LETHBRIDGE 2 AND LETHBRIDGE 3 SOLAR PROJECTS

OCTOBER 2023 NEWSLETTER #2

Low Carbon Nu-Energy Corp. (the Proponent) is developing the Lethbridge 2 and Lethbridge 3 solar projects in your area. We are committed to engaging landowners, public stakeholders and members of the local community and we look forward to discussing the Projects with you.

ABOUT LOW CARBON NU-ENERGY CORP.

About Low Carbon Nu-Energy Corp. is a joint venture between Low Carbon (a privately-owned UK investment and asset management company founded in 2011) and Nu-E Corp. (a Canadian owned and operated solar company headquartered in Calgary, Alberta). The joint venture was established to develop a portfolio of projects in Alberta, including the permitted Lethbridge 1 Solar Project and the Lethbridge 2 and Lethbridge 3 Solar Projects, detailed further in this newsletter.

ABOUT THE PROJECT

In June 2023 a newsletter was mailed out to stakeholders introducing the Projects and we are writing today to provide additional information and an update on the Projects. The Lethbridge 2 Solar Project is a 17-megawatt (MW) facility and the Lethbridge 3 Solar Project is a 140 MW facility.

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PRIVACY STATEMENT

Collected personal information will be protected under the provincial *Personal Information Protection Act*. As part of the regulatory process for new generation projects and transmission lines, the Proponent may be required to provide your personal information to the Alberta Utilities Commission (AUC).

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PROJECT LOCATION

The Projects are both located in Lethbridge County approximately 3.5km south of the City of Lethbridge, as shown to the right. The Projects are located on approximately 1,450 acres combined of agricultural land.

The location for the Projects was chosen based on several considerations, including:

- Proximity to existing transmission and distribution infrastructure
- Strong solar resource
- Suitable land characteristics for a solar project
- Landowners open to hosting a solar project

PROJECT BENEFITS

The Proponent is committed to making a positive social impact for the communities in which we work. We strive to be a good neighbour, and work closely with the community to identify areas of opportunity and concern. Our community engagement will continue throughout the Project phases, including construction and operation.

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

- Creates new direct and indirect jobs through the development, construction, and operation phases of the Project. Roughly 100 short term jobs will be created throughout development and construction, 2-4 full time jobs will be created for the operation and maintenance of the Project. Approximately 90% of the jobs will be sourced locally.
- Property tax revenues throughout the life of the Project will support municipal services, infrastructure and education.
- Local Economic Boost: Local businesses will experience increased activity due to the spin-off opportunities created by the Project during development, construction, and operations.





PROJECT INFRASTRUCTURE

SOLAR PV MODULES

Bifacial PV modules have been proposed for installation at the Projects. A bifacial module is a double-sided module that transforms sunlight into electrical energy on both its top and bottom sides. They are different from mono-facial modules which only use one side for solar energy production. Bifacial modules are capable of producing more power per module and typically have higher efficiency than mono-facial modules, resulting in less land usage for the same or greater power output. Local weather conditions in Alberta are well suited to bifacial technology as there is substantial snow cover on the ground, which will boost production during the winter months. One of the benefits of using bifacial modules in Alberta is that sunlight is reflected from the surface of snow-covered land, which can generate electricity from the underside of the panel.

GROUND MOUNTING SYSTEMS

The Proponent intends to install the PV modules on single-axis tracker systems which follow the path of the sun to produce additional electricity.

INVERTER/TRANSFORMER STATIONS

Inverters are electrical devices that change direct current (dc) to alternating current (ac). Transformers are electrical equipment that increase or decrease the voltage of electricity. The Projects will use inverter/transformer stations to change the dc electricity from the solar PV modules to ac electricity and increase the voltage.

PROJECT SUBSTATION

The 34.5 kV underground collector lines will connect to the power substation where power transformers and control systems will step up the voltage to 138kV for connection to the AIES. A new substation is only required for the Lethbridge 3 Project.

INTERCONNECTION

The Proponent proposes connecting the Lethbridge 2 Project to the Alberta Integrated Electric System at the distribution level and connection of the Project will be handled by FortisAlberta. The Lethbridge 3 Project will be connected to the existing 138kV transmission line on the west side of the Project, via a new project specific 138kV collector substation. AltaLink Management Ltd. (AltaLink) will construct the interconnection facilities to connect the Lethbridge 3 Project to the grid, subject to a separate regulatory process with the Alberta Electric System Operator (AESO).

OTHER INFRASTRUCTURE

The inverter/transformer stations in the Projects will be connected through 34.5kV underground collector lines that connect to an electrical house (E-house) containing medium voltage and low voltage switchgear and auxiliary equipment for the Lethbridge 2 Project and to the Project substation for the Lethbridge 3 Project. The new substation will contain one high voltage transformer. In order to transport materials during the construction stage and to access the Project equipment for regular maintenance during operations, the Project will require the construction of new access paths, and where possible, the upgrade of existing roads in the area to minimize disturbance.



PROJECT STUDIES

Environment:

The Proponent initiated field studies in May 2022 which included the following:

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

The results of these field studies were compiled into a Renewable Energy Project Submission Report, which was submitted to Alberta Environment and Protected Areas (AEPA) in March 2023. AEPA will issue a Renewable Energy Wildlife Referral Report following their review (anticipated in November 2023). The Proponent is committed to consulting with AEPA to understand any potential concerns it may have, and will incorporate AEPA's feedback. The Proponent will continue to work with AEPA throughout the development, construction, and operations of the Project, and ensure that environmental surveys are kept up to date per AEPA guidelines.

Historical resources:

A submission was made to Alberta Culture for both Project areas in April 2023. Alberta Culture required specific archaeological field work to be completed and the results of the field work were submitted to Alberta Culture in March 2023. This submission is under review and an approval is expected by December 31, 2023.

Noise:

The Proponent is completing a noise impact assessment (NIA) for the proposed Projects as per AUC Rule 012, Noise Control. This detailed NIA shall confirm that the Projects are noise compliant for all evaluated residences within 1.5km of the Projects. A copy of the NIA will also be included in the application for the AUC.

Glare:

A glare assessment has been completed for the Project to assess potential for glare at aerodromes, nearby residences and along local roads. The assessment modeled three neighbouring roads (6 receptors), seven residences (12 receptors) and four flight path receptors landing at the Lethbridge airport. The glare assessment determined that lower grade glare, including the lowest level "green" and intermediate level "yellow" grade glare, was identified at 14 of the 22 evaluated receptors. With mitigation via backtracking angle limits, no assessed receptors are expected to receive hazardous yellow glare. Backtracking angle limitation is a common and easy to implement mitigation method. With this method, yellow glare risk is eliminated at all receptors and the Project is not likely to have the potential to create hazardous glare conditions on the assessed receptors. A glare impact map outlining the assessment results is included in this package and a copy of the Solar Glare Analysis Report will be included in the application to the AUC.

Interconnection:

Applications for system access have been submitted to the Alberta Electric System Operator and various engineering studies are underway to allow the Project to connect to the Grid.

WHO IS THE AUC?

The Alberta Utilities Commission (AUC) is a quasi-judicial independent agency established by the Government of Alberta, responsible to ensure that the delivery of Alberta's utility service takes place in a manner that is fair, responsible and in the public interest. They regulate investor-owned natural gas, electric and water utilities, and certain municipally owned electric utilities to ensure that customers receive safe and reliable service at just and reasonable rates. The AUC ensures that electric facilities are built, operated and decommissioned in an efficient and environmentally responsible way. The AUC also provides regulatory oversight of issues related to the development and operation of the wholesale electricity market in Alberta as well as the retail gas and electricity markets in the province. For more information visit www.auc.ab.ca or refer to the enclosed brochure.

PRELIMINARY PROJECT SCHEDULE

Newsletter #1 to Stakeholders – June 2023 Newsletter #2 to Stakeholders – October 2023 Public Consultation – Ongoing Tentative Public Open House - December 2023 AEPA Submission - March 2023 Anticipated AEPA Referral Report – November 2023 Anticipated AUC Submission – December 2023 Anticipated AUC Submission – December 2023 Anticipated AUC Approval – April 2024 Municipal Permitting - March 2024 to September 2024 Construction Commencement (if approved) – Q2 2025 Construction Completion - Q1 2027

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

Alberta Utilities Commission (AUC) Phone: (780) 427-4903 Toll-Free by dialing 310-000 before the number Email: consumer-relations@auc.ab.ca

NEXT STEPS



The Proponent is committed to meaningful engagement with all stakeholders in the Project. Following this newsletter, we will be contacting nearby landowners, occupants and residents to gather feedback and hosting a community open house, expected in December 2023. An invitation will be sent out to stakeholders once the open house details are known. We intend to file two solar power plant applications and one substation application with the AUC in December 2023. The Proponent intends to submit the required Municipal applications to Lethbridge County following AUC submission. We are committed to sharing information about the Projects 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 Projects. We will incorporate a summary of stakeholder comments into the application that we submit to the AUC. We have included an AUC brochure titled "Participating in the AUC's independent review process" with this newsletter.



CONTACT US

If you have any questions about the Project, or to arrange a personal consultation, please contact:



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