

# Springbrook Solar Project

You are receiving this package because you live on or own land within approximately 2km of the proposed Springbrook Solar Project. This newsletter is the second installment of the Public Stakeholder Consultation Process and will provide you with the relevant project updates and milestones achieved to date. We welcome any comments or questions you may have.

## **Project Overview**

Over the past several years, the proposed Springbrook Solar Project (the Project) has been under development by Saturn Power Inc. (Saturn), in partnership with the Red Deer Regional Airport and Red Deer County. The ground mount solar photovoltaic facility will have a generation capacity of up to 20 MW AC. The Project is located in Red Deer County, southwest of Red Deer, Alberta, and adjacent to the Red Deer Regional Airport approximately 1.8 km from the settlement of Springbrook.

The Project is currently in the final stages of development, having successfully completed various studies and assessments in preparation to file a generator application with the Alberta Utilities Commission (AUC) in mid 2021.

The Project will be designed and constructed to operate for 35 years. At the end of the Project life, the facility will either be decommissioned or retrofitted with new equipment, subject to approvals in place at that time.

### SPRINGBROOK SOLAR PROJECT DETAILS

#### **Project Location**

Red Deer County at the southeast corner of Township Rd 374 and Range Rd 281 (C&E Trail) (See Site Plan)

#### **Project Size**

Up to 20 MW AC

#### **Site Characteristics**

Flat, vacant and agricultural land adjacent to operating runway of Red Deer Regional Airport

#### Security

The Project site will be enclosed by a chain link fence and will be accessed via a gate at Township Rd 374

#### **Project Coordinates**

52°11'47.058" N, 113°53'49.848" W (Centre of Site)

#### **Project Area**

91.7 acres (reduced from 115 acres)

#### Technology

Single Axis Tracker panels with Bi-Facial solar PV modules that are no higher than 2.7 m

#### Interconnection

FortisAlberta Distribution Grid

#### **Energy Output**

33,866 MWh annually

# **Proposed Project Site Plan**



The Proposed Site Plan below, as seen from a bird's eye view, presents the final footprint of the Project. The land enclosed within the Project fenceline, depicted in blue, has undergone extensive environmental and feasibility studies and assessments to ensure the safety and viability of the Project. The Project will be a distribution connected project with FortisAlberta and will require approximately 46,000 Bi-Facial solar PV modules, 80 inverters, and 8 transformers all enclosed in 4.4 km of perimeter fencing that will be at least 2.1 m in height. An online interactive Site Plan can be found on the Project Website (link provided on final page).



# **Project Updates**



Correspondence throughout the first round of the Participant Involvement Program (PIP) has proven to be invaluable, giving Saturn the opportunity to consult and collaborate with community members. These discussions have influenced changes to the Project Site Plan, including:

**Increased Setbacks**: An increase in the distance between road frontages and the Project boundary to help reduce visual impacts for residents and passersby along Twp Rd 374 and Rge Rd 281 (C&E Trail). Towards the northern most end of the Project, the solar array will be set back 94 m from the edge of Twp Rd 374. Towards the western most end of the Project, the solar array will be set back approximately 251 m from the edge of Rge Rd 281 (C&E Trail).

**Construction Laydown Area**: To increase the array setback from Twp Rd 374, the location of the construction laydown area, that will store Project equipment and materials, was changed.

Project Footprint: A reduction in the overall Project Footprint from 115 acres to 91.7 acres.

**Our Commitment:** A commitment, by Saturn, to add and maintain new vegetative screening around key areas of the Project perimeter, including along the northern Project boundary on Twp Rd 374.

# **Key Project Stages and Equipment**

#### **Construction Mobilization**

Once the Project is fully permitted and the Engineering and Procurement finalized, the mobilization of the work force, vehicles, equipment, and materials will begin. Deliveries will be made to a designated laydown area within the fenced area of the Project.

#### **Site Preparation**

The site is already very flat and will require minimal grading to host the Project.

#### **Access Roads**

Gravel roads, approximately 5 m wide, will be constructed within the Project Footprint to provide access within the site during construction and maintenance of the facility.

#### **Facility Equipment Installation**

#### Pile Installation:

Piles are used to support the racking and solar PV panels. Piles will be driven or rotary bored into the ground approximately 2.0 m - 4.0 m deep depending on final engineering.

#### **Racking Installation**:

Steel racking is installed onto the piles and used to safely support the solar PV panels. The Project will utilize Single Axis Tracker racking which aligns the panels with the sun and uses a mechanical motor to slowly follow the sun from east to west as the day progresses.

#### Solar PV Module Installation:

These modules will be mounted onto the racking system to transform absorbed sunlight into generated electricity when exposed to sunlight.

#### Cabling:

All major cabling will be placed within dug and reinstated trenches along the rows of the solar panels.

#### **Termination and Testing**:

Cable termination into all facility equipment will be finalized and tested to ensure proper and complete connection and installation.

#### **Inverter Installation**:

Inverters will convert the electricity generated by the solar panels from direct current (DC) to a publicly usable alternating current (AC). The inverters will be mounted on the racking across the Project site.

#### **Transformers**:

Transformers will be used to step-up the voltage to deliver the renewable energy to the utility grid.

#### **Commissioning and Interconnection**

Commissioning procedures will confirm the Project system is designed, constructed, operating and performing as intended prior to generating power onto the FortisAlberta distribution grid.

### Estimated Project Timeline

#### 2019/2020

Field Studies and Impact Assessments Conducted

**October 2020** First Round of Participant Involvement Program is Initiated

> May 2021 Completion of Impact Assessments

**June 2021** Round 2 Participant Involvement Program is Initiated

[WE ARE HERE]

Summer 2021 Submit AUC Application

Summer/Fall 2021 AUC Review and Approval

Winter 2021 Equipment Procurement & Engineering

#### Winter 2021/Spring 2022

Acquire Construction-Specific Permits, Development Permit, and Building Permit

> **Spring 2022** Start of Construction

Winter 2022 Expected Commercial Operation Date

# **Project Benefits**



**Air Quality:** Annually, the Project is estimated to reduce Greenhouse Gas (GHG) Emissions by approximately 17,950 tonnes of CO2e. Over the 35-year anticipated Project lifespan, GHG emissions will be reduced by 575,000 tonnes of CO2e.

**Alberta's Renewable Electricity Act (the Act):** The Act outlines the initiative of phasing out coal fired emissions and moving towards having 30% of Alberta's energy generated by renewable sources by 2030. The Project will aid in supporting this goal and reduce the Province's reliance on fossil fuel energy sources.

#### **Economic Benefits:**

**Job Creation (direct):** There will be approximately 35-40 short-term jobs created throughout the development and construction phases of the Project and 1-2 full time jobs required for Operation and Maintenance of the Project throughout its lifetime. Approximately 90% of the required jobs will be locally sourced.

**Job Creation (indirect):** Throughout the development and construction of the Project, a surge of employees will be present within the Red Deer area, requiring accommodation and lodging, and relying on local goods and services for the majority of their needs. This will help spur additional revenue for the local community.

**Property Tax Revenue:** Direct revenue will be generated for the Red Deer County through property tax revenue that will equate to over \$5 Million over the Project lifespan.

**Community Benefits:** Saturn Power and Red Deer County will be developing a Community Benefits Agreement which ensures that additional funds flow directly into the community including monetary contributions to community groups, fundraisers and clubs, as well as scholarships for local students. In addition, Saturn hopes the Project can participate further with the community through apprenticeship programs, facility tours, and informative presentations to schools.

**Location:** The Project site has been selected in an unserviceable area of the Red Deer Regional Airport that is well outside of future long term business development plans of the Airport and is adequately setback from runway operations to ensure safe operations.

### **RED DEER REGIONAL AIRPORT**

"In addition to providing the region with a sustainable power source, this project will also provide the Red Deer Regional Airport with yet another source of stable operating revenue, the likes of which are required in order for the Airport to achieve its goal of becoming financially sustainable." – Graham Ingham, CEO, Red Deer Regional Airport

# Permitting



### **Provincial Approvals**

The Project will require approval from the Alberta Utilities Commission (AUC), which is an independent agency of the Province and ensures that the delivery of Alberta's utility service takes place in a manner that is fair, responsible and in the public interest. To support the AUC Application, we have engaged independent consultants to perform several environmental and technical studies to assess impacts of the Project and acquire approvals from other provincial agencies. Various reports supporting the approvals listed below are available on the Springbrook Project website.

**Alberta Environment and Parks - Fish and Wildlife Stewardship (AEP-FWS):** A third-party environmental consultant has conducted field studies to confirm existing wildlife, wildlife habitat, vegetation, wetlands and water courses within the Project area and have submitted their findings into the AEP-FWS for review. The AEP-FWS has reviewed the Project location, mitigation strategies, including associated infrastructure and construction plans, and post-construction monitoring and mitigation program. The AEP-FWS has issued a Referral Report ranking the Project as low risk to wildlife and wildlife habitat, based on Project siting, limited wildlife use in the area, and commitments made to mitigate and monitor wildlife impacts.

Post-construction monitoring will be conducted and supervised by an experienced wildlife biologist for the first three years of the Project Operation, in compliance with the AEP Wildlife Directive for Alberta Solar Energy Projects. An annual report on findings will be submitted to the AEP and AUC to assess the effectiveness of mitigation efforts, identify any wildlife risks, and determine whether additions or modifications to mitigation measures will need to be made.

**Glint and Glare Analysis:** A Glint and Glare analysis was conducted to assess the potential of glare impacts from the proposed solar array on nearby receptors. This analysis was recently updated in accordance with the 2021 regulatory changes dictated by the AUC Rule 007. The study concluded that the project can operate without causing hazardous glare on evaluated receptors including aviators, drivers and residences located near the Project.

**Noise Impact Assessment (NIA):** A NIA was conducted by an experienced third-party consultant in accordance with the AUC Rule 012: Noise Control. The results of noise modelling indicated that all surrounding receptors are in compliance with the permissible sound levels outlined in the AUC Rule 012.

**Historical Resources Act:** The Ministry of Culture, Multiculturalism and Status of Women has reviewed and issued approval for the construction of the Project under Alberta's Historical Resources Act.

### **Federal Approvals**

A qualified aviation consultant has been engaged to ensure that the design of the Project considers the safety and future growth of the Red Deer Regional Airport.

**Transport Canada:** A Plan of Construction Operations (PCO) is currently under review. The PCO has been prepared by a third-party aviation consultant to ensure that the Project design considers the safety of the Red Deer Regional Airport operations. The PCO outlines the steps and restrictions to construction activities to ensure minimum impacts on the Airport operations.

**NavCanada:** Under the NavCanada permitting requirements, a Land Use Application was submitted and approved ensuring our Project development complies with air navigation system safety and efficiency.

### **Municipal Approvals**

Red Deer County has been a true advocate for the Project and has become long-term partners in the endeavor of bringing clean emission-free renewable energy to one of Alberta's fastest growing communities.

**Red Deer County:** Prior to construction start, the Project will acquire additional approvals from Red Deer County including but not limited to a Building Permit and Development Permit to ensure the Project development is compliant with Land Use Bylaws.



### SATURN POWER Company Background

Saturn Power Inc. is a Canadian renewable energy developer specializing in mid-sized utility scale solar, wind and energy storage projects. With more than 14 years of experience, Saturn has significant renewable energy knowledge and expertise, ranging in scope from early-stage development through to construction and commercial operation of over 150 MW of solar, wind and energy storage power projects and currently operates over 45 MW of assets in Canada.

As Saturn emerged from the vision of two farmers, their knowledge, value, and unique understanding of the lay of the land has been embedded into the internal workings of the company and its employees. Saturn has always put a strong emphasis on being unrivalled in its stewardship of the land and will continue to do so wherever it operates.

### **RED DEER COUNTY**

"Red Deer County is proud to support this exciting new project in the Hamlet of Springbrook, as it will generate valuable revenue for this emerging community while also supporting the Red Deer Regional Airport. In addition, renewable energy is identifed as a priority in the Red Deer County Economic Development Strategic Plan 2017." - Tara Logan, Business Development Officer, Red Deer County

# **Next Steps - Public Consultation**

Saturn strongly believes in the importance of community outreach to build and maintain strong relationships within the communities which host our projects. We encourage you to provide feedback or to reach out with questions. For more information on how you can participate in the AUC approval process, please refer to the enclosed AUC brochure Participating in the AUC's independent review process. Please visit our website for Project information, reports on completed assessments and studies, and a Frequently Asked Questions (FAQ) document of queries from the first PIP round: **www.saturnpower.com/Springbrook-Solar** 

### CONTACT US



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