

Photo Credit: @istock.com/republica

Renewable Energy in Alberta

Alberta Government

Ag Dex 817-15 August 14, 2017

> Farmers' Advocate Office <u>www.farmersadvocate.gov.ab.ca</u> <u>farmers.advocate@gov.ab.ca</u> 310-FARM (3276) Twitter: @fao_alberta Facebook: Farmers' Advocate Office of Alberta

About the Farmers' Advocate Office (FAO)

Our Mission

The mission of the FAO is to create value for rural Albertans and our stakeholders by:

- empowering rural Albertans through awareness on key issues;
- providing objective, unbiased ideas and advice for resolving disputes;
- representing the rural Alberta perspective on matters of concern;
- and facilitating interaction on strategic matters among key stakeholders.

The Farmers' Advocate Office (FAO) was established in 1973 by the former Minister of Agriculture as a resource for Albertan farmers and ranchers. Today the FAO remains within the Ministry of Agriculture and Forestry, and works to ensure the rights and interests of rural Albertans are recognized, understood, and protected.

Negotiating Renewable Energy Leases was first released in February 2017 in response to requests from Albertan landowners for additional resources to aid in the negotiation of wind and solar leases. This publication collects the relevant information from the different regulators, departments, and agencies within the province to help landowners ask informed questions and evaluate the opportunity of having a power plant on their land or within their community. As an advocate, the FAO does not create policy, but will provide comment on existing laws and policies and work as a liaison between landowners, industry, government, and regulators.

Note:

The recommendations in this document are targeted towards lease agreements where the renewable energy developer owns and operates the technology and infrastructure, connects into the grid, and compensates the landowner for the use of the land. This guide is <u>not</u> intended for micro-generation (landowners who are purchasing and installing wind or solar power generation infrastructure for their own personal use). Landowners wishing to install micro-generation infrastructure to meet their own electricity needs may want to contact the Alberta Utilities Commission (AUC) for additional information.

Background

In 2015, the Government of Alberta released the *Climate Leadership Plan*. The plan articulated a goal of phasing out coal fired emissions and moving towards having 30% of Alberta's energy coming from renewable sources by 2030. The Government of Alberta directed the Alberta Electric System Operator (AESO) to develop and implement a program to meet the goal of 30% by 2030.

Designed and administered by AESO, the Renewable Energy Program (REP) will add 5,000 megawatts (MW) of renewable energy capacity to the grid by 2030, starting with the first procurement process for 400MW in spring 2017. The intent of the program is to keep costs as low as possible through a competitive process and operate the program concurrent to the retirement of coal generation.

Developers who hope to secure a REP contract must participate in a fair and transparent competitive bidding process managed by the AESO. This process has three stages, which will take a total of 7-11 months to complete:

- <u>Request for Expressions of Interest (REOI) | 4-6 weeks</u> The purpose of this stage is to gauge the level of interest. Developers have no obligation to participate in subsequent stages after they submit an Expression of Interest.
- <u>Request for Qualifications (RFQ) | 4-6 months</u> During this stage, the eligibility requirements of developers wishing to bid during the RFP stage are assessed. Developers must submit their project proposals at this stage. Only qualified bidders can move on to the RFP stage.
- <u>Request for Proposals (RFP) | 2-3 months</u> The RFP stage determines which developers bidding to receive support payments will be entered into a Renewable Electricity Support Agreement (RESA).

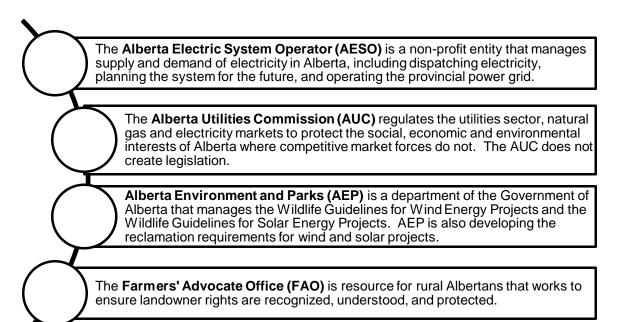
For landowners, the significance of this process is in the timelines developers are facing. It is important to understand that not all options to lease will result in a renewable energy development being constructed. Additionally, a landowner should be aware that if the developer is successful in their bid to the AESO, the developer may opt to sell the package to a more financially able company for construction and operation. This means that the developer you negotiate with may not be the same company that operates the site.

Projects submitted to the program must meet certain eligibility requirements, including being 5 MW or greater in size and, for the first round of REP, they must be able to be operational by December 1, 2019. Successful applicants ("proponents") will receive a 20-year contract. Proponents will be paid a certain \$/megawatt per hour payment that reflects the difference between their bid price and the Alberta pool price, which helps provide stability for the developer.

In addition to the 30% by 2030 goal, Alberta's electricity market is moving towards a capacity market, where generators will be paid for having generation available to supply, whether or not any energy is actually being generated and supplied. Alberta presently has an energy-only market, where generators are paid are paid for the electricity they generate. The movement towards a capacity market has the objective of providing greater certainty for all Albertans. The details of the capacity market structure have not yet been established.

As a result of REP, a greater number of landowners are being approached by renewable energy developers for wind or solar leases. This guide is designed to assist Albertan landowners who have been approached by a renewable energy developer seeking to lease land for the development and construction of a solar or wind energy power plant.

Table 1: Who's Who?



Executive Summary

Negotiating for a wind or solar lease is different than negotiating with the oil and gas industry. In Alberta, there is no right of entry or expropriation process for a renewable energy power plant. Participation in a wind or solar lease for a power plant is 100% voluntary, and you are under no obligation to entertain a proposal. Contracts are negotiated bilaterally between the landowner and the renewable energy developer. If you decline interest, the developer will have to find an alternative location. However, the new spot may be located nearby, in which case you would experience impacts without generating direct value from revenue.

While power plants are entirely voluntary, there may be a need for associated infrastructure, such as substations or distribution and transmission lines, when a power plant is established. The *Surface Rights Act* process for right of entry applies to associated infrastructure, so ultimately your power plant could have other implications for you or your neighbours.

If you are approached by a wind or solar developer, keep in mind that the developer's representative in a solar or wind negotiation is only representing one party. There is no standard option to lease for wind and solar developments. What is proposed by companies can differ greatly, and a contract is generally designed to meet the drafter's needs, not the landowner's. A landowner should take the time to fully understand the proposed agreement and ask questions to ensure their needs are adequately reflected.

The Farmers' Advocate Office (FAO) recommends getting legal advice prior to signing the proposed contract. Having legal counsel review the document in advance is a good investment that could save you money and frustration in the long-term. An experienced lawyer can help ensure you fully understand the agreement and its potential risks. It is recommended that landowners negotiate with the developer to have the costs for legal review covered by the developer.

Developers may choose to use land agents who are licensed under the *Land Agents Licensing Act* for the negotiation of wind and solar leases, but they are not required to do so by law. If a developer uses a licensed land agent for the negotiation of a wind or solar lease and the landowner feels they've been treated unethically, they may contact the Land Agents Licensing Registrar with Alberta Labour at 780-415-4600.

Table 2: Electricity Generation in Alberta

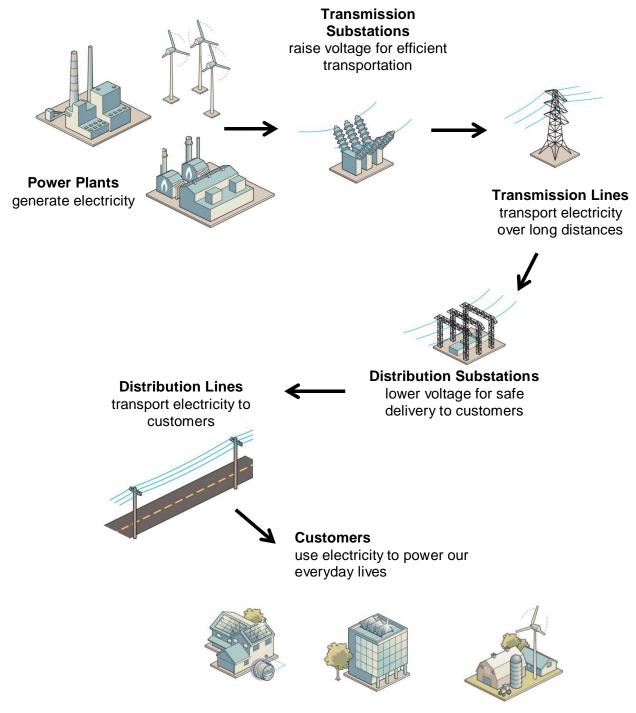


Image Credit: Adapted from Alberta Electric System Operator (AESO)

Negotiating Renewable Energy Leases

• How much land will be used?

The total area of land required will depend on the size of the project being contemplated. Solar developments are typically more land-intensive than wind projects. On average, a solar project can require up to 7 acres for every MW of energy produced, whereas the typical modern wind turbine, with a capacity of greater than 2MW, may have a footprint between half an acre and 1.5 acres. This turbine footprint is considered to include the surface footprint of the turbine and the access road.

Land used for a wind energy power plant is considered dual use because the land around the turbines can continue to be used for grazing or cultivation. It is only a very small portion of the land that is removed from agricultural use over the long-term due to the wind turbine pad, roads, or electrical substations.

The land being utilized for a solar development will typically not be used for other purposes concurrently, although some jurisdictions have opted to graze sheep under the panels. Other types of livestock, such as goats or cattle, have too great of an impact on the infrastructure.

In either case, the developer may wish to maximize the amount of land in the initial lease to enable flexibility in construction and project design. Contracts will usually provide the developer with discretion on how the land will be used.

• What type of infrastructure should I expect?

The average modern wind tower is approximately 100 meters tall with 3 blades that are 50 meters in length. Technology is changing quickly and these dimensions could get larger, but it is anticipated that the overall footprint would remain relatively stable despite advances in technology. The concrete foundations can be 14 meters across and reach 10-12 metres into the ground. The blades on a wind turbine will begin rotating in 14km/hour winds, and will automatically stop rotating for safety reasons if wind speeds rise above 90km/hour.

A collector system will bring the energy generated by the turbine through underground cables to a substation for conversion. These systems will be buried below plow depth, which simplifies maintenance for the developer and minimizes disruption for the landowner.

The testing equipment for wind energy sites usually includes meteorological towers ("met towers") or other remote sensing units, such as Light Detection and Ranging (LIDAR), to measure wind speeds over time. The met towers used for testing are typically between 50 and 100 metres tall. Sonic Detecting and Ranging (SONAR) and LIDAR units are ground-based cubes.

For a solar power plant, a landowner could expect a foundation system with either helical or driven piles, depending on subsurface conditions. These piles will be 7-9 feet into the ground (the preferred depth is largely dependent on frost heave). Erosion control beneath the racking is generally accomplished by planting appropriate local vegetation beneath the panels. Sheep may be used to graze under the panels.

The solar panels are attached to fixed-tilt racking or tracking systems, which are attached to the pilings. The panels are placed on an angle perpendicular to the sun to

garner as much generation as possible. The panels are usually tested for glare before they are manufactured.

Many landowners are curious about the ability of solar panels to withstand hail: the panels are made with a tempered glass that gets tested and rated for 1 inch pieces of hail moving at 88 kilometres per hour. Hail damage to good quality panels occurs infrequently; however, excessive snow loads and wind could cause the panels to warp, which could reduce efficiency.

For solar power plants, direct current cabling is run from strings of panels to combiners and onto inverters. The output of the inverters is transferred to electrical loads on site or via the distribution or transmission system to loads off-site. Modern solar panels typically have a lifespan of 30-40 years, and a warranty around 25 years.

• How long is a typical lease?

A lease gives the developer the exclusive and undisturbed right to use the lands for the installation and use of infrastructure for renewable energy development. Solar and wind energy leases are registered as caveats on title. Easements are typically used for collector systems that tie the project into the grid, which are also registered on title.

A landowner's agreement with the developer will usually start with signing an option to lease. Options to lease are used to help the developer determine if the site is viable before committing long-term. The option will cover the period need for testing, which is typically 3-8 years.

An option to lease may include language that bind the landowner for the term of the option, regardless of whether or not any testing is actually performed. When the option to lease ends, the renewable energy developer can choose to extend the option or enter into a long-term agreement with the landowner, but they are under no obligation to do so.

A wind or solar lease is a long-term contract, ranging in length from 20-60 years. A landowner may request a shorter period, but the developer may be reluctant to agree if the timeline is too short, as they may not earn back their investment. A successful proponent of REP will enter into a 20 year Renewable Energy Support Agreement (RESA) with AESO, so most developers will ask for a 20 year minimum term.

There is no standard contract for wind or solar leases in Alberta. Since all solar and wind leases are private civil agreements, disputes and non-compliance related to the lease would be matters resolved through the courts.

How do I know if the company is reputable?

You may wish to try and mitigate your risk by researching the developer, getting referrals, and selecting a company that is reputable, experienced, well-established, and licensed to operate in Alberta. Ask about successful projects they have had, either in Canada or beyond our borders.

However, you should be aware that the developer applying to the Alberta Utilities Commission (AUC) for an approval may do the legwork of acquiring the land and then sell the project to another company. Throughout the project's lifespan, the developer will have the right to sell or assign the property at their discretion unless the contract specifically states that landowner approval is needed beforehand. The developer would have to apply to the AUC to transfer an approval to another developer. When land is sold, it is normal that the new owner would inherit the conditions placed on the original owner. It is important to make sure that the lease provisions include the assignment to all future successors to guarantee that the commitments and responsibilities in the lease are met by any and all future business partners, potentially even receivers in the situation of insolvency.

Oil and gas companies are monitored under the Licensee Liability Rating (LLR) program with the Alberta Energy Regulator (AER), which assesses their assets in relation to their liabilities. An oil and gas company can face restrictions on the purchase of new assets or be required to post a bond if their asset-to-debt ratio falls below a certain threshold. No equivalent oversight exists for wind and solar developers, as there is no legislated requirement for wind and solar developers to meet any particular financial criteria. The application to the AUC only requires that a developer be licensed to operate in Alberta. The AUC does, however, have the jurisdiction to inquire about an applicant's financial status.

• How long do I get to review the proposal?

Participation in a wind and solar energy lease is voluntary and there is no right of entry process. If you do not negotiate quickly enough, the only risk is that the developer will find an alternative location.

If you are feeling pressured by a developer, you should request undisturbed time to review the complete proposal, get legal counsel, and have discussions with your neighbours and the municipality. For oil and gas, a landowner must be provided 48 hours undisturbed to review a proposal under section 17(2) *Land Agents Licensing Act.* This requirement does not apply to the negotiation of wind and solar leases.

• How will compensation be structured?

There is no legislated compensation structure for wind and solar leases. The compensation structure outlined in the *Surface Rights Act* does not apply to wind and solar leases, and the AUC does not play a role in the determination of landowner compensation.

The approach for paying compensation will vary from developer to developer, and a landowner may wish to negotiate a particular payment structure to have their needs met. Developers will typically offer the same contracting structure for all landowners participating in a project.

Possible payment structures could include:

- Fixed: The landowner would receive a stable annual rental payment.
- <u>Fixed Plus Variable:</u> The landowner would receive a stable annual rental payment and a royalty based on generation.
- <u>Variable Only:</u> The landowner would receive a royalty based on generation and no annual rental payment.

The FAO does not provide advice on compensation amounts; however, we will recommend that landowners negotiate compensation with some fixed component. Compensation purely based on generation could be inconsistent and initial estimates could be incorrect. Since wind and solar energy depend on environmental conditions,

using a fixed plus variable approach helps provide consistency for the landowner for the entire lifecycle of the development, recognizing times when it may not be generating, such as during construction, maintenance, or decommissioning. Additionally, a fixed plus variable payment structure helps align the interests of the parties because both the landowner and the developer will have an interest in ensuring the site is functioning as well as possible. It also recognizes Alberta's movement towards a capacity market, wherein developers will be paid for the capacity they provide, not for the electricity they generate.

In some areas, landowners and developers have taken the approach of pooling and splitting compensation, recognizing that although the infrastructure itself may be on one person's land, the impacts are shared by multiple landowners in the vicinity. Developers have found that this can help establish trust.

It is advisable to be realistic about the developer's initial proposal if they are promising a particular number of turbines, amount of electricity generated, or certain economic return. It is difficult for any developer to know exactly what the project proposal will look like until the testing is completed. The initial estimates may be attractive, but they may not be reflective of the final rental amount. Until the site is proven during the first few years of operation, these numbers may be speculative, high-level estimates and could be overstated. For wind energy developments, on-site meteorological testing can assist developers in understanding the potential for production.

Since the *Surface Rights Act* does not apply to renewable energy leases, there is no built-in compensation review on the 5-year anniversary. Impacts can change over time, and it may be beneficial to include a clause on periodic renegotiation of compensation in the lease agreement. Many landowners find it convenient to include a built-in inflation factor in the compensation calculation.

The landowner and the developer should also engage in a discussion on damages, and how any disputes around damages might be addressed (mediation or arbitration, or both). Cost responsibilities for these types of processes should be discussed. The Surface Rights Board (SRB) does not have any jurisdiction over solar and wind energy leases, so unsettled disputes over damages would ultimately need to be determined in the courts, where legal costs could exceed the original amount of the damage.

• Should I notify my neighbours, or is that the responsibility of the developer? Power plants, including wind turbines and solar projects, require an approval from the Alberta Utilities Commission (AUC). Power plants are defined to include facilities for the generation and gathering of electric energy from any source. For wind and solar projects, this also includes the collector system and the substation that feeds into the transmission or distribution system.

The developer of a power plant must submit a formal application to the AUC for review. The AUC has the role of ensuring that the delivery of Alberta's utility services takes place in a manner that is fair, responsible, and in the public interest. The application is submitted to the AUC after the agreements with landowners have been secured.

Prior to making an application to the AUC, the developer must conduct a public involvement program to identify and inform people who might be directly affected by the project. Notice will be provided to all occupants, residents and landowners within 2,000 meters of a proposed power plant. The developer must undertake personal consultation for all landowners, occupants, and residents within 800 meters of the project boundaries. Guidelines for notification are outlined in AUC *Rule 007: Applications for Power Plants,*

Substations, Transmission Lines, Industrial System Designations and Hydro Developments, which is available on the AUC website at <u>www.auc.ab.ca</u>. If there are populated areas just outside the notification distances, developers are encouraged to include these areas in their public involvement program. The guidelines only set the minimum standards, so a developer may wish to exceed the standards to work with the needs of the community and the municipality.

Potentially affected parties should participate in the involvement program to identify and resolve concerns. The developer may consult with affected landowners individually and host open houses in the community to provide information. A community-based approach helps ensure all landowners get the same information. If such a community session is not offered by the developer, the landowner who is contemplating the power plant may request that a community session be held.

A well-executed public involvement program is mutually beneficial for the community and the developer. The Canadian Wind Energy Association (CanWEA) has a valuable resource called the "*Best Practices Guide for Community Engagement and Public Consultation*." This publication provides a practical guide for respectful, two-way engagement between developers and the community. A copy of this publication is available on the FAO website.

A check and balance on the developer's public involvement program occurs once an application is received by the AUC, as notice is mailed to people within 2,000 meters of the proposed plant. The notice includes key dates, contacts, and means for participation. If there are outstanding concerns and a public hearing is necessary to determine the approval, the AUC will conduct a public information session in the community near the proposed power plant to outline the opportunities for public involvement and answer any process-related questions.

Regardless of any formalized involvement process, the FAO encourages landowners to discuss wind and solar lease opportunities with their neighbours at an early stage in negotiations. Choosing to install a power plant on private land is a decision that affects the whole community.

• What types of concerns might adjacent landowners have about a power plant? Adjacent landowners could be concerned and affected in a variety of ways:

Hunting

To help ensure the safety of the workers and equipment, hunting at wind farms is generally not encouraged by developers, though a landowner may wish to negotiate with the developer to find a fitting solution.

Associated Infrastructure

Even though the power plant itself is entirely voluntary, Alberta's right of entry process does extend to substations, and transmission and distribution lines. Existing infrastructure may not have the capacity for the new project. Aboveground and underground collector and transmission lines may be needed to tie into the grid.

If collector lines are needed on adjacent lands, the developer will seek easement agreements with the affected landowners. A landowner contemplating a power plant should ask the developer if they anticipate a need for distribution and transmission lines. Alberta's transmission system needs are determined by the AESO in a separate application. Under the first round of REP, the AESO has required that applications utilize existing transmission and distribution lines.

<u>Aerial Spraying</u>

Aerial spraying would need to be coordinated with the developer. Aerial spraying typically occurs at low wind speeds, whereas wind turbines operate at higher wind speeds.

<u>Noise</u>

Under AUC *Rule 012: Noise*, noise is measured cumulatively in the area, including noise from other energy-related facilities. All generators must comply with this rule and, in some circumstances, conduct post-construction noise monitoring.

The AUC regulates the permissible sound level based on the time of day and a landowner's proximity to the power plant, with acceptable levels ranging from 40-56 dba. For frame of reference, the average vacuum cleaner is 70dba and the average dishwasher is around 40-50dba. The AUC will investigate all operational noise complaints to ensure compliance once a power plant is constructed and in operation.

Limitations on Future Development

Adjacent properties may face limitations on future developments if they interfere with the renewable energy development. A lease agreement may dictate setbacks for future development. Noise from wind turbines could limit the cumulative noise in an area, thereby restricting incremental developments that would create further noise.

Visual Impacts

Wind and solar developments can have a visual impact on the lands, which could create a contentious relationship between neighbours. Adjacent landowners should be aware that turbines include beacon lights that shine at night.

Shadow Flicker

Some residences in the vicinity of a wind development may observe a shadow flicker through wind turbines. The best practice within industry is to avoid any more than 30 hours of shadows being cast on nearby residences per year, with a maximum of 25 minutes in any particular day. A landowner might request shadow flicker modeling prior to finalizing the project layout, as well as visual barriers such as tree rows or berms.

<u>Traffic</u>

Depending on construction and maintenance needs, local traffic may increase. The developer will enter into a road use agreement with the local municipality. They must adhere to the terms of the agreement related to road use and maintenance requirements. Dust control is within the jurisdiction of the local municipality.

Ice Shed

Ice shed from turbine blades can cause safety concerns for adjacent landowners. These concerns can be mitigated through municipal bylaws for setbacks from roads and access points. The landowner and the developer may also wish to establish an agreement on setbacks for adverse weather conditions.

How does the AUC make decisions on applications if adjacent landowners are concerned?

When considering a power plant application, the AUC must consider whether the construction and operation of the plant would be in the public interest, having regard to its social, economic, and environmental impacts.

When issues arising from an application cannot otherwise be resolved, the AUC may hold a public hearing. The AUC must hold a hearing if persons who have filed submissions or objections to a power plant application have demonstrated that they have rights that may be directly and adversely affected by the AUC's decision. Such a person may participate fully in the hearing, including giving evidence, questioning witnesses, and providing arguments. This permission to participate is referred to as "standing."

The AUC makes decisions on standing on a case-by-case basis. However, in past wind and solar power plant applications, the AUC has granted standing to residents within 2 kilometers from a proposed power plant who have demonstrated that they are directly and adversely affected. If one person with standing has outstanding concerns, that is enough to trigger a hearing. A group that has the desire to participate but does not have standing may ask to make a submission to the hearing anyway. They also have the option of connecting with a landowner who has standing to gain participation through them.

A hearing brings together all parties that may be directly and adversely affected by an application to publicly express their views and present their evidence in support of, or in opposition to, an application. Hearings may be held in person or in writing. An in person hearing will typically be held in the community where the project is proposed.

Participants in the hearing may represent themselves, but most choose to retain legal counsel and technical experts as this is a formal court-like process. This helps ensure the AUC has the best quality information for consideration when making a decision. A directly and adversely affected adjacent landowner with standing may be reimbursed for reasonable costs, subject to meeting the AUC's rule requirements and review. Costs are assessed on a case by case basis in accordance with AUC *Rule 009: Local Intervener Costs*. A cost decision is made after the hearing has completed, but interveners can apply for advance funding. The Commission panel will be assessing, among other things, the lawyer or expert's contribution to the understanding of the issues, and whether or not work was unnecessarily duplicated.

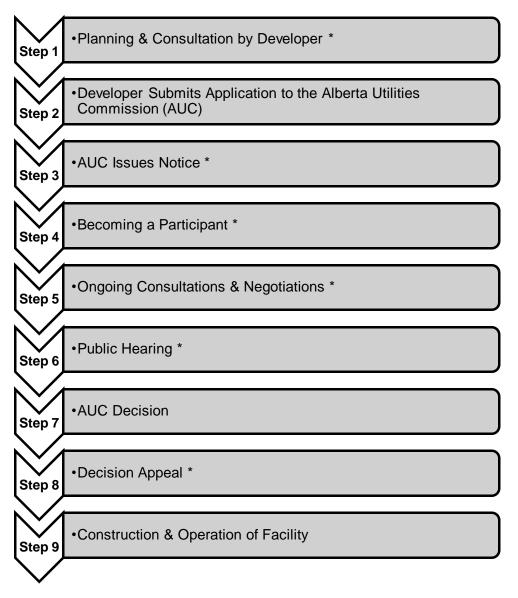
Under the AUC rules, the cost awards are scalable, so not all legal counsel will be reimbursed at the same rate. Additionally, the manner of payment should be discussed with legal counsel and technical experts early on. Some will accept whatever cost award is given by the AUC, while others will charge a rate to the landowner regardless of what is granted by the AUC. Prior to engaging legal counsel or technical experts, an adjacent landowner should review AUC *Rule 009: Local Intervener Costs* for more information.

The AUC typically issues a power plant decision within 90 days of the close of record for a hearing. The AUC may approve the application, approve it with conditions, or deny the application. Anyone may attend an AUC hearing as an observer, and decisions are posted publicly on its website at <u>www.auc.ab.ca</u>.

A hearing participant who is not satisfied with the decision may request that the AUC review the decision, but there are limited grounds for review. More information on the

grounds for review is available in AUC *Rule 016: Review of Commission Decisions.* The participant also has the option of filing a permission to appeal application in the Court of Appeal within 30 days from when the decision is issued.

Table 3: Alberta Utilities Commission (AUC) Process



*indicates steps with opportunities for public involvement

• How will access to the land be handled?

In accordance with Alberta Environment and Parks' (AEP) *Wildlife Directive for Alberta Wind Energy Projects,* wind projects must be designed in a manner that minimizes new access. Developers are encouraged to coordinate with other land users to minimize disturbance. The directive also provides a variety of measures for controlling access of unauthorized vehicles.

Access points and projected timelines should be determined for each stage in the contract. Construction access needs will differ from operational and maintenance needs. If the lease area is not near your home, the frequency or means of access during construction may be of little concern, but if the lease area is near your residence

(or your neighbour's residence), it may be beneficial to get an idea of how much traffic is anticipated. The road use agreements with the local municipality will play a large role in determining timelines and preferred routes. Once the site is operating, a developer will typically require 24/7 access to the site in case of emergencies, but a landowner may wish to develop a process for being notified in advance, recognizing that any emergency access needed by the developer or the regulator would supersede this process.

If existing roads owned by the landowner are being used, the landowner should get clarification on the projected traffic, impact to the road, and who is responsible for future maintenance. A road use agreement may be necessary. Compensation for using an existing road during the construction stage can be negotiated.

If new roads were constructed for the purposes of the wind or solar development, the developer would be required to abide with drainage requirements from AEP. Landowners often prefer low grade roads to help ensure that equipment can cross with ease; however, low grade roads may have a greater risk for the spread of noxious and prohibited noxious weeds. Construction efforts should reflect the needs of the landowner and the municipality in regards to weed control and biosecurity. Some Alberta soil types are sensitive to traffic and construction activities. Options for low impact access, especially during inclement weather, should be incorporated when crossing or constructing on sensitive soils.

• How will the site be fenced?

The developer has no obligation to fence the site. Fencing is something that would need to be negotiated. Landowners need to negotiate with the developer to ensure the written contract reflects their fencing needs. If there are sheep grazing on a solar site, the fencing will have to be tall enough to detract predators. Constructed wind farms generally do not have fencing, as the land is dual use and the turbine towers are off the ground and the doors are padlocked.

The FAO recommends being specific about fencing needs in the contract. Needs around fencing should articulate details such as the type of fence and other needs such as gates or cattle guards. A landowner may negotiate to have the developer cover the initial cost of the fence. The contract should also stipulate who is responsible for the ongoing maintenance during the life of the project, and what will happen if the landowner's fencing needs change over time.

• How will the developer handle maintenance, both for the site and the infrastructure?

Solar and wind infrastructure will require regular maintenance to ensure it continues to operate safely. Each turbine manufacturer will have specific maintenance requirements. The developer may not know the needs of turbine vendors in advance of the agreement, so they will likely specify that access be available at any time for safety reasons. A landowner and a developer will usually work together to develop a protocol for access for maintenance.

The landowner may want to capture in writing any aspects of site maintenance that are particularly important to them. Snow can reduce the effectiveness of solar panels during winter months. The landowner may wish to discuss the process for clearing snow with the developer.

Weed control can become a source of friction between companies, landowners, and adjacent property owners if it is not properly addressed. Weed control measures are

usually identified in the lease agreement. The FAO recommends being specific on how and when the developer will conduct weed control, determining what products will be used and how adjacent property owners will be notified. The responsibility for weed control could be contracted back to the landowner to ensure the weed control is performed in a manner that is consistent with the rest of the land.

A landowner should be aware that under the provincial *Weed Control Act*, if a company does not conduct adequate weed control for prohibited or prohibited noxious weeds, a municipality is allowed to issue notice to both the developer (lessor/occupant) and the landowner. If a developer does not conduct adequate weed control and is unresponsive to notice for weed control, the landowner could ultimately bear the responsibility for the weed control costs incurred by the municipality.

Clubroot, fusarium head blight, and other diseases are also becoming a greater concern in Alberta. We recommend that all landowners become familiar with the Clubroot Management Plan from Alberta Agriculture and Forestry, which is available on the FAO website. The basic standard is to request that large clumps of dirt be power washed off of vehicles and equipment prior to entering the land. Risk averse producers may wish to request additional protection with measures such as misting a disinfectant (i.e. bleach) or implementing footbaths for staff. A landowner may request soil sampling be done prior to the construction of a project to provide a baseline for the future. Soil testing the locations under cultivation prior to construction can confirm the presence of clubroot, but it cannot definitively confirm its absence.

• How is the environment protected?

Under the *Water Act*, the Crown has ownership of all water and wetlands, even on private land. Alberta Environment and Parks (AEP) must be notified before any activity impacting wetlands or drainage occurs to ensure the proper authorizations are in place. An "activity" could include the creation of drainage ditches, the construction of a road, or anything that alters surface drainage. It is the responsibility of the developer to ensure all regulatory requirements and applicable AEP standards are followed.

Similarly, wildlife is property of the Crown and, as such, AEP has established *Wildlife Guidelines for Wind Energy Projects (2017)* and *Wildlife Guidelines for Alberta Solar Projects.* These can be found online on the FAO website. Under AUC *Rule 007: Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments,* a developer's application to the AUC must demonstrate that environmental concerns have been addressed. A sign-off from AEP is required for the developer's application to the AUC.

The primary wildlife-related issues for wind and solar energy projects are: direct mortality to birds and bats; habitat loss, degradation and fragmentation resulting from habitat alterations; and disturbance.

The AEP Directive provides a framework for avoiding and mitigating wildlife concerns related to the power plant and its associated facilities using standards and best management practices. The standards provide siting, timing, and site-related wildlife requirements, while the best management practices provide information and considerations for planning wind energy facilities. The Directive is designed to recognize the uniqueness of each project and the need for adaptive solutions.

From a landowner perspective, some key aspects of the guidelines include:

- Siting of wind energy sites must be done in a manner that avoids and mitigates disturbance of important wildlife habitats.
- Once a site is selected, the developer will be required to examine the available wildlife data for the project area and a 1 km buffer zone. The developer must conduct wildlife and vegetation surveys for a minimum of 1 year. If a project has not begun within 5 years of the completion of wildlife surveys, new surveys will be required.
- The applicant will be required to abide by species-based setbacks outlined under Schedule A of the *Wildlife Directive for Wind Energy Projects*.
- A wind developer is required to conduct a post-construction monitoring program for a minimum of 3 years after the project is operational.
- If post-construction monitoring reveals wildlife mortalities higher than AEP's acceptable levels, the developer must undertake mitigation measures such as altering cut-in speed, feathering of turbine blades (turning the angle of the blade), seasonal shut down, and other acceptable industrial practices. Where such mitigation measures are required, an additional 2 years of post-construction monitoring will also be required.

AEP is developing a process for completing pre-site assessments for all disturbances that could impact native grasslands. Future AEP directives will outline considerations for conservation and monitoring during a project's lifespan from an environmental perspective.

Wind and solar power were recently added to the list of "activities" under the *Environmental Protection and Enhancement Act (EPEA)*. This will provide AEP the discretion to require Environmental Impact Assessments (EIA) for wind and solar developments that produces more than 1 MW of electrical output. It is anticipated that an EIA would only be required in circumstances where the project:

- includes unproven technologies that may pose a risk to the environment or human health;
- o is located in an area with high environmental sensitivity; or
- is met with significant public concerns related to environment aspects of the development.

• Can I see the developer's studies regarding noise and the environment before construction?

The developer will be required to conduct studies regarding noise and wildlife for their application to the AUC. Directives from AEP will outline the expected wildlife survey component and help ensure that the structure of these studies is consistent from developer to developer, while remaining adaptable to local conditions. Developers will also perform a shadow flicker study for their proposed project.

Noise and environmental impact studies will not be available when the land is being secured. Once these studies are filed in support of an application to the AUC, they form part of the public record of the proceeding. As a landowner, you may request that this information be provided for your review when it is completed.

• Does the landowner incur any liability for trespassers or people getting injured on the project site?

An agreement will generally indemnify the landowner from accidents and damages resulting from the development during its entire life cycle, including construction. What an indemnity clause does is shift the potential incurrence of cost in the event that there is a lawsuit. This is important to consider if you have other leases, crop tenants, or custom

harvesters operating near the equipment. Indemnity clauses look different from contract to contract, so the FAO recommends getting legal advice to ensure the clause is suitable for your particular situation.

A landowner can also ask to be named as an additional insured party on the insurance policy, which would mean that the insurance company would defend both the landowner and the developer in the event of an issue. A landowner should not hesitate to request clarification on what type of insurance the developer has in place and the coverage amount. Likewise, landowners should advise their insurers of their plans to host a wind or solar development and add to their homeowner policy once development occurs, in the event that they themselves cause damage to infrastructure.

• How does this new lease relate to my other leases, easements, and right of ways? The developer will examine other encumbrances on title, such as leases or right of ways for pipelines or well sites. Each licensed development has associated setbacks that will need to be observed. As a landowner, you should be aware of any other caveats on your land title and ensure that the developer has an understanding of the other infrastructure on the land.

• What is the role of a municipal district or county?

The FAO recommends that landowners talk with their municipality before signing a wind or solar energy lease to get a better understanding of the county's bylaws. Municipalities have the authority to develop bylaws concerning wind and solar development, but the approach will differ from community to community.

It is important to understand that, under section 619 of the *Municipal Government Act* (*MGA*), if a municipality's decision is at odds with a decision of the AUC, the AUC's decision can prevail over a bylaw or decision of a municipality. This occurs extremely rarely, and it must relate to an issue of contention addressed in the AUC proceeding.

CanWEA's *Best Practices for Community Engagement and Public Consultation* encourages developers to establish contact with the municipality before the information is published more broadly in the community. This helps ensure that the county is aware of the project if it receives questions. Developers are required to consult with the municipality prior to submitting their application for a project to the AUC.

• What should I know about taxes?

A landowner should talk to their lawyer, their accountant, and their municipal tax assessor to get a better understanding of the potential tax implications prior to signing a solar or wind lease. On a federal taxation level, your accountant may be able to provide advice on the possible income tax implications of a wind or solar lease.

For municipal taxes, there are two components a landowner should consider: the infrastructure and then the land itself. The infrastructure will be taxed directly to the developer as linear property. If the company was to become insolvent, the landowner would not become directly responsible for the outstanding linear taxes.

For the land itself, the lease agreement between the landowner and the developer will stipulate how the property taxes will be paid. The rate of taxation may be different than in the past if the zoning has changed. The landowner and the developer would both receive the notice for the taxes, but the lease agreement would clarify that the property taxes are the responsibility of the developer for the life of the development.

Talking with your assessor will provide a clearer idea of the anticipated amount of the property taxes. This is an important conversation because the landowner is ultimately responsible for the payment of property taxes if the company becomes insolvent and the site is not sold during the receivership process. The exact amount of these taxes is difficult to determine because it will depend on the assessed value of the infrastructure left behind. Non-operational renewable energy infrastructure is no longer taxed as linear property but is considered an improvement on the land. From an assessment perspective, there is limited value in non-operational renewable energy infrastructure. Note that if the site was non-operational at any stage during the life of the development, the infrastructure would be taxed as improvements rather than linear property.

• What if I am part of an irrigation district?

In Alberta, the *Irrigation Districts Act (IDA)* establishes 13 irrigation districts in the province. Irrigation districts are responsible for constructing, operating, and maintaining irrigation works for the purposes of conveying and delivering water. Irrigation districts are an important part of the agricultural base in many rural communities.

For developers, agricultural land may be attractive for site selection due to fewer environmental constraints around the maintenance of wildlife habitat. However, use of irrigated land for wind and solar developments may be a concern to the irrigation district, as a significant investment has been made in the infrastructure. Removal of irrigation acres can create stranded assets. There may also be a financial and efficiency loss to the irrigation district.

Landowners should be aware that removing land from irrigation may result in a permanent loss of those water rights. A landowner should discuss possible wind and solar projects with their irrigation district prior to signing an agreement to better understand the potential implications. An irrigation district may qualify for standing in a hearing with the Alberta Utilities Commission (AUC), if they are determined to be directly and adversely affected.

How does the developer plan to reclaim the site at the end of its life?

Unlike an oil and gas lease, a renewable energy lease gains value over time. Whereas an oil or gas well will become depleted over time, a wind or solar site may be considered "proven" as it ages. Therefore, even an older site could remain attractive to investors. Lease agreements are generally longer than the lifespan of the equipment, providing an opportunity for repowering. A landowner should keep in mind that repowering may require different or upgraded infrastructure.

The developer may be required to provide a decommissioning or reclamation plan with their initial application to the AUC. The legislated definition for reclamation in Alberta includes decommissioning, but for the purposes of this document, we often draw distinctions between decommissioning (removal of infrastructure) and reclamation (bringing land back to equivalent land capability).

For wind energy, decommissioning would involve the removal of the turbine towers and concrete foundations to minimum of 1 meter. For solar developments, decommissioning would involve removing the panels and racking systems.

Underground cabling should be considered in the infrastructure discussions. A landowner may wish to negotiate full removal if they have future plans for the land, keeping in mind that full removal can create a greater environmental disturbance. The lease will often provide that there will be no caveat on title after the project is reclaimed,

so future landowners may be unaware that there are structures remaining below the surface.

The aim of reclamation is to achieve "equivalent land capability." Under the *Conservation and Reclamation Regulation,* equivalent land capability refers to the ability of the land to support various land uses after reclamation similar to the ability that existed prior to an activity being conducted on the land.

The *Renewable Electricity Act* added wind and solar power generation to the list of "activities" under the *Environmental Protection and Enhancement Act* in spring 2017. Unlike oil and gas, renewable energy projects do not require a Reclamation Certificate at the end of their life, but AEP is currently developing conservation and reclamation requirements. Until these requirements are completed, AEP recommends that landowners refer to the *2010 Reclamation Criteria for Wellsites and Associated Facilities for Cultivated Lands* to help negotiate conservation and reclamation outcomes. This document is available on the FAO website.

In the 2010 Reclamation Criteria for Wellsites and Associated Facilities for Cultivated Lands, the company is required to assess and compare landscape, soil, and vegetation parameters onsite and offsite. The intent of the criteria is to evaluate whether land function and operability is comparable to the surrounding area or an appropriate reference, and describe the allowable changes in site conditions. It is anticipated that the conservation and reclamation requirements for wind and solar will be similar to what currently exists for oil and gas, with changes to recognize the uniqueness of the sector.

From a negotiation standpoint, a landowner should assume the site will be decommissioned and reclaimed at the end of the lease term and engage in a thorough conversation concerning possible end-of-life scenarios, even though the site may be repowered rather than decommissioned or reclaimed.

Timing will be a particularly important component of this discussion. When does the developer anticipate undertaking the decommissioning and reclamation? Would there be a gap in between decommissioning and reclamation? How long would reclamation take? How will the landowner be paid as these processes are taking place?

Both the decommissioning plan and the lease agreement should stipulate how long a company must pay rentals during the decommissioning and reclamation periods, and how damages will be handled when bringing the land back to equivalent land capability.

• What happens to the infrastructure on my land if the developer becomes insolvent?

There is a possibility that a developer could become insolvent before fulfilling the decommissioning and reclamation obligations contained in their lease agreement and decommissioning plan. Landowners should be aware that there is no industry or government-funded "orphan" program that would remove the infrastructure and reclaim the solar or wind lease belonging to an insolvent company. In oil and gas, the Orphan Well Association (OWA) takes care of the end-of-life remediation and reclamation needs in the event that the operator is no longer financially viable. The OWA is funded through oil and gas industry levies paid by licensees and collected by the Alberta Energy Regulator (AER). This program does not extend to wind and solar leases.

Various scenarios could unfold in the event of an insolvency. "Insolvent" simply means a company cannot pay its debts; it is not a formal legal state. When a company is in

receivership, the receiver takes control of the assets and sells them to satisfy secured creditors, whereas in bankruptcy the goal is to satisfy as many secured and unsecured creditors as possible.

The renewables industry is fundamentally different than oil and gas in that the sites can gain value over time and the infrastructure maintains a strong resale value. If the developer was to become insolvent, a receiver would take control of the assets and make a determination on how to go forward. If the site was economical, it could be sold to another developer, who would continue with the existing lease. Note that if a receiver takes control of a site and plans to continue to operate the assets, they would be responsible for the payments as per the lease agreement until the site is sold. The receiver would not be responsible for any arrears.

There is a possibility that some sites may be determined to have no economic future and would be salvaged for scrap. Here the distinction between decommissioning and reclamation is important. In the event of an insolvency, it is likely that decommissioning would, to a large degree, be taken care of through the receivership or bankruptcy processes for sites that are no longer economically viable. Salvaging provides an economic incentive for decommissioning. The receiver would not be responsible for reclamation, so the landowner could be left with the unwanted materials such as concrete foundations or pilings, and underground cabling. In the event that a site is being salvaged by a receiver, the landowner should not attempt to remove any infrastructure until the receivership process has concluded.

A landowner should also be aware that there is no recovery of rentals process for unpaid renewable energy surface lease rentals through the Surface Rights Board (SRB). If the developer was to become insolvent and default on their payment, recourse is through the courts as the lease would be treated as a typical commercial agreement. In the case of a bankruptcy, there is a process for unsecured creditors, but the reality is that chances of collecting are minimal, as the value of assets in a bankruptcy is usually much lower than the total liabilities.

Possible solutions for mitigating this risk include negotiating a bond, security deposit or letter of credit for reclamation. Landowners are encouraged to discuss possibilities for mitigating their risks with their lawyer.

• When can the landowner terminate the lease?

The details associated with the termination of a lease are unique to each agreement. A lease is considered a civil agreement, which means that enforcement is through the courts, which can be costly. All agreements should include a dispute resolution clause, where the developer and the landowner will be required to go to mediation, arbitration or the courts to help resolve a dispute. The FAO recommends discussing options for dispute resolution and termination when legal advice is being sought during the negotiation stage. This discussion should also include a conversation about the costs associated with dispute resolution.

Most current contracts do not contain a provision allowing the landowner to terminate the contract. The FAO recommends asking for an "opt-out" clause in the agreement to capture circumstances under which the landowner may cancel the agreement. Most developers will have strict parameters around such a clause. Note that the cancellation provisions for contracts under the *Fair Trading Act* do not apply to wind and solar energy leases.

• How do I find a good lawyer?

Getting legal advice is an imperative aspect of having a good contract that meets your needs. A landowner can ask a developer to help cover the cost of obtaining independent legal advice on a proposed contract.

You don't necessarily want the same lawyer who completed your real estate transaction or your estate planning: the lawyer you select should have a specialized expertise in renewable energy negotiations.

The FAO will not provide a recommendation for any particular lawyer. To find a suitable lawyer, a landowner can call the Law Society of Alberta. They will be able to provide the names of three lawyers with relevant expertise, and the first 30 minutes of consultation with each lawyer is free. Alternatively, another avenue for finding a lawyer would be to research which lawyers represented landowners on recent decisions from the AUC. This information is publicly available on the AUC website.

• Do I need to sign a confidentiality clause?

A lease agreement will normally include a confidentiality clause. This will limit your ability to share details of the agreement with your friends and neighbours. If you signed a confidentiality clause, you would need the developer's permission before bringing an issue to an advisor or an agency such as the FAO.

If you have any further questions, you may contact the FAO through the Ag Info Centre by phone at 310-FARM (3276) or by email at <u>farmers.advocate@gov.ab.ca</u>.

This is a working document that will be updated on an ongoing basis. It was last updated July 28, 2017. We are open to feedback, comments, and suggestions.

Thank you to the Alberta Association of Municipal Districts and Counties (AAMDC), Alberta Agriculture and Forestry, the Alberta Electric System Operator (AESO), Alberta Energy, Alberta Environment and Parks, Alberta Municpal Affairs, the Alberta Utilities Commission (AUC), the Canadian Wind Energy Association (CanWEA), Daryl Bennett (My Landman Group), and Paula McGarrigle and Evelyn Carpenter (Solas Energy Consulting Inc.) for your assistance in the development of this publication.

Advice provided by the Farmers' Advocate Office, including this document, is provided for general information only. This information may not be relied upon as legal advice or as substitute for it. You are responsible for applying any general information provided to your particular situation, if appropriate, and deciding upon a course of action. The Farmers' Advocate Office (FAO) and Alberta Agriculture and Forestry make no warranty, expressed or implied, and do not assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information provided to you. For all important business and personal matters, you should consider obtaining independent legal and other professional advice to properly assess and understand your options and obligations.

GLOSSARY

Applicant – In reference to the AUC process, an "applicant" is a person or corporation that is intending to construct, operate, or alter a hydro development, power plant, substation, or transmission line in Alberta.

Associated infrastructure – Associated infrastructure includes substations, and distribution and transmission lines.

Bond – A bond is a financial sum that is posted to help ensure compliance with laws or the stipulations outlined in a lease.

Capacity market – A market model where generators are paid for having generation available to supply, whether or not any energy is actually produced or supplied. Details about Alberta's coming capacity market have not yet been determined.

Caveat – An encumbrance that will appear on a Certificate of Title when someone other than the registered owner has a legal claim or interest in the land. "Caveat" is a Latin word meaning "let him beware."

Clubroot – Clubroot is a serious soil-borne disease found in canola, mustard and other crops in the cabbage family. The objective of the Clubroot Management Plan (Agriculture & Forestry) is to minimize yield losses due to clubroot and reduce the further spread of clubroot. Clubroot was declared a pest under the *Agricultural Pests Act* in 2007.

Collector system – A collector system is a system of cables that is used to collect the electricity generated by the turbines or solar panels to be brought to a substation for conversion.

Decommissioning – The removal of energy infrastructure from the land. Included under the definition for "reclamation" under the *Environmental Protection and Enhancement Act*.

Distribution lines – Any system or works used for the delivery and distribution of electric energy directly to consumers. This does not include a power plant or transmission line.

Easement – An encumbrance that will appear on the Certificate of Title that conveys the right to cross or use another person's land for a specific purpose. Easements are typically used for the land used for collector systems.

Encumbrance – Encumbrance refers to any charge on land created or effected for any purpose whatever, inclusive of mortgage, mechanics' or builders' liens, when authorized by statute, and executions against land, unless expressly distinguished. [*Land Titles Act*]

Environmental Impact Assessment (EIA) – An EIA is defined under section 40 of the *Environmental Protection and Enhancement Act*. The purpose of this process is:

- a. to support the goals of environmental protection and sustainable development,
- b. to integrate environmental protection and economic decisions at the earliest stages of planning an activity,
- to predict the environmental, social, economic and cultural consequences of a proposed activity and to assess plans to mitigate any adverse impacts resulting from the proposed activity, and
- d. to provide for the involvement of the public, proponents, the government and government agencies in the review of proposed activities.

Alberta Environment and Parks (AEP) can require an EIA for wind and solar projects. It is anticipated that an EIA would only be required where the project includes unproven technologies that may pose a risk to the environment or human health; is located in an area with high environmental sensitivity; or is met with significant public concerns related to environment aspects of the development.

Equivalent land capability – In reclamation, equivalent land capability refers to the ability of the land to support various land uses after conservation and reclamation similar to the ability that existed prior to an activity being conducted on the land.

Feathering – Feathering refers to turning the angle of a blades of a turbine into or out of the wind to control production or absorption of power. [Wildlife Guidelines for Wind Energy Projects, AEP]

Fixed compensation – Compensation for a renewable energy lease in which the developer provides the landowner with a static sum of compensation on an annual basis.

Fixed plus variable compensation – Compensation for a renewable energy lease in which the developer provides the landowner with a static sum for compensation as well as royalties based on generation on an annual basis.

Fusarium head blight (FHB) – Fusarium head blight is a serious fungal disease found in wheat, barley, oats and corn. Fusarium graminearum was declared a pest under the *Agricultural Pests Act* in 1999.

Grid/Alberta Interconnected Electric System – The system of interconnected transmission power lines and generators in Alberta.

Indemnity clause – An indemnity clause may be included in a renewable energy lease to transfer the risk between the two parties to prevent loss or compensate for a loss which may occur as a result of a specified event.

Irrigation District – The *Irrigation Districts Act* establishes 13 irrigation districts in Alberta, which exist to convey and deliver water through the irrigation works; divert and use quantities of water; construct, operate and maintain the irrigation works; and maintain and promote the economic viability of the district.

Insolvent – A company may be considered insolvent if it is unable to pay debts as they fall due in the usual course of business, or if they have liabilities in excess of the market value of assets.

Licensee Liability Rating (LLR) – The liability management program governing most conventional upstream oil and gas wells, facilities, and pipelines, as specified in *Directive 006: Licensee Liability Rating (LLR) Program and Licence Transfer Process.* The LLR is managed by the AER.

Linear property – Linear property is a type of property defined under section 284(1) (k) of the *Municipal Government Act*. Linear property includes gas and oil wells, pipelines, telecommunications and cable property, and electric power property (generation, transmission and distribution).

Meteorological towers – A tower used at a potential project site to determine the wind characteristics.

Micro-generation – Micro-generation refers to renewable energy projects (not exceeding 5MW) that allow Albertans to generate their own electricity.

Orphan infrastructure – In the upstream oil and gas industry, an orphan is a well, pipeline, facility or associated site for which there is no one legally responsible and/or financially able party to deal with its abandonment and reclamation responsibilities.

Occupant – An occupant is the person who occupies, exercises control over or has the right to occupy or exercise control over land. In the context of the *Weed Control Act*, the renewable energy developer is considered an "occupant."

Power plant – A power plant is a facility for the generation and gathering of electric energy from any source, including wind or solar developments.

Proponent – In reference to the AESO process, developers who are interested in or currently participating in REP are referred to as "proponents." Parties participating in the Request for Qualifications or Request for Proposal stages are referred to as "bidders."

Receiver – The receiver is the person or company appointed to settle the affairs of a company in the event of bankruptcy or insolvency.

Receivership – An insolvent company may enter into a formal receivership process, where the assets come under the control of a receiver, who will work to sell the assets to cover the debts of secured creditors.

Reclamation – Under the *Environmental Protection and Enhancement Act*, reclamation means any or all of the following:

- i. the removal of equipment or buildings or other structures or appurtenances;
- ii. the decontamination of buildings or other structures or other appurtenances, or land or water;
- iii. the stabilization, contouring, maintenance, conditioning or reconstruction of the surface of land;
- iv. any other procedure, operation or requirement specified in the regulations;

Renewable Electricity Program (REP) – The Renewable Electricity Program (REP), designed and administered by the Alberta Electric System Operator (AESO), will encourage the development of 5,000 megawatts (MW) of renewable electricity generation capacity to the grid by 2030.

Right of Entry – A legislated process under the *Surface Rights Act* that allows a company the right to entry, use and take the surface of the land to conduct operations when landowner consent cannot be obtained. This process does not apply to wind and solar projects.

Scalable – Capable of being easily expanded or upgraded on demand.

Secured Creditor – A lender who takes collateral in exchange for loaning money.

Standing – If it appears to the AUC that a decision on an application may directly and adversely affect the rights of a person or organization, they will be given "standing" to participate at a hearing.

Substation/switching station – A facility where equipment is used to tie together two or more electric circuits through switches (circuit breakers). The switches are selectively arranged to permit a circuit to be disconnected or to change the electric connection between the circuits.

Surface Rights Board (SRB) – The SRB is a tribunal that assists landowners/occupants and operators resolve disputes related to the development of subsurface resources such as oil, gas, and coal or to build and operate pipelines and power transmission lines. The SRB processes do not extend to wind and solar leases.

Electric transmission system – An interconnected group of electric transmission lines and associated equipment for moving or transferring electricity in bulk between points of supply and points at which it is transformed for delivery over the distribution system lines to consumers, or is delivered to other electric systems.

Variable only compensation – Compensation for a wind or solar lease where the developer provides the landowner royalties based on generation on an annual basis.

Contacts

Farmers' Advocate Office (FAO) – Agriculture and Forestry www.farmersadvocate.gov.ab.ca farmers.advocate@gov.ab.ca 310-FARM (3276)

Alberta Utilities Commission (AUC) <u>www.auc.ab.ca</u> <u>consumer-relations@auc.ab.ca</u> 780-427-4903

Alberta Environment and Parks (AEP) <u>www.aep.alberta.ca</u> <u>ESRD.Info-Centre@gov.ab.ca</u> 310-ESRD (3773)