Rd.
Cranbrook, BC V1C 7G1**

Date: June 15, 2023

Management Plan: Investigative Licence – Solar Power

Site name: Sun Valley Solar

Applicant: Enterprise Renewables (2017) Ltd.

Section A – Project Overview

The Sun Valley Solar Investigative Licence enables investigation of the solar resource within the Licence area in order to evaluate the potential for the future development of a solar energy project. This management plan has been submitted via the Front Counter BC online Crown Land Tenure Application e-service on June 15, 2023.

The Licence area is in the East Kootenay Region of British Columbia on map tile 82G (BCGS 250k). The location of the Licence area is indicated in the attached mapping and shapefiles provided as part of this Application. The Licence area consists of six polygons, with a total area of 4981 hectares. At this time the final location of the solar farm is not known, and its siting will follow extensive desk-top engineering and financial analysis of each of the five polygon areas during the Investigative Licence term. Some of the factors that will influence the project's final location include the solar resource, site access, proximity to dwellings, terrain shading, constructability of the terrain, proximity to and availability of transmission/distribution capacity, and environmental constraints. Each of these elements will be analyzed during the Investigation phase and an optimized layout will be generated. Though the final project design will require an area much smaller than the Investigative Licence area, the full Investigative Licence area is required to allow design flexibility and proper optimization of the project. The footprint of the final project is not known at this time and will require the completion of site engineering studies, as well as determination of the solar module mounting system (fixed vs tracking). The Licence area has been checked for potential conflicts using the iMap2.0 tool, the ILRR Map Inquiry tool, and the FrontcounterBC Discovery tool.

The Sun Valley Solar energy project was selected for potential submission into a future BC Hydro RFP.

The project has several key advantages: it is located on terrain that has previously been disrupted by forestry activities or consists of low-lying scrubland, is in close proximity to distribution intertie, is in non-complex terrain with low construction costs, has been sensitively sited to eliminate visual constraints, has no nearby dwellings, and has been pre-screened for environmental and technical constraints.

During the investigative phase it may be necessary to collect on-site solar irradiance data. Based on state-of-the-art of solar energy yield assessment, it may also be possible to calculate the energy yield of the project to a bankable level using satellite

data and land-based weather station data rather than on-site monitoring equipment. Whether or not to install monitoring equipment, and the location of such an installation, will be decided following engagement with several renewable energy consultancies. If on-site monitoring equipment is required for the purposes of solar irradiance data collection, the equipment may include a pyranometer, battery bank, and small solar panel for charging. Two photo examples of a typical solar irradiance monitoring system have been included in Appendix A. This equipment will cause no site disturbance (placed on top of the ground) and will not be anchored to the ground. The monitoring equipment would be sited on grassland and no site clearing will be required. Impacts on waterways, wildlife, or archaeological sites are not anticipated. Enterprise Renewables confirms that no ground disturbance will occur during the term of this Investigative Licence. Enterprise also commits to submit Statutory Declarations to document when any on-site monitoring or site investigations have occurred or are planned and the location of any on-site monitoring equipment. Enterprise Renewables understands that there are many conflicting overlaps within the five site areas that contain archeological and environmental values, and confirm that no ground disturbance will occur as part of the Investigative Licence. Enterprise Renewables is aware that the licence area covers two Conservation Lands and that the licence holder is responsible for complying with regulations in these areas.

The following activities will be initiated to help assess the viability of the site:

- a) Installation of monitoring equipment – The purpose of this monitoring equipment is the measurement of solar irradiance.
- b) Geology – A physical assessment of the Investigative Licence area may be performed to determine the suitability of the ground to support the installation of solar panel arrays.
- c) Public Engagement – This will include initial engagement with First Nations, government agencies, and relevant community groups. First Nations and community groups will be identified in consultation with FrontCounter BC and the Ministry of Forest Lands and Natural Resources. Initial engagement will begin as early as possible in the hopes of identifying issues early on and of building strong and mutually beneficial relationships and partnerships. Discussions with FLNRO will be conducted in order to ensure that all relevant First Nations and stakeholders have been identified and that an engagement framework is agreed upon. A consultation log spreadsheet will be maintained.
- d) Site Access – Site access will be via existing forestry roads. The site polygons are all located less than 2 km from highway 95. Existing access roads will not be modified during the investigative phase. No tree cutting is anticipated to be required within the Licence area. Enterprise will not construct any new roads or reactivate roads without prior written consent from the ministry and acknowledgement that a separate road application would be required.
- e) Archaeology - The site will be reviewed for Archaeological significance at the request of the identified First Nations or FLNRO. It will be determined if the site will need a review for Archaeological significance as part of the early-stage consultation with the identified First Nations as well as FLNRO. Once the solar array layout has been drafted it will be shared with all interested First Nations and FLNRO.
- f) Water Courses and Fish Habitat – A physical review of the watercourses and fish habitat within the site area will be undertaken. Based on a review of aerial photography and TRIM base mapping there appears to be no stream or

wetlands that cross the site. As a result no impacts to watercourses or wetlands are anticipated. As part of the development plan commitments, a thorough review of any affected watercourses will be undertaken by certified biologists/hydrologists. First Nations will be consulted in detail regarding any watercourse assessments, potential impacts from project construction, and in developing mitigation measures for any potential impacts. All timing restrictions with respect to construction will be followed as indicated by the Wildlife Act. Required setbacks to watercourses will be adhered to in all cases. No negative impacts to fish or the aquatic environment are anticipated during the investigative or project construction phases. Any activity concerning fish habitat will follow all guidelines of the provincial Fish Protection Act and federal Fisheries Act.

- g) *Bird Species and Habitat* – Bird species and habitat will be reviewed within the site area. Specialized consultants will be engaged to aid in the review. Comments specific to the Application Area as provided by Ecosystems (MFLNRO) will be used to help guide what bird species and habitat may be reviewed. Initial species have not yet been identified by Ecosystems. Best management practices as recommended by Ecosystems will be implemented to minimize any adverse effects on the listed species during the investigative phase, including complete adherence to all relevant provincial/federal enactments including Section 34 of the provincial Wildlife Act and the Water Act. A specialized consultant will be engaged to aid in the review of bird species and habitat based on the request of FLNRO, consultation with First Nations, the requirements of the Species at Risk Act (SARA), the Migratory Birds Convention Act, and the commitments made in the Project Development Plan. If required, a complete mitigation plan addressing any possible impacts will be developed in consultation with FLNRO and local First Nations.

Section B – Maps of Area

Please refer to the Application attachments for the General Location Map and Detailed Site Map.

Section C – Investigative Schedule

Activity	Description of Activity	Time Period	Potential Impact
Installation of solar monitoring equipment	Place the monitoring equipment within the licence area. This equipment will be mounted on a stand with a footprint area of less than 8 square meters. Only existing on-site roads will be used to access the site. The equipment will be installed on grassland with existing access. No site disturbance is anticipated due to this activity. This equipment will cause no site disturbance whatsoever and will not be anchored to the ground. No site clearing will be required.	The installation timing will be dependent on identifying a route to market for the power.	No impacts anticipated.
Bird monitoring activities	Will be undertaken as necessary in consultation with FLNRO. May involve on-site observations by bird expert consultants.	The timing of bird monitoring will be dependent on identifying a route to market for the power.	No impacts anticipated. Best management practices as recommended by Ecosystems will be implemented to minimize any adverse effects on the listed species during the investigative phase, including complete adherence to all relevant provincial/federal enactments including Section 34 of the provincial Wildlife Act and the Water Act.
Water Courses and Fish Habitat	A physical review of the watercourses and fish habitat within the site area will be undertaken. As part of the Development Plan commitments, a thorough review of any affected watercourses and fish habitat would be undertaken by	The timing will be dependent on identifying a route to market for the power.	No streams or wetlands are expected to exist on the project site. Required setbacks to watercourses will be adhered to in all cases if streams/wetlands are identified. No negative impacts to fish or the aquatic

	certified biologists/hydrologists if required.		environment are anticipated during the investigative phase.
Geotechnical work	A physical assessment of the Licence area will be performed by an expert consultant to determine the suitability of the ground to support future solar panel array installation.	The timing will be dependent on identifying a route to market for the power.	No impacts anticipated.
Survey Work	Some preliminary survey work may be required to determine preferred access routes for future solar panel delivery and foundation design. Survey work will use temporary surface based tripods supporting survey equipment. No site disturbance will be required.	The timing will be dependent on identifying a route to market for the power.	No impacts anticipated.
Archaeology Studies	Archaeology consultants will be engaged at the request of the identified First Nations with respect to ground disturbances caused by solar panel installation in the vicinity of potential archaeological sites.	The timing will be dependent on identifying a route to market for the power.	No impacts anticipated.

The success of the Sun Valley solar energy project will have strong economic benefits for both the local First Nations and the local community, and will help contribute the future where renewable energy makes up the vast majority of Canada's total energy consumption.

If you require any additional information, please contact Mark Green at 778-829-7742 or mark.green@e3offshore.com

Yours Sincerely,



Mark Green, Director of Development

APPENDIX A

