



T R A V E R S S O L A R P R O J E C T

GREENGATE POWER CORPORATION

February 2019 • Newsletter #1

COMMUNITY OPEN HOUSE

Please join us at our first community open house to learn more about the proposed Project design, the Alberta Utilities Commission (AUC) process, and the proposed Project schedule. The open house is an opportunity to provide your input. **The open house will be held at the following date and location:**

**WEDNESDAY, FEBRUARY 20, 2019
7:00 PM TO 10:00 PM
VULCAN LODGE HALL
231 CENTRE ST, VULCAN, ALBERTA**

REFRESHMENTS WILL BE SERVED

INTRODUCTION

Greengate Power Corporation (Greengate) is developing the 400 megawatt alternating current (MW_{ac}) Travers Solar Project (the Project) in your area. We are committed to engaging landowners, public stakeholders, and members of the local community, and we look forward to starting this dialogue with you over the coming months. This newsletter is an opportunity for us to share information about solar energy and the Project with you. We encourage you to reach out and ask questions, provide comments, or suggest improvements. Please join us at our first community open house (details above). You will have an opportunity to meet our team and our consultants and to ask questions about the Project design, environmental evaluation, visual representation, noise impact assessments, and glare study.

ABOUT US

Greengate is a leading renewable energy company based in Calgary, Alberta. To date, Greengate has successfully developed 450 MW of operating wind projects in Alberta, including the 150 MW Halkirk Wind Power Project and the 300 MW Blackspring Ridge Wind Power Project. These projects represent over 30% of the wind energy generated in Alberta and provide a clean source of energy to approximately 200,000 homes. Greengate currently has a solar photovoltaic (PV) development portfolio of approximately 700 MW_{ac}.

IN THIS PACKAGE

- Community Open House Invite
- Introduction of the Travers Solar Project and Team
- Project Schedule and Studies
- Community Fund and Involvement

INSERTS

- Proposed Project Map
- Preliminary Noise Contour Map
- Visual Simulations
- AUC Public Involvement Brochure



COMMUNITY FUND AND INVOLVEMENT

We are pleased to announce that we are setting up a community development fund for the Project. We will provide the community with a funding commitment throughout the Project's life, and we will work with community representatives to support local initiatives and projects. We will share more details on the fund with you as the Project progresses. This community development fund will be in addition to the significant municipal tax revenues generated by the Project. **We are also interested in supporting local events and activities in the community. Please let us know if there are ways that we can support your community's local initiatives!**

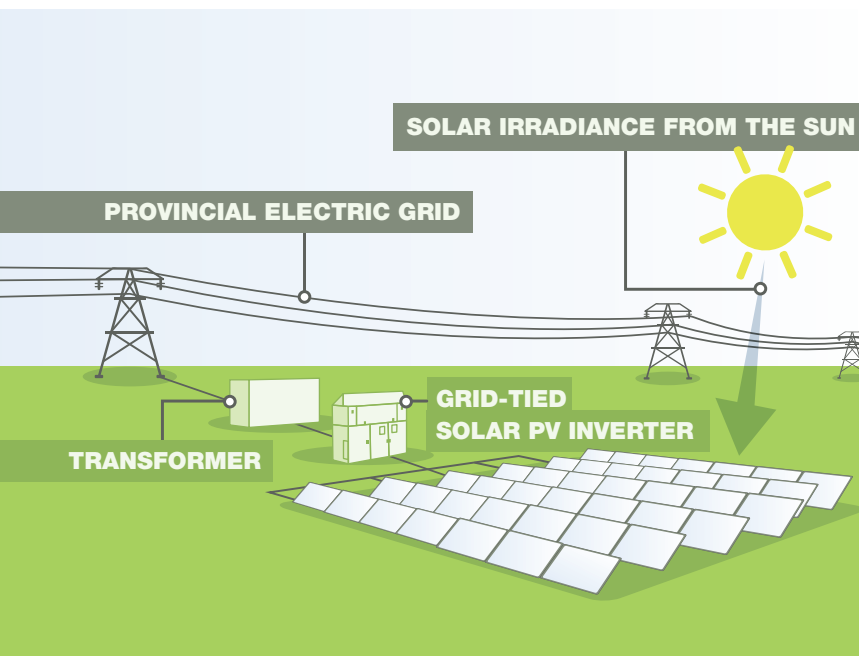
ABOUT THE TRAVERS SOLAR PROJECT

Greengate began developing the Project in 2017. The Project includes approximately 4,700 acres of land located 8 km south west of the Village of Lomond, in Vulcan County. The Project is located in Township 15, Ranges 20 and 21, West of the Fourth Meridian, on privately owned, cultivated, and grazing land. The Project area has a strong solar resource, which is characteristic of Alberta's resource, and the Project will generate clean energy over its 35+ year lifetime.

The Project will be approximately 400 MW_{ac} in size, and it is anticipated to be under construction in mid to late 2019. The Project involves installing approximately 2,500,000 solar PV modules, 166 inverter/transformer stations, an electrical collection system, access roads, and the construction of a Project Substation to connect to the Alberta Interconnected Electric System (AIES). The Project may also require a temporary laydown area during construction and will require an operations and maintenance building during Project operations. Depending on Project conditions, construction could occur in multiple phases. The proposed Project map is included as a separate page to this newsletter, and is subject to change.

Solar PV modules: Solar PV modules (also referred to as solar panels) absorb the sun's rays as a source of energy for generating electricity. These modules are used as a component of a larger PV system when connected with other modules. The proposed Project will use either mono or polycrystalline solar PV modules. Greengate is also exploring the use of bi-facial modules which is a technology that allows electricity to be generated from both the front and the back side of the module. Modules vary in dimensions; typical modules are approximately 2 metres (m) long by 1 m wide. Solar module size and capacity is subject to change. Continual innovation of solar module technology has greatly reduced the cost of solar power, allowing solar to be competitive with large scale electricity generation.

Racking: Racking is the mounting system used to support the solar PV modules. Greengate has proposed installing the modules on a fixed-tilt racking system which remains at a stationary tilt angle. Greengate is also investigating the option of using a single-axis tracker system which can follow the path of the sun to produce additional electricity.



Ground-mounting systems: This Project will be ground-mounted and will use either driven steel piles or helical "screw" piles. Both systems use a structure that penetrates the ground to anchor the racking in place.

Transformers and inverters: An inverter is an electronic device that converts direct current (dc) to alternating current (ac). Transformers are electrical equipment that increase or decrease the voltage of the electricity within the solar PV facility. The Project will use inverters and transformers to convert the dc electricity from the solar PV module to ac electricity and increase the voltage to connect to the Alberta electricity grid.

Interconnection: Greengate proposes connecting the Project to the AIES through an existing 240 kV transmission line located at the western portion of the Project. Greengate will construct the interconnection facilities to connect the Travers Solar Project to the Grid.

Electrical collection system: The inverter/transformer stations in the Project will be connected through a combination of 34.5-kilovolt (kV) aboveground or underground collector lines that connect to the Project Substation. The collector lines will be located underground, where feasible.

Access roads: The Project will require the construction of new access roads and where possible, the upgrade of existing roads in the area to minimize disturbance. These roads are required to transport materials during the construction stage and to access the Project equipment for regular maintenance during operations.

PROJECT BENEFITS

The Project will have many community benefits, including the following:

- **Local employment** — During construction, the Project will create over 200 full-time jobs, creating opportunities for both local individuals and businesses. During operation, the Project will provide an estimated two to ten permanent, full-time jobs.
- **Local economic boost** — Local businesses will experience increased activity due to the spin-off opportunities the Project will create during development, construction and operations.
- **Property taxes** — The Project will pay annual property taxes to the County, resulting in financial benefits to the community.
- **Clean electricity generation** — The Project will generate emissions-free electricity to power more than 111,000 homes in Alberta. This Project will offset more than 472,000 tonnes of greenhouse gas emissions annually.

STATUS OF STUDIES

Environment: Greengate initiated field studies in 2017 and completed the studies in 2018. These studies included the following:

- Wildlife surveys, including breeding bird, spring and fall bird migration and sharp-tailed grouse
- Vegetation studies
- Desktop wetland delineation and informal field verification
- Habitat mapping

The results of these field studies were compiled and analyzed in a third-party environmental evaluation report. The environmental evaluation was provided to Alberta Environment and Parks (AEP) for review on December 14, 2018. AEP will issue a Renewable Energy Wildlife Referral Report following their review (anticipated in Q1/Q2 2019). Greengate is committed to consulting with AEP to understand any potential concerns it may have, and Greengate will incorporate AEP's feedback. Greengate will continue to work with AEP throughout the development, construction, and operations of the Project.

Historical resources: Greengate has submitted Project information to Alberta Culture and Tourism for review to obtain a *Historical Resources Act* approval.

Noise: Greengate has completed a noise impact assessment (NIA) for the proposed Project layout as per AUC Rule 012, Noise Control. The project is considered noise compliant for all evaluated residences within 1.5 km of the Project.

Glare: Greengate has completed a third-party glare analysis for the Travers Solar Project. The analysis included 12 observations points along nearby roads (Highway 529 and Range Road 205) and at nearby residences. The third-party glare analysis results will be available to review at the upcoming open house and Greengate can provide further details of the glare analysis upon request.

Visual simulation: Greengate has completed third-party visual representations from 3 locations near the Project. Greengate has included these representations in this package.



TIMELINE

February 2019	— ● —	Initiate public consultation (February 2019 Project Specific Information Package (PSIP))
February 20, 2019	— ● —	Open house
Feb – Mar 2019	— ● —	Personal consultation with stakeholders
Q2 2019	— ● —	AUC submission
Q3 2019	— ● —	Anticipated AUC approval
Q2-Q3 2019	— ● —	Municipal Development Permit Submission and Approval
Q3 2019	— ● —	Start construction
Q4 2021	— ● —	Commercial operations

PROJECT MILESTONE

**ANTICIPATED
PROJECT
SCHEDULE ***

* Public consultation will continue throughout the Project's life, from development to construction, operations, and decommissioning.

NEXT STEPS

We will be hosting our open house, where we will show stakeholders the detailed plans for the Project. Following the open house, we will continue to engage in public consultation with stakeholders in the surrounding area. We are committed to engaging landowners, public stakeholders and potentially affected Indigenous communities regarding the Project. We have engaged Vulcan County and will initiate discussions on our emergency response plan with the Fire Chief. We intend to file for a solar power plant application with the Alberta Utilities Commission (AUC) by Q2 2019. We are committed to sharing information about the Project and working with the public to ensure that we hear and address stakeholder input and concerns. We encourage stakeholders to participate throughout this process and to contact us if you have any questions or concerns about the Project. We will incorporate a summary of stakeholder comments into the power plant application that we submit to the AUC. We have included AUC brochure titled Public Involvement in a Proposed Utility Development with this newsletter.

To learn more about the AUC application and review process, please contact the AUC at:

Telephone: 780-427-4903 (toll-free by dialing 310-0000 before the number)
Email: consumer-relations@auc.ab.ca **Website:** www.auc.ab.ca

FREQUENTLY ASKED QUESTIONS

Q: What is considered in the noise impact assessment (NIA)?

A: In Alberta, all energy-generating projects must demonstrate compliance under AUC Rule 012: Noise Control. The NIA must evaluate the cumulative noise emissions from the proposed Project; existing projects, including oil and gas facilities; and permitted power projects, and it must consider the cumulative impact at nearby residences. AUC Rule 012: Noise Control identifies the allowable threshold for a project's noise compliance. In this Project, only the inverters and substation emit noise. Literature shows that a change in noise of three decibels is barely perceptible to humans; a change of five decibels is considered apparent. The NIA results indicate that the cumulative sound level increase of 2.5 decibels at the most affected residence is below the daytime and night time permissible sound levels. The noise contour on the Noise Contour Map demonstrates that the Project is compliant with all residences.

Q: How will weeds be managed to prevent impacts on neighboring farmland during Project operations?

A: The Project is subject to the *Weed Management Act*. Greengate will manage weeds with herbicides as required. Greengate will also be using an experienced Operations and Maintenance contractor to manage weed control. We will engage local farmers and the County to discuss appropriate land cover to avoid impacts on neighboring agricultural land.

Q: What types of activities are expected during construction? How will dust be controlled during construction and operations?

A: Construction will include delivering Project equipment, earthmoving, trenching the electrical collector system, and assembling and installing the solar modules and other Project equipment. Dust management will be a part of the construction and operations plans; management may include imposed speed limits for construction and operations crews along access roads. We will work with the municipality on the dust mitigation approach.

Q: How long is the Project expected to be operational? What happens after the Project life?

A: The Project is expected to be operational for at least 35 years. At the end of the Project life, the Project will be decommissioned or repowered. If decommissioned, equipment such as the solar modules and racking could be recycled and salvaged. All infrastructure below 1.5 metres will remain underground to prevent further disturbance to the land. This is consistent with the Conservation and Reclamation Directive for Renewable Energy Operations. Decommissioning will be completed according to the regulatory requirements at the end of life, and to contractual decommissioning obligations.



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Privacy Commitment: Greengate is committed to protecting your privacy. Collected personal information will be protected under the provincial Personal Information Protection Act. As part of the regulatory process for new generation projects, Greengate may be required to provide your personal information to the AUC. For more information about how Greengate protects your personal information, visit our website at www.greengatepower.com or contact us toll-free at **1.833.476.4283 ext. 106**.