

JUMBO SOLAR WITH STORAGE PROJECT

**AUGUST 2023
NEWSLETTER #1**

Neoen is developing the Jumbo Solar with Storage Project in your area. We are committed to engaging landowners, public stakeholders and members of the local community and we look forward to discussing the Project with you.

ABOUT NEOEN



Neoen is the leading French Independent Power Producer developing, financing, constructing and operating renewable energy power plants. Neoen is a long-term owner-operator, specializing in wind, solar and energy storage, with an experienced staff of 360 employees and a presence in 17 countries worldwide. As of today, Neoen has 6.6 GW of assets under operation and/or late-stage construction. In April 2023, Neoen started the construction of the Fox Coulee Project (75MWac / 93MWp), its first project in Alberta, located in Starland County.

ABOUT THE PROJECT

The Jumbo Solar with Storage Project (the Project) is being developed by Neoen Renewables Canada Inc. (Neoen or the Proponent). The Project began development in 2022 and includes approximately 1,500 acres of land located approximately 1.6 km south west of the Town of Fort Macleod, Alberta, in the Municipal District of Willow Creek No. 26. The Project is located within Township 8, Range 26, West of the Fourth Meridian, on privately owned, cultivated land (as shown on the enclosed map). The Project area has a strong solar resource, characteristic of Alberta, and will generate clean energy over its 30+ year lifetime.

The Project is located on cultivated land and will consist of up to 218 megawatts ac (MWac) of solar capacity with a 71MW/144 megawatt-hour (MWh) battery energy storage system (BESS), charging from the solar facility. Based on the preliminary design, the Project includes approximately 405,000 solar photovoltaic modules installed on a single-axis tracking system, 45 inverter/transformer stations, an electrical collection system, internal access roads and the construction of a Project substation to connect to the Alberta Interconnected Electric System (AIES).

IN THIS NEWSLETTER:

- About Neoen
- About the Project
- Project Location
- Project Benefits
- Project Infrastructure
- Project Studies
- Who is the AUC?
- Preliminary Project Schedule
- Next Steps
- BESS Information
- BESS FAQ
- Contact Us

INSERTS:

- Preliminary Project Layout
- Glare Map
- AUC Brochure

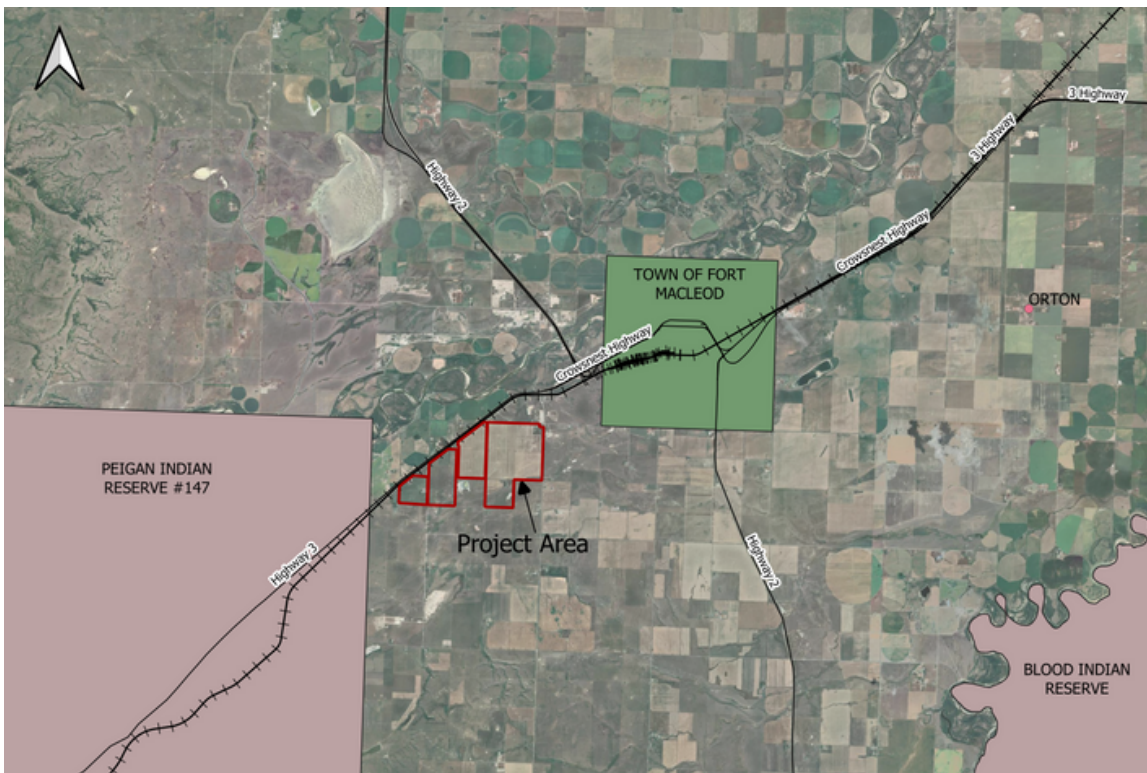
PRIVACY STATEMENT

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).



PROJECT LOCATION

The proposed Project is located approximately 1.6 km south west of the Town of Fort Macleod, as shown below.

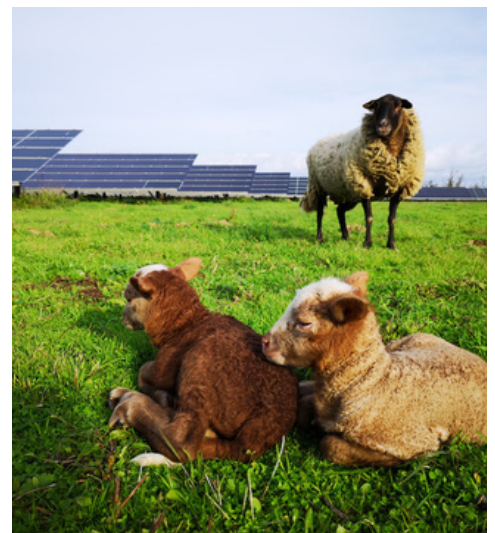


PROJECT BENEFITS

Neoen 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:

- **Local Employment:** The Project will create up to 350 full-time jobs during construction, creating opportunities for local individuals and businesses. During operations, the Project will provide five permanent full-time jobs.
- **Local Economic Boost:** Local businesses will experience increased activity due to the spin-off opportunities created by the Project 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 Energy Generation:** The Project will generate emissions-free electricity for approximately 70,000 homes.



PROJECT INFRASTRUCTURE

SOLAR PV MODULES

Bifacial PV modules have been proposed for installation at the Project. 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.

BATTERY ENERGY STORAGE SYSTEM

The BESS will be located adjacent to the Project substation. The collocated battery storage configuration will store energy and enable increased integration of renewables with the electric grid. Neoen expects a total of 72 BESS containers and 18 inverter/transformer skids. Please refer to the BESS Frequently Asked Questions page and enclosed site layout for additional details.

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 Project will use inverter/transformer stations to change the dc electricity from the solar PV modules to ac electricity and increase the voltage.

INTERCONNECTION

The Proponent proposes connecting the Project to the AIES through an existing 240-kilovolt (kV) transmission line located directly on the Project lands. AltaLink Management Ltd. (AltaLink) will construct the interconnection facilities to connect the 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 Project will be connected through 34.5 kV underground collector lines that connect to the Project substation. The Project 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 March 2023 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 and analyzed in a third-party report. The report will be provided to Alberta Environment and Protected Areas (AEPA) for review in October 2023. AEPA will issue a Renewable Energy Wildlife Referral Report following their review (anticipated in Q1 2024). 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:

The Project expects to receive *Historical Resources Act* approval in March 2024 from Alberta Culture.

Noise:

The Project is completing a noise impact assessment (NIA) for the proposed layout as per AUC Rule 012, Noise Control. This detailed NIA shall confirm that the Project is noise compliant for all evaluated residences within 1.5km of the Project. 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 ground transportation route paths (Highway 3, Highway 810, and one railway) and twenty residences within 800m of the Project. In addition, the two Fort MacLeod Airport flight paths within 4km of the Project were modeled. The glare assessment determined that 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 on the flight paths 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 Hazard Analysis Report will be included in the application to the AUC.

Emissions Modelling: As part of the Project's emergency response plan, air emissions modelling will be undertaken for the BESS equipment. A copy of this assessment will be available upon request.

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

Notification to stakeholders – August 2023
Public Consultation – Ongoing
Tentative Public Open House - September 2023
AEPA Submission - October 2023
Anticipated AEPA Referral Report - Q1 2024
Anticipated AUC Submission – March 2024
Anticipated AUC Approval – August 2024
Municipal Permitting - March 2024 to September 2024
Construction Commencement (if approved) – Q3 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

Neoen 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 September 2023. We intend to file a solar power plant and battery storage application with the AUC in March 2024. 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 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:



Samantha Brown

SABR Energy Consulting Inc.

P: (587) 434-7547

E: sbrown@sabreenergyconsulting.com

BATTERY ENERGY STORAGE SYSTEM

The Project is designed to incorporate 71 MW/144 MWh of battery energy storage, charging from the solar facility. The collocated hybrid solar with storage project configuration enables the integration of renewables with the electric grid, maximizing the use of the transmission infrastructure and lowering the associated costs for consumers. The BESS will be located adjacent to the substation, as indicated on the enclosed site plan. The BESS includes inverters housed within the battery units, as well as medium voltage transformers, to change the current and voltage of electricity as needed. The BESS is a containerized solution designed to meet and exceed National Fire Protection Agency (NFPA) 855 requirements. Energy storage represents a safe and reliable application in the evolution of the energy mix in Alberta.

BATTERY ENERGY STORAGE SYSTEM - FAQs

What is a Battery Energy Storage System?

A BESS stores energy and discharges it at times when it is most needed. Stored energy enables a more reliable grid and a greater supply of renewable energy to the grid.

What type of batteries are used?

The proposed BESS consists of lithium-ion batteries, which are the same batteries used to charge smart phones and electric cars. This battery technology has been proven to be stable and reliable.

What safety measures are in place for the batteries?

The proposed BESS will be self-contained units placed on concrete pads. Each battery contains internal temperature control, cooling systems, and electrical safety systems which enable it to automatically shut down if is not performing as expected. A BESS-specific emergency response plan will be included in the Project's site-specific emergency response plan.

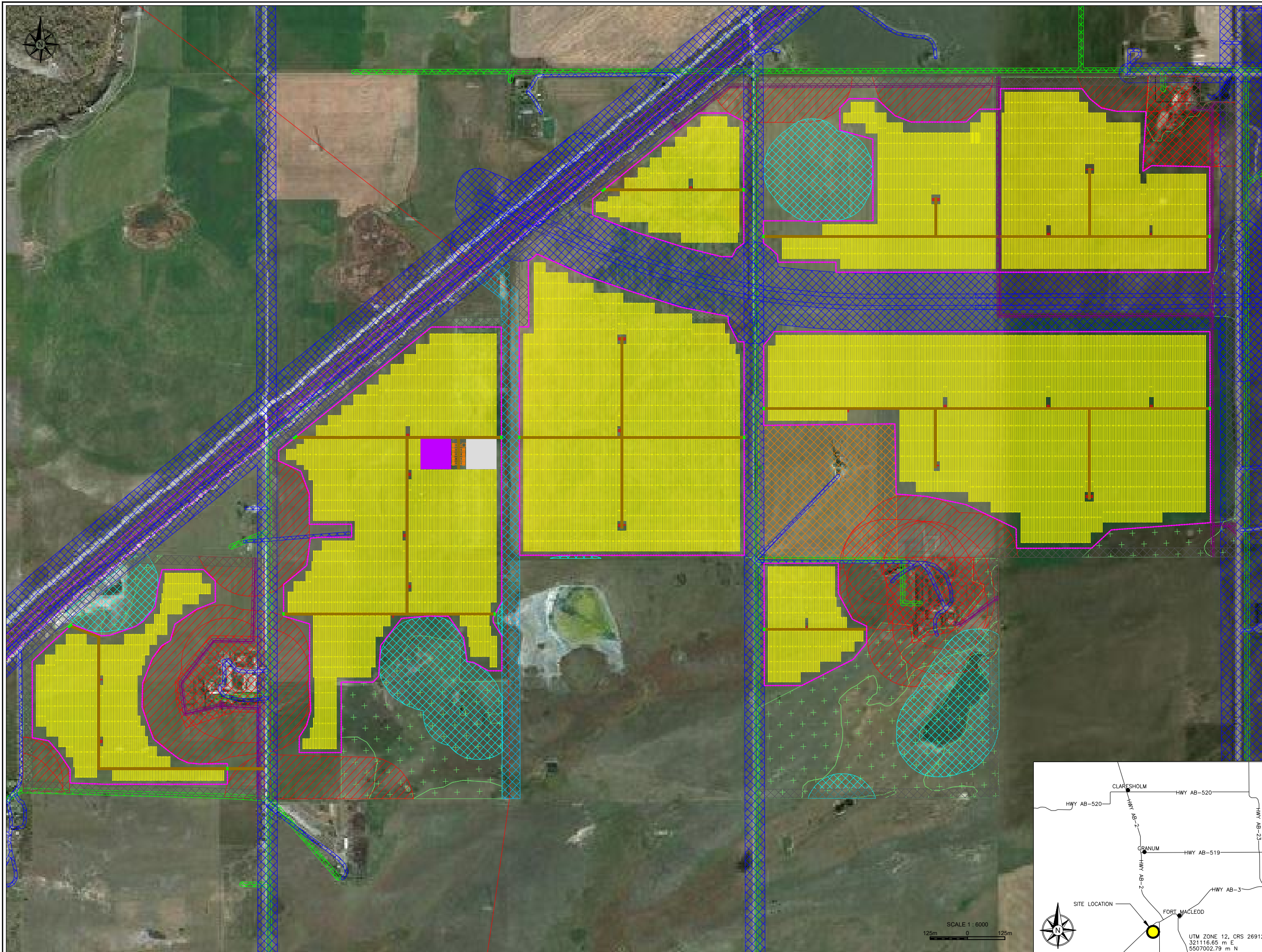
What happens to the batteries after operation ends?

Neoen will remove all above-ground infrastructure, and rehabilitate the site when the Project ceases to operate. After removal, most of the material in the batteries is reclaimed or recycled with over 60% recovered for re-use.

What will the BESS look like?

Each container is a standard 20 foot container (length 6.1m / width 2.5m / height 2.9m). For comparison, a regulation basketball hoop stands 10 feet tall. A total of 18 inverter/transformer skids are expected and each skid measures 10.3m x 6.0m. The overall footprint of the BESS area is 126m x 108.8m. The details of each BESS, including the number of storage units, the associated inverter/transformer stations, and arrangement of the components, are shown on the enclosed site layout.

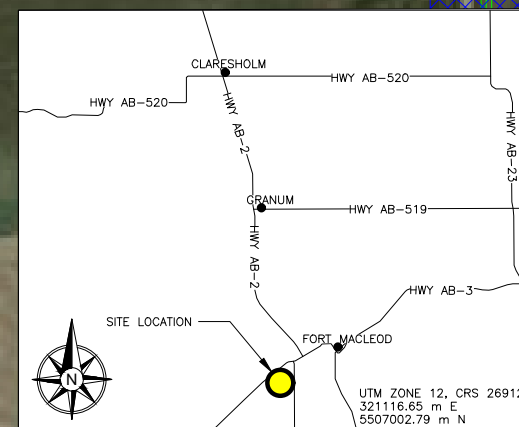




NOTES:

SITE DETAILS	
FENCED AREA (ACRES)	~818
RACKING TYPE	1P
PITCH	5.0m
MODULES PER STRING	25
NO. 3 STRING TRACKERS	4446
NO. 2 STRING TRACKERS	890
NO. 1 STRING TRACKERS	1098
RATED MODULE OUTPUT	590
MODULE QUANTITY	405,400
INVERTER RATING (kVA)	4400
INVERTER QUANTITY	45
BESS CONTAINER STORAGE CAPACITY (MWh)	3
BESS CONTAINER QUANTITY	54
BESS PCS CAPACITY (MVA)	8.8
BESS PCS QUANTITY	9
BESS CAPACITY (MW/MWh)	71/144
DC CAPACITY (MW)	239.19
GRID CAPACITY (MW)	178.20
GRID OVERBUILD	1.208
GROUND COVERAGE RATIO	0.4344

- LEGEND:
- SOLAR MODULES C/W TRACKER
 - INVERTER / TRANSFORMER STATION
 - SUBSTATION (100m x 100m)
 - LAYDOWN AREA (100m x 100m)
 - BESS (8.8MVA, 6x3MWh BESS CONTAINERS)
 - BESS SUPPLEMENTARY SEA-CANS
 - INTERNAL ACCESS ROADS (8m WIDTH)
 - WETLAND SETBACK (100m)
 - 240 kV TRANSMISSION LINE / ROW (60m)
 - MUNICIPAL ROADS AND HIGHWAYS / SETBACK (ROAD 22.86m FROM ROW, HIGHWAY 70m)
 - PRIVATE ROAD / SETBACK (5m)
 - RESIDENCE PROPERTY / SETBACK (152.4m)
 - RAILWAY / ROW (60m)
 - LOW PRESSURE PIPELINE / ROW (13m)
 - NON-PARTICIPATING NEIGHBOUR SETBACK (45.7m FRONTING ON OR ADJACENT TO MUNICIPAL ROADWAY, 30.5m OTHER)
 - NATIVE PRAIRIE
 - EXISTING TURBINE SETBACK
 - DISTRIBUTION LINE / SETBACK (8m)
 - FENCELINE
 - GATE



A ISSUED FOR REVIEW	MM	JC	SW	2023/07/18
REV: DESCRIPTION:		BY: CHR'DJAPP'DJ	DATE:	
STATUS: REVIEW				
<p>Green Cat Renewables Canada Corp. #855 - 401 9th AVE SW CALGARY, AB, CANADA T2P 3C5 +1(866) 216-2481 www.greencatrenewables.ca</p>				
CLIENT:				
PROJECT: JUMBO SOLAR WITH STORAGE				
DRG TITLE: SITE PLAN				
DATE: 2023/07/18	SCALE: 1:6000	PROJECT SHEET NUMBER: 23041-ELE-LAY-0001	ISSUED BY: JC	APPROVED BY: SW

319000

322000

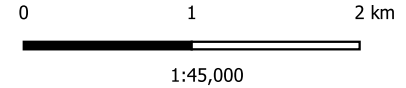
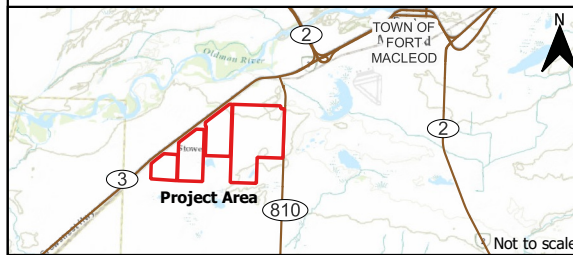
325000

Jumbo Solar with Storage Project Glare Impact Map

Legend

- Project Area
- Consultation Area (400m)
- Notification Area (800m)
- Road Route Assessed
- Railway Route Assessed
- Highway
- Municipal Road
- Railway
- ➔ Flight Path Direction

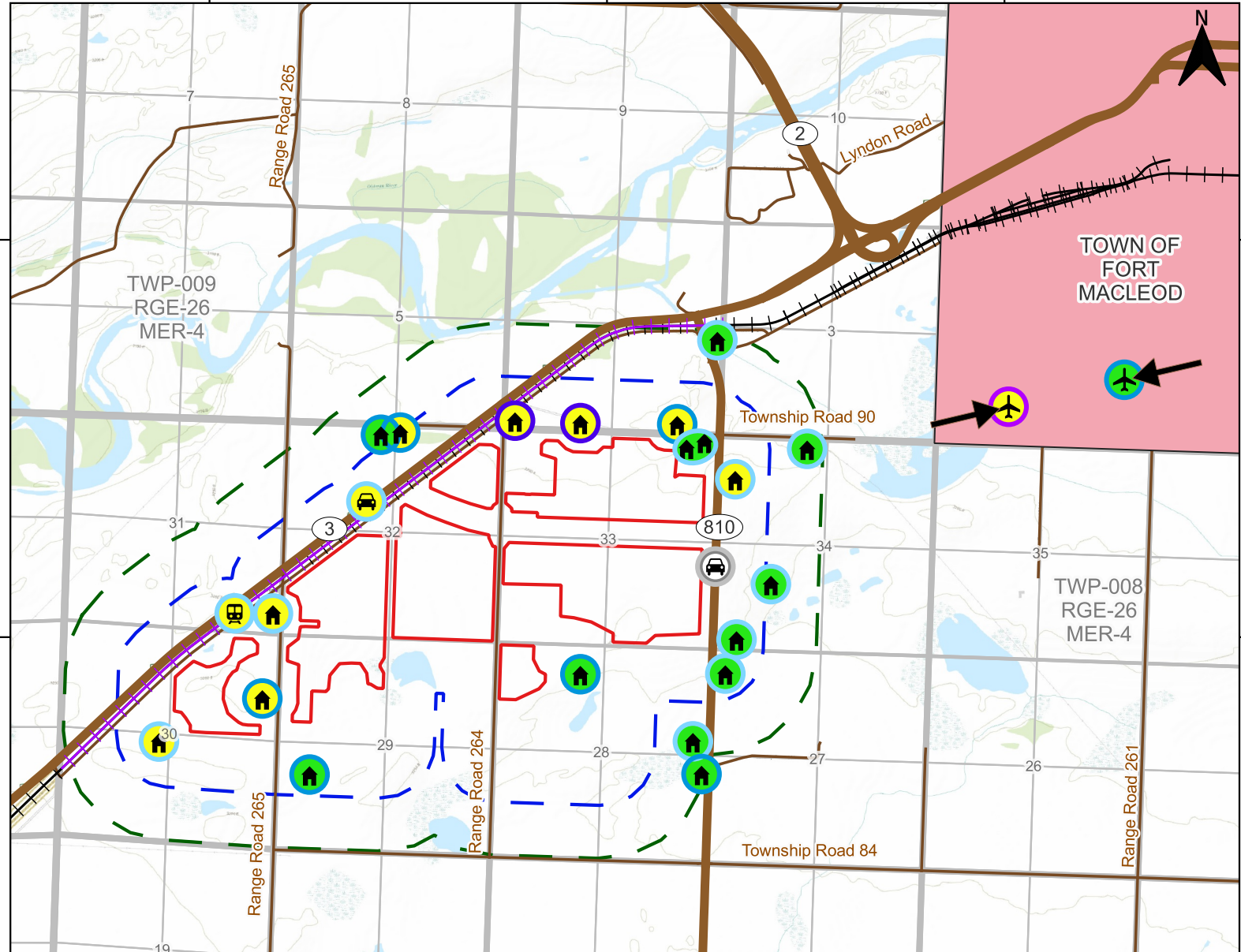
Notes: Glare impacts depicted in this map represent the worst-case scenario for most receptors when arrays are allowed to backtrack to angles as shallow as 1°. Notably, the flight paths experience more glare at some steeper backtracking angles above 1°, but mitigation methods will be used to eliminate any yellow glare in the assessed fields of view on these flight paths.



Coordinate System: EPSG:26912 - NAD83 / UTM zone 12N
 Data Credits: Neoen Renewables Canada Inc., Green Cat Renewables Canada Corp., AltaLIS, ESRI, NRN

Client: **NEOEN**

Drawing by: Green Cat Renewables Canada Corp.
 Doc Number: Jumbo_GlareImpactMap
 Version: 1.0
 Author: BK
 Checked by: JM
 Approved by: JS
 Date: 2023-07-25



Glare Receptors	Glare Intensity	Max Minutes/Day**
Dwelling	No Glare	0 min/day
Passenger/Truck/Commercial*	Green Glare	1-15 min/day
Train	Yellow Glare	16-30 min/day
Flight Path*		31-60 min/day
		155 min/day

* Assessed as routes (not point locations).
 ** ±15° field of view (FOV) for the ground based transportation routes. ±25° FOV for flight paths. Glare does not necessarily occur every day of the year. The max minutes/day accounts for both green and yellow glare.

319000

322000

325000

5509500

5506500

5503500

5509500

5506500

5503500

Step 5: Consultation and negotiation (if applicable)*

The Commission supports ongoing efforts to reach an agreeable outcome for the applicant and all affected parties. The Commission encourages the applicant and those who have filed a statement to continue to attempt to resolve any outstanding issues. If all concerns can be satisfactorily resolved this may eliminate the need for a formal hearing. However, if there continues to be unresolved issues, those matters will typically be addressed at an AUC hearing.

Step 6: The public hearing process*

The AUC will issue a notice of hearing if there continues to be legitimate unresolved concerns with the application. The notice of hearing will provide a hearing date and location in addition to a process schedule. The AUC conducts public hearings in its Edmonton and Calgary hearing rooms and, where suitable venues exist, in communities closer to the proposed project area.

The public hearing process allows persons with standing that have unresolved concerns about the application, to express their views directly to a panel of Commission members.

An AUC hearing is a formal, evidence-based, court-like proceeding. The public can attend the hearing in person or listen to hearings online through the AUC's website.

Participants in a hearing can either represent themselves or be represented by a lawyer. In addition, participants may hire experts to assist in preparing and presenting evidence to support their position.

Cost assistance

A person determined by the Commission to be a local intervener can apply for reimbursement of reasonable costs. Those who hire a lawyer or technical experts must be aware that while reimbursement for the costs of legal and technical assistance is available under AUC Rule 009: *Local Intervener Funding*, recovery of costs is subject to the Commission assessing the value of the

contribution provided by the lawyer and technical experts. People with similar interests and positions are expected to work together to ensure that expenditures for legal or technical assistance are minimized and costs are not duplicated.

Step 7: The decision

The AUC's goal is to issue its written application decision no more than 90 days after the hearing is complete. The Commission can approve, or deny an application and can also make its approval conditional upon terms or conditions. All AUC decision reports are available to any member of the public on the AUC's website or by obtaining a printed copy from the AUC.

Step 8: Opportunity to appeal

An applicant or dissatisfied participant may formally ask the Court of Appeal of Alberta for permission to appeal a Commission decision. An application for permission to appeal must be filed within 30 days from the date the decision is issued.

An applicant or dissatisfied participant can also ask the Commission to review its decision. An application to review a Commission decision must be filed within 60 days from the date the decision is issued and satisfy the limited grounds described in AUC Rule 016: *Review and Variance of Commission Decisions*.

Step 9: Construction, operation and compliance

An applicant that receives approval to build and operate a facility from the Commission must adhere to any conditions that were set out in that approval. If concerns about compliance with approval conditions and post-construction operations cannot be resolved with the applicant, they can be brought to the AUC's attention for consideration. The AUC has significant compliance and enforcement powers for all approved applications. Additional information is available on the AUC website under "Compliance and enforcement."

*Opportunity for public involvement

The Alberta Utilities Commission is an independent, quasi-judicial agency of the Government of Alberta that ensures the delivery of Alberta's utility services take place in a manner that is fair, responsible and in the public interest.

Contact us

Phone: 310-4AUC (310-4282 in Alberta)
1-833-511-4AUC (1-833-511-4282 outside Alberta)
Email: info@auc.ab.ca

Eau Claire Tower 1400, 600 Third Avenue S.W. Calgary, Alberta T2P 0G5	106 Street Building 10th Floor, 10055 106 Street Edmonton, Alberta T5J 2Y2
---	--

The Alberta Utilities Commission is committed to ensuring that Albertans whose rights may be directly and adversely affected by a utility development project are informed of the application and have the opportunity to have their concerns heard, understood and considered.



Participating
in the AUC's
independent
review process

Application review process

Step 1: Public consultation prior to application by proponent

Step 2: Application filed with the AUC

Step 3: Public notice issued by the AUC

Step 4: Public submissions to the AUC

Step 5: Consultation and negotiation

Step 6: The public hearing process

Step 7: The decision

Step 8: Opportunity to appeal

Step 9: Construction, operation and compliance

www.auc.ab.ca

The AUC's regulatory role in needs and facility applications and its independent review and hearing process:

The AUC uses an established process, outlined in this brochure, to review social, economic and environmental impacts of facility projects to decide if approval is in the public interest. Approvals from the AUC are required for the construction, operation, alteration and decommissioning of transmission lines and electric substations.

Approvals are required for:

- The need for transmission upgrades.
- The route and location of transmission facilities.
- The siting of power plants, including renewables such as wind and solar more than five megawatts.

Sometimes a needs application is considered together with a facility application in a single hearing; sometimes separate hearings may be held to consider each application.

Step 1: Public consultation prior to application*

Prior to filing an application with the AUC for the approval of a proposed utility development, the applicant must engage in a public consultation program in the area of the proposed project, so that concerns may be raised, addressed and, if possible, resolved.

The application guidelines and requirements for facility applications can be found in AUC Rule 007: *Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments*, and AUC Rule 020: *Rules Respecting Gas Utility Pipelines*.

Potentially affected parties are strongly encouraged to participate in the initial public consultation, as early involvement in discussions with an applicant may lead to greater influence on project planning and what is submitted to the AUC for approval.

The Alberta Electric System Operator, as the system planner, will notify potentially affected stakeholders of applications on the need for transmission development.

Step 2: Application filed with the AUC

When the participant involvement requirements have been completed, the applicant files its application with the AUC through a public filing system, called the eFiling System, on the AUC website.

The application is then reviewed to ensure the information required by the Commission is included. If the required information is not provided, the AUC may close the application or request more

information from the applicant. In the application, any issues that were raised during the public consultation and any related amendments to the proposal should be identified. All unresolved objections or concerns identified during the public consultation must be described in the application.

Step 3: Public notice

The AUC generally issues a notice by mail directly to those who live, operate a business or occupy land in the project area who may be affected by the Commission's decision on the proposed project. The notice for larger facility projects with potentially greater impacts may also be published in local newspapers.

The notice will specify a submission deadline. The information required by this deadline is general in nature as outlined in Step 4. Additional opportunities to provide evidence and additional information will arise after this deadline.

Step 4: Public submissions to the AUC*

The AUC review process is referred to as a proceeding. Anyone with unresolved objections or concerns about the application can file a brief written statement with the AUC on the proceeding. The easiest way to file a statement is to fill out the form through the eFiling System found on the AUC website. The statement must include your contact information, where you reside or own property in relation to the proposed facility, your concern or interest in the application, an explanation of your position and what you feel the AUC should decide.

The AUC uses the information it gathers through the forms to decide whether to hold a hearing on the application(s). The Commission must hold a hearing if a person can demonstrate that he or she has rights that may be directly or adversely affected by the Commission's decision on the application. Such a person is said to have standing before the Commission. If the AUC decides to hold a hearing, the AUC will provide further opportunities for participants with standing to understand the application and present their position on the application either in writing or in person.

Subject to some limited exceptions, all information and materials provided as part of an AUC proceeding will become part of the public record and will be available through the eFiling System. The AUC's treatment of some types of information as confidential is rare and only available under limited circumstances to ensure that the AUC's process is open and transparent.

AUC eFiling System

The eFiling System is the tool that the AUC uses to manage applications and submissions in its proceeding-based review. The eFiling System gives access to all public documents associated with an application and is how to provide your input to the AUC and monitor the related proceeding filings. Those who do not have access to the internet can send submissions, evidence and other material by mail and the AUC will upload the submission on their behalf.

***Opportunity for public involvement**