

David Caplan Project Developer Box 1900, Station "M" 110 – 12th Avenue SW, Calgary, AB T2P 2M1 T: (403) 966-9463 E: Sunhills\_Solar@transalta.com www.transalta.com

January 13, 2023

#### **Re: Sunhills Solar Project**

Dear Stakeholder,

TransAlta Corporation ("the Proponent") is proposing to construct and operate the SunHills Solar Project ("the Project") on the Highvale Mine site south of Wabamun Lake.

The enclosed Project Specific Information Package is intended to provide an overview of the proposed Solar Project. This package includes SunHills Solar Newsletter, outlining project details and timeframes, including the project's Open House details. Associated project mapping is also included, as well as a solar glare study and the Alberta Utilities Commission (AUC) brochure, "*Participating in the AUC's independent review process to consider facility applications."* 

Should you have questions or concerns regarding the Project we would kindly ask that you contact us by **March 24, 2023,** via 1-877-636-7822 (toll-free) or via email at <u>Sunhills Solar@transalta.com</u>

We thank you for your participation in this process and look forward to hearing from you.

Yours truly, TRANSALTA CORPORATION

David Caplan Project Developer

## SunHills Solar Project Newsletter

## Introduction

TransAlta Corporation ("TransAlta") is proposing to construct the 130-megawatt (MW) SunHills Solar Project ("SunHills" or "the Project"), located over one kilometre from the south side of Wabamun Lake, on lands included within the Highvale Mine site in Parkland County. The mine closed in 2021 and is currently being reclaimed. Once the Project is operational, it is expected to generate approximately 247 gigawatt hours of electricity in the first year.



This Project is comprised of two sites on TransAlta-Owned land that part of the Highvale Mine. The two sites are former coal pits (Pit 04 and Pit 06). Combined, the two sites will cover an area of approximately 465 hectares (1150 acres). The Highvale Mine ceased operations in 2021 and is currently undergoing decommissioning and reclamation. A portion of the Pit 04 site is shown above. transalta

#### Why Solar Power?

SunHills will generate solar power on lands formerly mined for coal. The Project demonstrates TransAlta's commitment to advancing the energy transition thoughtfully by repurposing existing assets and infrastructure to develop new sources of clean power.

#### How Does It Work?

Photovoltaic (PV) panels are typically made of semiconducting silicon wafers. When photons (light) from the sun collide with the material in the modules, electrons are dislodged. Those free electrons flow into conductors within the panels and into the collector system through the substation and into the grid to be delivered to Albertans as high-quality electricity.

## About TransAlta

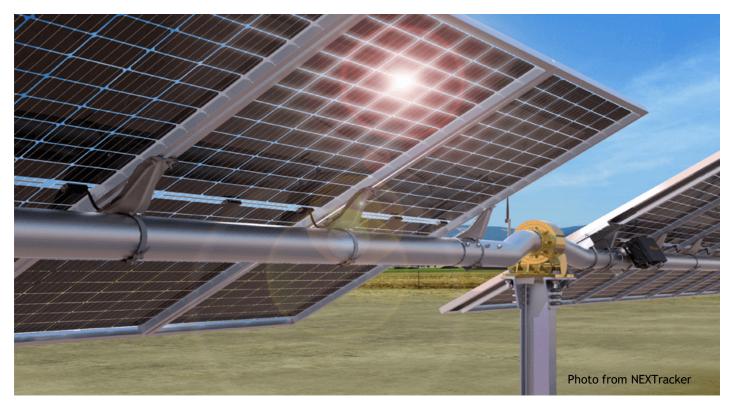
TransAlta owns, operates and develops a diverse fleet of electrical power generation assets in Canada, the United States and Australia with a focus on long-term shareholder value. TransAlta provides municipalities, medium and large industries, businesses and utility customers with clean, affordable, energy efficient and reliable power. Today, TransAlta is one of Canada's largest producers of wind power and Alberta's largest producer of hydro-electric power. For over 111 years, TransAlta has been a responsible operator and a proud member of the communities where we operate and where our employees work and live. TransAlta aligns its corporate goals with the UN Sustainable Development Goals and its climate change strategy with CDP (formerly Climate Disclosure Project) and the Task Force on Climate-related Financial Disclosures ("TCFD") recommendations. TransAlta has been recognized by CDP with an 'A- 'rating. TransAlta has achieved a 61 per cent reduction in GHG emissions since 2015.





Project Map – subject to change

## transalta<sup>®</sup>



Although TransAlta is still determining equipment and vendors to be used, the project will use bifacial panels mounted on single axis trackers (SAT). Typical SAT system shown above.

## **Proposed Onsite Equipment**

TransAlta's aim is to construct a state-of-the-art facility that uses industry-leading technology focused on safety, reliability, and performance. The design for the Project will use bifacial panels (also known as modules), mounted on single axis trackers. TransAlta is assessing vendors and equipment for the Project, including solar panel modules, inverters, and tracker manufacturers to assist with the design, permitting and construction of the Project.

Other infrastructure includes inverters, fencing, access roads, an underground electrical collection system, switchgear, automation and controls, and overhead connections to an existing substation (Marion 21S) which will be upgraded with a new transformer and other associated equipment as required.

Bifacial solar panels absorb light on both sides. The side facing the sun generates the bulk of the electricity, but the opposite side also collects ambient light, especially in the winter when sunlight reflects off the snow on the ground. Bifacial modules produce more power per module and are more efficient than mono-facial modules, resulting in less land required for equal or greater power generation.

Single axis trackers follow the sun all day long, keeping the panels perpendicular to the sun for maximum efficiency. After the sun goes down the trackers reset to face east, ready to catch the sun the next day.

### **Connection to the Alberta Interconnected Electric System**

TransAlta is working with the Transmission Facility Owner AltaLink and the Alberta Electric System Operator ("AESO") to connect the Project to the Alberta Interconnected Electric System ("AIES" or "grid") through the existing Marion 21S substation. Once a connection solution is determined it will be shared with the public for feedback. No new transmission lines are required to connect the Project, however, upgrades to the existing substation infrastructure will be necessary.



Existing AltaLink Substation Marion 21S Substation

## **Project Construction**

Should the Project receive AUC approval, construction is expected to run between Q3 2024 to Q1 2025, with commissioning and commercial operation milestones anticipated for the first quarter of 2025. The Project is expected to employ approximately 160 workers during the peak construction period.

## **Environmental Assessments**

The following field surveys were completed from the fall of 2021 to the spring of 2022 per Wildlife Directive for Alberta Solar Energy Projects:

- Amphibian surveys
- Aerial ungulate survey
- Breeding bird surveys
- Diurnal raptor surveys
- Habitat mapping
- Nocturnal owl surveys
- Raptors nest surveys
- Spring and fall migrating bird surveys

The results of these assessments indicate that no species designated as a "species-at-risk" under the *Wildlife Act and Environment Protection and Enhancement Act* ("EPEA") are likely to be impacted by the Project. The Project does not require the use of water, and there will be no impact to river flows, fish or fish habitat. The Project will also not impact any w e t I and s because there are no wetlands in the project area. As part of the mine reclamation process all water drains into unnamed end-pit lakes south of the solar project areas.

Comprehensive environmental studies including wildlife studies, vegetation studies, wetlands delineation, and habitat mapping have been conducted for the Highvale mine over many decades. The combined results of these studies, as well as the results of the studies listed above, were compiled into a report and submitted to Alberta Environment and Protected Areas ("AEPA") in the second quarter of 2022. The ("AEPA") issued a Renewable Energy Wildlife Referral Report on September 26, 2022, following their review, confirming an overall risk rating of "low" to wildlife and wildlife habitat, based on Project siting on an existing open pit mine, limited wildlife habitat value, and commitments made by TransAlta to mitigate and monitor wildlife impacts.

## **Historical Resources**

TransAlta will seek confirmation from the Historic Resource Management Branch of Alberta Ministry of Culture and will conduct a Historical Resource Impact Assessment if deemed necessary under the *Historical Resources Act*.

## **Noise Impact Assessment**

A Noise Impact Assessment ("NIA") will be conducted in January of 2023. The NIA evaluates the potential noise impacts taking into consideration existing and proposed infrastructure in the area. The Project has a low noise profile, and the NIA is expected to confirm that the Project will meet the permissible sound levels per the <u>Alberta Utilities Commission ("AUC")</u> <u>Rule 012: Noise Control.</u> A copy of the NIA will be submitted as part of the AUC application.

### **Glare Assessment**

A Solar Glare Hazard Analysis ("SGHA") was completed in Q4 2022 in compliance with <u>AUC Rule</u> <u>007: Applications for Power Plants, Substations, Transmission Lines, Industrial System</u> <u>Designations, Hydro Developments and Gas Utility Pipelines</u>. The SGHA assessed the potential for glare impacts on all residences, roads, and railways within 800m of the Project boundary. There are no known active aerodromes within 4km of the Project boundary. As such, no aerodromes were included in the SGHA. The full SGHA report will be included in the application to the AUC.

## **Regulatory Requirements**

TransAlta is preparing to file its application to the AUC in Q1, 2023 in accordance with AUC's Rule 007 Prior to filing the AUC application, TransAlta will engage with Indigenous groups and local stakeholders and will incorporate feedback into its Participant Involvement Program ("PIP") as per the AUC's Rule 007 PIP requirements. Any additional questions or concerns related to the Project continue to be collected via email at: **Sunhills Solar@transalta.com**.

We recommend a review of the AUC brochure – *Participating in the AUC's independent review process*, which provides an overview of the application process.

For additional information we invite you to visit the AUC's website at: **www.auc.ab.ca** If you have questions regarding the AUC's process, please contact the AUC at: **310-4282** (in Alberta) or **1-833-511-4282** (outside Alberta) or by email at: **info@auc.ab.ca** 

## **Preliminary Project Schedule (Subject to Change)**

	2021	2022	2023	2024
Environmental assessments	Q3, Q4	Q1		
Stakeholder & Indigenous engagement			Q1	
AUC application submission			Q1	
Approvals & permits			Q2, Q3	
Project construction				Q2, Q4
Project commissioning				Q1 2025

## **Emergency Response**

TransAlta maintains detailed emergency response guides for all of its generation facilities. These plans provide detailed actions for TransAlta personnel to take in the event of a medical emergency, a dam breach or flooding, fire and evacuation, an environmental spill and security incidents. TransAlta also maintains emergency response preparedness plans and shares these plans with Indigenous groups, municipalities and other stakeholders.

TransAlta will develop a site-specific Emergency Response Plan ("ERP") for the construction and operation of the Project. Site-specific risks will be identified, and appropriate site monitoring and communication protocols will be put into place. The project's emergency response plan will be developed in consultation with local responders, local authorities, Indigenous groups, municipalities and other stakeholders.

TransAlta will review the existing ERP for the Highvale Mine site and adjust as required to suit the Project. Emergency response training sessions will be provided for local authorities (Parkland County), Indigenous groups and other stakeholders as necessary. TransAlta is committed to working with stakeholders in developing of the ERP and will file with the AUC upon completion.

## **Local Community Benefits**

During construction, the Project will generate opportunities for both local individuals and businesses, creating up to 160 full-time jobs during construction. The Project will also generate significant property tax revenue for the County, resulting in financial benefits to the broader community.

#### We Want to Hear from You

If you have any questions, comments, or concerns about the SunHills Solar Project, there are several ways to get in touch with us:

- 1. EMAIL us at Sunhills Solar@transalta.com
- 2. **PHONE** our dedicated, toll-free project line at **1-877-636-7822**
- Attend our OPEN HOUSE on February 15, 2023, from 3:00 -7:00 pm at SunHills Mine Office (Address: 4419B Sundance Road, Seba Beach, AB TOE 2B0.

For more information on the Project, please visit our website at: <a href="https://transalta.com/about-us/our-operations/projects-in-development/sunhills-solar-project/">https://transalta.com/about-us/our-operations/projects-in-development/sunhills-solar-project/</a>

## **Frequently Asked Questions**

## 1. Why did TransAlta choose the Highvale Mine site for the location of the SunHills Solar Project?

TransAlta took into consideration several criteria when evaluating different sites within Alberta such as environmental impacts, flooding risks and other hazards, transmission capacity, terrain, and land availability. The mine site suited these criteria well. Locating the project on the mine site also avoids taking any valuable agricultural lands out of service (most industrial scale solar facilities are built on farmland).

## 2. Will the Project create any greenhouse gas emissions during operations?

Normal operation of the solar facility will not result in any emissions.

#### 3. What is the expected operating life of the Project?

The expected operating life of the Project is approximately 35 years. At the end of its useful life, the equipment will be disposed of or recycled in a safe manner in accordance with Alberta's Conservation and Reclamation Directive for Renewable Energy Operations and, where applicable, the manufacturer's recycling programs. The area used for solar will be reclaimed in a similar manner as the remaining Highvale Mine.

#### 4. What noise impacts are anticipated with the facility?

Under all operating conditions, the Project is expected to be below the AUC's Rule 012 permissible sound levels. While TransAlta has not yet selected the tracker vendor, in general, solar tracker systems have a low noise profile. A copy of the NIA will be included as part of the AUC application.

#### 5. How will TransAlta maintain a safe solar power facility?

Safety is a key consideration both in determining the type of equipment, the placement of the arrays and related equipment, and our emergency response plans, and throughout the construction and operation of the facility. TransAlta will prepare emergency response plans for the solar generation facility and will work with local first responders to provide them with information and training on how to respond in the unlikely event of a fire or other emergency. Multiple layers of mitigation will also be included in the project design and operational procedures. For example, anyone working at or visiting the site will be required to wear Personal Protective Equipment ("PPE") as they would in other areas of the mine site. They will be required to undergo safety training before going onsite.

#### 6. What type of foundation will the Project be built upon?

Foundations for solar arrays are typically helical piers or driven steel; soil conditions may require ballast at some locations. Geotechnical studies will be conducted to provide best design options.

#### 7. How many workers will be on site during the construction period?

TransAlta anticipates there will be approximately 160 workers on site during the peak construction period of the Project.

#### 8. What type of equipment will be onsite during construction?

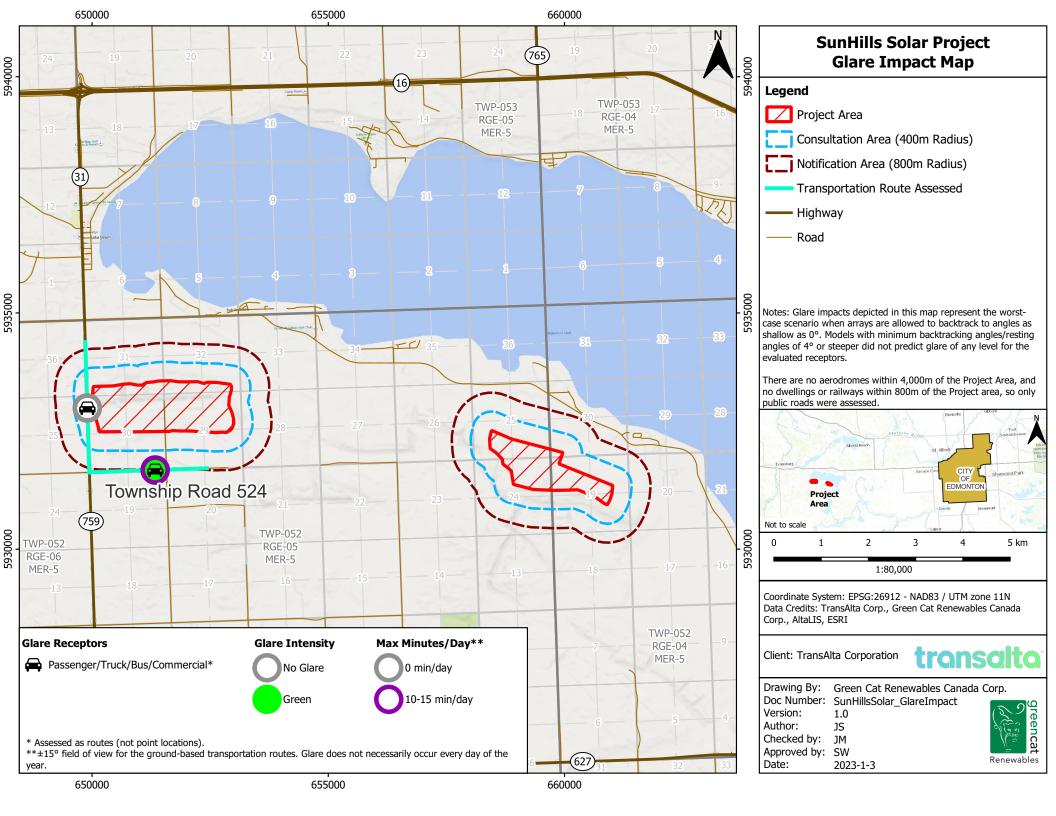
Typical equipment anticipated during construction may include flat-bed trucks, skid steers, forklifts, excavators, bull dozers, compaction machines, pile drivers, concrete trucks, and cranes. Size and quantity of the equipment may vary depending on the type of soil conditions.

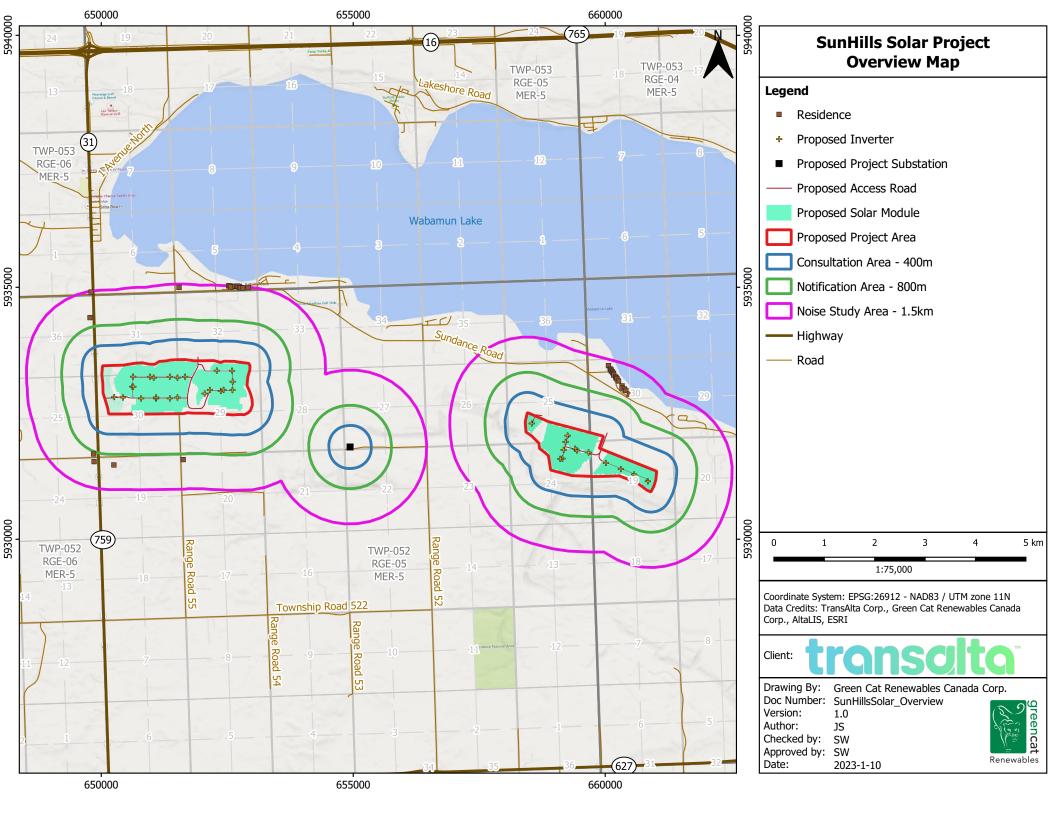
#### 9. How will this project impact my land value?

As TransAlta is using existing lands within the Highvale mine site, no impact to property values as a result of the project is expected.

# 10. What kind of traffic impacts will there be for landowners attempting to access their properties during project construction? What routes with be used to haul equipment and materials to site?

Throughout construction, traffic to the site will increase with heavy trucks delivering equipment and materials, and construction workers arriving and leaving. TransAlta will work with local stakeholders to determine the best routes and methods to manage any traffic issues caused by the temporary increase in volume.









## **Participating in the AUC's independent** review process to consider facility applications

#### The AUC regulatory \$ review process to consider facility applications for utility projects

The AUC uses an established process to review social, economic and environmental impacts of facility projects to decide if approval of a project is in the public interest.

The AUC considers applications requesting approval of the need for transmission development and facilities applications seeking approval to construct, operate, alter and decommission electric and natural gas facilities. Applications, as specified in AUC Rule 007, are required for:

- The need for transmission upgrades.
- The route and location of transmission facilities.
- The siting of power plants.
- The construction of a battery storage system.
- The designation of an industrial system.
- The need for and siting of natural gas utility pipelines.

Sometimes the Alberta Electric System Operator's needs identification document application is considered together with a facility application in a single proceeding; sometimes separate proceedings are held to consider each application.

### **Application review** process

Step 1: Public consultation prior to applying to the AUC Step 2: Application filed to the AUC Step 3: Public notice 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

## **Application review process**

### **Step 1: Public consultation prior to** applying to the AUC

An applicant seeking approval of a proposed utility development project is required to engage in a participant involvement program prior to filing an application with the AUC. The public involvement program involves consultation with persons whose rights may be directly and adversely affected by 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, Hydro Developments and Gas Utility Pipelines.

Potentially affected parties are strongly encouraged to participate in the public consultation, also called a participant involvement program. Early, active and ongoing discussions with an applicant may lead to greater influence on project planning and what is submitted to the AUC for approval.

#### Step 2: Application filed to the AUC

= When the applicant has concluded its consultation with potentially affected parties and the participant involvement requirements have been completed, the applicant files its application through the AUC online public filing system, called the eFiling System.

AUC staff members review each application submitted to verify that all of the application requirements in Rule 007 have been met before an application is deemed complete. If all of the required information is not provided, the application may be closed or missing information will be requested of the applicant. Rule 007 specifies, among other requirements, that applicants must submit the results of a public involvement program in its application that includes information about how applicants consulted and notified stakeholders and Indigenous groups and identifies any unresolved objections and concerns about the project.

### **Step 3: Public notice**

Ř

When the AUC receives an application it is assigned a proceeding number and the AUC generally mails a notice of application directly to those who live, operate a business or occupy land in the project area who may be directly and adversely affected if the AUC approves the application. The notice initiates the opportunity for formal intervention in the proceeding to consider an application or applications. The notice of application will also set out important dates and information about where to find the application and other items being considered. The five-digit eFiling System proceeding number in the notice is the most efficient way to find information about a proposed project through the AUC website.

#### Step 4: Public submissions to the AUC

Prior to the submission deadline provided in the notice, formal submissions of outstanding concerns and unresolved objections about a project may be submitted to the AUC. To submit a concern, participants will need to register to participate in the proceeding, which involves providing a brief written statement called a statement of intent to participate. Submissions are filed electronically through the eFiling System. The information filed becomes part of the public record and is an important part of the process to ensure that outstanding concerns are heard, understood and considered.

R

The AUC uses the information gathered through statement of intent to participate submissions to decide whether to hold a hearing on the application(s). The AUC must hold a hearing if a concerned person can demonstrate that they have rights that may be directly or adversely affected by the AUC's decision on the application. Such a person is said to have standing before the AUC. If the AUC decides to hold a hearing, the AUC will provide further opportunities for participants with standing to ask the applicant questions on the public record and present their position on the application either in writing or in person. Hearings may

www.auc.ab.ca

be held in writing, in person or virtually through web-conference software.

#### AUC eFiling System

The eFiling System is the online tool that the AUC uses to manage applications and submissions in its proceedingbased review. The eFiling System gives access to all public documents associated with an application. The system is also used to submit your concerns and provide input to the AUC and can be used to monitor 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.

## Step 5: Consultation and negotiation (if applicable)

The AUC supports efforts to reach a mutually agreeable outcome among the applicant and affected parties. The AUC encourages the applicant and those who have filed a statement of intent to participate 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 in an AUC hearing.

#### Step 6: The public hearing process

The AUC will issue a notice of hearing if a person with standing continues to have legitimate unresolved concerns with the application. The notice of hearing will provide a hearing date and location, or specify if the hearing will be held in writing or virtually. When the AUC holds a public hearing, registered parties are given the opportunity to express their views directly to a panel of Commission members. Any member of the public can listen to an in-person or virtual oral hearing. An oral public hearing operates similar to a court proceeding. 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**

000

h

A person determined by the AUC to have standing or 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: *Rules on Local Intervener Costs*, recovery of costs is subject to the AUC's assessment of the value of the contribution provided by the lawyer and technical experts in assisting the AUC to understand the specifics of the case. It is also subject to the AUC's published scale of costs.

People with similar interests and positions are expected and encouraged 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 decision no more than 90 days after the close of record. The AUC can approve, or deny an application and can also make its approval conditional upon terms or conditions. AUC decisions are publicly available through the AUC website at www.auc.ab.ca.

#### Step 8: Opportunity to appeal

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

**E** 

An applicant or participant in a proceeding can also ask the AUC to review its decision. An application to review a 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 of Commission Decisions*.

## Step 9: Construction, operation and compliance

An applicant that receives approval to build and operate a facility from the AUC is expected to follow through on any commitments it has made to parties and 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. 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.

We are 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.



#### **Contact us**

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

Eau Claire Tower 1400, 600 Third Avenue S.W. Calgary, Alberta T2P 0G5