

## Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines

This rule as amended was approved by the Alberta Utilities Commission on March 18, 2022, and is effective on April 25, 2022.

---

### Contents

1	Purpose .....	4
2	Application process.....	5
2.1	Preparation of an application.....	5
2.2	Submission via the eFiling System.....	5
2.3	Application deemed complete .....	6
3	Application processing timelines.....	6
4	Power plants.....	8
4.1	Exemptions.....	9
4.1.1	Micro-generation.....	10
4.1.2	Power plants less than one megawatt .....	10
4.1.3	Isolated generating unit .....	10
4.2	Checklist applications for new power plants equal to or greater than one megawatt and less than 10 megawatts that are not proposed as micro-generation units under the Micro-generation Regulation .....	10
4.2.1	Amendment process.....	11
4.3	Wind power plant applications.....	11
4.3.1	Applications where changes in equipment or layout are anticipated after the approval of the application.....	11
4.3.2	Information requirements.....	12
4.3.3	Amendment process.....	20
4.4	Solar power plant applications.....	23
4.4.1	Applications where changes in equipment or layout are anticipated after the approval of the application.....	23
4.4.2	Information requirements.....	23
4.4.3	Amendment process.....	32
4.5	Thermal power plant applications.....	34
4.5.1	Applications where changes in equipment are anticipated after the approval of the application.....	34
4.5.2	Information requirements.....	35
4.5.3	Amendment process.....	42
4.6	Other power plant applications.....	45
4.6.1	Applications where changes in equipment are anticipated after the approval of the application.....	45
4.6.2	Information requirements.....	46
4.6.3	Amendment process.....	53
4.7	Hydroelectric power plants and hydro developments .....	55
4.7.1	Information requirements.....	55
4.8	Community generation .....	62
4.8.1	Information requirements.....	62

	4.8.2 Amendment process.....	64
5	Time extension applications for power plants.....	64
	5.1 Information requirements.....	65
6	Decommission and salvage or cancellation of power plants.....	66
7	Transmission lines, substations and other transmission facilities.....	67
	7.1 Needs identification document applications to construct or alter a substation or transmission line.....	67
	7.1.1 Needs identification document application information requirements.....	68
	7.1.2 Abbreviated needs identification document application information requirements.....	70
	7.2 Transmission line, substation and other transmission facility applications.....	71
	7.2.1 Information requirements.....	72
	7.2.2 Amendment process.....	79
8	Time extension applications for transmission facilities.....	81
9	Decommission and salvage or cancellation for transmission facilities.....	82
	9.1 Decommission and salvage information requirements.....	82
	9.2 Cancellation information requirements.....	83
10	Battery storage facilities.....	83
	10.1 Battery storage facility information requirements.....	84
11	Interconnection applications.....	90
	11.1 Information requirements.....	90
	11.1.1 Connection to the distribution system.....	90
	11.1.2 Connection to the transmission system.....	91
12	Industrial system designation applications.....	91
	12.1 Information requirements.....	91
13	Gas utility pipelines.....	94
	13.1 Exemptions.....	94
	13.2 Certain pipeline installations.....	94
	13.2.1 Certain pipelines and activities.....	95
	13.3 Project need.....	95
	13.3.1 Need assessment information requirements.....	96
	13.3.2 Abbreviated need.....	97
	13.3.3 Abbreviated need information requirements.....	98
	13.4 Gas utility pipeline applications.....	98
	13.4.1 Information requirements.....	99
	13.5 Amendments.....	104
	13.5.1 Amendment process.....	104
	13.5.2 Checklist amendment application.....	106
	13.5.3 Amendment application.....	108
	13.5.4 Information requirements.....	108
	13.6 Time extension applications for gas utility pipelines.....	109
	13.7 Operational requirements.....	110
	13.7.1 Pipeline flaring, incinerating and venting.....	110
	13.7.2 Venting and fugitive emissions management requirements.....	110
	13.7.3 Records of pipeline flaring, incinerating and venting.....	111
	13.8 Storage requirements.....	112
14	Approval transfer applications.....	112
	14.1 Information requirements.....	112
	14.1.1 Electric facility approval transfer.....	112
	14.1.2 Gas utility pipeline approval transfer.....	113
15	Abbreviations.....	114
16	Glossary.....	115

Appendix A1 – Participant involvement program guidelines .....	119
Appendix A1-B – Participant involvement program guidelines for Indigenous groups .....	136
Appendix A2 – Independent System Operator (ISO) participant involvement program guidelines .....	144
Appendix B1 – Economic comparison format – requirement ISD9 .....	145

---

## 1 Purpose

This rule applies to applications for the construction, alteration, operation and connection of power plants, [hydro developments](#), substations, transmission lines, battery storage facilities and industrial system designations, pursuant to the [Hydro and Electric Energy Act](#), and for approval of a needs identification document, pursuant to the [Electric Utilities Act](#) and the [Transmission Regulation](#).

This rule also applies to applications for the construction, operation or modification of [gas utility pipelines](#) or [pipeline installations](#), pursuant to the [Pipeline Act](#) and the [Gas Utilities Act](#).

Any [person](#) intending to construct, alter, operate, or connect, power plants, hydro developments, substations, transmission lines, battery storage facilities or industrial system designations, including ownership changes and construction or alteration, time extensions, or construct, operate or modify a gas utility pipeline or pipeline installation must file an application with the Alberta Utilities Commission in accordance with this rule.

This rule groups information requirements together for each specific application type. For example, an applicant for a wind power plant can find all the relevant information requirements in subsection 4.3, while an applicant for a time extension related to a power plant can find all the relevant information requirements in Section 5.

This rule also contains appendixes that an applicant must be familiar with before submitting an application.

If you are accessing this rule online, it contains hyperlinks to reference other sections and definitions of certain words and phrases.

Text boxes that contain supplemental information to meet the rule requirements are found throughout this rule.

## 2 Application process



The following section describes the application process. It provides guidance for preparation of an application, an overview of the eFiling System and the AUC's process for deeming an application complete.

### 2.1 Preparation of an application

Prior to filing an application, an applicant must follow the participant involvement program guidelines set out in [Appendix A1](#) – Participant involvement program guidelines, [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups and/or [Appendix A2](#) – ISO participant involvement program guidelines. An applicant must include documentation describing its notification and consultation program in its application.

### 2.2 Submission via the eFiling System

Before registering a proceeding, ensure a separate application has been created for each facility within your project.

Example: Two applications are required if applying for a time extension for a project that consists of a substation and a transmission line.

An applicant must file its application electronically using the AUC's eFiling System. The eFiling System is accessible via the AUC website at [www.auc.ab.ca](http://www.auc.ab.ca).

All applicants must request a new proceeding and add applications electronically. Applications include application forms that the applicant completes using the eFiling System, together with attachments that the applicant uploads to the eFiling System. An application form must be created for each separate facility within a project before the proceeding can be registered.

Applicants can find the application forms hyperlinked in the respective information requirement sections of this rule.

The forms are also listed on the Rule 007 Related information page on the AUC website.

After all the application forms and attachments have been uploaded to the eFiling System the proceeding can then be registered.

**All documents filed in respect of a proceeding, including any application submissions and any documents received prior to the commencement of the proceeding, will be placed on the public record, unless the Commission directs otherwise.**

Instructions on how to use the eFiling System, including: request a new proceeding, submit an application, and upload documents, can be found in the [eFiling System User Guide](#). Questions and issues on the use of the eFiling System should be directed to the filing services support staff at 403-592-4500 or by email to [info@auc.ab.ca](mailto:info@auc.ab.ca).

### 2.3 Application deemed complete

The Commission reviews all applications to ensure regulatory compliance and completeness.

#### **The Commission will not process an application that contains major deficiencies.**

If the application contains major deficiencies, it will be closed and the applicant will receive an explanation via the eFiling System. An example of a major deficiency is the omission of key information, such as neglecting to include a renewable energy referral report from Alberta Environment and Parks (AEP) for a wind or solar power plant application, participant involvement information or a noise impact assessment when applying to build a power plant in proximity to residences.

If the application has minor deficiencies, or where clarification of information provided in the application is required, the Commission may request further information from the applicant. Failure to respond in the stated time frame may result in the Commission closing the application with written notification of the reason for the rejection.

The Commission will issue an application complete letter in a proceeding when it has deemed an application to be complete.

- When determining if an application is complete, the Commission considers whether the information provided by the applicant about the proposed facility satisfies all of the Commission's information requirements.

### 3 Application processing timelines

The AUC has established performance standards and timelines for processing facility applications. There are five categories of facility applications based on process requirements that are driven by the complexity of an application. Descriptions of the application categories and the corresponding processing timelines are set out in Table 3.1.

Table 3.1: Performance standards for facility applications

Category	1	2	3	4	5
<b>Process</b>	<ul style="list-style-type: none"> <li>• no notice</li> <li>• no objections</li> <li>• no information requests</li> </ul>	<ul style="list-style-type: none"> <li>• no notice</li> <li>• no objections</li> <li>• one round of AUC information requests</li> </ul>	<ul style="list-style-type: none"> <li>• notice</li> <li>• no objections/ no person with standing</li> <li>• one or more rounds of AUC information requests</li> </ul>	<ul style="list-style-type: none"> <li>• notice</li> <li>• objections</li> <li>• no participant information requests</li> <li>• written/oral hearing</li> </ul>	<ul style="list-style-type: none"> <li>• notice</li> <li>• objections</li> <li>• participant information requests</li> <li>• written/oral hearing</li> </ul>
<b>Record development timeline</b>	5 business days*	35 days	90 days	120 days	205 days
<b>Performance standard</b>	90 per cent			80 per cent	
<b>Decision writing timeline</b>	15 days	20 days	30 days	75 days	90 days
<b>Performance standard</b>	100 per cent				

\* This is the only performance standard based on business days; all other performance standards are based on calendar days.

The performance standards for record development are premised on the process steps necessary to ensure a complete application and a sufficient evidentiary record to allow the Commission to decide whether approval of an application is in the public interest. Those process steps are summarized in Table 3.2.

Table 3.2: Record development steps

Record development steps by category					
Process	Category				
	1	2	3	4	5
AUC application review	X	X	X	X	X
Notice of application			X	X	X
AUC information request round 1		X	X	X	X
AUC information request round 2			X	X	X
Objection/standing ruling				X	X
Completeness notification	X	X	X	X	X
Notice of hearing				X	X
Participant information requests					X
Intervener evidence				X	X
Rebuttal evidence				X	X
Oral or written hearing				X	X
Argument/reply argument				X	X

The record development timelines are based on the receipt of applications that are complete or substantially complete. The timelines do not take into account process steps that are in addition to those outlined in Table 3.2 (such as technical meetings, negotiated settlements, supplemental information requests and motions for various matters), which could extend the overall timeline.

The Commission will assign new applications to one of the five category types listed above and will advise applicants of the application category in an application response letter that is issued in the proceeding. The Commission may revise the assigned category if more process steps are required to consider the application.

As described throughout this rule, the Commission allows checklist applications to be submitted in certain instances. The Commission will assess the eligibility for an application to be filed as a checklist application and will issue a decision within five business days of receiving a properly completed checklist application.

Checklist applications may be submitted for new power plants equal to or greater than one MW and less than 10 MW, minor amendments to transmission facilities and for time extensions for transmission facilities, for some routine abbreviated needs identification document applications and for minor amendments to gas utility pipelines.

## 4 Power plants

Power plant applications are made pursuant to Section 11 of the *Hydro and Electric Energy Act*.



This section provides information on power plant exemptions and situations where an application may not be required. It sets out the checklist application process for new power plants that are equal to or greater than one MW and less than 10 MW and then sets out information requirements for power plants 10 MW or greater, by type of power plant, specifically:

- wind power plants
- solar power plants
- thermal power plants
- other power plants
- hydroelectric power plants and [hydro developments](#)
- community generation

If a power plant has an associated substation (for example a collector substation or step-up transformer), the applicant must choose whether the substation is considered:

- As a part of the power plant. In this situation, a power plant approval is requested and no separate substation permit and licence requested, or
- Separate from the power plant. In this situation, a power plant approval and a substation permit and licence are both requested.

If there is duplication between the requirements for a power plant application and an associated substation or connection order (for example, if one participant involvement program was completed for the project and each application requires a summary of the participant involvement program), the applicant must satisfy the requirements in full in one of the applications, and may refer to that application in the other application(s).

If a separate substation or connection order is also part of the project, a separate application form should be added for each component prior to registering the proceeding.

#### **4.1 Exemptions**

The following section lists power plants that may not require an AUC application or approval. If no exemptions for power plants are applicable, the owner must file a power plant checklist application or a power plant application containing all the information required by this rule and [Rule 012: Noise Control](#).

Even if an owner of a power plant is exempt from filing an application under this rule, the Commission retains the jurisdiction to investigate issues in relation to compliance with this rule and Rule 012, and to confirm that the requirements for exemption are satisfied and continue to be satisfied.

#### 4.1.1 Micro-generation

If a customer, within the meaning of [Rule 024: Rules Respecting Micro-Generation](#), is proposing a micro-generation generating unit, the customer must refer to Rule 024 to determine whether the proposed micro-generation generating unit (power plant) meets the requirements for an exemption or an application is required under this rule.

#### 4.1.2 Power plants less than one megawatt

If the power plant is less than one MW, the owner may proceed without filing an application if the requirements of subsection 18.1(2) of the *Hydro and Electric Energy Regulation* are met.

#### 4.1.3 Isolated generating unit

If the power plant is an isolated generating unit with a [total capability](#) of less than 10 MW, the owner may proceed without filing an application if the requirements of subsection 18.3(2) of the *Hydro and Electric Energy Regulation* are met.

### 4.2 Checklist applications for new power plants equal to or greater than one megawatt and less than 10 megawatts that are not proposed as micro-generation units under the Micro-generation Regulation

An applicant must file a checklist application using the checklist form if the power plant:

- Is or will be located at a site that will have a total capability of one MW or greater and less than 10 MW, regardless of whether the energy generated is solely for its own use or for export to the Alberta Interconnected Electric System;
- Does not directly and adversely affect any person;
- Has no adverse effect on the environment; and
- Complies with [Rule 012: Noise Control](#).

The checklist form contains questions reflecting the location, capability and type of power plant and confirmation that all of the regulatory requirements for the project have been met. If the project is a wind or solar power plant, the applicant must submit a signed renewable energy referral report from Alberta Environment and Parks (AEP) Fish and Wildlife Stewardship. Applicants are not required to file any other related supporting documents (e.g., participant involvement program summaries, noise impact assessment); however, applicants are required to retain all related supporting documents. The Commission will continue to ensure compliance with its requirements via an audit review process.

The Commission will assess eligibility for an application to be filed as a checklist application and will issue a decision within five business days of receiving a properly completed checklist

application. Applicants may be asked to file supplemental information for applications that are not eligible to be filed as checklist applications.

Please use the [Power plant checklist application form](#) to assemble the information requirements for a checklist application.

An application to construct and operate a power plant that is 10 MW or greater is not eligible for the checklist application process and must include the requirements corresponding to the power plant type (e.g., wind, solar, thermal).

#### **4.2.1 Amendment process**

If amendments are required to a power plant that was approved under the checklist application process, the applicant must follow the amendment process filing requirements corresponding to the power plant type (e.g., wind, solar, thermal), as set out below.

### **4.3 Wind power plant applications**

An application to construct and operate a wind power plant must include the information requirements listed in subsection 4.3.2.

#### **4.3.1 Applications where changes in equipment or layout are anticipated after the approval of the application**

Wind turbine technology continues to advance rapidly, often in less time than it takes for a project to progress through the development, permitting and pre-construction cycle. To provide applicants with flexibility to accommodate technology selection after a project is approved, the requirements for a wind power plant include allowances that must be finalized in a project update.

An applicant submits one of the following types of applications to construct and operate a wind power plant:

- An application where no changes are anticipated after the approval of the application, and the applicant has identified specific equipment, including type and model, and proposes a specific layout for the project.
- An application where changes in equipment or layout are anticipated after the approval of the application.

If an applicant is filing for a project where no changes are anticipated after the approval of the application, and the applicant has identified specific equipment, including type and model, and proposed a specific layout for the project, the applicant must submit its application in accordance with the information requirements set out in subsection 4.3.2.

If an applicant is filing for a project where changes in equipment or layout are anticipated after the approval of the application, the applicant must submit its application in accordance with the information requirements set out in subsection 4.3.2. An applicant must submit a final project update to the Commission at least 90 days prior to the start of construction, in accordance with the requirements set out in subsection 4.3.3.

#### 4.3.2 Information requirements



Please use the [Wind power plant application form](#) to assemble the information requirements for the project. Wind power plant is abbreviated as WP below.

##### Project description

WP1) State the approvals that are being applied for from the AUC and describe the power plant and collector system, including the number of wind-powered generators (or turbines) and their make, model, the [nominal capability](#) of each wind-powered generator in MW and the [total capability](#) of the power plant in MW, including battery storage, if applicable. If the vendors have not been selected or the equipment has not been finalized, provide:

- The total capability of the power plant in MW, including battery storage, if applicable.
- The anticipated maximum hub height and maximum rotor-swept area of the individual turbines.

The maximum hub height and maximum rotor-swept area in the application must not exceed what was assessed in the AEP renewable energy referral report.

WP2) Provide a list of existing approvals for facilities directly affected by this project, if any.

WP3) Provide details of the project ownership structure, including the names of all companies having an ownership interest in the project and their ownership share, and if applicable, the name of the project operator. Confirm that the applicant is a [qualified owner](#).

WP4) For a municipality or a subsidiary of a municipality to hold an interest in a generating unit, provide documentation confirming compliance with Section 95 of the *Electric Utilities Act*.

WP5) Describe the location of the project:

- Provide the legal description of the proposed power plant site (legal subdivision [LSD], section, township, range, meridian and/or plan, block, lot, municipal address for urban parcels) and connection point, if applicable.
- Provide the longitude and latitude coordinates for the centre of each structure supporting a wind-powered generator.
- Provide a Keyhole Markup Language (.kml/.kmz) file that contains the geographic data of each of the major components, including wind turbine locations, substation locations and project boundary of the proposed power plant. This file should reflect the information shown on the drawings and maps submitted to address information requirement WP6.

WP6) Provide the following drawings and maps with units of measure/scale and the direction of north specified:

- i. A legible plant site drawing showing all wind turbines, collector substations, collector lines and access roads and the power plant site boundary.
- ii. Legible maps showing:
  - The power plant site boundary.
  - Land ownership of surrounding lands, including any residences and dwellings within the notification radius described in [Appendix A1 – Participant involvement program guidelines, Table A1-1: Electric facility application notification and consultation requirements](#).
  - Neighbouring municipalities, [First Nation reserves](#), Metis Settlements, including nearby roads, water bodies and other landmarks that may help identify the general location of the project area. This map may be at a larger scale than the detailed maps provided in response to other information requirements.
  - All registered [aerodromes](#) and any known unregistered aerodromes within 4,000 metres from proposed turbine locations.
  - Important environmental features and [sensitive areas](#) in the [local study area](#).
  - Any additional [energy-related facilities](#) within the project area.
  - The proposed collector line route or routes, and major land use and resource features (e.g., vegetation, topography, existing land use,

existing rights-of-way). This information should also be provided in air photo mosaics.

- WP7) Provide the requested approval date from the Commission, the expected construction start date, the expected in-service date of the project and the requested construction completion date to be used in the project approval. Provide the rationale for these dates.

#### Project connection

- WP8) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted.
- WP9) Provide the asset identification code assigned by the independent system operator (ISO) and the ISO Project ID number related to your system access service request, if available.
- WP10) If the power plant is to be connected to the transmission system, provide a map with one or more conceptual layouts showing possible routes and general land locations for facilities that would be used to interconnect the power plant to the Alberta Interconnected Electric System.

If the power plant is to be connected to the distribution system, provide a statement from the distribution facility owner indicating that it is willing to connect the generating facilities.

#### Emergency response plan

- WP11) Confirm the applicant has or will have a corporate or site-specific emergency response plan for the construction and operation of the proposed power plant. If the applicant will have a corporate emergency response plan, please explain why it decided not to develop a site-specific emergency response plan.
- WP12) Provide a summary of the following:
- The site-specific risks (construction phase and operations phase) that have been identified to date.
  - The emergency mitigation measures that have been identified.
  - The site monitoring and communication protocols that will be put into place.

- WP13) Confirm that local responders and authorities have been contacted or notified regarding the project emergency response plan. Describe any requirements or feedback received and describe how the applicant intends to address the requirements and feedback received.

#### Shadow flicker assessment

- WP14) Submit a shadow flicker assessment report that predicts the extent of shadow flicker at **receptors** within 1.5 kilometres from the centre point of each turbine where the potential for shadow flicker is possible. The assessment report must:

- Describe the time, location and duration of the shadow flicker predicted to be caused by the project.
- Describe the software or tools used in the assessment, the assumptions and the input parameters (equipment-specific and environmental) utilized.
- Describe the qualification of the individual(s) that performed the assessment.
- Include a map that identifies all receptors and the expected duration of shadow flicker for each receptor.

A copy of the map identifying all shadow flicker receptors and the expected duration of shadow flicker for each receptor must be included as part of the applicant's participant involvement program materials.

If requested by a receptor (that has the potential for shadow flicker and is located within 1.5 kilometres of a turbine), the applicant must provide a copy of its shadow flicker assessment report and communicate the results specific to that receptor.

#### Environmental information

- WP15) If preparation of either a federal impact assessment or a provincial environmental impact assessment report was required, provide a copy as an appendix to the application and a separate environmental evaluation is not required. If a federal impact assessment or a provincial impact assessment report was not required, submit an environmental evaluation of the project. The environmental evaluation must:

- Describe the present (pre-project) environmental and land use conditions in the local study area.
- Identify and describe the project activities and infrastructure that may adversely affect the environment.
- Identify the specific ecosystem components (i.e., terrain and soils, surface water bodies and hydrology, groundwater, wetlands, vegetation species and communities, wildlife species and habitat, aquatic species and habitat, air quality and environmentally sensitive areas) within the local study area that may be adversely affected by the project.

All projects must be compliant with any applicable regional land use plans adopted under the *Alberta Land Stewardship Act*.

- Describe any potential adverse effects of the project on the ecosystem components during the **life of the project**.
- Describe the methodology used to identify, evaluate and rate the adverse environmental effects and determine their **significance**, along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the life of the project to reduce the potential adverse effects.
- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual(s) who conducted or oversaw the environmental evaluation.

It is an applicant's responsibility to be aware of any emergency orders issued by Environment and Climate Change Canada that may be applicable to a project.

WP16) For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the environmental review process. Projects on federal lands may be subject to



provincial laws, standards and permits. The applicant must address how it has considered AUC Rule 007, Rule 012 and [Rule 033: Post-approval Monitoring Requirements for Wind and Solar Power Plants](#) and describe the steps taken, if any, to address specific requirements set out in these rules.

- WP17) Submit a stand-alone, project-specific environmental protection plan (or environmental management plan) that itemizes and summarizes all of the mitigation measures and monitoring activities that the applicant is committed to implementing during construction and operation to minimize any adverse effects of the project on the environment.

Owners of approved and constructed wind power plants are required to submit an annual post-construction monitoring survey report to AEP and the AUC pursuant to [Rule 033: Post-approval Monitoring Requirements for Wind and Solar Power Plants](#).

#### End-of-life management

- WP18) Submit a copy of the initial renewable energy operations conservation and reclamation plan (REO C&R Plan) as set out in the *Conservation and Reclamation Directive for Renewable Energy Operations*.
- WP19) Provide an overview of how the operator will ensure sufficient funds are available at the project end of life to cover the cost of [decommissioning](#) and [reclamation](#).

#### Noise

- WP20) Provide a noise impact assessment in accordance with Rule 012.

#### Approvals, reports and assessments from other agencies

- WP21) Identify any other acts (e.g., *Environmental Protection and Enhancement Act, Water Act, Public Lands Act, Highway Development and Protection Act* and *Wildlife Act*) that may apply to the project, identify approvals the project may require, and provide the status of each of these approvals.
- WP22) Submit a signed renewable energy referral report from Alberta Environment and Parks (AEP) Fish and Wildlife Stewardship. If the applicant is unable to provide a renewable energy referral report at time of application, the applicant must clearly identify the reason and provide details of its status.

WP23) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a historic resource impact assessment is required, briefly describe any known historical or archaeological sites, palaeontological sites, or traditional use sites of a historic resource nature. If a *Historical Resources Act* approval has been obtained, provide a copy of it.

Applicants are responsible for ensuring that any summary provided protects the confidential and sensitive nature of a historical resource site.

WP24) If the government of Alberta, through the Aboriginal Consultation Office (ACO) or otherwise, directed consultation with an [Indigenous group](#) for related approvals (i.e., *Public Lands Act, Water Act, Environmental Protection and Enhancement Act, Historical Resources Act, Government Organization Act, etc.*) the applicant must provide a copy of the pre-consultation assessment, the adequacy assessment and the specific issues and response table (if prepared). If the government of Alberta, through the ACO or otherwise, indicated that a pre-consultation assessment is not required, the applicant must provide a copy of that direction. If advice from the government of Alberta has not been obtained, the applicant must provide justification for its decision to not seek advice.

An applicant is responsible for fulfilling the requirements of all other agencies with jurisdiction over a project. For example:

- Transport Canada requires that an aeronautical assessment form for obstruction evaluation and a final drawing of the wind turbine locations be submitted at least 90 days prior to the start of construction.
- NAV CANADA requires that a land use proposal submission form be submitted prior to project construction.

### Participant involvement program

WP25) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See [Appendix A1](#) – Participant involvement program guidelines and [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups.)

WP26) List all occupants, residents and landowners on lands within the appropriate notification radius as shown below and described in [Appendix A1](#) – Participant involvement program guidelines, as well as Indigenous groups, owners of

aerodromes or other interested persons that were consulted as part of the participant involvement program.

Table 4.1: Notification radius for wind power plants

Size	Location	Notification radius
< 1 MW	urban	first row of occupied properties
	rural	1,500 metres
1 - <10 MW	urban	first row of occupied properties
	rural	1,500 metres
≥ 10 MW	urban or rural	1,500 metres

- WP27) Supply a list of contact information for all persons who had been contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.
- WP28) Summarize consultation with local jurisdictions (e.g., municipal districts, counties).
- WP29) Summarize consultation with Environment and Climate Change Canada regarding potential interference with nearby weather radars. If Environment and Climate Change Canada has identified the potential for significant interference with a weather radar, provide a copy of a mitigation agreement to be concluded with Environment and Climate Change Canada prior to the operation of the power plant.
- WP30) Summarize consultation with Alberta First Responder Radio System, identify potential interference with other radar/radio frequency towers and provide mitigation measures agreed upon.
- WP31) Identify all persons who expressed a concern(s) about the project. For each person, include the following information:
- The specifics of the concern(s).
  - Steps taken to try and resolve the concern(s).
  - Whether the concern(s) was resolved.

The AUC considers a concern to be resolved when the stakeholder in question expresses that they are satisfied with a proposed solution. The AUC does not consider that an applicant's acknowledgment of a stakeholder concern resolves the concern.

### Battery storage facility

If a battery storage facility is to be constructed and operated as a part of the wind power plant, the applicant must also submit the information specified in Section 10.

### Community generation

If the project is a proposed community generation project, the applicant must also submit the information specified in subsection 4.8.

#### **4.3.3 Amendment process**

This section outlines the process for projects that have received AUC approval and require an amendment. Depending on the scope of the proposed changes in relation to the original application, an applicant can make one of the following three types of submissions to amend its wind power plant approval: final project update, letter of enquiry, or amendment application.

Descriptions of eligibility for each of the submission types are described in the following sections.

#### Final project update

If an applicant has applied for a project where changes in equipment or layout are anticipated after the application has been approved, a final project update must be submitted to the Commission at least 90 days prior to the start of construction. The allowances and requirements for a final project update are outlined below.

For wind power projects where the applicant is able to confirm that the project has stayed within the outlined allowances, an applicant is only required to submit a final project update on the record of the original proceeding. The AUC will review the update to confirm that the project has stayed within the allowances.



Please use the [Wind power plant final project update requirements form](#) to assemble the information required for the final project update.

If project amendments as described in the final project update are not within the outlined allowances, an applicant must submit either a letter of enquiry or an amendment application to the AUC.

Table 4.2: Final project update requirements for wind power plants

Project element	Allowance relative to approved element	Requirement for project update
Hub height, rotor-swept area of individual turbines.	Cannot increase.	Confirm hub height and, rotor-swept area of individual turbines.
Environmental effects from hub height and rotor-swept area of individual turbines.	The actual hub height and actual rotor-swept area must not exceed what was assessed in the Alberta Environment and Parks Fish and Wildlife Stewardship renewable energy referral report.	Confirm that environmental effects from hub height and rotor-swept area of individual turbines have not increased.
Total capability of power plant in MW (including battery storage, if present).	Cannot increase or decrease by more than +/- 10 per cent or +/- 10 MW, whichever is less.	Confirm total capability of power plant in MW (including battery storage, if present).
Project layout.	Number of turbines cannot increase.	Confirm final turbine locations. Confirm eliminated turbine locations.
Extent of land use disturbance within the approved project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) within the approved project boundary.
Total disturbance (in hectares) to native grassland or other types of wildlife habitat, encroachment into Alberta Environment and Parks' minimum setbacks for wildlife habitat features; or, any encroachments into Alberta Environment and Parks' minimum setbacks for permanent wetlands.	Cannot increase.	Confirm total disturbance (in hectares) to native grassland or other types of wildlife habitat, encroachment into Alberta Environment and Parks' minimum setbacks for wildlife habitat features; or, any encroachments into Alberta Environment and Parks' minimum setbacks for permanent wetlands have not increased over what has been approved.
Noise environment.	Must continue to meet permissible sound levels at the most affected receptor(s) (as determined under Rule 012).	Provide sound output of noise generating equipment.  Provide table of predicted noise levels (to one decimal point) from finalized project at receptors.  Confirm that the project continues to meet permissible sound levels at the most affected receptors (as determined under Rule 012).  Provide any new or additional noise mitigation measures implemented to ensure that permissible sound levels will be met.
Participant involvement program.	If new or additional notification or consultation is required, including any requirements	Confirm that new or additional notification or consultation either was not required or that it was undertaken.

Project element	Allowance relative to approved element	Requirement for project update
	under Rule 012, there cannot be any unresolved objections arising from the final project update.	Provide a summary of any new or additional notification or consultation that was undertaken.  Confirm that there are no unresolved objections to the project arising from the final project update.
Final plant site layout.	Each turbine and collector substation cannot be relocated more than 100 metres from the approved location.  Changes to the layout of access roads, collector lines and crane paths can be made within the approved project boundary as long as an <a href="#">experienced wildlife biologist</a> has confirmed that these changes do not infringe on any wildlife habitat or any wildlife features, or alter any mitigation commitments.	Provide a final plant site drawing and map showing the location of the project's turbines, collector substation(s), roads, collector lines and the project boundary and provide a .kml/.kmz file.  Confirm that the location of each turbine and collector substation has not been relocated more than 100 metres from the approved location.  If changes are made to the layout of access roads, collector lines and crane paths, provide confirmation from an experienced wildlife biologist that these changes do not infringe on any wildlife habitat or any wildlife features, or alter any mitigation commitments. Confirm that the changes all occur within the approved project boundary.
Project boundary.	Approved project boundary cannot increase.	Confirm that the approved project boundary has not increased.

### Letter of enquiry

If an applicant is making minor alterations to an existing or approved but not yet constructed wind power plant that exceed the final project update allowances set out in Table 4.2, the applicant may submit a letter of enquiry pursuant to sections 11, 12 and 18.2 of the *Hydro and Electric Energy Regulation*. In the letter of enquiry, the applicant must provide information respecting the need, nature, extent, land affected and the timing of the alterations. The applicant must demonstrate that the proposed alterations do not have any adverse impacts on the environment or any [person](#).

### Amendment application

If an applicant is making changes to an existing or approved but not yet constructed wind power plant that exceed the final project update allowances outlined in Table 4.2

and do not meet the criteria for a letter of enquiry, the applicant must file an amendment application that provides all applicable information required within subsection 4.3.2.

#### 4.4 Solar power plant applications

An application to construct and operate a solar power plant, must include the information requirements listed in subsection 4.4.2.

##### 4.4.1 Applications where changes in equipment or layout are anticipated after the approval of the application

Solar technology continues to advance rapidly, often in less time than it takes for a project to progress through the development, permitting and pre-construction cycle. To provide applicants with flexibility to accommodate technology selection after a project is approved, the requirements for a solar power plant include allowances that must be finalized in a project update.

An applicant submits one of the following types of applications to construct and operate a solar power plant:

- An application where no changes are anticipated after the approval of the application, and the applicant has identified specific equipment, including type and model, and proposes a specific layout for the project.
- An application where changes in equipment or layout are anticipated after the approval of the application.

If an applicant is filing for a project where no changes are anticipated after the approval of the application, and the applicant has identified specific equipment, including type and model, and proposed a specific layout for the project, the applicant must submit its application in accordance with the information requirements set out in subsection 4.4.2.

If an applicant is filing for a project where changes in equipment or layout are anticipated after the approval of the application, the applicant must submit its application in accordance with the information requirements set out in subsection 4.4.2. An applicant must submit a final project update to the Commission at least 90 days prior to the start of construction, in accordance with the requirements set out in subsection 4.4.3.

##### 4.4.2 Information requirements



Please use the [Solar power plant application form](#) to assemble the information required for the project. Solar power plant is abbreviated as SP below.

## Project description

- SP1) State the approvals that are being applied for from the AUC and describe the power plant and collector system, including the number of solar photovoltaic panels and their make, model and the **nominal capability** of each solar photovoltaic panel in MW and the **total capability** of the power plant in MW, including battery storage, if applicable. If the vendors have not been selected or the equipment has not been finalized, provide:
- The **total capability** of the power plant in MW, including battery storage, if applicable.
  - The anticipated type and number of solar modules, the physical dimensions of the solar array and the type of solar tracking system, if applicable.
- SP2) Provide a list of existing approvals for facilities directly affected by this project, if any.
- SP3) Provide details of the project ownership structure, including the names of all companies having an ownership interest in the project and their ownership share, and if applicable, the name of the project operator. Confirm that the applicant is a **qualified owner**.
- SP4) For a municipality or a subsidiary of a municipality to hold an interest in a generating unit, provide documentation confirming compliance with Section 95 of the *Electric Utilities Act*.
- SP5) Describe the location of the project:
- Provide the legal description of the proposed power plant site (legal subdivision [LSD], section, township, range, meridian and/or plan, block, lot, municipal address for urban parcels) and connection point, if applicable.
  - Provide a Keyhole Markup Language (.kml/.kmz) file that contains the geographic data of each of the major components, including substation locations and project boundary of the proposed power plant. This file should reflect the information shown on the drawings and maps submitted to address information requirement SP6.
- SP6) Provide the following drawings and maps with units of measure/scale and the direction of north specified:
- i. A legible plant site drawing showing the solar array, collector substations, collector lines and access roads and the power plant site boundary.



- ii. Legible maps showing:
- The power plant site boundary.
  - Land ownership of surrounding lands, including any residences and dwellings within the notification radius described in [Appendix A1 – Participant involvement program guidelines](#), [Table A1-1: Electric facility application notification and consultation requirements](#).
  - Neighbouring municipalities, [First Nation reserves](#), Metis Settlements, including nearby roads, water bodies and other landmarks that may help identify the general location of the project area. This map may be at a larger scale than the detailed maps provided in response to other information requirements.
  - All registered [aerodromes](#) and any known unregistered aerodromes within 4,000 metres of the edge of the proposed power plant site boundary.
  - Important environmental features and [sensitive areas](#) in the [local study area](#).
  - Any additional [energy-related facilities](#) within the project area.
  - The proposed collector line route or routes, and major land use and resource features (e.g., vegetation, topography, existing land use, existing rights-of-way). This information should also be provided in air photo mosaics.

SP7) Provide the requested approval date from the Commission, the expected construction start date, the expected in-service date of the project and the requested construction completion date to be used in the project approval. Provide the rationale for these dates.

#### Project connection

SP8) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted.

SP9) Provide the asset identification code assigned by the independent system operator (ISO) and the ISO Project ID number related to your system access service request, if available.

SP10) If the power plant is to be connected to the transmission system, provide a map with one or more conceptual layouts showing possible routes and general land locations for facilities that would be used to interconnect the power plant to the Alberta Interconnected Electric System.

If the power plant is to be connected to the distribution system, provide a statement from the distribution facility owner indicating that it is willing to connect the generating facilities.

#### Emergency response plan

SP11) Confirm the applicant has or will have a corporate or site-specific emergency response plan for the construction and operation of the proposed power plant. If the applicant will have a corporate emergency response plan, please explain why it decided not to develop a site-specific emergency response plan.

SP12) Provide a summary of the following:

- The site-specific risks (construction phase and operations phase) that have been identified to date.
- The emergency mitigation measures that have been identified.
- The site monitoring and communication protocols that will be put into place.

SP13) Confirm that local responders and authorities have been contacted or notified regarding the project emergency response plan. Describe any requirements or feedback received and describe how the applicant intends to address the requirements and feedback received.

#### Solar glare assessment

SP14) Submit a solar glare assessment report that predicts the solar glare at [receptors](#) within 800 metres from the boundary of the project and registered aerodromes and known unregistered aerodromes within 4,000 metres from the boundary of the project where the potential for glare is possible. The assessment report must:

- Describe the time, location, duration and intensity of solar glare predicted to be caused by the project.
- Describe the software or tools used in the assessment, the assumptions and the input parameters (equipment-specific and environmental) utilized.
- Describe the qualification of the individual(s) performing the assessment.
- Identify the potential solar glare at critical points along highways, major roadways and railways.
- Identify the potential solar glare at any registered and known unregistered aerodromes within 4,000 metres from the boundary of the project, including the potential effect on runways, flightpaths and air traffic control towers.
- Include a map (or maps) identifying the solar glare receptors, critical points along highways, major roadways and railways and aerodromes that were assessed.
- Include a table that provides the expected intensity of the solar glare (e.g., green, yellow or red) and the expected duration of solar glare at each identified receptor, critical points along highways, major roadways and railways and any registered and known unregistered aerodromes.

It is an applicant's responsibility to be aware of Transport Canada's document TP1247E, *Aviation: Land Use In The Vicinity of Aerodromes*.

Environmental information

SP15) If preparation of either a federal impact assessment or a provincial environmental impact assessment report was required, provide a copy as an

If requested by a receptor (that has the potential for solar glare and is located within 800 metres of the project boundary), the applicant must provide a copy of its solar glare assessment report and communicate the results specific to that receptor.

A copy of the map(s) identifying the solar glare receptors and a table providing the expected intensity of the solar glare must be included as part of the applicant's participant involvement program materials.

appendix to the application and a separate environmental evaluation is not required. If a federal impact assessment or a provincial impact assessment report was not required, submit an environmental evaluation of the project. The environmental evaluation must:

- Describe the present (pre-project) environmental and land use conditions in the local study area.
- Identify and describe the project activities and infrastructure that may adversely affect the environment.
- Identify the specific ecosystem components (i.e., terrain and soils, surface water bodies and hydrology, groundwater, wetlands, vegetation species and communities, wildlife species and habitat, aquatic species and habitat, air quality and environmentally sensitive areas) within the local study area that may be adversely affected by the project.
- Describe any potential adverse effects of the project on the ecosystem components during the [life of the project](#).
- Describe the methodology used to identify, evaluate and rate the adverse environmental effects and determine their [significance](#), along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the life of the project to reduce the potential adverse effects.
- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual or individuals who conducted or oversaw the environmental evaluation.

All projects must be compliant with any applicable regional land use plans adopted under the *Alberta Land Stewardship Act*.

It is an applicant's responsibility to be aware of any emergency orders issued by Environment and Climate Change Canada that may be applicable to a project.

SP16) For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the environmental review process. Projects on federal lands may be subject to

provincial laws, standards and permits. The applicant must address how it has considered AUC Rule 007, Rule 012 and Rule 033 and describe the steps taken, if any, to address specific requirements set out in these rules.

- SP17) Submit a stand-alone, project-specific environmental protection plan (or environmental management plan) that itemizes and summarizes all of the mitigation measures and monitoring activities that the applicant is committed to implementing during construction and operation to minimize any adverse effects of the project on the environment.

Owners of approved and constructed solar power plants are required to submit an annual post-construction monitoring survey report to AEP and the AUC pursuant to Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants*.

#### End-of-life management

- SP18) Submit a copy of the initial renewable energy operations conservation and reclamation plan (REO C&R Plan) as set out in the *Conservation and Reclamation Directive for Renewable Energy Operations*.
- SP19) Provide an overview of how the operator will ensure sufficient funds are available at the project end of life to cover the cost of **decommissioning** and **reclamation**.

#### Noise

- SP20) Provide a noise impact assessment in accordance with Rule 012.

#### Approvals, reports and assessments from other agencies

- SP21) Identify any other acts (e.g., *Environmental Protection and Enhancement Act*, *Water Act*, *Public Lands Act* and *Wildlife Act*) that may apply to the project, identify approvals the project may require, and provide the status of each of these approvals.
- SP22) Submit a signed renewable energy referral report from Alberta Environment and Parks (AEP) Fish and Wildlife Stewardship. If the applicant is unable to provide a renewable energy referral report at time of application, the applicant must clearly identify the reason and provide details of its status.

- SP23) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a historic resource impact assessment is required, briefly describe any known historical or archaeological sites, palaeontological sites, or traditional use sites of a historic resource nature. If a *Historical Resources Act* approval has been obtained, provide a copy of it.

Applicants are responsible for ensuring that any summary provided protects the confidential and sensitive nature of a historical resource site.

- SP24) If the government of Alberta, through the Aboriginal Consultation Office (ACO) or otherwise, directed consultation with an [Indigenous group](#) for related

An applicant is responsible for fulfilling the requirements of all other agencies with jurisdiction over a project. For example:

- Transport Canada requires that an aeronautical assessment form for obstruction evaluation and a final drawing of the solar panel layout be submitted at least 90 days prior to the start of construction.
- NAV CANADA requires that a land use proposal submission form be submitted prior to project construction.

approvals (i.e., *Public Lands Act, Water Act, Environmental Protection and Enhancement Act, Historical Resources Act, Government Organization Act*, etc.) the applicant must provide a copy of the pre-consultation assessment, the adequacy assessment and the specific issues and response table (if prepared). If the government of Alberta, through the ACO or otherwise, indicated that a pre-consultation assessment is not required, the applicant must provide a copy of that direction. If advice from the government of Alberta has not been obtained, the applicant must provide justification for its decision to not seek advice.

#### Participant involvement program

- SP25) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See [Appendix A1](#) – Participant involvement program guidelines and [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups.)
- SP26) Confirm that, if applicable, Alberta Transportation, the municipality in which the project is located, the applicable railway companies, and the owner of any registered and known unregistered aerodrome within 4,000 metres of the

project boundary were consulted and provide a summary of any objections received, mitigations discussed, and any outstanding objections.

- SP27) List all occupants, residents and landowners on lands within the appropriate notification radius as shown below and described in [Appendix A1](#) – Participant involvement program guidelines, as well as Indigenous groups, owners of aerodromes or other interested persons that were consulted as part of the participant involvement program.

Table 4.3: Notification radius for solar power plants

Size	Location	Notification radius
≥150 kW but < 1 MW	urban	first row of occupied properties
	rural	400 metres
1 - <10 MW	urban	first row of occupied properties
	rural	800 metres
≥ 10 MW	urban or rural	800 metres

- SP28) Supply a list of contact information for all [persons](#) who had been contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in [Appendix A1](#) – Participant involvement program guidelines.

- SP29) Summarize consultation with local jurisdictions (e.g., municipal districts, counties).

- SP30) Identify all persons who expressed a concern(s) about the project. For each person, include the following information:

- The specifics of the concern(s).
- Steps taken to try and resolve the concern(s).
- Whether the concern(s) was resolved.

The AUC considers a concern to be resolved when the stakeholder in question expresses that they are satisfied with a proposed solution. The AUC does not consider that an applicant's acknowledgment of a stakeholder concern resolves the concern.

### Battery storage facility

If a battery storage facility is to be constructed and operated as a part of the solar power plant, the applicant must also submit the information specified in Section 10.

### Community generation

If the project is a proposed community generation project, the applicant must also submit the information specified in subsection 4.8.

#### 4.4.3 Amendment process

This section outlines the process for projects that have received AUC approval and require an amendment. Depending on the scope of the proposed changes in relation to the original application, an applicant can make one of the following three types of submissions to amend its solar power plant approval: final project update, letter of enquiry, or amendment application.

Descriptions of eligibility for each of the submission types are described in the following sections.

##### Final project update

If an applicant has applied for a project where changes in equipment or layout are anticipated after the application has been approved, a final project update must be submitted to the Commission at least 90 days prior to the start of construction. The allowances and requirements for a final project update are outlined below.

For solar power projects where the applicant is able to confirm that the project has stayed within the outlined allowances, an applicant is only required to submit a final project update on the record of the original proceeding. The AUC will only review the update to confirm that the project has stayed within the allowances.

Please use the [Solar power plant final project update requirements form](#) to assemble the information required for the final project update.

If project amendments as described in the final project update are not within the outlined allowances, an applicant must submit either a letter of enquiry or an amendment application to the AUC.

Table 4.4: Final project update requirements for solar power plants

Project element	Allowance relative to approved element	Requirement for project update
Type, number and physical dimensions of solar modules, including solar tracking system.	Can change.	Confirm the final type and number of solar modules, the physical dimensions of the solar array, and the type of solar tracking system, if applicable. Provide confirmation that the changes do not cause added solar glare to occur at critical points along highways, major roadways and



Project element	Allowance relative to approved element	Requirement for project update
		railways and any registered and known unregistered aerodromes.
Total capability of power plant in MW (including battery storage, if present).	Cannot increase or decrease by more than +/- 10 per cent or +/- 10 MW, whichever is less.	Confirm total capability of power plant in MW (including battery storage, if present).
Extent of land use disturbance located within the approved project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) located within the approved project boundary.
Total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Parks' minimum setbacks for wildlife habitat features; or, any encroachments into Alberta Environment and Parks' minimum setbacks for permanent wetlands.	Cannot increase.	Confirm total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Parks' minimum setbacks for wildlife habitat features; or, any encroachments into Alberta Environment and Parks' minimum setbacks for permanent wetlands has not increased over what was approved.
Noise environment.	Must continue to meet permissible sound levels at the most affected receptor(s) (as determined under Rule 012).	<p>Provide sound output of noise generating equipment.</p> <p>Provide table of predicted noise levels (to one decimal point) from finalized project at receptors.</p> <p>Confirm that the project continues to meet permissible sound levels at the most affected receptors (as determined under Rule 012).</p> <p>Provide any new or additional noise mitigation measures implemented to ensure that permissible sound levels will be met.</p>
Participant involvement program.	If new or additional notification or consultation is required, including any requirements under Rule 012, there cannot be any unresolved objections to the project arising from the final project update.	<p>Confirm that new or additional notification or consultation either was not required or that it was undertaken. Provide a summary of any new or additional notification or consultation that was undertaken.</p> <p>Confirm that there are no unresolved objections to the project arising from the final project update.</p>
Final plant site layout.	The solar array and collector substation cannot be relocated	Provide a final plant site drawing and map showing the location of the project's solar array, collector

Project element	Allowance relative to approved element	Requirement for project update
	more than 100 metres from the approved location.	substation(s), roads, collector lines and the site boundary and provide a .kml/.kmz file.  Confirm that the location of the solar array and collector substation(s) has not been relocated more than 100 metres from the approved location.  If changes are made to the layout of access roads and collector lines, provide confirmation from an <a href="#">experienced wildlife biologist</a> that the changes do not infringe on any wildlife habitat or any wildlife features, or alter any mitigation commitments. Confirm that the changes all occur within the approved project boundary.
Project boundary.	Approved project boundary cannot increase.	Confirm that the approved project boundary has not increased.

### Letter of enquiry

If an applicant is making minor alterations to an existing or approved but not yet constructed solar power plant that exceed the final project update allowances set out in Table 4.4, the applicant may submit a letter of enquiry pursuant to sections 11, 12 and 18.2 of the *Hydro and Electric Energy Regulation*. In the letter of enquiry, the applicant must provide information respecting the need, nature, extent, land affected and the timing of the alterations. The applicant must demonstrate that the proposed alterations do not have any adverse impacts on the environment or any [person](#).

### Amendment application

If an applicant is making changes to an existing or approved but not yet constructed solar power plant that exceed the final project update allowances outlined in Table 4.4 and do not meet the criteria for a letter of enquiry, the applicant must file an amendment application that provides all applicable information required within subsection 4.4.2.

## **4.5 Thermal power plant applications**

An application to construct and operate a thermal power plant must include the information requirements listed in subsection 4.5.2.

### **4.5.1 Applications where changes in equipment are anticipated after the approval of the**

## application

To provide applicants with flexibility to accommodate technology selection after a project is approved, the requirements for a thermal power plant include allowances that must be finalized in a project update.

An applicant submits one of the following types of applications to construct and operate a thermal power plant:

- An application where no changes are anticipated after the approval of the application, and the applicant has identified specific equipment, including type and model, and proposes a specific layout for the project.
- An application where changes in equipment or layout are anticipated after the approval of the application.

If an applicant is filing for a project where no changes are anticipated after the approval of the application, and the applicant has identified specific equipment, including type and model, and proposed a specific layout for the project, the applicant must submit its application in accordance with the information requirements set out in subsection 4.5.2.

If an applicant is filing for a project where changes in equipment or layout are anticipated after the approval of the application, the applicant must submit its application in accordance with the information requirements set out in subsection 4.5.2. An applicant must submit a final project update to the Commission at least 90 days prior to the start of construction, in accordance with the requirements set out in subsection 4.5.3.

### 4.5.2 Information requirements



Please use the [Thermal power plant application form](#) to assemble the information requirements for the project. Thermal power plant is abbreviated as TP below.

#### Project description

- TP1) State the approvals that are being applied for from the AUC and describe the power plant, including the number of generating units and their make, model and the **nominal capability** of each generating unit in MW. If the vendors have not been selected or the equipment has not been finalized, provide:
- The **total capability** of the power plant in MW, including battery storage, if applicable.
  - The anticipated make and model of each generating unit.

- TP2) Provide a list of existing approvals for facilities directly affected by this project, if any.
- TP3) Provide details of the project ownership structure, including the names of all companies having an ownership interest in the project and their ownership share, and if applicable, the name of the project operator. Confirm that the applicant is a [qualified owner](#).
- TP4) For a municipality or a subsidiary of a municipality to hold an interest in a generating unit, documentation confirming compliance with Section 95 of the *Electric Utilities Act* is required.
- TP5) Describe the location of the project:
- Provide the legal description of the proposed power plant site (legal subdivision [LSD], section, township, range, meridian and/or plan, block, lot, municipal address for urban parcels) and connection point, if applicable.
  - Provide a Keyhole Markup Language (.kml/.kmz) file that contains the geographic data for each of the major components, including substation locations and project boundary of the proposed power plant. This file should reflect the information shown on the drawings and maps submitted to address information requirement TP6.
- TP6) Provide the following drawings and maps with units of measure/scale and the direction of north specified:
- i. A legible plant site drawing showing all major equipment components, for example, generators, turbines, heat recovery steam generators, step-up transformers, boilers and the power plant site boundary.
  - ii. Legible maps showing:
    - The power plant site boundary.
    - Land ownership of surrounding lands, including any residences and dwellings within the notification radius described in [Appendix A1 – Participant involvement program guidelines, Table A1-1: Electric facility application notification and consultation requirements](#).
    - Neighbouring municipalities, [First Nation reserves](#), Metis Settlements, including nearby roads, water bodies and other landmarks that may help identify the general location of the project area. This map may be at a larger scale than the detailed maps provided in response to other information requirements.

- Important environmental features and **sensitive areas** in the **local study area**.
- Any additional **energy-related facilities** within the project area.
- The major land use and resource features (e.g., vegetation, topography, existing land use, existing rights-of-way). This information should also be provided in air photo mosaics.

TP7) Present the estimated power plant heat rates, efficiency of the power plant and details of the cooling system for the power plant.

TP8) For power plants with natural gas piping located within the power plant site boundary, provide the following information:

- A schematic showing the tie-in points and associated design and operating pressures (both upstream and downstream of the tie-in points).
- The diameter, maximum operating pressure (in kilopascals) and length of the natural gas pipelines proposed within the power plant site.
- The design philosophy that will be utilized for the pipeline connections.
- The associated qualifications of the gas installation contractor.
- Confirmation that the fuel gas piping within the proposed plant site will be designed and constructed as pressure piping in accordance with the *Pressure Equipment Safety Regulation AR49/2006* administered by the Alberta Boilers Safety Association (ABSA) and that all required ABSA approvals will be obtained prior to operation.

TP9) Provide the requested approval date from the Commission, the expected construction start date, the expected in-service date of the project and the requested construction completion date to be used in the project approval. Provide the rationale for these dates.

#### Project connection

TP10) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted.

TP11) Provide the asset identification code assigned by the independent system operator (ISO) and the ISO Project ID number related to your system access service request, if available.

TP12) If the power plant is to be connected to the transmission system, provide a map with one or more conceptual layouts showing possible routes and general land locations for facilities that would be used to interconnect the power plant to the Alberta Interconnected Electric System.

If the power plant is to be connected to the distribution system, provide a statement from the distribution facility owner indicating that it is willing to connect the generating facilities.

It is an applicant's responsibility to be aware of any emergency orders issued by Environment and Climate Change Canada that may be applicable to a project.

#### Emergency response plan

TP13) Confirm the applicant has or will have a corporate or site-specific emergency response plan for the construction and operation of the proposed power plant. If the applicant will have a corporate emergency response plan, please explain why it decided not to develop a site-specific emergency response plan.

TP14) Provide a summary of the following:

- The site-specific risks (construction phase and operations phase) that have been identified to date.
- The emergency mitigation measures that have been identified.
- The site monitoring and communication protocols that will be put into place.

TP15) Confirm that local responders and authorities have been contacted or notified regarding the project emergency response plan. Describe any requirements or feedback received and describe how the applicant intends to address the requirements and feedback received.

## Environmental information

TP16) Identify the current emissions standards or guidelines that are applicable to the proposed project. Submit a table that provides the plant's emission rates (e.g., kg/MWh) for nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), and primary particulate matter. The table must compare the emission rates to the current *Alberta Air Emissions Standards for Electricity Generation* and any other emission standards or guidelines that are applicable to the proposed project.

All projects must be compliant with any applicable regional land use plans adopted under the *Alberta Land Stewardship Act*.

TP17) Indicate whether the proposed plant will be in compliance with the Alberta air quality standards or guidelines (e.g., *Ambient Air Quality Objectives and Guidelines Summary*) applicable to the proposed project for ground-level concentrations of pollutants. Identify all standards and guidelines that apply.

TP18) Provide a summary of any feedback received to date from AEP addressing the environmental aspects of the project and any mitigation measures and monitoring activities recommended by AEP.

TP19) Provide a copy of the emissions modelling report that was prepared for the *Environmental Protection and Enhancement Act* application to AEP.

TP20) If preparation of either a federal impact assessment or a provincial environmental impact assessment report was required, provide a copy as an appendix to the application and a separate environmental evaluation is not required. If a federal impact assessment or a provincial impact assessment report was not required, submit an environmental evaluation of the project. The environmental evaluation must:

- Describe the present (pre-project) environmental and land use conditions in the local study area.
- Identify and describe the project activities and infrastructure that may adversely affect the environment.
- Identify the specific ecosystem components (i.e., terrain and soils, surface water bodies and hydrology, groundwater, wetlands, vegetation species and communities, wildlife species and habitat, aquatic species and habitat, air quality and environmentally sensitive areas) within the local study area that may be adversely affected by the project.

- Describe any potential adverse effects of the project on the ecosystem components during the [life of the project](#).
- Describe the methodology used to identify, evaluate and rate the adverse environmental effects and determine their [significance](#), along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the life of the project to reduce the potential adverse effects.
- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual or individuals who conducted or oversaw the environmental evaluation.

TP21) For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the environmental review process. Projects on federal lands may be subject to provincial laws, standards and permits. The applicant must address how it has considered AUC Rule 007 and Rule 012 and describe the steps taken, if any, to address specific requirements set out in these rules.

TP22) Submit a stand-alone, project-specific environmental protection plan (or environmental management plan) that itemizes and summarizes all of the mitigation measures and monitoring activities that the applicant is committed to implementing during construction and operation to minimize any adverse effects of the project on the environment.

#### End-of-life management

TP23) Provide an overview of how the operator will ensure sufficient funds are available at the project end of life to cover the cost of [decommissioning](#) and [reclamation](#).

#### Noise



TP24) Provide a noise impact assessment in accordance with Rule 012.

Approvals, reports and assessments from other agencies

TP25) Identify any other acts (e.g., *Environmental Protection and Enhancement Act*, *Water Act*, *Public Lands Act* and *Wildlife Act*) that may apply to the project, identify approvals the project may require, and provide the status of each of these approvals.

TP26) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a historic resource impact assessment is required, briefly describe any known historical or archaeological sites, palaeontological sites, or traditional use sites of a historic resource nature. If a *Historical Resources Act* approval has been obtained, provide a copy of it.

TP27) If the government of Alberta, through the Aboriginal Consultation Office (ACO) or otherwise, directed consultation with an [Indigenous group](#) for related approvals (i.e., *Public Lands Act*, *Water Act*, *Environmental Protection and Enhancement Act*, *Historical Resources Act*, *Government Organization Act*, etc.) the applicant must provide a copy of the pre-consultation assessment, the adequacy assessment and the specific issues and response table (if prepared). If the government of Alberta, through the ACO or otherwise, indicated that a pre-consultation assessment is not required, the applicant must provide a copy of that direction. If advice from the government of Alberta has not been obtained, the applicant must provide justification for its decision to not seek advice.

Applicants are responsible for ensuring that any summary provided protects the confidential and sensitive nature of a historical resource site.

Participant involvement program

TP28) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See [Appendix A1](#) – Participant involvement program guidelines and [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups).

TP29) List all occupants, residents and landowners on lands within the appropriate notification radius as shown below and described in [Appendix A1](#) – Participant involvement program guidelines, as well as Indigenous groups or other interested [persons](#) that were consulted as part of the participant involvement program.

Table 4.5: Notification radius for thermal power plants

Size	Location	Notification radius
< 1 MW	urban	first row of occupied properties
	rural	1,500 metres
1 - <10 MW	urban	first row of occupied properties
	rural	1,500 metres
≥ 10 MW	urban or rural	2,000 metres

- TP30) Supply a list of contact information for all persons who had been contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in [Appendix A1](#) – Participant involvement program guidelines.
- TP31) Summarize consultation with local jurisdictions (e.g., municipal districts, counties).
- TP32) Identify all persons who expressed a concern(s) about the project. For each person, include the following information:
- The specifics of the concern(s).
  - Steps taken to try and resolve the concern(s).
  - Whether the concern(s) was resolved.

The AUC considers a concern to be resolved when the stakeholder in question expresses that they are satisfied with a proposed solution. The AUC does not consider that an applicant's acknowledgment of a stakeholder concern resolves the concern.

#### Battery storage facility

If a battery storage facility is to be constructed and operated as a part of the thermal power plant, the applicant must also submit the information specified in Section 10.

#### Community generation

If the project is a proposed community generation project, the applicant must also submit the information specified in subsection 4.8.

### 4.5.3 Amendment process

This section outlines the process for projects that have received AUC approval and require an amendment. Depending on the scope of the proposed changes in relation to the original

application, an applicant can make one of the following three types of submissions to amend its thermal power plant approval: final project update, letter of enquiry, or amendment application.

Descriptions of eligibility for each of the submission types are described in the following sections.

### Final project update

If an applicant has applied for a project where changes in equipment are anticipated after the application has been approved, a final project update must be submitted to the Commission at least 90 days prior to the start of construction. The allowances and requirements for a final project update are outlined below.

For thermal power projects where the applicant is able to confirm that the project has stayed within the outlined allowances, an applicant is only required to submit a final project update on the record of the original proceeding. The AUC will review the update to confirm that the project has stayed within the allowances.

Please use the [Thermal power plant final project update form](#) to assemble the information required for the final project update.

If project amendments as described in the final project update are not within the outlined allowances, an applicant must submit either a letter of enquiry or an amendment application to the AUC.

Table 4.6: *Final project update for thermal power plants*

Project element	Allowance relative to approved element	Requirement for project update
Make, model, vendor and specifications associated with final generation equipment.	May change.	Confirm final make, model, vendor and specifications associated with the final generation equipment to be installed.
Total capability of power plant in MW.	Cannot increase or decrease by more than +/- 10 per cent or +/- 10 MW, whichever is less.	Confirm total capability of power plant in MW.
Extent of land use disturbance located within the approved project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) located within the approved project boundary.
Total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Parks' minimum setbacks for wildlife habitat features; or, any encroachments into Alberta	Cannot increase.	Confirm total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Parks' minimum setbacks for wildlife habitat features; or, any encroachments into Alberta Environment and Parks' minimum setbacks for permanent

Project element	Allowance relative to approved element	Requirement for project update
Environment and Parks' minimum setbacks for permanent wetlands.		wetlands have not increased over what has been approved.
Noise environment.	Must continue to meet permissible sound levels at the most affected receptor(s) (as determined under Rule 012).	<p>Provide sound output of noise generating equipment.</p> <p>Provide table of predicted noise levels (to one decimal point) from finalized project at receptors.</p> <p>Confirm that the project continues to meet permissible sound levels at the most affected receptors (as determined under Rule 012).</p> <p>Provide any new or additional noise mitigation measures implemented to ensure that permissible sound levels will be met.</p>
Air emissions.	Cannot increase.	Confirm that air emissions associated with the updated project do not exceed those specified in the original application.
Participant involvement program.	If new or additional notification or consultation is required, including any requirements under Rule 012, there cannot be any unresolved objections to the project arising from the final project update.	<p>Confirm that new or additional notification or consultation either was not required or that it was undertaken. Provide a summary of any new or additional notification or consultation that was undertaken.</p> <p>Confirm that there are no unresolved objections to the project arising from the final project update.</p>
Final plant site layout.		Provide a final plant site drawing and map with locations and descriptions of the project's major components and the site boundary, and provide a .kml/.kmz file.

### Letter of enquiry

If an applicant is making minor alterations to an existing or approved but not yet constructed thermal power plant that exceed the final project update allowances set out in Table 4.6, pursuant to sections 11, 12 and 18.2 of the *Hydro and Electric Energy Regulation*, the applicant may submit a letter of enquiry. In the letter of enquiry, the applicant must provide information respecting the need, nature, extent, land affected and

the timing of the alterations. The applicant must demonstrate that the proposed alterations do not have any adverse impacts on the environment or any person.

#### Amendment application

If an applicant is making changes to an existing or approved but not yet constructed thermal power plant that exceed the final project update allowances outlined in Table 4.6 and do not meet the criteria for a letter of enquiry, the applicant must file a complete amendment application that provides all applicable information required within subsection 4.5.2.

### **4.6 Other power plant applications**

An application to construct and operate a power plant must include the information outlined in subsection 4.6.2.

Examples of other power plants are biomass, geothermal and compressed air power plants.

#### **4.6.1 Applications where changes in equipment are anticipated after the approval of the application**

To provide applicants with flexibility to accommodate technology selection after a project is approved, the requirements for a power plant include allowances that must be finalized in a project update.

An applicant submits one of the following types of applications to construct and operate a power plant:

- An application where no changes are anticipated after the approval of the application, and the applicant has identified specific equipment, including type and model, and proposes a specific layout for the project.
- An application where changes in equipment or layout are anticipated after the approval of the application.

If an applicant is filing for a project where no changes are anticipated after the approval of the application, and the applicant has identified specific equipment, including type and model, and proposed a specific layout for the project, the applicant must submit its application in accordance with the information requirements set out in subsection 4.6.2, as appropriate for the specifications of the generation type.

If an applicant is filing for a project where changes in equipment or layout are anticipated after the approval of the application, the applicant must submit its application in accordance with the information requirements set out in subsection 4.6.2. An applicant must submit a final project update to the Commission at least 90 days prior to the start of construction, in accordance with the requirements set out in subsection 4.6.3.

## 4.6.2 Information requirements



Please use the *Other power plant applications form* to assemble the information requirements for the project. Other power plant is abbreviated as OP below.

### Project description

- OP1) State the approvals that are being applied for from the AUC and describe the power plant, including the number of generating units and their make, model and the **nominal capability** of each generating unit in MW. If the vendors have not been selected or the equipment has not been finalized, provide:
- The **total capability** of the power plant in MW, including battery storage, if applicable.
  - The anticipated make and model of each generating unit.
- OP2) Provide a list of existing approvals for facilities directly affected by this project, if any.
- OP3) Provide details of the project ownership structure, including the names of all companies having an ownership interest in the project and their ownership share, and if applicable, the name of the project operator. Confirm that the applicant is a **qualified owner**.
- OP4) For a municipality or a subsidiary of a municipality to hold an interest in a generating unit, documentation confirming compliance with Section 95 of the *Electric Utilities Act* is required.
- OP5) Describe the location of the project:
- Provide the legal description of the proposed power plant site (legal subdivision [LSD], section, township, range, meridian and/or plan, block, lot, municipal address for urban parcels) and connection point, if applicable.
  - Provide a Keyhole Markup Language (.kml/.kmz) file that contains the geographic data for each of the major components, including substation locations and project boundary of the proposed power plant. This file should reflect the information shown on the drawings and maps submitted to address information requirement OP6.
- OP6) Provide the following drawings and maps with units of measure/scale and the direction of north specified:

- i. A legible plant site drawing showing all major equipment components and the power plant site boundary.
  - ii. Legible maps showing:
    - The power plant site boundary.
    - Land ownership of surrounding lands, including any residences and dwellings within the notification radius described in [Appendix A1](#) – Participant involvement program guidelines, [Table A1-1](#): Electric facility application notification and consultation requirements.
    - Neighbouring municipalities, [First Nation reserves](#), Metis Settlements, including nearby roads, water bodies and other landmarks that may help identify the general location of the project area. This map may be at a larger scale than the detailed maps provided in response to other information requirements.
    - Important environmental features and [sensitive areas](#) in the [local study area](#).
    - Any additional [energy-related facilities](#) within the project area.
    - The major land use and resource features (e.g., vegetation, topography, existing land use, existing rights-of-way). This information should also be provided in air photo mosaics.
- OP7) Present the estimated power plant heat rates, efficiency of the power plant and details of the cooling system for the power plant.
- OP8) For power plants with natural gas piping located within the power plant site, provide the following information:
- A schematic showing the tie-in points and associated design and operating pressures (both upstream and downstream of the tie-in points).
  - The diameter, maximum operating pressure (in kilopascals) and length of the natural gas pipelines proposed within the power plant site.
  - The design philosophy that will be utilized for the pipeline connections.
  - The associated qualifications of the gas installation contractor.
  - Confirmation that the fuel gas piping within the proposed plant site will be designed and constructed as pressure piping in accordance with the *Pressure Equipment Safety Regulation* AR49/2006 administered by the Alberta Boilers Safety Association (ABSA) and that all required ABSA approvals will be obtained prior to operation.

- OP9) Provide the requested approval date from the Commission, the expected construction start date, the expected in-service date of the project and the requested construction completion date to be used in the project approval. Provide the rationale for these dates.

#### Project connection

- OP10) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted.
- OP11) Provide the asset identification code assigned by the independent system operator (ISO) and the ISO project ID number related to your system access service request, if available.
- OP12) If the power plant is to be connected to the transmission system, provide a map with one or more conceptual layouts showing possible routes and general land locations for facilities that would be used to interconnect the power plant to the Alberta Interconnected Electric System.

If the power plant is to be connected to the distribution system, provide a statement from the distribution facility owner indicating that it is willing to connect the generating facilities.

#### Emergency response plan

- OP13) Confirm the applicant has or will have a corporate or site-specific emergency response plan for the construction and operation of the proposed power plant. If the applicant will have a corporate emergency response plan, please explain why it decided not to develop a site-specific emergency response plan.
- OP14) Provide a summary of the following:
- The site-specific risks (construction phase and operations phase) that have been identified to date.
  - The emergency mitigation measures that have been identified.
  - The site monitoring and communication protocols that will be put into place.
- OP15) Confirm that local responders and authorities have been contacted or notified regarding the project emergency response plan. Describe any requirements or feedback received and describe how the applicant intends to address the requirements and feedback received.



## Environmental information

- OP16) Identify any current emissions standards or guidelines that are applicable to the proposed project. Submit a table that provides the plant's emission rates (e.g., kg/MWh) for nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), and primary particulate matter. The table must compare the emission rates to the current *Alberta Air Emissions Standards for Electricity Generation* and any other emission standards or guidelines that are applicable to the proposed project.
- OP17) Indicate, if applicable, whether the proposed plant will be in compliance with the Alberta air quality standards or guidelines (e.g., *Ambient Air Quality Objectives and Guidelines Summary*) applicable to the proposed project for ground-level concentrations of pollutants. Identify all standards and guidelines that apply.
- OP18) Provide a summary of feedback received to date from AEP addressing the environmental aspects of the project and any mitigation measures and monitoring activities recommended by AEP.
- OP19) Provide a copy of the emissions modelling report that was prepared for the *Environmental Protection and Enhancement Act* application to AEP, if applicable.
- OP20) If preparation of either a federal impact assessment or a provincial environmental impact assessment report was required, provide a copy as an appendix to the application and a separate environmental evaluation is not required. If a federal impact assessment or a provincial impact assessment report was not required, submit an environmental evaluation of the project. The environmental evaluation must:
- Describe the present (pre-project) environmental and land use conditions in the local study area.
  - Identify and describe the project activities and infrastructure that may adversely affect the environment.

It is an applicant's responsibility to be aware of any emergency orders issued by Environment and Climate Change Canada that may be applicable to a project.

All projects must be compliant with any applicable regional land use plans adopted under the *Alberta Land Stewardship Act*.

- Identify the specific ecosystem components (i.e., terrain and soils, surface water bodies and hydrology, groundwater, wetlands, vegetation species and communities, wildlife species and habitat, aquatic species and habitat, air quality and environmentally sensitive areas) within the local study area that may be adversely affected by the project.
- Describe any potential adverse effects of the project on the ecosystem components during the [life of the project](#).
- Describe the methodology used to identify, evaluate and rate the adverse environmental effects and determine their [significance](#), along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the life of the project to reduce the potential adverse effects.
- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual or individuals who conducted or oversaw the environmental evaluation.

OP21) For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the environmental review process. Projects on federal lands may be subject to provincial laws, standards and permits. The applicant must address how it has considered AUC Rule 007 and Rule 012 and describe the steps taken, if any, to address specific requirements set out in these rules.

OP22) Submit a stand-alone, project-specific environmental protection plan (or environmental management plan) that itemizes and summarizes all of the mitigation measures and monitoring activities that the applicant is committed to implementing during construction and operation to minimize any adverse effects of the project on the environment.

### End-of-life management

- OP23) Provide an overview of how the operator will ensure sufficient funds are available at the project end of life to cover the cost of **decommissioning** and **reclamation**.

### Noise

- OP24) Provide a noise impact assessment in accordance with Rule 012.

### Approvals, reports and assessments from other agencies

- OP25) Identify any other acts (e.g., *Environmental Protection and Enhancement Act*, *Water Act*, *Public Lands Act* and *Wildlife Act*) that may apply to the project, identify approvals the project may require, and provide the status of each of these approvals.

- OP26) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a historic resource impact assessment is required, briefly describe any known historical or archaeological sites, palaeontological sites, or traditional use sites of a historic resource nature. If a *Historical Resources Act* approval has been obtained, provide a copy of it.

Applicants are responsible for ensuring that any summary provided protects the confidential and sensitive nature of a historical resource site.

- OP27) If the government of Alberta, through the Aboriginal Consultation Office (ACO) or otherwise, directed consultation with an **Indigenous group** for related approvals (i.e., *Public Lands Act*, *Water Act*, *Environmental Protection and Enhancement Act*, *Historical Resources Act*, *Government Organization Act*, etc.) the applicant must provide a copy of the pre-consultation assessment, the adequacy assessment and the specific issues and response table (if prepared). If the government of Alberta, through the ACO or otherwise, indicated that a pre-consultation assessment is not required, the applicant must provide a copy of that direction. If advice from the government of Alberta has not been obtained, the applicant must provide justification for its decision to not seek advice.

### Participant involvement program

- OP28) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See

[Appendix A1](#) – Participant involvement program guidelines and [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups).

OP29) List all occupants, residents and landowners on lands within the appropriate notification radius as shown below and described in [Appendix A1](#) – Participant involvement program guidelines, as well as Indigenous groups or other interested [persons](#) that were consulted as part of the participant involvement program.

Table 4.7: Notification radius for other power plants

Size	Location	Notification radius
< 1 MW	urban	first row of occupied properties
	rural	1,500 metres
1 - <10 MW	urban	first row of occupied properties
	rural	1,500 metres
≥ 10 MW	urban or rural	2,000 metres

OP30) Supply a list of contact information for all persons who had been contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in [Appendix A1](#) – Participant involvement program guidelines.

OP31) Summarize consultation with local jurisdictions (e.g., municipal districts, counties).

OP32) Identify all persons who expressed a concern(s) about the project. For each person, include the following information:

- The specifics of the concern(s).
- Steps taken to try and resolve the concern(s).
- Whether the concern(s) was resolved.

The AUC considers a concern to be resolved when the stakeholder in question expresses that they are satisfied with a proposed solution. The AUC does not consider that an applicant's acknowledgment of a stakeholder concern resolves the concern.

Battery storage facility

If a battery storage facility is to be constructed and operated as a part of the power plant, the applicant must also submit the information specified in Section 10.

Community generation

If the project is a proposed community generation project, the applicant must also submit the information specified in subsection 4.8.

### 4.6.3 Amendment process

This section outlines the process for projects that have received AUC approval and require an amendment. Depending on the scope of the proposed changes in relation to the original application, an applicant can make one of the following three types of submissions to amend its power plant approval: final project update, letter of enquiry, or amendment application.

Descriptions of eligibility for each of the submission types are described in the following sections.

#### Final project update

If an applicant has applied for a project where changes in equipment are anticipated after the approval of the application, a final project update must be submitted to the Commission at least 90 days prior to the start of construction. The allowances and requirements for a final project update are outlined below.

For power projects where the applicant is able to confirm that the project has stayed within the outlined allowances, an applicant is only required to submit a final project update on the record of the original proceeding. The Commission will review the update to confirm that the project has stayed within the allowances.



Please use the [Other power plant final project update requirements form](#) to assemble the information required for the final project update.

If project amendments as described in the final project update are not within the outlined allowances, an applicant must submit either a letter of enquiry or an amendment application to the AUC.

Table 4.8: Final project update requirements for other power plants

Project element	Allowance relative to approved element	Requirement for project update
Make, model, vendor and specifications associated with final generation equipment.	May change.	Confirm final make, model, vendor and specifications associated with the final generation equipment to be installed.
Total capability of power plant in MW.	Cannot increase or decrease by more than +/- 10 per cent or +/- 10 MW, whichever is less.	Confirm total capability of power plant in MW.
Extent of land use disturbance located within the approved project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) located within the approved project boundary.

Project element	Allowance relative to approved element	Requirement for project update
Total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Parks' minimum setbacks for wildlife habitat features; or, any encroachments into Alberta Environment and Parks' minimum setbacks for permanent wetlands.	Cannot increase.	Confirm total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Parks' minimum setbacks for wildlife habitat features; or, any encroachments into Alberta Environment and Parks' minimum setbacks for permanent wetlands has not increased over what was approved.
Noise environment.	Must continue to meet permissible sound levels at the most affected receptor(s) (as determined under Rule 012).	<p>Provide sound output of noise generating equipment.</p> <p>Provide table of predicted noise levels (to one decimal point) from finalized project at receptors.</p> <p>Confirm that the project continues to meet permissible sound levels at the most affected receptors (as determined under Rule 012).</p> <p>Provide any new or additional noise mitigation measures implemented to ensure that permissible sound levels will be met.</p>
Air emissions.	Cannot increase.	Confirm that air emissions associated with the updated project do not exceed those specified in the original application.
Participant involvement program.	If new or additional notification or consultation is required, including any requirements under Rule 012, there cannot be any unresolved objections to the project arising from the final project update.	<p>Confirm that new or additional notification or consultation either was not required or that it was undertaken. Provide a summary of any new or additional notification or consultation that was undertaken.</p> <p>Confirm that there are no unresolved objections to the project arising from the final project update.</p>
Final plant site layout.		Provide a final plant site drawing and map with locations and descriptions of the project's major components and the site boundary, and provide a .kml/.kmz file.

### Letter of enquiry

If an applicant is making minor alterations to an existing or approved but not yet constructed power plant that exceed the final project update allowances set out in Table

4.8, pursuant to sections 11, 12 and 18.2 of the *Hydro and Electric Energy Regulation*, the applicant may submit a letter of enquiry. In the letter of enquiry, the applicant must provide information respecting the need, nature, extent, land affected and the timing of the alterations. The applicant must demonstrate that the proposed alterations do not have any adverse impacts on the environment or any [person](#).

#### Amendment application

If an applicant is making changes to an existing or approved but not yet constructed power plant that exceed the final project update allowances outlined in Table 4.8 and do not meet the criteria for a letter of enquiry, the applicant must file a complete amendment application that provides all applicable information required within subsection 4.6.2.

### 4.7 Hydroelectric power plants and hydro developments

An application to construct or alter a hydroelectric power plant and an associated [hydro development](#) must contain all of the following information requirements.

Hydro development applications are made pursuant to sections 9 and 10 of the *Hydro and Electric Energy Act*.

Power plant applications are made pursuant to Section 11 of the *Hydro and Electric Energy Act*.

A hydro development project may, depending on its size, require assessments by the Natural Resources Conservation Board, AEP, and federal agencies including the Impact Assessment Agency of Canada.

#### 4.7.1 Information requirements



Please use the [Hydroelectric power plant and hydro development application form](#) to assemble the information requirements for the project. Hydroelectric power plant is abbreviated as HE below.

- HE1) State the approvals that are being applied for from the AUC. Describe the power plant including the number of generating units and their make, model and the [nominal capability](#) of each generating unit in MW, and the [hydro development](#), including technical and engineering details.
- HE2) Provide a list of existing approvals for facilities directly affected by this project, if any.
- HE3) Provide details of the ownership structure, including the names of all companies having an ownership interest in the project and their ownership share, and if applicable, the name of the project operator. Confirm that the applicant is a [qualified owner](#).

- HE4) For a municipality or a subsidiary of a municipality to hold an interest in a generating unit, provide documentation confirming compliance with Section 95 of the *Electric Utilities Act*.
- HE5) Describe the location of the project:
- Provide the legal description of the proposed hydro development (legal subdivision [LSD], section, township, range, meridian and/or plan, block, lot, municipal address for urban parcels) and connection point, if applicable.
  - Provide a Keyhole Markup Language (.kml/.kmz) file that contains the geographic data of each of the major components, including substation location and project boundary of the proposed hydro development. This file should reflect the information shown on the drawings and maps submitted to address information requirement HE6.
- HE6) Provide the following drawings and maps with units of measure/scale and the direction of north specified:
- i. A legible plant site drawing showing all major equipment components of the proposed hydro development and the site boundary.
  - ii. Legible maps showing:
    - The proposed hydro development site boundary.
    - Land ownership of surrounding lands, including any residences and dwellings within the notification radius described in [Appendix A1 – Participant involvement program guidelines](#), [Table A1-1: Electric facility application notification and consultation requirements](#).
    - Neighbouring municipalities, [First Nation reserves](#), Metis Settlements, including nearby roads, water bodies and other landmarks that may help identify the general location of the project area. This map may be at a larger scale than the detailed maps provided in response to other information requirements.
    - Important environmental features and [sensitive areas](#) in the [local study area](#).
    - Any additional [energy-related facilities](#) within the project area.
    - The major land use and resource features (e.g., vegetation, topography, water bodies, existing land use, existing



rights-of-way). This information should also be provided in air photo mosaics.

- HE7) Provide the requested approval date from the Commission, the expected construction start date, the expected in-service date of the project and the requested construction completion date to be used in the project approval. Provide the rationale for these dates.

#### Project connection

- HE8) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted.
- HE9) Provide the asset identification code assigned by the independent system operator (ISO) and the ISO Project ID number related to your system access service request, if available.
- HE10) If the proposed hydro development is to be connected to the transmission system, provide a map with one or more conceptual layouts showing possible routes and general land locations for facilities that would be used to interconnect the proposed hydro development to the Alberta Interconnected Electric System.

If the proposed hydro development is to be connected to the distribution system, provide a statement from the distribution facility owner indicating that it is willing to connect the generating facilities.

#### Emergency response plan

- HE11) Confirm the applicant has or will have a corporate or site-specific emergency response plan for the construction and operation of the proposed hydro development. If the applicant will have a corporate emergency response plan, please explain why it decided not to develop a site-specific emergency response plan.
- HE12) Provide a summary of the following:
- The site-specific risks (construction phase and operations phase) that have been identified to date.
  - The emergency mitigation measures that have been identified.
  - The site monitoring and communication protocols that will be put into place.

- HE13) Confirm that local responders and authorities have been contacted or notified regarding the project emergency response plan. Describe any requirements or feedback received and describe how the applicant intends to address the requirements and feedback received.

Environmental information

- HE14) Provide a summary of feedback received to date from AEP addressing the environmental aspects of the project and any mitigation measures and monitoring activities recommended by AEP.

All projects must be compliant with any applicable regional land use plans adopted under the *Alberta Land Stewardship Act*.

- HE15) If preparation of either a federal impact assessment or a provincial environmental impact assessment report was required, provide a copy as an appendix to the application and a separate environmental evaluation is not required. If a federal impact assessment or a provincial impact assessment report was not required, submit an environmental evaluation of the project. The environmental evaluation must:

- Describe the present (pre-project) environmental and land use conditions in the [local study area](#).
- Identify and describe the project activities and infrastructure that may adversely affect the environment.
- Identify the specific ecosystem components (i.e., terrain and soils, surface water bodies and hydrology, groundwater, wetlands, vegetation species and communities, wildlife species and habitat, aquatic species and habitat, air quality and environmentally sensitive areas) within the [local study area](#) that may be adversely affected by the project.
- Describe any potential adverse effects of the project on the ecosystem components during the [life of the project](#).
- Describe the methodology used to identify, evaluate and rate the adverse environmental effects and determine their [significance](#), along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the life of the project to reduce the potential adverse effects.

It is an applicant's responsibility to be aware of any emergency orders issued by Environment and Climate Change Canada that may be applicable to a project.

- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual or individuals who conducted or oversaw the environmental evaluation.

HE16) Submit a stand-alone, project-specific environmental protection plan (or environmental management plan) that itemizes and summarizes all of the mitigation measures and monitoring activities that the applicant is committed to implementing during construction and operation to minimize any adverse effects of the project on the environment.

HE17) For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the environmental review process. Projects on federal lands may be subject to provincial laws, standards and permits. The applicant must address how it has considered AUC Rule 007 and Rule 012 and describe the steps taken, if any, to address specific requirements set out in these rules.

#### End-of-life management

HE18) Provide an overview of how the operator will ensure sufficient funds are available at the project end of life to cover the cost of [decommissioning](#) and [reclamation](#).

#### Noise

HE19) Provide a noise impact assessment in accordance with Rule 012.

#### Approvals, reports and assessments from other agencies

HE20) Identify any other acts (e.g., *Environmental Protection and Enhancement Act*, *Water Act*, *Public Lands Act* and *Wildlife Act*) that may affect the project, identify approvals the project may require, and provide the status of each of these approvals.

HE21) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a historic resource impact assessment is required, briefly describe any known historical or archaeological sites, palaeontological sites, or traditional use sites of a historic resource nature. If a *Historical Resources Act* approval has been obtained, provide a copy of it.

Applicants are responsible for ensuring that any summary provided protects the confidential and sensitive nature of a historical resource.

HE22) If the government of Alberta, through the Aboriginal Consultation Office (ACO) or otherwise, directed consultation with an [Indigenous group](#) for related approvals (i.e., *Public Lands Act*, *Water Act*, *Environmental Protection and Enhancement Act*, *Historical Resources Act*, *Government Organization Act*, etc.) the applicant must provide a copy of the pre-consultation assessment, the adequacy assessment and the specific issues and response table (if prepared). If the government of Alberta, through the ACO or otherwise, indicated that a pre-consultation assessment is not required, the applicant must provide a copy of that direction. If advice from the government of Alberta has not been obtained, the applicant must provide justification for its decision to not seek advice.

#### Participant involvement program

HE23) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See [Appendix A1](#) – Participant involvement program guidelines and [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups.)

HE24) List all occupants, residents and landowners on lands within the appropriate notification radius as shown below and described in [Appendix A1](#) – Participant involvement program guidelines, as well as Indigenous groups, non-governmental organizations or other interested persons that were consulted as part of the participant involvement program.

Table 4.9: Notification radius for hydroelectric power plants

Size	Location	Notification radius	Personal consultation
< 1 MW	urban	first row of occupied properties	N/A
	rural	1,500 metres	N/A
1 - <10 MW	urban	first row of occupied properties	first row of occupied properties
	rural	1,500 metres	N/A
≥ 10 MW	urban or rural	2,000 metres	800 metres

Because a **hydro development** may affect persons located at significant distances upstream and downstream of the facility, identifying directly and adversely affected persons may require a broader interpretation than in other facility review processes.

- HE25) Supply a list of contact information for all **persons** who had been contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in **Appendix A1** – Participant involvement program guidelines.
- HE26) Summarize consultation with local jurisdictions (e.g., municipal districts, counties).
- HE27) Identify all persons who expressed a concern(s) about the project. For each person, include the following information:
- The specifics of the concern(s).
  - Steps taken to try and resolve the concern(s).
  - Whether the concern(s) was resolved.

The AUC considers a concern to be resolved when the stakeholder in question expresses that they are satisfied with a proposed solution. The AUC does not consider that an applicant's acknowledgment of a stakeholder concern resolves the concern.

### Battery storage facility

If a battery storage facility is to be constructed and operated as a part of the hydro development, the applicant must also submit the information specified in Section 10.

### Community generation

If the project is a proposed community generation project, the applicant must also submit the information specified in subsection 4.8.

## **4.8 Community generation**

If an applicant is applying to have a small-scale generating unit qualified as a community generating unit, or to report changes to an existing community generating unit, the application must include the information outlined below.

Community generation applications are made pursuant to the *Small Scale Generation Regulation*. To be eligible to be qualified as a community generating unit, a generating unit must first be qualified as a small-scale generating unit by the distribution facility owner for the service area in which the generating unit is located.

These information requirements do not apply to changes to a small-scale generating unit unless the changes may make the community generating unit cease to be a community generating unit, as outlined in Section 10 of the *Small Scale Generation Regulation*.

### **4.8.1 Information requirements**



Please use the [Community generating unit application form](#) to assemble the information requirements for the project. Community generating unit is abbreviated as CG below.

#### Project description

CG1) Describe the generating unit(s) including quantity, make, model and the [total capability](#) in MW.

CG2) Describe the location of the generating unit(s).

- Provide the legal description of the generating unit site (legal subdivision [LSD], section, township, range, meridian and/or plan, block, lot, municipal address for urban parcels) and connection point, if applicable.
- Confirm if the generating unit is located within an isolated community as defined in the *Isolated Generating Units and Customer Choice Regulation*. If the generating unit is located within an isolated community, confirm that the generating unit is not designated as an isolated generating unit.

CG3) Confirm if the generating unit requires an AUC power plant approval.

- If the generating unit has an existing AUC power plant approval, provide the AUC power plant approval number.
- If there is an active AUC power plant application associated with the generating unit, provide the AUC proceeding number. If an application for an AUC power plant approval will be submitted at a later date, provide the estimated application date.
- If the generating unit does not require an AUC power plant approval, explain why an approval is not required.
- If the generating unit does not require an AUC power plant approval because it is a small power plant within the meaning of the *Hydro and Electric Energy Regulation*, confirm that the generating unit complies with each of the requirements of subsection 18.1(2) of that regulation.

If an application for an AUC power plant approval is being submitted concurrently with a community generation application, clearly indicate this in both the application for community generation and the power plant application.

CG4) Confirm if the generating unit is currently in service and if so, provide the in-service date. If the generating unit is not in service, provide the estimated in-service date. If the generating unit has not been constructed, provide the estimated construction start date.

#### Eligibility

CG5) Confirm that the generating unit qualifies as a small-scale generating unit under the *Small Scale Generation Regulation*; include documentation from the distribution facility owner confirming that qualification.

CG6) Describe how the community group associated with the generating unit satisfies the definition of community group in subsection 1(e) of the *Small Scale Generation Regulation*.

CG7) Provide the community benefits agreement or community benefits statement associated with the generating units, as defined in subsections 1(b) and 1(c) of the *Small Scale Generation Regulation*. Clearly describe the benefits received by the community group under the community benefits agreement or community benefits statement. Indicate the category or categories each benefit falls within (i.e., social, environmental or economic).

- CG8) Provide details of the ownership structure of the generating unit, including the names of all entities having an ownership interest in the generating unit and their ownership share. Confirm if the generating unit is wholly owned by the community group identified in the community benefits statement or community benefits agreement.
- CG9) Provide a detailed breakdown of costs for the meter equipment associated with the generating unit, excluding any related installation or commissioning costs. If the meter equipment has not been procured, provide an estimate of costs that will be incurred for the meter equipment, excluding any related installation or commissioning costs.

Pursuant to the *Small Scale Generation Regulation*, costs to install or commission the meter are excluded from the Commission's determination of the amount of compensation.

#### 4.8.2 Amendment process

Notice of any changes that may cause a qualified community generating unit to cease being a community generating unit, including changes described in subsection 10(1) of the *Small Scale Generation Regulation*, should be filed as a letter of enquiry application through the eFiling System.

A letter of enquiry notifying the Commission of changes to a qualified community generating unit may be filed by the generating unit owner or the distribution facility owner for the service area in which the generating unit is located.

## 5 Time extension applications for power plants

This section outlines the requirements for applications for a time extension to complete the construction or alteration of a power plant or [hydro development](#). Time extensions may be granted at the discretion of the Commission.

An application for a time extension for a power plant or hydro development must include the information outlined below.

Applications for a time extension to complete the construction or alteration of a power plant or hydro development are made pursuant to Section 19 of the *Hydro and Electric Energy Act*.

Time extension applications should be filed well in advance of the currently approved construction completion date in order to give the Commission sufficient time to consider the application.



## 5.1 Information requirements



Please use the [Time extension application for power plants form](#) to assemble the information requirements for the project. Time extension application for power plants is abbreviated as TEP below.

- TEP1) Provide a list of the existing approvals for facilities affected.
- TEP2) Explain whether construction of the approved power plant and other associated facilities has commenced. If it has not yet commenced, explain whether it will commence prior to the expiry date of the existing approval. Explain why the construction or alteration completion date will not be met, why the time extension is required and provide an updated project schedule, including the expected construction start date, the expected in-service date of the project and the requested construction completion date to be used in the project approval.
- TEP3) Provide a new noise impact assessment, as required under subsection 1.5 of Rule 012 if one or more of the following conditions is satisfied:
- The most affected dwelling(s) as defined by Rule 012 have changed; or
  - There are new [energy-related facilities](#) that may influence sound levels at dwellings located within 1.5 kilometres of the approved facility boundary.
- TEP4) Confirm that the participant involvement program meets the requirements contained in [Appendix A1 – Participant involvement program guidelines](#) and [Appendix A1-B – Participant involvement program guidelines for Indigenous groups](#). Describe any concerns specific to the time extension request, raised by directly and adversely affected persons and how the concerns were dealt with or will be dealt with.
- TEP5) Supply a list of contact information for all [persons](#) who were contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in Section 9 of [Appendix A1 – Participant involvement program guidelines](#).
- TEP6) For a time extension to construct or alter a solar or wind power plant, provide:

- Confirmation that the renewable energy referral report will remain valid until the commencement of construction. If it will not remain valid until the commencement of construction, submit an updated renewable energy referral report from Alberta Environment and Parks (AEP) Fish and Wildlife Stewardship, or confirmation that an updated referral report will be obtained such that the referral report is maintained as current until the commencement of construction.
- Confirmation that the project wildlife surveys remain current and do not require updating, or confirmation that all wildlife surveys will be maintained as current until the commencement of construction.

- TEP7) For a time extension to construct or alter a power plant that is not solar or wind power, provide confirmation that the project does not require a wildlife survey or that the project wildlife surveys remain current and do not require updating.
- TEP8) If the project has received a connection order, confirm that the Alberta Electric System Operator (if the project is to be connected to the transmission system) or the distribution facility owner (if the project is to be connected to the distribution system) has no concerns with the new construction or alteration completion date.
- TEP9) Provide any available updates on outstanding directions associated with the existing approvals.

## 6 Decommission and salvage or cancellation of power plants

Discontinuing the operation of a power plant is referred to as [decommission](#) in this section. Dismantling or removing any works or installations forming part of a power plant is referred to as salvaging.

Notifications to decommission and salvage power plants are made pursuant to Section 22 of the *Hydro and Electric Energy Act*. This notice should be filed as a letter of enquiry application through the eFiling System.

Applications to decommission and salvage a power plant that contains an isolated generating unit are made pursuant to Section 21 of the *Hydro and Electric Energy Act*.

Cancellation of an approval for an unconstructed power plant does not require an application. Instead, the power plant approval holder should indicate that the project is being cancelled in a response to the Commission's direction to provide confirmation of completion of the power plant.

## 7 Transmission lines, substations and other transmission facilities

This section outlines the requirements for applications for needs identification documents, and situations where needs identification documents may not be required. It then sets out the requirements for applications to construct and alter transmission facilities, including transmission lines, substations, telecommunications facilities and fibre optic facilities.

### 7.1 Needs identification document applications to construct or alter a substation or transmission line

The independent system operator (ISO) is responsible for identifying the need for the construction of new transmission projects or alterations to existing transmission facilities as set out in Section 34 of the *Electric Utilities Act* and the *Transmission Regulation*. When the ISO identifies such a need, it seeks approval from the Commission of a needs identification document which is sometimes referred to as a “NID” or a “NID application.”

The ISO may submit an abbreviated needs identification document (ANID) application for a project responding to a generation or load system access service request at an estimated cost of less than \$5 million for system-related cost.

A NID or an ANID can be submitted either as a stand-alone application or concurrently with a related facility application. When applications are filed concurrently, the NID and facility applications will be reviewed in a single Commission proceeding; however, the ISO will remain responsible for any concerns raised with respect to the need and the proposed technical solution of system enhancement, upgrade or interconnection. An approval, if granted, will be issued to the ISO for the needs identification document or abbreviated needs identification document prior to or at the same time as a permit and licence (if granted) is issued to the facility applicant.

Unless otherwise directed, a NID application must contain the information set out in the requirements listed in the *Transmission Regulation*, and information requirements set out in subsection 7.1.1 of this rule. An ANID application must include the information outlined in subsection 7.1.2. If the information required is not provided, the application must indicate the reason for which the information was omitted.

For routine ANIDs driven by system access service requests from generators and non-distribution facility owner loads, the ISO may file a checklist application confirming that the regulatory requirements for the proposed work have been completed. An ANID will only qualify as routine, and be eligible to be filed as a checklist application, if:

- There are no unresolved stakeholder objections.
- There are no system-related costs.
- The project does not result in any Category A adverse system impacts.

- The project is not anticipated to result in significant environmental effects.
- The alternative selection is straightforward or obvious (i.e., the ISO has compelling rationale for why one technical solution is superior).

For checklist applications, the ISO will not be required to file any other related supporting documents (e.g., technical studies, participant involvement program summaries), however, it will be required to retain the related supporting documents. The Commission will continue to ensure compliance with its requirements via audit procedures. The Commission will assess eligibility for an application to be filed as a checklist application and will issue a decision within five business days of receiving a properly completed checklist application. The ISO will be asked to file supplemental information for applications that are not eligible to be filed as checklist applications.



Please use the [Needs identification document checklist application form](#) to assemble the information required for a routine ANID checklist application.

Pursuant to the *Transmission Regulation*, a NID application is not required for:

- Maintenance upgrades, enhancements or other modifications to a [transmission facility](#) proposed by a transmission facility owner (TFO) or market participant if the maintenance upgrade, enhancement, or other modification improves the efficiency or operation of the transmission facility but does not materially affect transmission facility capacity.
- A transmission facility approved by the ISO pursuant to an abbreviated needs approval process established under ISO Rules Section 501.3.

If the exemption above does not apply, or if the TFO or market participant does not have prior approval from the ISO under the abbreviated needs approval process, it must receive AUC approval of the NID or ANID before an application for a new transmission facility or a time extension or alteration to an existing facility may be considered. Alternatively, the NID application may be submitted concurrently with the facility application under Section 15.4 of the *Hydro and Electric Energy Act*.

#### 7.1.1 Needs identification document application information requirements



Please use the [Needs identification document application form](#) to assemble the information requirements for the project. Needs identification document is abbreviated as NID below.

NID1) Provide the information required under subsection 11(3) of the *Transmission Regulation*.

- NID2) Provide information to support the ISO assessment of the need and selection of a preferred option. This information should include but is not limited to:
- A desktop evaluation to evaluate the environmental and land use effects of the options.
  - Technical analyses (such as power flow studies, stability studies, reactive power and other necessary studies) prior to and following connection of the applied-for load or generators.
  - Short-circuit levels of all substations in the area under consideration before and after the proposed expansion or enhancements are completed.
  - Transmission system losses before and after the proposed expansion or enhancements are completed.
- NID3) Provide the rationale, determination and assumptions for the following:
- The proposed transmission line configurations for each option.
  - Applicable ratings/capability for major elements.
  - Electrical configuration of proposed new substations or amendments to existing substations for breaker arrangements, line terminations and other major equipment.
- NID4) Provide an Association for the Advancement of Cost Engineering (AACE) Class 4 cost estimate for the applied-for option in accordance with the requirements in ISO Rules Section 504.5 and the Alberta Electric System Operator (AESO) Information Document #2015-002R, Service Proposals and Cost Estimating. The format of the cost estimate provided must take the form of the estimate summary that is obtained by completing the AESO's cost estimate template (available on the AESO web page).
- NID5) Indicate the date by which the transmission development described in the proposed needs identification document approval must be direct assigned to a transmission facility owner or market participant.
- NID6) Describe the participant involvement program conducted by the ISO, including the rationale used to develop the participant involvement program (see [Appendix A2](#) – ISO participant involvement program guidelines). A summary of how the ISO addressed the issues raised by participants must be included in the NID application.

### 7.1.2 Abbreviated needs identification document application information requirements



Please use the [Abbreviated needs identification document application form](#) to assemble the information requirements for the project. Abbreviated needs identification document is also abbreviated as NID below.

- NID7) Provide the information required under subsections 11(3)(a), (b), (f), (g) and (h) of the *Transmission Regulation*.
- NID8) Provide information to support the ISO's assessment of the need and selection of a preferred option. Depending on the nature of the need and the proposed solution, this information may include but is not limited to:
- A desktop evaluation to evaluate the environmental and land use effects of the options.
  - Technical analyses (such as power flow studies, stability studies, reactive power and other necessary studies) prior to and following connection of the applied-for load or generators.
  - Short-circuit levels of all substations in the area under consideration before and after the proposed expansion or enhancements are completed.
  - Transmission system losses before and after the proposed expansion or enhancements are completed.
- NID9) Provide the rationale, determination and assumptions for the following:
- The proposed transmission line configurations for each option.
  - Applicable ratings/capability for major elements.
  - Electrical configuration of proposed new substations or amendments to existing substations for breaker arrangements, line terminations and other major equipment.
- NID10) For projects where connection options are causing or exacerbating existing local area congestion, provide a connection assessment and the details of any operating procedures or remedial action schemes, generation must-run or constraint management protocols that may be implemented to meet reliability requirements prior to the transmission system enhancement or expansion being implemented.
- NID11) Provide an AACE Class 4 cost estimate for the applied-for option and other viable options in accordance with the requirements in ISO Rules Section 504.5 and the AESO Information Document #2015-002R, Service Proposals and

Cost Estimating. The format of the cost estimate provided must take the form of the estimate summary that is obtained by completing the AESO's cost estimate template (available on the AESO web page).

- NID12) Provide a description of the participant involvement program conducted by the ISO, including the rationale used to develop the participant involvement program (see [Appendix A2](#) – ISO participant involvement program guidelines). A summary of how the ISO addressed the issues raised by participants must be included in the application.

## 7.2 Transmission line, substation and other transmission facility applications

This section outlines the requirements for applications to construct or alter transmission facilities, including transmission lines, substations, telecommunication facilities, and fibre optic facilities.

Applications to construct and operate [transmission facilities](#) are made pursuant to sections 14 and 15 of the *Hydro and Electric Energy Act*.

Applications by a market participant to construct and temporarily operate a substation or transmission line are made pursuant to Section 24.31 of the *Transmission Regulation*.

Any application to construct and operate a substation or transmission line must include the information outlined in subsection 7.2.1.

If the proposed development includes both a substation application and a transmission line application, and there is duplication between the requirements (for example, if one participant involvement program was completed for the project and each application requires a summary of the participant involvement program), the applicant must satisfy those requirements in full in one of the applications, and may refer to that application in the other application.

A separate application form should be submitted for each [transmission facility](#) and interconnection application as part of a single proceeding.

If a new connection to the Alberta Interconnected Electric System is also necessary, a connection order application must also be made, pursuant to Section 18 of the *Hydro and Electric Energy Act*, and include the information indicated in Section 11.

Applications to discontinue, dismantle or remove an approved transmission facility are made pursuant to Section 21 of the *Hydro and Electric Energy Act*. The information requirements for these applications can be found in Section 9.

## 7.2.1 Information requirements



Please use the [Transmission/substation facility application form](#) to assemble the information requirements for the project. Transmission/substation facility is abbreviated as TS below.

### Project description

- TS1) Provide a description of the proposed project.
- TS2) Confirm if the application is for a customer project or an application related to a proposal for a market participant under Section 24.31 of the *Transmission Regulation*.
- TS3) Provide details of the ownership structure, including the names of all companies having an ownership interest in the project and their ownership share, and if applicable, the name of the operator of the facilities that is seeking to acquire the permit or licence. Confirm that the applicant is a [qualified owner](#).
- TS4) Provide a list of existing approvals for facilities directly affected by this project, if any.
- TS5) Provide a copy of the ISO direct assignment letter pursuant to the *Electric Utilities Act*. Alternatively, if a needs identification document was not required, provide a copy of the ISO approval letter pursuant to the abbreviated needs approval process, or provide a statement in the application that the project was exempt pursuant to the *Transmission Regulation* (as described in subsection 7.1 of this rule).
- TS6) Provide the most up-to-date functional specification issued by the ISO.
- TS7) Describe the design and ratings of the transmission line and major elements of the substation.
- TS8) If the ISO requires the facility applicant to determine the choice of [conductors](#), describe the conductor size and arrangement selected and the basis for the conductor selection.
- TS9) If the application is not direct assigned by the ISO, provide the rationale for the rating/size of any proposed conductor or piece of [major substation equipment](#).
- TS10) Describe the proposed transmission line structure type, including height and spacing; if more than one type of structure is proposed, state where each type will be used.



- TS11) State the right-of-way width and the basis for determining the width.
- TS12) Describe all major substation equipment being applied for, including the height of any telecommunications structure, and provide a list of the final major equipment that would be in the substation.
- TS13) Describe the switching and protection features of the proposed transmission facilities.
- TS14) Describe the electrical interaction of proposed transmission facilities with other facilities, such as pipelines, railways, telephone, radio and television transmission facilities, and other surface structures.
- TS15) Describe the changes to existing facilities required to accommodate the proposed facilities.
- TS16) Describe any transmission line routing alternatives to the proposal, and compare the relative effects (environmental, social and economic, including any associated distribution costs) of these alternatives with the proposal. If the alternatives are segmented, include a comparison of the effects of each segment to the effects of its corresponding alternative segments.
- TS17) Provide an electric single-line diagram or switching map showing new facilities in place in the system. In the case of a substation, provide an electric single-line diagram and a substation layout diagram, including major items of equipment and the fenced boundary of the substation, with units of measure/scale.
- TS18) Discuss the construction schedule, equipment and method of construction, and method of eventual right-of-way maintenance.
- TS19) Provide the requested approval date from the AUC, the expected construction start date, the expected in-service date of the project and the requested construction completion date to be stipulated in the project permit(s) and licence(s).
- TS20) If available, provide the location of any required temporary or permanent workspace areas and access roads, and state whether these locations are requested to be listed in a permit and licence.

TS21) Provide the following drawings and maps with units of measure/scale and the direction of north specified:

- i. A legible map defining the study area and state the reasons for the chosen area.
- ii. Legible maps of the proposed facilities showing:
  - The preferred transmission line route and any alternative routes or segments.
  - Right-of-way widths.
  - Location of the transmission line on the right-of-way.
  - Location of the transmission line relative to property lines.
  - Kilometre points along each transmission line route.
- iii. Legible maps and air photo mosaics upon which the proposed transmission line route(s) and/or substation have been imposed and showing the residences, landowner names, and major land use and resource features along the routes and/or adjacent to the substation (e.g., agricultural crops or pasture, topography, soil type, existing land use, existing rights-of-way, existing or potential historical, archaeological or paleontological sites, and superficial and mineable resources).
- iv. Legible maps showing the most relevant environmental features, wildlife and aquatic habitat, ecological communities, environmentally [sensitive areas](#), protected areas and designations present in the [local study area](#).

TS22) Provide a Keyhole Markup Language (.kml/.kmz) file that contains the geographic data of the transmission line centrelines for all applied for transmission route options and substation locations. This file should reflect the information shown on the drawings and maps submitted to address information requirement TS21.

TS23) If applicable, describe the measures proposed to minimize potential visual effects of the proposed development, including the identification of project components and locations that require screening and the screening measures (e.g., fences, earth berms, painting, landscaping) to be used.

#### Environmental information

TS24) Submit an environmental evaluation of the project. The environmental evaluation must:

- Describe the present (pre-project) environmental and land-use conditions for the proposed route, substation location and any alternatives.
- Identify and describe the potential effects of construction and operation of the project on the environment. In particular, describe any potential adverse effects on soils, terrain, vegetation species and communities, wetlands, wildlife species and wildlife habitat, aquatic species and habitat, groundwater, surface water bodies and hydrology, environmentally sensitive areas, and land use within the local study area following and referencing published Alberta Environment and Parks (AEP) guidelines if applicable.
- Describe the methodology used and any field surveys conducted to identify, evaluate, and rate any potential environmental effects and determine their **significance**, along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the **life of the project** to reduce the potential adverse effects.
- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual(s) who conducted or oversaw the environmental evaluation.
- Present an overall comparison of the proposed routes, in particular, identify the environmental features and any potential environmental effects (e.g., on native vegetation communities, rare plants, wetlands, topography, unique terrain features, sensitive soils, wildlife species setbacks and wildlife habitat, and environmentally significant areas), and identify land use and resource features (e.g., agricultural, residential, recreational, forestry, trapping and hunting areas, protective notations, and existing or potential

All projects must be compliant with any applicable regional land use plans adopted under the *Alberta Land Stewardship Act*.

It is an applicant's responsibility to be aware of any emergency orders issued by Environment and Climate Change Canada that may be applicable to a project.

archaeological sites) for each route in a table with stated units (kilometre, total number, etc.).

- Summarize the compatibility of the proposed facility with various municipal services if a proposed transmission line passes through or immediately adjacent to an **urban** centre.
- If the project crosses agricultural land, describe any plans to prevent the spread of weeds and pests on agricultural land.
- If the project involves the modification or repair of an existing substation, describe any current or past on-site use of polychlorinated biphenyls (PCB) and summarize any site-specific incident spill records. Where soil disturbance will occur on or immediately adjacent to the substation site, describe any soil sampling or contamination assessment to be undertaken and describe any plans to safely manage, transport and dispose of contaminated soils.

TS25) For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the environmental review process. Projects on federal lands may be subject to provincial laws, standards and permits. The applicant must address how it has considered AUC Rule 007 and Rule 012 and describe the steps taken, if any, to address specific requirements set out in these rules.

TS26) Submit a stand-alone, project-specific environmental protection plan (or environmental management plan) that itemizes and summarizes all of the mitigation measures and monitoring activities that the applicant is committed to implementing during construction and operation to minimize any adverse effects of the project on the environment.

TS27) Describe any **decommissioning** of existing transmission facilities and describe the **reclamation** plan that will be carried out, including for any temporary workspace areas and temporary access roads following commissioning.

## Noise

- TS28) Provide a noise impact assessment in accordance with Rule 012 for new substations and transformer additions within an existing substation, clearly indicating the impact of the new substation and/or transformer addition.

## Approvals from other agencies

- TS29) Identify any other acts (e.g., *Environmental Protection and Enhancement Act*, *Water Act*, *Public Lands Act* and *Wildlife Act*) that may apply to the project, identify approvals the project may require, and provide the status of each of these approvals.
- TS30) For the preferred route and possible alternatives, applicants must provide a summary of feedback received to date from AEP (including the local wildlife biologist of AEP) addressing the environmental aspects of the project, and confirmation that AEP is satisfied with any proposed mitigation measures and monitoring activities, or identify any unresolved project aspects where agreement with AEP was not achieved.
- TS31) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a historic resource impact assessment is required, briefly describe any known historical, archaeological sites, palaeontological sites, or traditional use sites of a historic resource nature. If a *Historical Resources Act* approval has been obtained, provide a copy of it.

Applicants are responsible for ensuring that any summary provided protects the confidential and sensitive nature of a historical resource.

## Participant involvement program

- TS32) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See [Appendix A1](#) – Participant involvement program guidelines and [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups).
- TS33) List all occupants, residents and landowners within the appropriate notification radius as determined using [Appendix A1](#) – Participant involvement program guidelines, as well as Indigenous groups and other interested persons that were notified or consulted as part of the participant involvement program.
- TS34) Supply a list of contact information for all persons who had been contacted as part of the participant involvement program in a spreadsheet in accordance

with the template included in [Appendix A1](#) – Participant involvement program guidelines.

- TS35) Summarize consultation with local jurisdictions (e.g., municipal districts, counties).
- TS36) Identify all [persons](#) who expressed a concern(s) about the project. For each person, include the following information:
- The specifics of the concern(s).
  - Steps taken to resolve the concern(s).
  - Whether the concern(s) was resolved.

The AUC considers a concern to be resolved when the stakeholder in question expresses that they are satisfied with a proposed solution. The AUC does not consider that an applicant's acknowledgment of a stakeholder concern resolves the concern.

#### Economic assessment

- TS37) Provide an AACE Class 3 cost estimate for the preferred route and all alternatives on a common basis, in accordance with the requirements in ISO Rules Section 504.5 and the AESO Information Document #2015-002R, Service Proposals and Cost Estimating. The format of the cost estimate provided must take the form of the estimate summary that is obtained by completing the AESO's cost estimate template (available on the AESO web page). Where identifiable, include costs to be borne by persons other than the applicant and the applicant's customer(s) in the comparison. This information requirement may not be applicable to market participant and merchant line applications.

## Market participant choice

TS38) In addition to the above, if the applicant is a market participant applying under Section 24.31 of the *Transmission Regulation*, the applicant must also:

- Provide confirmation that all required agreements are in place with the TFO including the asset transfer agreement, the written agreement with the TFO for the temporary operation of the **transmission facility**, if available, and confirmation of ISO approval of the connection proposal.
- Specify the temporary period for which the market participant expects to hold the operating licence, which may not exceed the term specified in the written agreement with the TFO for the temporary operation of the transmission facility.

If the written agreement with the TFO for the temporary operation of the transmission facility is not available at the time of application filing, the market participant must provide confirmation that the agreement is in place prior to energization.

If a market participant or TFO is applying to transfer an operating licence for a **transmission facility** to a TFO, pursuant to the *Transmission Regulation* and the *Hydro and Electric Energy Act*, the application must be filed with the AUC prior to the end of the temporary period for which the market participant expects to hold the operating licence. The requirements for an application to transfer an operating licence from a market participant to a TFO can be found in Section 14 of this rule.

### **7.2.2 Amendment process**

This section outlines the process for transmission facilities that have received AUC approval and require an amendment. Depending on the scope of the proposed changes in relation to the original application, an applicant can proceed to amend its transmission facilities approvals without filing an application, by submitting a checklist application or an amendment application.

#### No application

No application is required if there are no changes to the existing permit and licence and the project meets all of the following conditions:

- It is considered a minor alteration.
- There are no adverse effects on a **person** or the environment.

If a decision is required by the AUC, a letter of enquiry application or an amendment application should be submitted.

If no application is required, proponents shall retain a project record for information purposes that includes a project description, the need, nature, extent and the timing of the project, and the criteria used to determine that the project was a minor alteration with no adverse effects on a person or the environment. The project record could be requested by the Commission in the event that there is a complaint related to the project. Further, the project record may be subject to a subsequent compliance review by the AUC.

Examples of projects that would likely be considered minor alterations have no adverse effects on a person or the environment, and would therefore not require an application, include:

- Addition or replacement of equipment in a substation that is not considered [major substation equipment](#).
- A like-for-like replacement of major substation equipment where there is no change to the substation's fenced area or noise profile.
- A like-for-like transmission tower replacement with no change to the transmission line's approved right-of-way.
- Most maintenance to substations, transmission lines and telecommunications towers.

#### Checklist application

If the project is a minor alteration and there are no adverse effects on a person or the environment, but the project requires the amendment of an existing permit and licence, or requires a decision by the AUC, the application should be filed as a checklist application in lieu of a letter of enquiry. A letter of enquiry application is stipulated pursuant to Section 11 of *Hydro and Electric Energy Regulation*.

The applicant must file a checklist application, confirming that all the regulatory requirements for the proposed amendment have been met and a draft of the amended permit and licence, including an updated transmission line route map. All applications for minor [transmission facility](#) alterations must be filed as a checklist application using the checklist form. The checklist form contains questions respecting the need, nature, extent and the timing of the alterations and confirmations that the proposed alterations do not have any adverse impacts on the environment and people.



Applicants are not required to file any other related supporting documents (e.g., environmental evaluations, participant involvement program summaries), however, applicants are required to retain all related supporting documents. The Commission will continue to ensure compliance with its requirements via an audit review process.

The Commission will assess eligibility for an application to be filed as a checklist application and will issue a decision within five business days of receiving a properly completed checklist application. Applicants may be asked to file supplemental information for applications that are not eligible to be filed as checklist applications.



Please use the [Electric transmission checklist application form](#) and accompanying instructions to assemble the information requirements for a transmission facility alteration.

#### Amendment application

If an applicant is making changes that are not a minor alteration, or there are potentially adverse effects on a person or the environment, the applicant must file an amendment application with the AUC that provides all applicable information required within subsection 7.2.1.

### **8 Time extension applications for transmission facilities**

An application for a time extension for a [transmission facility](#) must be filed as a checklist application confirming that the regulatory requirements for the proposed time extension have been met and, in some cases, a draft of the amended permit and licence must be included.

Applications for a time extension to complete the construction or alteration of a substation or transmission line are made pursuant to Section 19 of the *Hydro and Electric Energy Act*.

Applicants will not be required to file any other related supporting documents (e.g., environmental evaluations, participant involvement program summaries), however, applicants will be required to retain the related supporting documents. The Commission will continue to ensure compliance with its requirements via audit procedures.

The Commission will assess eligibility for an application to be filed as a checklist application and will issue a decision within five business days of receiving a properly completed checklist application.

Time extension applications should be filed well in advance of the currently approved construction completion date in order to give the Commission sufficient time to consider the application.

Applicants will be asked to file supplemental information for checklist applications that do not meet the requirements.



Please use the [Electric transmission time extension checklist application form](#) and accompanying instructions to assemble the information requirements for a transmission facility alteration.

## 9 Decommission and salvage or cancellation for transmission facilities

Applications to discontinue the operation of, or dismantle or remove any work or installation forming part of a permit and/or licence with respect to a substation, a transmission line and other transmission facilities are made pursuant to Section 21 of the *Hydro and Electric Energy Act*.

An application to [decommission](#) or salvage a [transmission facility](#) must include the information outlined in subsection 9.1.

An application to cancel a transmission facility permit and licence must include the information outlined in subsection 9.2.

### 9.1 Decommission and salvage information requirements



Please use the [Decommission and salvage application form](#) to assemble the information requirements for the project. Decommission and salvage is abbreviated as DST below.

- DST1) Provide the permit and licence of the facility to be [decommissioned](#) or salvaged.
- DST2) Provide a letter from the ISO endorsing the project.
- DST3) Provide information on: the salvage, remediation and [reclamation](#) work to be performed; an assessment of contamination; the legislative requirements or other published guidelines that will be adhered to or considered.
- DST4) Confirm that decommissioning will take place in alignment with any clean up and reclamation plan in place.
- DST5) Provide a cost estimate and the schedule for the salvage.
- DST6) Confirm that personal notification was provided to occupants, residents, landowners, Indigenous groups and other utilities on, or [directly adjacent](#) to, the project right-of-way or location
- DST7) Identify all [persons](#) who expressed a concern(s) about the project. For each person, include the following information:

- The specifics of the concern(s).
- Steps taken to resolve the concern(s).
- Whether the concern(s) was resolved.

## 9.2 Cancellation information requirements



Please use the [Cancellation application form](#) to assemble the information required for the cancellation of a project. Cancellation is abbreviated as CT below.

### Needs identification document approval cancellation

CT1) Provide the approval number to be cancelled and the rationale for the cancellation.

### Transmission line, substation and other transmission facility cancellation

CT2) Provide the permit and licence number to be cancelled.

CT3) Provide the connection order number to be cancelled, if applicable.

CT4) Provide a letter from the ISO endorsing the cancellation.

CT5) Describe whether any work on the construction of the transmission line or substation has been started, and if so, describe the extent of the work.

CT6) If any work on the construction of the transmission line or substation has been started, describe how the site will be reclaimed.

CT7) Confirm that personal notification was provided to occupants, residents, landowners, Indigenous groups, and other utilities on, or [directly adjacent](#) to, the project right-of-way or location.

## 10 Battery storage facilities

If an applicant is applying to construct and operate a new battery storage facility or to alter an approved battery storage facility, the application must include the information requirements listed in subsection 10.1.

If a connection order is also part of the project, a separate interconnection application should be added prior to registering the proceeding.

## 10.1 Battery storage facility information requirements



Please use the [Battery storage facility application form](#) to assemble the information requirements for the project. Battery storage facility is abbreviated as BF below.

### Project description

- BF1) State the approvals that are being applied for from the AUC.
- BF2) Provide the [total capability](#) in MW and storage capacity in megawatt-hour (MWh) of the project.
- BF3) Describe where the proposed battery storage facility is charged from and discharged to.
- BF4) Summarize the discussions held with the ISO, transmission facility owner, and/or distribution facility owner regarding the interconnection of the proposed battery storage facility, including any concerns indicated and solutions proposed.
- BF5) Provide a single-line diagram for the project including the metering points for the proposed project.
- BF6) Describe the recycling plan, based on current regulations, for the battery storage facility at project end of life and confirm that the final recycling plan will be in accordance with the regulation in place at the time of [decommissioning](#).
- BF7) Provide a list of existing approvals for facilities directly affected by this project, if any.
- BF8) Provide details of the project ownership structure, including the names of all companies having an ownership interest in the project and their ownership share, and if applicable, the name of the project operator. Confirm that the applicant is a [qualified owner](#).
- BF9) Provide documentation confirming compliance with Section 95 of the *Electric Utilities Act*, if applicable.
- BF10) Describe the location of the project:
  - Provide the legal description of the proposed project site (legal subdivision [LSD], section, township, range, meridian and/or plan, block, lot, municipal address for urban parcels) and connection point, if applicable.

- Provide a Keyhole Markup Language (.kml/.kmz) file that contains the geographic data for each of the major components and project boundary of the proposed project. This file should reflect the information shown on the drawings and maps submitted to address information requirement BF11

BF11) Provide the following drawings and maps with units of measure/scale and the direction of north specified:

- i. A legible plant site drawing showing all major equipment components and the project site boundary.
- ii. Legible maps showing:
  - The project site boundary.
  - Land ownership of surrounding lands, including any residences and dwellings within the notification radius described in [Appendix A1](#) – Participant involvement program guidelines, [Table A1-1](#): Electric facility application notification and consultation requirements.
  - Neighbouring municipalities, [First Nation reserves](#), Metis Settlements, including nearby roads, water bodies and other landmarks that may help identify the general location of the project area. This map may be at a larger scale than the detailed maps provided in response to other information requirements.
  - Important environmental features and [sensitive areas](#) in the [local study area](#).
  - Any additional [energy-related facilities](#) within the project area.
  - The major land use and resource features (e.g., vegetation, topography, existing land use, existing rights-of-way). This information should also be provided in air photo mosaics.

BF12) Provide the requested approval date from the Commission, the expected construction start date, the expected in-service date of the project and the requested construction completion date to be used in the project approval. Provide the rationale for these dates.

#### Project connection

BF13) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted.

- BF14) Provide the asset identification code assigned by the independent system operator (ISO) and the ISO Project ID number related to your system access service request, if available.
- BF15) If the battery storage facility is to be connected to the transmission system, provide a map with one or more conceptual layouts showing possible routes and general land locations for facilities that would be used to interconnect the battery storage facility to the Alberta Interconnected Electric System.
- If the battery storage facility is to be connected to the distribution system, provide a statement from the distribution facility owner indicating that it is willing to connect the battery storage facilities.

#### Emergency response plan

- BF16) Confirm the applicant has or will have a corporate or site-specific emergency response plan for the construction and operation of the proposed battery facility. If the applicant will have a corporate emergency response plan, please explain why it decided not to develop a site-specific emergency response plan.
- BF17) Provide a summary of the following:
- The site-specific risks (construction phase and operations phase) that have been identified to date.
  - The emergency mitigation measures that have been identified.
  - The site monitoring and communication protocols that will be put into place.
- BF18) Confirm that local responders and authorities have been contacted or notified regarding the project emergency response plan. Describe any requirements or feedback received and describe how the applicant intends to address the requirements and feedback received.

#### Environmental information

- BF19) Provide a summary of feedback received to date from AEP addressing the environmental aspects of the project and any mitigation measures and monitoring activities recommended by AEP.
- BF20) If preparation of either a federal impact assessment or a provincial environmental impact assessment report was required, provide a copy as an appendix to the application and a separate environmental evaluation is not

required. If a federal impact assessment or a provincial impact assessment report was not required, submit an environmental evaluation of the project. The environmental evaluation must:

- Describe the present (pre-project) environmental and land use conditions in the local study area.
- Identify and describe the project activities and infrastructure that may adversely affect the environment.
- Identify the specific ecosystem components (i.e., terrain and soils, surface water bodies and hydrology, groundwater, wetlands, vegetation species and communities, wildlife species and habitat, aquatic species and habitat, air quality and environmentally sensitive areas) within the local study area that may be adversely affected by the project.
- Describe any potential adverse effects of the project on the ecosystem components during the [life of the project](#).
- Describe the methodology used to identify, evaluate and rate the adverse environmental effects and determine their [significance](#), along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the life of the project to reduce the potential adverse effects.
- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual or individuals who conducted or oversaw the environmental evaluation.

It is an applicant's responsibility to be aware of any emergency orders issued by Environment and Climate Change Canada that may be applicable to a project.

BF21) For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the

environmental review process. Projects on federal lands may be subject to provincial laws, standards and permits. The proponent must address how it has considered AUC Rule 007 and Rule 012 and describe the steps taken, if any, to address specific requirements set out in these rules.

All projects must be compliant with any applicable regional land use plans adopted under the *Alberta Land Stewardship Act*.

- BF22) Submit a stand-alone, project-specific environmental protection plan (or environmental management plan) that itemizes and summarizes all of the mitigation measures and monitoring activities that the applicant is committed to implementing during construction and operation to minimize any adverse effects of the project on the environment.

#### End-of-life management

- BF23) Provide an overview of how the operator will ensure sufficient funds are available at the end of life of the project to cover the cost of decommissioning and [reclamation](#).

#### Noise

- BF24) Provide a noise impact assessment in accordance with Rule 012.

#### Approvals, reports and assessments from other agencies

- BF25) Identify any other acts (e.g., *Environmental Protection and Enhancement Act*, *Water Act*, *Public Lands Act* and *Wildlife Act*) that may apply to the project, identify approvals the project may require, and provide the status of each of these approvals.

- BF26) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a historic resource impact assessment is required, briefly describe any known historical or archaeological sites, palaeontological sites, or traditional use sites of a historic resource nature. If a *Historical Resources Act* approval has been obtained, provide a copy of it.

Applicants are responsible to ensure that any summary provided protects the confidential and sensitive nature of a historical resource site.

- BF27) If the government of Alberta, through the Aboriginal Consultation Office ([ACO](#)) or otherwise, directed consultation with an [Indigenous group](#) for related



approvals (i.e., *Public Lands Act, Water Act, Environmental Protection and Enhancement Act, Historical Resources Act, Government Organization Act*, etc.) the applicant must provide a copy of the pre-consultation assessment, the adequacy assessment and the specific issues and response table (if prepared). If the government of Alberta, through the ACO or otherwise, indicated that a pre-consultation assessment is not required, the applicant must provide a copy of that direction. If advice from the government of Alberta has not been obtained, the applicant must provide justification for its decision to not seek advice.

Participant involvement program

- BF28) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See [Appendix A1 – Participant involvement program guidelines](#) and [Appendix A1-B – Participant involvement program guidelines for Indigenous groups](#)).
- BF29) List all occupants, residents and landowners on lands within the appropriate notification radius as shown below and described in [Appendix A1 – Participant involvement program guidelines](#), as well as [Indigenous groups](#) or other interested persons that were consulted as part of the participant involvement program.

*Table 10.1: Notification radius for battery storage facilities*

Size	Location	Notification radius
≥150 kW but < 1 MW	urban	first row of occupied properties
	rural	400 metres
1 - <10 MW	urban	first row of occupied properties
	rural	800 metres
≥ 10 MW	urban or rural	800 metres

- BF30) Supply a list of contact information for all [persons](#) who had been contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in [Appendix A1 – Participant involvement program guidelines](#).

BF31) Summarize consultation with local jurisdictions (e.g., municipal districts, counties).

BF32) Identify all persons who expressed a concern(s) about the project. For each person, include the following information:

- The specifics of the concern(s).
- Steps taken to try and resolve the concern(s).
- Whether the concern(s) was resolved.

The AUC considers a concern to be resolved when the stakeholder in question expresses that they are satisfied with a proposed solution. The AUC does not consider that an applicant's acknowledgment of a stakeholder concern resolves the concern.

## 11 Interconnection applications

An application to interconnect a power plant to the Alberta Interconnected Electric System, or to interconnect two or more [transmission facilities](#) owned by different parties must include the information outlined in subsection 11.1.

An application is required pursuant to Section 18 of the *Hydro and Electric Energy Act*, for the interconnection of a power plant to the Alberta Interconnected Electric System or for interconnection of two or more transmission elements owned by different parties.

### 11.1 Information requirements



Please use the [Interconnection application form](#) to assemble the information requirements for the project. Interconnection is abbreviated as IC below.

#### 11.1.1 Connection to the distribution system

IC1) Provide a statement that the local distribution facility owner has agreed to the interconnection, the legal subdivision (LSD) of the interconnection point, and an electric single-line diagram showing the interconnection point with the distribution facility owner.

### 11.1.2 Connection to the transmission system

- IC2) Provide a statement from the ISO, at such time determined by the ISO, that endorses the interconnection and confirms that the interconnection will not result in adverse effects to the interconnected electric system.

An interconnection application to connect to the transmission system can be made by the transmission facility owner or market participant along with their facility application to construct and operate any facilities necessary to connect a power plant or a [transmission facility](#). The Commission will consider requirement IC2 to be met if the application to connect to the transmission system is accompanied by a needs identification document from the ISO.

## 12 Industrial system designation applications

An application to designate facilities as an industrial system must include the information outlined in subsection 12.1.

Applications requesting that an electric system be designated as an industrial system are made pursuant to Section 4 of the *Hydro and Electric Energy Act*.

If there is duplication between the requirements for an industrial system designation and an associated facility application (for example, if one participant involvement program was completed for the project and each application requires a summary of the participant involvement program), the applicant must satisfy those requirements in full in one of the applications, and may refer to the response in the corresponding application.

### 12.1 Information requirements



Please use the [Industrial system designation application form](#) to assemble the information requirements for the project. Industrial system designation is abbreviated as ISD below.

#### Project description

- ISD1) State the approvals that are being applied for from the AUC and include a complete list of all electric facilities and equipment of 25 kilovolts or more to be included in the industrial system designation.
- ISD2) Provide a list of existing approvals for facilities directly affected by this project, if any.
- ISD3) Provide the legal description of the location of the electric facilities to be included in the proposed industrial system (legal subdivision [LSD], section, township, range,

meridian and/or plan, block, lot, municipal address for urban parcels) and connection point, if applicable.

- ISD4) Provide the following drawings and maps with units of measure/scale and direction of north specified:
- A legible site drawing showing all major components of the industrial operation.
  - A legible map showing the location of major electric facilities, such as power plants, transmission lines and substations.
- ISD5) Provide an electrical single-line diagram of the entire industrial complex. This diagram must clearly show existing facilities, future facilities and their ownership.
- ISD6) Provide block diagrams showing electrical, natural gas, steam, water and feedstock flows between the different blocks representing processes, including the flow of electricity to and from the Alberta Interconnected Electric System. Relevant units of measurement must be included to indicate flows (e.g., megawatts for electric flows, and cubic metres per second for gas and water flows). Also include in these diagrams the volumes consumed or produced by each process block.
- ISD7) Provide a detailed description of the overall industrial process and include a list of the companies that own or operate different aspects of the industrial process, and describe how the different aspects of the industrial process will be managed.
- ISD8) Provide an annual estimate of the gross amounts for generation, on-site load, import from and export to the Alberta Interconnected Electric System.
- ISD9) Demonstrate, by way of an economic comparison, that the internal supply through on-site generation is the most economic source of power for the industrial complex. For example, if the industrial complex uses cogeneration to produce electric and thermal energy, the applicant must provide a comparison of the costs of the internal supply of electricity and process heat with the alternative of contracting electrical supply from the Alberta Interconnected Electric System and installing heat exchangers or boilers in place to satisfy the thermal requirements of the industrial process. The economic comparison must be provided in a format similar to what is provided in [Appendix B1](#) – Economic comparison format – requirement ISD9.

All assumptions must be clearly stated, along with the basis for each assumption. In the discussion of the assumptions, address significant factors that could affect

the economic comparison, such as fuel prices, power pool prices and delivery tariffs.

Provide a discussion of the sensitivities of the economic analysis in relation to the major factors that could have an impact on the economic comparison.

- ISD10) Demonstrate that there is significant investment in:
- The expansion or extension of the industrial operations processes.
  - The development of the electricity supply.
- ISD11) Provide an assessment of losses and congestion on transmission lines due to the electric power that the industrial complex would supply to the Alberta Interconnected Electric System. The assessment must also take into account other existing generation and generation under construction.
- ISD12) If the industrial operation extends beyond the contiguous property of the industrial complex, provide information to satisfy the Commission that the overall cost of providing the owner's own distribution or transmission facilities to interconnect the integral parts of the industrial operation is equal to or less than the tariffs applicable for distribution or transmission in the service area where the industrial operation is located.
- ISD13) If the industrial system will result in a significant and sustained increase in efficiency in the process of the industrial operation or in the production and consumption of electric energy by the industrial operation as a result of the integration of the electric system with the industrial operations the electric system forms part of and serves, provide a thermal energy balance to demonstrate this increase in efficiency.
- ISD14) Explain how the proposal meets the principles of an industrial system outlined in subsection 4(2) of the *Hydro and Electric Energy Act*.
- ISD15) Explain how the proposal meets the criteria of an industrial system outlined in subsection 4(3) of the *Hydro and Electric Energy Act*.

#### Participant involvement program

- ISD16) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See [Appendix A1](#) – Participant involvement program guidelines and [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups).

ISD17) Supply a list of contact information for all **persons** contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in [Appendix A1](#) – Participant involvement program guidelines.

ISD18) Identify all persons who expressed a concern(s) about the project. For each person, include the following information:

- The specifics of the concern(s).
- Steps taken to try and resolve the concern(s).
- Whether the concern(s) was resolved.

The AUC considers a concern to be resolved when the stakeholder in question expresses that they are satisfied with a proposed solution. The AUC does not consider that an applicant's acknowledgment of a stakeholder concern resolves the concern.

### 13 Gas utility pipelines

[Gas utility pipeline](#) applications are made pursuant to the *Pipeline Act* and *Gas Utilities Act*.

This section provides information on gas utility pipeline exemptions and situations where an application may not be required. It then sets out the requirements for need applications, and the requirements for applications to construct, operate, or modify gas utility pipeline(s) or [pipeline installation\(s\)](#). Lastly, it sets out ongoing operational and reporting requirements for gas utility pipelines, including obligations related to flaring, incinerating, venting and storage.

#### 13.1 Exemptions

The following section lists [gas utility pipelines](#), installations and activities that may not require an AUC application or licence. If no exemptions are applicable, the gas utility must file a gas utility pipeline application containing all the information required by this rule and Rule 012: *Noise Control*.

Even if a gas utility is exempt from filing an application, the gas utility must provide a project-specific information package to any landowners, occupants, and residents that may be directly and adversely affected. The gas utility must file an application if there are unresolved objections.

#### 13.2 Certain pipeline installations

No licence is required for the following [pipeline installations](#):

- loading racks

- meter stations
- regulator stations
- line heaters associated with pipelines

### 13.2.1 Certain pipelines and activities

No licence is required for the following pipelines and activities:

- Pipelines forming part of a **rural** gas utility, as defined in the *Gas Distribution Act*.
- Low pressure distribution pipelines operated at a maximum operating pressure (MOP) of 700 kilopascals or less.
- A **pipeline replacement** if each individual section is less than 100 metres long and:
  - The replaced pipe is removed.
  - The work is carried out within the existing right-of-way.
  - The replacement sections are identical, of the same material, or evaluated as being equal or superior to the existing material.
- A pipeline or tie-in that is wholly within a single-surface lease boundary or is wholly within adjacent or abutting facility surface leases, per subsection 1(4) of the *Pipeline Rules*.
- A temporary surface pipeline that will be in continuous use for less than 21 consecutive days (consent for temporary surface pipelines must be obtained from the local Alberta Energy Regulator (AER) field centre).

No licence is required for a temporary surface pipeline that will be in continuous use for less than 21 days, however consent for the pipeline must be obtained from the local Alberta Energy Regulator field centre. If a temporary surface pipeline is expected to be in continuous use for 21 days or longer, a licence must be obtained from the Commission.

### 13.3 Project need

This section sets out the requirements for establishing the need for a **gas utility pipeline** capital project as part of a facility application.

The need for a gas utility pipeline capital project must be established before a licence will be issued regardless of what form of rate regulation applies to the gas utility. The Commission will assess the need for a project in the first instance the gas utility identifies the project to the Commission, either as part of a rate filing (i.e., general rate application or as part of an

application for companies that are operating under performance-based regulation) or a facility application.

If a gas utility files an application for a licence for a project where the need was not previously assessed and approved in the rate decision, or before the rate decision is issued, the need will be considered in conjunction with the facility application instead of the rate filing.

Need for a project should be addressed only one time, although need may be reconsidered if there is a material change in circumstances.

Projects that are part of a multi-component, integrated program should be identified and reviewed as part of that larger program to ensure that the Commission has a full understanding of the program scope and implications.

### 13.3.1 Need assessment information requirements



Please use the [Gas utility pipeline need assessment application form](#) to assemble the information required for the project. [Gas utility pipeline](#) is abbreviated as GU below.

- GU1) Identify any current or anticipated rate or facility applications associated with the project.
- GU2) Provide an explanation of why the project is required, including but not limited to:
  - A description of current infrastructure and why it cannot be used to meet the need identified.
  - Forecast demand information for growth projects.
  - For replacement projects, an explanation of why the current system is no longer adequate to meet current and future requirements.
- GU3) Describe whether the project is part of a larger initiative including a description of the project's various components, functions and forecast in-service dates.
- GU4) Provide a summary of the studies and analysis performed in identifying the timing and nature of the need.
- GU5) Describe alternatives considered to address the identified need, including doing nothing.
- GU6) Provide technical and economic comparison of all viable alternatives considered, including:



- An evaluation of operational efficiency and reliability provided by each option.
- An estimate of the capital, operating and maintenance costs for each option.
- An economic assessment, with documentation of assumptions, illustrating the cumulative present value of revenue requirements over a 20-year term, depicted, where possible, with a year-by-year graphical representation.
- A description of related infrastructure that will be impacted e.g., distribution facilities that will also be required and a cost estimate for such facilities.
- An evaluation of factors respecting implementation of each alternative, including timing and risks during construction.
- A summary of any ratepayer or industry dialogue, including any feedback.
- A high-level evaluation of the land use impacts of each alternative.

GU7) Describe the applicant’s choice of preferred alternative, including:

- The rationale for selecting the alternative.
- The implementation schedule for the alternative.

### 13.3.2 Abbreviated need

An abbreviated need assessment processes is available for the [gas utility pipeline](#) projects identified in Table 13.1 where there are no unresolved objections or significant environmental impacts. Thresholds in Table 13.1 indicate the maximum project cost or scope and where a project falls into two or more categories, the lower threshold applies.

Table 13.1: *Abbreviated need thresholds*

New growth projects.	\$1,000,000
<a href="#">Pipeline replacement</a> projects required to comply with class location changes.	\$2,000,000
Replacement, removal or relocation projects for existing facilities within or in close proximity to the existing right-of-way.	\$1,000,000
Replacement, removal or relocation projects for existing facilities where the project is fully reimbursed under the terms of a third party contribution.	No limit
New growth projects for receipt or delivery connections involving less than 100 metres of pipeline, and the associated metering and regulating facilities.	100 metres

### 13.3.3 Abbreviated need information requirements



Please use the [Gas utility pipeline abbreviated need assessment application form](#) to assemble the information required for the project. [Gas utility pipeline](#) is abbreviated as GU below.

- GU8) Describe which threshold in Table 13.1 applies to the project.
- GU9) Confirm that there are no unresolved interested party objections or significant environmental impacts.
- GU10) Provide an estimated capital cost for the project.
- GU11) Provide an explanation of why the project is required, including but not limited to:
  - A description of current infrastructure and why it cannot be used to meet the need identified.
  - For replacement projects, an explanation of why the current system is no longer adequate to meet current and future requirements.

### 13.4 Gas utility pipeline applications

This section outlines the requirements for applications to construct and operate [gas utility pipelines](#) and [pipeline installations](#), and to replace existing pipelines or pipeline segments greater than 100 metres in length.

The types of pipelines requiring a licence under this rule are listed in the consultation and notification table in Appendix A1 – Participant involvement program guidelines under Section 5 specific to gas utility pipelines, along with their respective consultation and notification requirements. The applicant must identify the correct category type for the proposed pipeline and perform all associated consultations and notifications.

If a gas utility is not able to confirm that an information requirement is satisfied, the gas utility must provide a detailed explanation of which regulatory standards or requirements are not met and, wherever possible, support the explanation with a technical assessment that demonstrates how the project's design, construction and operational considerations nevertheless address public safety and environmental concerns.

The category type of a gas utility pipeline is dependent on the pipe diameter and the hydrogen sulphide (H<sub>2</sub>S) content of the transported product.

### 13.4.1 Information requirements



Please use the [Gas utility pipeline licence application form](#) to assemble the information required for the project. [Gas utility pipeline](#) is abbreviated as GU below.

#### Project description

- GU12) State the licence(s) being applied for from the AUC.
- GU13) Provide a description of the proposed project.
- GU14) Provide a list of existing approvals for facilities directly affected by this project, if any.
- GU15) Describe whether the need for the project has already been established or is currently under consideration in another proceeding. If so, provide the proceeding number. If not, confirm that need will be considered in conjunction with the facility application.
- GU16) If a capital cost forecast for the project has previously been provided to the Commission, confirm that current cost estimates do not vary by more than +/-30 per cent. If the previous and current cost estimates vary by more than +/-30 per cent, provide updated capital cost forecasts.
- GU17) For pipeline applications that involve new construction or an amendment to change or correct the pipeline route/right-of-way, submit a right-of-way plan and confirm that no permanent dwellings exist within the pipeline right-of-way boundaries.
- GU18) Provide the H<sub>2</sub>S content in the gas phase in mol/kmol.
- GU19) Confirm that the partial pressure of H<sub>2</sub>S in the gas phase is less than 0.30 kilopascals. If not, please provide the partial pressure of H<sub>2</sub>S in the gas phase.
- GU20) Confirm that the project meets all applicable Canadian Standards Association (CSA) Z662 design requirements.
- GU21) Confirm that all steel pipe, fittings, flanges and valves meet the applicable requirements of a standard or specification given in Table 5.3 of CSA Z662.
- GU22) Confirm that procedures for corrosion mitigation, monitoring, evaluation and record keeping will be implemented prior to operation.

- GU23) For pipeline installation applications, confirm that piping within the line heater is designed to meet American Society of Mechanical Engineers (ASME) B31.3.
- GU24) For pipeline installation applications, submit a process flow diagram that accurately represents the operations of the installation and contains:
- All existing and proposed equipment at the pipeline installation including process equipment, measurement points and safety equipment.
  - Source(s) of all inlet or receipts and deliveries, including all fuel lines, flare lines and vent points.
  - A legend and annotations clearly identifying new equipment.
- GU25) For pipeline installation applications, submit a plot plan that clearly indicates the on-lease location of all the equipment (with the exception of valves) as indicated on the process flow diagram.

The partial pressure of H<sub>2</sub>S in the gas phase is determined by multiplying the mole fraction of H<sub>2</sub>S in the gas phase by the maximum operating pressure (MOP). The applicant must use the results of the calculation to determine the need for sour service materials as required by CSA Z662.

#### Emergency response plan

- GU26) Confirm the applicant has or will have a corporate-level emergency response plan that addresses the fundamentals for handling an emergency situation arising from the construction or operation of a [gas utility pipeline](#) or pipeline installation.

#### Environmental information

- GU27) If preparation of either a federal impact assessment or a provincial environmental impact assessment report was required, provide a copy as an appendix to the application and a separate environmental evaluation is not required. If a federal impact assessment or a provincial impact assessment report was not required, submit an environmental evaluation of the project. The environmental evaluation must:

- Describe the present (pre-project) environmental and land use conditions in the [local study area](#).
- Identify and describe the project activities and infrastructure that may adversely affect the environment. In particular, describe any potential adverse effects on soils, terrain, vegetation species and communities, wetlands, wildlife species and habitat, aquatic species and habitat, groundwater, surface water bodies and hydrology, environmentally [sensitive areas](#), and land use within the local study area, following and referencing published AEP guidelines if applicable.
- Describe the methodology used to identify, evaluate, and rate any adverse environmental effects and determine their [significance](#), along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the life of the project to reduce the potential adverse effects.
- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual(s) who conducted or oversaw the environmental evaluation.
- Present an overall comparison of the proposed routes and identify the environmentally preferred route. In particular, identify the major environmental features and any potential environmental effects (e.g., on native vegetation communities, rare plants, wetlands, topography, unique terrain features, sensitive soils, wildlife species setbacks and habitat, and environmentally significant areas), and identify land use and resource features (e.g., agricultural, residential, recreational, forestry, trapping and hunting areas, protective notations, and existing or potential archaeological sites) for each route in a table with stated units (kilometre, total number, etc.).

All projects must be compliant with any applicable regional land use plans adopted under the *Alberta Land Stewardship Act*.

It is an applicant's responsibility to be aware of any emergency orders issued by Environment and Climate Change Canada that may be applicable to a project.

- Summarize the compatibility of the proposed facility with various municipal services if a proposed transmission line passes through or immediately adjacent to an urban centre.
- If the project crosses agricultural land, describe any plans to prevent the spread of weeds and pests on agricultural land.

GU28) For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the environmental review process. Projects on federal lands may be subject to provincial laws, standards and permits. The applicant must address how it has considered AUC Rule 007 and Rule 012 and describe the steps taken, if any, to address specific requirements set out in these rules.

GU29) Submit a stand-alone, project-specific environmental protection plan (or environmental management plan) that itemizes and summarizes all of the mitigation measures and monitoring activities that the applicant is committed to implementing during construction and operation to minimize any adverse effects of the project on the environment.

#### Nitrogen oxides emissions

GU30) When nitrogen oxides (NO<sub>x</sub>) emissions are present at pipeline installations that require registration or approval with the Alberta Energy Regulator (AER):

- Confirm that dispersion modelling has been conducted in accordance with the *AEP Air Quality Model Guideline*.
- Based on dispersion modelling, indicate whether the predicted NO<sub>2</sub> concentrations will be in compliance with the *Alberta Ambient Air Quality Objectives and Guidelines* using guidance from the *AEP Air Quality Model Guideline*.
- Standby equipment used only for emergency purposes can be excluded from dispersion modelling.
- Confirm that the engine exhaust stack height is set in accordance with the direction given in the *AEP Code of Practice for Compressor and Pumping Stations and Sweet Gas Processing Plants*.

- NO<sub>x</sub> emissions from steam generation units, heaters and boilers can be excluded from dispersion modelling if their combined contribution is less than three per cent of the total NO<sub>x</sub> emissions.

### Noise

GU31) Provide a noise impact assessment in accordance with Rule 012.

### Approvals, reports and assessments from other agencies

GU32) Identify any other acts (e.g., *Environmental Protection and Enhancement Act*, *Water Act*, *Public Lands Act*, *Highway Development and Protection Act* and *Wildlife Act*) that may apply to the project, identify approvals the project may require, and provide the status of each of these approvals.

GU33) If the proposed gas utility pipeline or an activity related to a gas utility pipeline will result in a surface disturbance in the transportation/utility corridors, provide a ministerial consent or letter of non-objection from Alberta Infrastructure.

GU34) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a historic resource impact assessment is required, briefly describe any known historical or archaeological sites, palaeontological sites, or traditional use sites of a historic resource nature. If a *Historical Resources Act* approval has been obtained, provide a copy of it.

Applicants are responsible for ensuring that any summary provided protects the confidential and sensitive nature of historical resource sites.

### Participant involvement program

GU35) Identify the consultation and notification radius applicable to the project as set out in the consultation and notification table in [Appendix A1](#) – Participant involvement program guidelines under Section 5.

GU36) Provide the distance to the nearest residence in kilometres.

GU37) For pipeline installations, provide the distance to the nearest [surface development](#) in kilometres.

GU38) Summarize the participant involvement information, including a description of the activities undertaken and include any engagement materials provided. (See

[Appendix A1](#) – Participant involvement program guidelines and [Appendix A1-B](#) – Participant involvement program guidelines for Indigenous groups).

- GU39) Supply a list of contact information for all [persons](#) who had been contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.
- GU40) Summarize consultation with local jurisdictions (e.g., municipal districts, counties).
- GU41) Confirm that all other Crown disposition holders, oil and gas reserve owners, and pipeline licensees that may be directly and adversely affected have been notified of the project.
- GU42) Identify all persons who expressed a concern(s) about the project. For each person, include the following information:
- The specifics of the concern(s).
  - Steps taken to try and resolve the concern(s).
  - Whether the concern(s) was resolved.

## 13.5 Amendments

### 13.5.1 Amendment process

This section outlines the process for projects that have received a pipeline licence and require a licence amendment due to a physical alteration or a change in operating parameters.

A licence amendment is also required to correct erroneous or invalid information on a current licence, and to notify the Commission when a previously approved pipeline or installation is not constructed.

Depending on the scope of the proposed changes in relation to the original application, a gas utility can make one of the following two types of submissions to amend its pipeline licence: a checklist amendment application or an amendment application.

Unless otherwise specified, an amendment application must be filed and the gas utility must obtain a licence amendment prior to undertaking any activity described in this section. Within 90 days of receiving an amended licence, the gas utility must file a related OneStop application with the AER, and file confirmation of the OneStop update with the Commission.



Table 13.2 outlines the eligibility requirements and application process for checklist amendment applications and amendment applications.

Table 13.2 Amendment process eligibility and application requirements

	Checklist amendment application	Complete amendment application
<b>Description</b>	<ul style="list-style-type: none"> <li>No decision report issued because the amendment reflects record updates due to an error, a review of as-built information or a discontinuation or abandonment notification.</li> <li>Approval for the amendment or related activity is set out in an earlier decision or the amendment is administrative in nature.</li> <li>Minimal or no capital cost implications to customers.</li> </ul>	<ul style="list-style-type: none"> <li>Amendments to existing pipelines that involve ground disturbance and construction activities.</li> <li>Cost allocation to customers greater than \$10,000.</li> </ul>
<b>Pipeline amendment application examples</b>	<ul style="list-style-type: none"> <li>Record amendments.</li> <li>Pipeline splits due to as-built review.</li> <li>Abandonment applications filed within 90 days of completing the abandonment operation.</li> <li>Low-pressure conversion (also known as deletion).</li> <li>Maximum operating pressure (MOP) decrease.</li> <li>Pipeline splits and abandonments requested and paid for by a third party.</li> </ul>	<ul style="list-style-type: none"> <li>Pipeline removal and replacement projects.</li> <li>Pipeline splits applied for in conjunction with removal and replacement projects.</li> <li>Maximum operating pressure (MOP) increase.</li> <li>All other application types not mentioned in checklist amendment application column including: <ul style="list-style-type: none"> <li>compressor addition or removal of a surface pipeline in operation for more than 21 days, etc.</li> </ul> </li> </ul>

	Checklist amendment application	Complete amendment application
<b>Application process</b>	<ul style="list-style-type: none"> <li>• An applicant files its application using the eFiling system.</li> <li>• The Commission reviews the application for eligibility for a checklist amendment.</li> <li>• If the Commission determines that a checklist amendment application is sufficient, the Commission reviews the application for completeness, accuracy and technical correctness.</li> <li>• If the Commission approves the application, it issues an amended licence but no decision report.</li> <li>• The applicant files a related OneStop application with the AER.</li> <li>• The AER follows up directly with the applicant on any errors found on the OneStop application.</li> <li>• The applicant files confirmation of the OneStop update with the AUC within 90 days of AUC approval.</li> </ul>	<ul style="list-style-type: none"> <li>• An applicant files its application using the eFiling System.</li> <li>• The Commission reviews the application for completeness, accuracy and technical correctness.</li> <li>• If any checklist amendment application activities are applied for in conjunction with any of the complete amendment application activities, the application will be treated as a complete amendment application.</li> <li>• If the Commission approves the application, it will issue a decision report and a licence.</li> <li>• The applicant files a related OneStop application with the AER.</li> <li>• The AER follows up directly with the applicant on any errors found on the OneStop application.</li> <li>• The applicant files confirmation of the OneStop update with the AUC within 90 days of AUC approval.</li> </ul>

### 13.5.2 Checklist amendment application

If a gas utility establishes that the proposed alterations are low-risk activities, the gas utility may file a checklist application confirming that the regulatory requirements for the proposed amendment have been met.

Applicants will not be required to file any other related supporting documents (e.g., environmental evaluations, participant involvement program summaries), however, applicants will be required to retain the related supporting documents. The Commission will continue to ensure compliance with its requirements via audit procedures.

The Commission will assess eligibility for an application to be filed as a checklist amendment application and will issue a decision within five business days of receiving a properly completed checklist application. Applicants will be asked to file supplemental information for checklist applications that do not meet the requirements.



Please use the [Gas utility pipeline checklist amendment application form](#) to assemble the information requirements for eligible [gas utility pipeline](#) amendment applications.

A checklist amendment application is ordinarily eligible for the following types of amendments:

- [Pipeline discontinuation](#).
- [Pipeline abandonment](#).
- Low pressure conversion (deletion from licence).
- Maximum operating pressure (MOP) decrease.
- [Pipeline split](#) (unless undertaken in conjunction with other amendments).
- Administrative or record-keeping updates.

Some checklist amendment applications have specific regulatory requirements, these are described in further detail below.

#### Pipeline discontinuation

A licence amendment is not required prior to a pipeline discontinuation; however, the gas utility must notify the Commission by submitting a checklist amendment application within 90 days of completion of the pipeline discontinuation.

When discontinuing a pipeline, the gas utility must ensure that proper discontinuation procedures are in place, cathodic protection is maintained, and setback distances are retained (right-of-way boundaries). A gas utility should be prepared to explain, with reference to supporting documentation, how it ensured that the pipeline was discontinued in accordance with the requirements of the *Pipeline Rules*.

#### Pipeline abandonment

A licence amendment is not required prior to a pipeline abandonment; however, the gas utility must notify the Commission by submitting a checklist amendment application within 90 days of completion of the pipeline abandonment.

When abandoning a pipeline, the gas utility must ensure that proper abandonment procedures are in place and take the measures required to ensure that the pipeline is left in a permanently safe and secure condition. A gas utility should be prepared to explain, with reference to supporting documentation, how it ensured that the pipeline was abandoned in accordance with the requirements of the *Pipeline Rules*.

### Maximum operating pressure decrease

The gas utility must determine if either of the following is affected by a decrease in maximum operating pressure (MOP) and take the necessary mitigation measures to ensure continued compliance:

- Pipeline integrity under the new MOP.
- Pressure compatibility with upstream and downstream pipelines (i.e., any necessary adjustments in overpressure protection).

### **13.5.3 Amendment application**

If a gas utility is making changes that do not meet the criteria for a checklist amendment application, the gas utility must file an amendment application that responds to all information requirements contained in subsection 13.5.4 as well as any additional information requirements specific to the amendment. The gas utility must also comply with the applicable notification and consultation requirements for pipeline activities requiring licence amendments, which are listed in the consultation and notification table in [Appendix A1](#) – Participant involvement program guidelines under Section 5.

An amendment application is ordinarily required for the following types of amendments:

- [pipeline removal](#)
- [partial pipeline removal](#)
- [pipeline resumption](#)
- maximum operating pressure increase

### **13.5.4 Information requirements**



Please use the [Gas utility pipeline licence application form](#) to assemble the information requirements for the project. [Gas utility pipeline](#) is abbreviated as GU below.

#### Pipeline resumption

- GU43) Explain whether the pipeline has been discontinued or abandoned, and provide the date on which it was last in active flowing service.
- GU44) Confirm that the pipeline was discontinued or abandoned in accordance with the requirements of the pipeline rules.
- GU45) Confirm that the pipeline will operate under the same parameters approved by the Commission when it was last in active flowing service.

- GU46) Confirm that cathodic protection was maintained in accordance with CSA Z662.
- GU47) Describe the integrity of the external coating, with reference to an engineering assessment or other supporting documentation if available. If the pipeline has previously been abandoned, provide a comprehensive engineering assessment supporting the resumption.

A licence may be granted to resume operation of an abandoned pipeline or a pipeline that was not discontinued in accordance with the *Pipeline Rules* if the licensee has supported the application with a comprehensive engineering assessment.

#### Maximum operating pressure increase

- GU48) Describe what testing was undertaken to confirm capability for the increased MOP.
- GU49) Confirm that the pipe, valves, flanges and fittings are suitable for the increased MOP.
- GU50) Confirm that an increase in MOP will not affect the existing overpressure protection on upstream and downstream pipelines.
- GU51) Describe whether any pipeline setbacks are affected by the increased MOP.
- GU52) Describe whether the increased MOP will necessitate either of the following:
- pipeline class re-designation
  - pipeline level reclassification

### **13.6 Time extension applications for gas utility pipelines**

If a gas utility is applying for a time extension for a [gas utility pipeline](#) prior to the licence expiring, a checklist amendment application must be filed confirming that the regulatory requirements for the proposed time extension have been met.

Time extension applications should be filed at least 30 days prior to the licence expiry date in order to give the Commission proper time to consider the application.

Prior to initiating new construction when a licence is nearing expiry, the gas utility must conduct a new resident and landowner search and determine if any new issues have arisen since the licence was granted.

If a gas utility intends to proceed with a proposed gas utility pipeline for which a licence has expired, the gas utility must fulfil all applicable requirements, including participant involvement requirements in [Appendix A1](#) – Participant involvement program guidelines, before filing a new application. The applicant should contact the Commission for further direction on how to proceed.



Please use the [Gas utility pipeline time extension checklist application form](#) to assemble the information requirements for the time extension application.

New pipeline licences and amendments expire one year from the date of issue if right-of-way clearing, construction or operation is not yet started. For administrative purposes, the pipeline status “to be constructed” automatically changes to an “operating” status one year from the date the licence was issued.

### 13.7 Operational requirements

This section sets out operational requirements applicable to gas utilities.

#### 13.7.1 Pipeline flaring, incinerating and venting

GU53) A [gas utility pipeline](#) licensee must comply with sections 6 and 7 of *AER Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting*.

#### 13.7.2 Venting and fugitive emissions management requirements

- GU54) Temporary, short-term venting is allowed at gas utility pipelines and [pipeline installations](#) on the following conditions:
- (a) Gas must be sweet.
  - (b) Gas must not contain any free hydrocarbon liquid (if free hydrocarbon liquids are present in the produced gas, a flare [or other gas combustion device] and liquid separation must be used).
  - (c) All liquids must be separated and contained in accordance with the storage requirements of *AER Directive 055: Storage Requirements for the Upstream Petroleum Industry*.
  - (d) Total gas volume must not exceed  $2 \times 10^3 \text{ m}^3$  and the duration must not exceed 24 hours.

- GU55) Temporary venting is permitted within 500 metres of a residence if the volume vented does not exceed 500 m<sup>3</sup>. Venting volumes in excess of 500 m<sup>3</sup> requires the approval of the local AER field centre and the consent of the resident whose residence is within 500 m of the venting.
- GU56) In the event of an upstream process upset, gas containing more than 10 mol/kmol H<sub>2</sub>S must not be vented to the atmosphere. Venting must not result in H<sub>2</sub>S odours outside the boundary of the site of the pipeline installation.
- GU57) Venting must not result in off-site exceedances of the *Alberta Ambient Air Quality Objectives*.

### 13.7.3 Records of pipeline flaring, incinerating and venting

- GU58) A licensee must keep all equipment and controls design information and submit it to the Commission upon request, if the Commission determines that there is a concern with the equipment or controls.
- GU59) A licensee must keep copies of operating limits and procedures and submit them to the Commission upon request.
- GU60) A licensee must keep design information on flare and incinerator system liquid separation equipment and submit it to the Commission upon request.
- GU61) A licensee must keep information on backflash controls and submit it to the Commission upon request if the Commission determines that there is a concern with the equipment or controls.
- GU62) A licensee must maintain a log of flaring, incinerating, and venting occurrences and respond to public complaints and to comply with release reporting requirements set out in the *Pipeline Rules*. Logs must:
- (a) Include information on complaints related to flaring, incinerating, and venting events and how these complaints were investigated and addressed.
  - (b) Describe each flaring, incinerating, and venting incident and any changes implemented to prevent future events of a similar nature from occurring.
  - (c) Include the date, time, duration, gas source or type (e.g., gas containing sulphur compounds such as mercaptans), and volumes for each incident.
  - (d) Be kept for a minimum of 12 months.

- GU63) Flaring, incinerating, and venting records must be made available to the Commission upon request for each pipeline or [pipeline installation](#), where flaring, incinerating, and venting occur.
- GU64) A licensee may retain logs for remote or semi-attended facilities at a central location where public complaints related to the pipeline installation in question would normally be received.

### 13.8 Storage requirements

- GU65) A [gas utility pipeline](#) licensee must comply with all applicable requirements of *AER Directive 055: Storage Requirements for the Upstream Petroleum Industry*.

## 14 Approval transfer applications

An application to transfer an approval with respect to a power plant, interconnection, [transmission facility](#), or industrial system designation, or [gas utility pipeline](#) must include the information outlined below.

Each approval that is being requested to be transferred must be submitted as a separate application, however, all

Both the existing and proposed approval holders shall register as applicants to the application. The future approval holder must be listed as the primary applicant.

If a market participant or TFO is applying to transfer an operating licence for a [transmission facility](#) to a TFO, pursuant to the *Transmission Regulation* and the *Hydro and Electric Energy Act*, the application must be filed with the AUC prior to the end of the temporary period for which the market participant expects to hold the operating licence.

of the transfers may be requested in a single proceeding.

### 14.1 Information requirements



Please use the [Electric facility approval transfer application form](#) or [Gas utility pipeline approval transfer application form](#) to assemble the information requirements for the project. Approval transfer is abbreviated as AT below.

#### 14.1.1 Electric facility approval transfer

- AT1) State the approvals or licences to be transferred, including connection orders, if applicable.
- AT2) Provide a list of existing approvals for facilities directly affected by the application.



- AT3) Provide a list of companies that may be affected by the transfer and confirm that these companies have no concerns regarding the application. This must include the transmission facility owner (TFO) or distribution facility owner that the facilities are connected to.
- AT4) Provide the effective date of the transfer.
- AT5) Provide details of the current and proposed ownership structure, including the names of all companies having an ownership interest and their ownership share, and if applicable, the name of the operator of the facilities that is seeking to acquire the approval, permit or licence. Confirm that the proposed approval holder is a **qualified owner**.
- AT6) If the proposed approval holder is a municipality or a subsidiary of a municipality, provide documentation confirming compliance with Section 95 of the *Electric Utilities Act*.
- AT7) For a transfer of an operating licence from a market participant to a TFO the application must include:
- Confirmation by the ISO that there has been satisfactory completion of all activities and requirements as required by the ISO connection process.
  - Confirmation by the TFO of its readiness to accept the facilities.
  - The date the transfer is to take effect.

#### **14.1.2 Gas utility pipeline approval transfer**

- AT8) State the licence(s) to be transferred.
- AT9) Provide a list of companies that may be affected by the transfer and confirm that these companies have no concerns regarding the application.
- AT10) Provide the effective date of the transfer.
- AT11) Describe the need that is being met by the pipeline transfer and the alternatives considered.
- AT12) Describe the pipeline integrity review that has been undertaken to ensure the safety and reliability of the pipeline.

## 15 Abbreviations

AACE	Association for the Advancement of Cost Engineering
AEP	Alberta Environment and Parks
AER	Alberta Energy Regulator
AESO	Alberta Electric System Operator (the independent system operator in Alberta (ISO))
AIES	Alberta Interconnected Electric System
ANID	abbreviated needs identification document
ASME	American Society of Mechanical Engineers
CSA	Canadian Standards Association
AUC	Alberta Utilities Commission
H <sub>2</sub> S	hydrogen sulphide
ISD	industrial system designation
ISO	independent system operator
Kg/MWh	kilograms per megawatt-hour
kW	kilowatt
kWh	kilowatt-hour
LSD	legal subdivision
MOP	maximum operating pressure
MW	megawatt
MWh	megawatt-hour
NID	needs identification document
NO <sub>x</sub>	nitrogen oxides
PIP	participant involvement program
SO <sub>2</sub>	sulphur dioxide
TFO	transmission facility owner

## 16 Glossary

Some of the terms used in this rule are defined for this particular context; these definitions are not necessarily the same as the generally accepted broader definitions of the terms.

Table 16.1: Glossary

Term	Definition
Aerodrome	Includes airports, heliports and registered and unregistered airstrips.
Commission	The Alberta Utilities Commission.
Conductor	The catch-all term for common conductors and bundling arrangements used for overhead electric power transmission lines, for example, different sizes of aluminum-conductor-steel-reinforced (ACSR) conductors, or all-aluminum-alloy (AAAC) conductors, arranged in two- or four-conductor bundles. In the case of an underground transmission system, conductor is the catch-all term for common types of underground cables, such as different sizes of cross-linked polyethylene (XLPE) cables.
Decommission (see also reclamation)	The permanent closure of all or part of a facility followed by removal of process equipment, buildings and other structures.
Directly adjacent	Any adjacent property that is within 100 metres of the right-of-way, substation site or power plant site boundary, as applicable, and would include property across the road from a right-of-way, but would exclude the property that is across a major divided highway.
Energy-related facilities	A facility under the jurisdiction of the Commission or other regulatory agency, used for energy generation or resource extraction. These include mining, extraction, processing and transportation (except by road or rail line) as well as federally regulated electrical transmission lines and pipelines.
Experienced wildlife biologist	Experienced wildlife biologist means a wildlife surveyor working in Alberta who has: <ul style="list-style-type: none"> <li>(i) The ability to positively identify target species by sight and/or sound.</li> <li>(ii) Familiarity with the species biology, including habitat requirements of the species and experience in identifying the species habitat features.</li> <li>(iii) Familiarity with survey methods as described in the Sensitive Species Inventory Guidelines.</li> <li>(iv) Attained a Bachelor of Sciences degree in Biology, Environmental Sciences, Renewable Resources, or holds a Technical Diploma in Natural Resources or Environmental Management from a certified college.</li> <li>(v) Multiple years of wildlife and surveying experience.</li> </ul>
Gas utility pipeline	A gas pipeline of a gas utility designated by regulation or of its affiliate, as set out in the <i>Gas Utilities Act</i> .

Term	Definition
Hydro development	A project for the furnishing of hydro energy to a power plant, and includes dams, diversion works, water conduits and all structures, machinery, appliances, fixtures and equipment, and all appurtenances and land and rights of way required in connection with that project.
First Nation reserve	A tract of land, the legal title to which is vested in Her Majesty, that has been set apart by Her Majesty for the use and benefit of a band subject to the <i>Indian Act</i> and to the terms of any treaty or surrender. Also known as 'Indian reserve'.
Indigenous group	First Nation, Metis Settlement or other group that has an Aboriginal or treaty right as provided in Section 35 of the <i>Constitution Act, 1982</i> .
Industrial	Industrial areas are within 800 metres of a single large industrial/commercial complex or numerous small or medium industrial/commercial facilities where no residential development exists.
Life of the project	The length of time required to construct, operate, <b>decommission</b> and reclaim all phases of a development.
Local study area	The area existing outside the boundaries of the project area, where there is a reasonable potential for immediate environmental impacts due to ongoing project activities. Defines the spatial extent directly or indirectly affected by the project.
Major substation equipment	Includes transformers, circuit breakers, capacitor banks, static VAR (volt-ampere reactive) compensators, reactors and telecommunications structures.
Minimal visual or noise impact	Visual or noise impact that is not reasonably expected to interfere with the use and enjoyment of property.
Nominal capability	The nameplate capacity of a single generating unit.
Partial pipeline removal	The physical removal of a pipeline where crossings are not being removed.
Person	Includes an individual, Indigenous group, unincorporated entity, partnership, association, corporation, trustee, executor, administrator or legal representative.
Pipeline abandonment	The permanent deactivation of a pipeline in accordance with the <i>Pipeline Rules</i> .
Pipeline discontinuation	The temporary deactivation of a pipeline or part of a pipeline.
Pipeline installation	Any equipment, apparatus, mechanism, machinery, or instrument incidental to the operation of a gas utility pipelines. Under this rule, only compressor stations are listed on the licence as pipeline installations.
Pipeline removal	The removal of an entire pipeline, including crossings of roads, railways, and watercourses.
Pipeline replacement	The replacement of an existing pipeline or a pipeline segment.
Pipeline resumption	Resuming operations on a discontinued pipeline or on a pipeline that has not been in active flowing service within the last 12 months to its original licensed parameters.
Pipeline split	When one pipeline segment is split into multiple line segments that are each assigned an individual line number.

Term	Definition
Qualified owner	<p>An owner of an asset that falls under one of the following categories:</p> <ul style="list-style-type: none"> <li>a) Registered under the <i>Companies Act</i>.</li> <li>b) Registered, incorporated or continued under the <i>Business Corporations Act</i>.</li> <li>c) Registered, incorporated or continued under the <i>Cooperatives Act</i>.</li> <li>d) Incorporated by an ordinance or an act of the legislature that empowers it to engage in the business of generation or transmission of electricity.</li> <li>e) A bank.</li> <li>f) A railway company incorporated under an act of the Parliament of Canada.</li> <li>g) A loan corporation or trust corporation.</li> <li>h) An insurer licensed under the <i>Insurance Act</i>.</li> <li>i) A municipal corporation.</li> <li>j) A co-operative association.</li> </ul>
Receptors	<p>Receptors means any permanently or seasonally occupied (minimum use of six weeks per year or more) dwellings used for the purpose of human rest; including a nursing home or hospital with the exception of an employee or worker residence, dormitory, or construction camp located within an energy-related facilities industrial plant boundary. Trailer parks and campgrounds may qualify as a dwelling if it can be demonstrated that they are in regular and consistent use.</p> <p>The dwelling must not be mobile and should have some sort of foundation or features of permanence (e.g., electrical power, domestic water supply, septic system) associated with it. Summer cottages or manufactured homes are examples of seasonally occupied dwellings, while a holiday trailer simply pulled onto a site is not</p>
Reclamation (for the purposes of this document, decommissioning is included as part of the process of reclamation)	<p>The process of reconverting disturbed land to its former or other productive uses.</p> <p>All practical and reasonable methods of designing and conducting an activity to ensure:</p> <ul style="list-style-type: none"> <li>▪ stable, non-hazardous, non erodible, favourably drained soil conditions, and</li> <li>▪ equivalent land capability.</li> </ul> <ul style="list-style-type: none"> <li>(1) The removal of equipment or buildings or other structures and appurtenances,</li> <li>(2) The decontamination of buildings or other structures or other appurtenances, or land or water,</li> <li>(3) The stabilization, contouring maintenance, conditioning or reconstruction of the surface of land,</li> </ul> <p>Any other procedure, operation or requirement specified in the regulations.</p>
Rural	<p>Rural communities are outside the municipal boundaries of cities, towns and villages or inside the municipal boundaries where no subdivision development exists within 800 metres of the proposed facility.</p>
Sensitive areas	<p>Areas that are important to the long-term maintenance of biological diversity, soil, water or other natural processes, at multiple spatial scales. These areas contain rare</p>

Term	Definition
	or unique elements, or include elements that may require special management consideration due to their conservation needs.
Significance	A measure of the magnitude, duration, frequency, timing, probability of occurrence, ecological and social context, geographic extent, and degree of reversibility of an effect on a valued ecosystem component.
Surface development	A railway, pipeline, canal or other right-of-way, road allowance, surveyed roadway, dwelling, industrial plant, aircraft runway or taxiway, buildings used for military purposes, permanent farm buildings, school, or church.
Total capability	The cumulative capability of all generating units at a site.
Transmission facility	A transmission line, substation, telecommunications structure, or fibre optic cable.
Urban	Urban communities are within the municipal boundaries of cities, towns and villages where subdivision development exists within 800 metres of the proposed facility.

## Appendix A1 – Participant involvement program guidelines

### 1 Purpose

#### 1.1 Purpose of the participant involvement program guidelines

These guidelines list the factors that an applicant should consider when creating its participant involvement program (PIP). The Commission expects that an applicant will adhere to these guidelines when developing its PIP. However, the Commission recognizes that there may be circumstances where it may be appropriate for an applicant to deviate from these guidelines. In those circumstances, the Commission expects the applicant to explain the circumstances and rationale for the deviation.

The precise extent and scope of an applicant's PIP cannot be predetermined because each application is unique and may present circumstances that must be addressed on an individual basis.

A PIP must be conducted before an electric facility or [gas utility pipeline](#) application can be submitted to the Commission. An applicant should consider these guidelines in relation to new electric facility or gas utility pipeline projects, and also when it is modifying, seeking a time extension, salvaging, or [decommissioning](#) an existing electric facility or modifying, seeking a time extension, removing or resuming service on a gas utility pipeline or installation.

The Commission requires the applicant to assume responsibility for informing stakeholders and [Indigenous groups](#) and involving them in the applicant's project.

If there is a potential for the applicant's project to impact Aboriginal or treaty rights as provided in Section 35 of the *Constitution Act, 1982* (Section 35 rights), applicants must specifically address this as part of the participant involvement program and identify the Indigenous groups consulted. Section 35 rights may be practiced on unoccupied Crown land and other lands to which the members have a right of access for such purposes.

#### 1.2 Purpose of the participant involvement program

It is paramount that effective communications take place between the applicant and all potentially affected [persons](#) including [Indigenous groups](#), the public, local authorities, agencies, industry and government so that concerns may be raised, properly addressed, and if possible, resolved. All persons whose rights may be directly and adversely affected by a proposed development must be informed of the application, have an opportunity to voice their concerns and have an opportunity to be heard.

## 2 Electric facility and gas utility pipeline development: a cooperative venture

Stakeholders and **Indigenous groups** are strongly encouraged to participate in ongoing issue identification, problem solving and planning with respect to local electric facility and **gas utility pipeline** projects. Early involvement in informal discussions with an applicant may lead to greater opportunity to influence project planning and mitigation of potential impacts. Recognition of landowner groups with common concerns and issues at an early stage of the PIP, especially in highly developed areas, may be an efficient way for applicants and potentially affected **persons** to interact and discuss the project and any related concerns.

## 3 Planning a participant involvement program

In its PIP, the applicant is expected to consider how to effectively communicate and interact with **persons** whose rights may be directly and adversely affected by the proposed project. This includes the public, local authorities, agencies, industry, **Indigenous groups** and government and may also include other groups that have a stake in electric facility and **gas utility pipeline** projects, should such groups make themselves known to the applicant.

As mentioned above, the development and implementation of the PIP must occur prior to the filing of an application with the Commission. The elements of the PIP must include:

- Project-specific information.
- A response to questions and concerns.
- A discussion of options, alternatives and mitigation measures.

Local authorities and various provincial departments have a role in ensuring orderly land use and development. Applicants should consider whether it is appropriate to involve these groups at an early stage in the planning of the electric facility or gas utility pipeline project and its PIP.

The Commission encourages an applicant to be sensitive to the capacity challenges and timing constraints of Indigenous groups (e.g., seasonal land use and cultural activities) and other stakeholders (e.g., planting, harvesting, calving seasons and statutory holidays) when developing and implementing its PIP.

## 4 Information to be provided

Comprehensive project-specific information must be developed and made available to all **persons** included in the PIP. Distribution of project-specific information may include, but is not limited to, website content, email, and addressed or unaddressed postal mail.

The applicant must use appropriate language and terminology in all written, electronic and website materials so that stakeholders and **Indigenous groups** can clearly understand the details of the proposed project and the impact(s) it may have upon them. At a minimum, all persons must be



given the following project-specific information and be provided with options for accessing more detailed information in the format of their choice (e.g., postal mail, website or electronic communication):

- Applicant contact name(s) and phone number(s) for further information or for raising concerns.
- Location of proposed electric or gas utility facilities, including site-specific map.
- A description of the general nature of potential impacts of the project, such as potential impacts on environment, traffic and construction impacts, visual impacts, noise impacts, etc.
- In the case of transmission facilities, a brief explanation of the need for the proposed facilities.
- Discussion of the potential restrictions on the development of lands adjacent to the proposed project, such as setbacks.
- Description of proposed on-site equipment.
- If applicable, a map(s) that identifies all receptors and the expected duration of shadow flicker for each receptor.
- If applicable, a map(s) identifying the solar glare receptors, registered and known unregistered [aerodromes](#), and critical points along highways, major roadways, and railways. The information must include information on the expected intensity and duration of any solar glare.
- Proposed project schedule including the deadline for persons to raise concerns with the applicant, the application filing date, construction start date and in-service date.

- The information package must include the most recent version of the following Commission public information document:
  - *Participating in the AUC's independent review process*
- Any other information that may assist stakeholders and **Indigenous groups** to understand the proposed project.

If the proposed project is part of a larger project, the applicant is expected to discuss the entire project and explain how it complements other development in the area.

In addition to the aforementioned, an applicant must include the following project-specific information about the project if applying for a **gas utility pipeline** licence. In the event that one or more points are not applicable an explanation must be provided:

- a. Emergency contact number of the applicant/licensee,
- b. Need for the proposed development and explanation of how it fits with existing and future plans.
- c. A description of all new and existing sources of gas flaring, incinerating, or venting from the proposed gas utility pipeline or **pipeline installation(s)**, and potential opportunities or alternatives to eliminate or reduce flaring, incinerating, or venting.
- d. Potential sources of emissions and odours during normal operating conditions (including trucking operations) and measures to control or eliminate them.

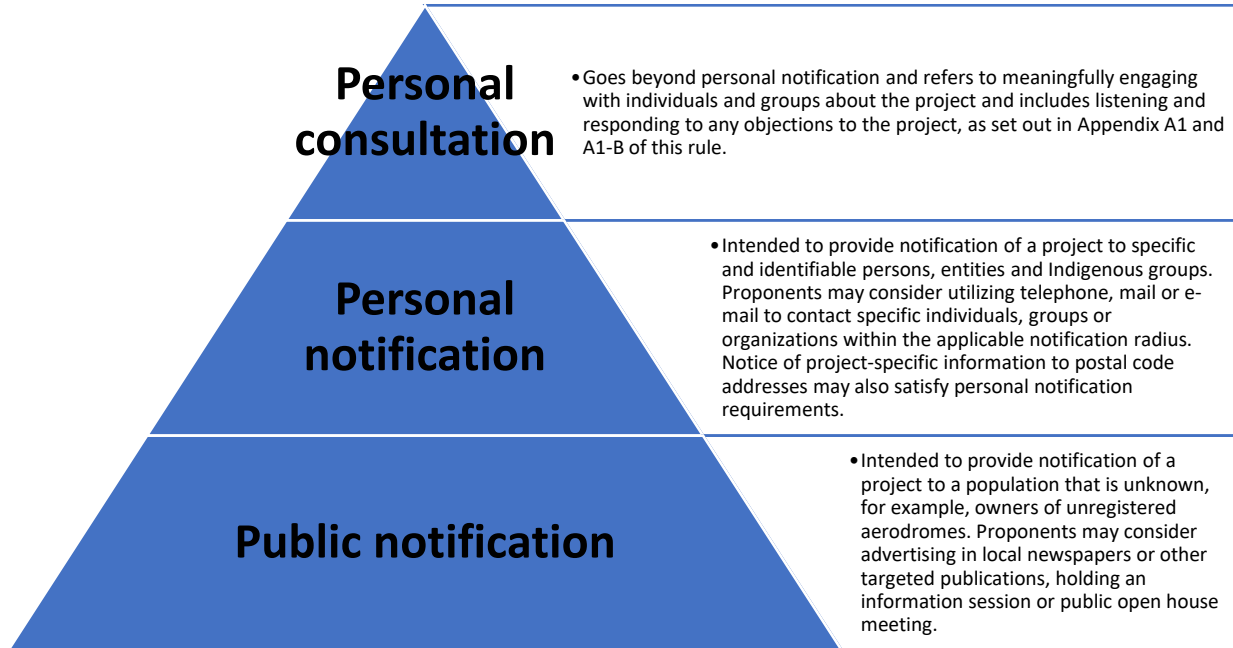
## 5 Consultation and notification

Who to include – electric facility and gas utility applications

If there are populated areas just outside the minimum notification distance, applicants should consider including those areas in the participant involvement program.

Depending on the scenario, this rule contemplates two types of notification requirements, personal notification and public notification, as well as personal consultation. The Commission recommends that notification and consultation should, at a minimum, be conducted to the distances outlined in the following table.

If there is Crown land within the distances identified in the following table, the applicants should consider if there is a potential for the project to impact Section 35 rights and if so, include



Indigenous groups in the PIP. Applicants are encouraged to be aware of the government of Alberta’s consultation policies and guidelines, and to use the government of Alberta’s Landscape Analysis Indigenous Relations Tool (LAIRT) to inform their decisions about consultation. If no steps were undertaken by the applicant to identify and consult with Indigenous groups, the applicant must provide an explanation for that decision.

Table A1-1: Electric facility application notification and consultation requirements

Type of facility application	Notification	Personal consultation
Solar power plant or battery storage facility less than 150 kW – urban and rural	Notification is not required, however any potential effects on persons or the environment must be taken into account in the design and installation of the project. The Commission retains the jurisdiction to investigate issues that may arise in relation to the project.	N/A
Power plants or battery storage facilities, less than one megawatt – urban.	Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the first row of occupied properties surrounding the proposed development, and consider including areas	N/A

Type of facility application	Notification	Personal consultation
	<p>beyond the first row of occupied properties surrounding the proposed development.</p> <p>For wind and solar power plants, provide personal notification to the owners of any registered aerodrome within 4,000 metres from the proposed turbine locations, or the edge of the proposed power plant site boundary for solar plants, and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from proposed turbine locations, or from the edge of the proposed solar power plant site boundary, respectively.</p>	
<p>Power plants or battery storage facilities, one to 10 megawatts – urban.</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the first row of occupied properties surrounding the proposed development, and consider including areas beyond the first row of occupied properties surrounding the proposed development.</p> <p>If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p> <p>For wind and solar power plants, provide personal notification to the owners of any registered aerodrome within 4,000 metres from the proposed turbine locations, or the edge of the proposed solar power plant site boundary, and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from proposed turbine locations, or from the edge of the proposed solar power plant site boundary, respectively.</p>	<p>Applicants should consider personal consultation to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the first row of occupied properties surrounding the proposed development, as the circumstances require.</p>
<p>Wind power plants, 10 megawatts or greater - urban and rural.</p>	<p>Provide public notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 1,500 metres measured from the edge of the proposed power plant site boundary.</p> <p>Provide personal notification to the owners of any registered aerodrome within 4,000 metres from the proposed turbine locations and provide public notification to owners of unregistered aerodromes within 4,000 metres</p>	<p>Personal consultation with occupants, residents, landowners, First Nation reserves, and Metis Settlements within 800 metres measured from the edge of the proposed power plant site boundary.</p>

Type of facility application	Notification	Personal consultation
	<p>measured from the proposed turbine locations.</p> <p>For major power plant applications, if there are populated areas just outside the 1,500-metre distance, applicants should consider including those areas in the public notification.</p> <p>If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p>	
<p>Solar power plants or battery storage facilities, less than one megawatt – rural (large rural industrial parks or large residential multi-parcel acreage subdivisions in this category may be considered as urban).</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 400 metres from the edge of site boundary of the proposed development.</p> <p>For solar power plants, provide personal notification to the owners of any registered aerodrome within 4,000 metres from the edge of the proposed power plant site boundary and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the edge of the proposed power plant site boundary.</p>	<p>N/A</p>
<p>Solar power plants or battery storage facilities, one to 10 megawatts – rural (large rural industrial parks in this category can be administered as urban).</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 800 metres from the edge of the proposed site boundary, as the circumstances require.</p> <p>For solar power plants, provide personal notification to the owners of any registered aerodrome within 4,000 metres from the edge of the proposed power plant site boundary and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the edge of the proposed power plant site boundary.</p>	<p>N/A</p>
<p>Solar power plants or battery storage facilities, 10 megawatts or greater - urban and rural.</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 800 metres measured from the edge of the proposed site boundary.</p> <p>For solar power plants, provide personal notification to the owners of any registered aerodrome within 4,000 metres from the edge</p>	<p>Personal consultation with occupants, residents, landowners, First Nation reserves, and Metis Settlements within 400 metres measured from the edge of the</p>

Type of facility application	Notification	Personal consultation
	<p>of the proposed power plant site boundary and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the edge of the proposed power plant site boundary.</p> <p>For major power plant applications, if there are populated areas just outside the 800-metre distance, applicants should consider including those areas in the personal notification.</p> <p>If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p>	<p>proposed project site boundary.</p>
<p>Wind, thermal, hydro or other power plants, less than one megawatt – rural (large rural industrial parks or large residential multi-parcel acreage subdivisions in this category can be administered as urban).</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 1,500-metre measured from the edge of the site boundary of the proposed development, as the circumstances require.</p> <p>For wind power plants, provide personal notification to the owners of any registered aerodrome within 4,000 metres from the proposed turbine locations and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the proposed turbine locations.</p>	<p>N/A</p>
<p>Wind, thermal, hydro or other power plants, one to 10 megawatts – rural (large rural industrial parks in this category can be administered as urban).</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 1,500-metres measured from the edge of the proposed power plant site boundary, as the circumstances require.</p> <p>For wind power plants, provide personal notification to the owners of any registered aerodrome within 4,000 metres from the proposed turbine locations and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the proposed turbine locations.</p>	<p>N/A</p>
<p>Thermal, hydro or other power plants, 10 megawatts or greater, urban and rural.</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 2,000 metres</p>	<p>Personal consultation with occupants, residents, landowners, First Nation reserves, and Metis Settlements within 800 metres</p>

Type of facility application	Notification	Personal consultation
	<p>measured from the edge of the proposed power plant site boundary.</p> <p>For major power plant applications, if there are populated areas just outside the 2,000-metre distance, applicants should consider including those areas in the personal notification.</p> <p>If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p>	<p>measured from the edge of the proposed power plant site boundary.</p>
<p>Overhead transmission line and new substation development – rural or industrial setting.</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 800 metres measured from the edge of the proposed right-of-way for the transmission line and/or the edge of the proposed substation site boundary.</p> <p>Notice of project-specific information to postal code addresses is generally sufficient to satisfy this communication requirement. If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p>	<p>Personal consultation with occupants, residents, landowners, First Nation reserves, and Metis Settlements on or directly adjacent to the proposed right-of-way for the transmission line and/or proposed substation site location.</p>
<p>New underground transmission lines or burying of existing transmission lines- rural.</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 200 metres measured from the centre of the proposed right-of-way for the transmission line.</p> <p>Alternatively, notice of project-specific information to postal code addresses is sufficient to satisfy this communication requirement. If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p>	<p>Personal consultation with occupants, residents, landowners, First Nation reserves, and Metis Settlements on or directly adjacent to the right-of-way for the transmission line.</p>

Type of facility application	Notification	Personal consultation
Overhead or underground transmission line and/or new substation development and/or substation upgrades and/or minor transmission line replacements within the original right-of-way – urban.	<p>Provide personal notification to occupants, residents landowners, First Nation reserves, and Metis Settlements within the <a href="#">first row of development surrounding</a> the proposed project.</p> <p>If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p>	Personal consultation with occupants, residents, landowners, First Nation reserves, and Metis Settlements on or directly adjacent to the right-of-way or substation site location.
Minor transmission line replacements within the original right-of-way – rural and <a href="#">industrial</a> .	<p>Provide personal notification to occupants, residents landowners, First Nation reserves, and Metis Settlements within 200 metres from the edge of the existing right-of-way.</p> <p>Alternatively, notice of project-specific information to postal code addresses is sufficient to satisfy this communication requirement. If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p>	Personal consultation with occupants, residents, landowners, First Nation reserves, and Metis Settlements on or directly adjacent to the existing right-of-way.
Substation developments within existing facilities, where there is a change in the substation fence line or which create visual or noise impact – rural and <a href="#">industrial</a> .	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 800 metres from the edge of the existing substation site boundary.</p> <p>Alternatively, notice of project-specific information to postal code addresses is sufficient to satisfy this communication requirement. If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.</p>	Personal consultation with occupants, residents, landowners, First Nation reserves, and Metis Settlements on or directly adjacent to the existing substation site location.
Substation developments within existing facilities, where there is no change in the substation fence line and which create <a href="#">minimal visual or noise impact</a> – rural and <a href="#">industrial</a> .	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 200 metres from the edge of the existing substation site boundary.</p> <p>Alternatively, notice of project-specific information to postal code addresses is sufficient to satisfy this communication requirement. If the applicant considers that certain landowners that should be notified of</p>	Personal consultation with substation landowners.



Type of facility application	Notification	Personal consultation
	the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.	
New substation developments for customers that are wholly contained within the customer's industrial complex.	Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis settlements within 200 metres from the edge of the proposed substation site boundary.  Alternatively, notice of project-specific information to postal code addresses is sufficient to satisfy this communication requirement. If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.	Personal consultation with occupants, residents and landowners on or directly adjacent to the proposed substation site location.
Decommission and salvage – transmission facilities.	Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements and other utilities on or directly adjacent to the existing facility right-of-way.  If the applicant considers that certain landowners that should be notified of the proposed project may be missed because they do not reside at the property, additional efforts to notify them should be considered.	N/A
Decommission and salvage – power plant.	Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements and other utilities on or directly adjacent to the existing facility.	N/A

For clarity:

- For the installation of fibre optic facilities where a direct and adverse effect may occur, the applicant should consult with the landowner on whose land the fibre optic work is proposed, and notify those persons **directly adjacent** if their rights may be directly and adversely affected. In a situation where no impact is expected, such as, for example, an insertion into an existing conduit, no consultation is required.
- Telecommunications towers should be treated similarly to a substation development or upgrade from whatever situation is applicable from the table in Section 5.

Table A1-2: Gas utility pipeline and pipeline installation consultation and notification requirements

Type of facility application	Notification	Personal consultation
<p>New pipeline construction, H<sub>2</sub>S partial pressure ≤ 0.3 kPa, and OD ≤ 323.9mm (Type 100)</p>	<p>Provide personal notification to Crown disposition holders, local authorities along the right-of way and <b>urban</b> authorities within 1.5 km.</p> <p>In a rural or industrial setting, provide personal notification to occupants, residents, landowners, <b>First Nation reserves</b>, and Metis Settlements within 0.1 km of the pipeline.</p> <p>In urban communities, provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the first row of development on each side of the pipeline.</p>	<p>Occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way, and those who request consultation after receiving notification (or otherwise convey objections or concerns).</p> <p>Confirmation of non-objection is required from occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way</p>
<p>New pipeline construction, H<sub>2</sub>S partial pressure ≤ 0.3 kPa, and OD &gt; 323.9mm (Type 101)</p>	<p>Provide personal notification to Crown disposition holders, local authorities along the right-of way and urban authorities within 1.5 km.</p> <p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 0.2 km of the pipeline.</p>	<p>Occupants, residents, landowners, First Nation reserves, and Metis Settlements within or <b>directly adjacent</b> to the pipeline right-of-way, and those who request consultation after receiving notification (or otherwise convey objections).</p> <p>Confirmation of non-objection is required from occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way</p>
<p>Construction, or removal of a compressor station</p>	<p>Provide personal notification to Crown disposition holders, local authorities and occupants, residents, landowners, First Nation reserves, and Metis Settlements within 1.5 km.</p>	<p>Occupants, residents, landowners, First Nation reserves, and Metis Settlements within 0.5 km.</p> <p>Confirmation of non-objection is required from occupants, residents, landowners, First Nation reserves, and Metis Settlements adjacent to the compressor station site.</p>
<p>Pipeline licence amendment - Complete removal (including all crossings) or partial removal</p>	<p>Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way and within the associated setbacks prior to filing the application.</p>	<p>N/A</p>

Type of facility application	Notification	Personal consultation
Pipeline licence amendment - Not constructed	Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way and within the associated setbacks.	N/A
Pipeline licence amendment - Abandonment	Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way and within the associated setbacks prior to abandonment.	N/A
Pipeline licence amendment - Discontinuation	N/A Application is filed within 90 days of completing the discontinuation operation to advise the Commission of the discontinuation	N/A
Pipeline licence amendment - MOP change and line split	Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way and within the associated setbacks only if the proposed activity decreases or eliminates setbacks.	N/A
Pipeline licence amendment - Resumption of discontinued pipeline	N/A	N/A
Pipeline licence amendment - Resumption of abandoned pipeline/ <a href="#">pipeline installations</a>	Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way and within the associated setbacks prior to filing the application.	N/A

## 6 General considerations for notification and consultation

It is an applicant's responsibility to assess the area potentially impacted by the project and determine whether the distance of notification recommended in these guidelines should be altered to include a greater area. It may be necessary to change the distance to include stakeholders or [Indigenous groups](#) who have expressed an interest in development in the area. An applicant should explain the basis of its decision to change the distance of notification recommended in these guidelines in its application.

During the planning of its PIP, the applicant should assess its need for public notification to reach the broader public and determine whether an information session or public open house meeting is required. When holding such information sessions, the applicant must disclose the same project-

specific information it would disclose to those individuals involved in personal consultation and notification.

The applicant must allow notified stakeholders and Indigenous groups a minimum of 14 calendar days to receive, consider and respond to the PIP for the proposed project prior to filing a facility application. The timeline for responses should be clearly stated in the PIP information as per Section 4.

In the case of a gas utility pipeline application, if an applicant has conducted personal consultation with every person in the applicable notification radius and obtained written confirmation of non-objection, the applicant may file an application once consultation is complete.

The applicant must make reasonable attempts to contact stakeholders and Indigenous groups, provide information about the project, discuss the project, and address any questions and concerns. If the applicant is unable to contact a stakeholder or Indigenous groups, it should be able to demonstrate reasonable attempts to establish contact.

The applicant is accountable for the outcomes of personal notification and consultation, including consultation and notification completed on its behalf by all personnel (including contracted personnel). Consequently, the applicant must ensure that individuals conducting personal notification and consultation:

- Possess a sound understanding of regulatory requirements and expectations for participant involvement.
- Possess full knowledge of the overall plan and direction of future development options.
- Use appropriate language and terminology in conversations and in written and electronic materials so that the stakeholders and Indigenous groups can clearly understand the details of the proposed project and the impact it may have on them, including that all applied-for routes, including alternative routes, could be approved.
- Have sufficient training and experience in conducting consultation including customer service, courtesy, and respect.

The applicant must provide its project-specific information to those stakeholders and Indigenous groups described in the Who to include section, above. The required information may be made available electronically or forwarded by courier, mail, fax, email or other means as agreed upon by the applicant and stakeholders and Indigenous groups consulted.

Notification to Indigenous groups should be provided to the official consultation contact(s) on the Aboriginal Consultation Office website.

If the stakeholder or Indigenous group does not wish to receive the project-specific information or declines to consult with the applicant, the applicant must document the refusal for compliance audit purposes.

The applicant must keep a log containing information on the dates personal consultation occurred or was attempted, whether project information was provided, and to whom the project information was given.

### **6.1 Specific considerations for consultation**

The applicant is expected to conduct one-on-one consultation with occupants, residents, landowners, and [Indigenous groups](#) as outlined in the Who to include section, above.

Where there is more than one landowner or occupant at an address, a consultation with one adult at that address will normally be sufficient, unless a request is made to meet with more than one landowner or occupant.

The applicant should use the method of consultation preferred by the occupant, resident, landowner, or Indigenous groups which could include face-to-face meetings, phone, email, or other electronic media.

Questions raised during discussions about the proposed project should alert the applicant to potential objections. The applicant should attempt to address concerns raised about the proposed project during consultation.

### **6.2 Consultation for projects on a First Nation reserve**

For an application that crosses or is wholly located on a [First Nation reserve](#) the applicant is required to obtain the necessary consent and approvals from the First Nation and, if applicable, the federal government. The applicant must notify the Chief and Council, and the lands office (if applicable) about the project, seek direction on the consultation and notification requirements, and obtain any federal land tenure that may be required for the project (i.e., *Indian Act*, *First Nation Land Management Act*, or other applicable legislation).

## **7 Changes in the project or circumstances affecting a participant involvement program**

The applicant is expected to make reasonable attempts to update stakeholders on material changes to the project, even if the application is withdrawn. Stakeholders and [Indigenous groups](#) included in the PIP should continue to be included in correspondence and information updates, except in cases where:

- The participant is no longer within the project notification distance due to a change in the location of the facilities under consideration (such as a rejected route).

Participants removed from project communications for these reasons must be advised by the applicant that they will no longer be receiving communications relating to the project.

- The participant is not within the notification distance of a localized change to the facilities under consideration (such as a minor route deflection). In these cases, only participants within the notification zone surrounding the localized change require communications related to the change.

When a change in circumstances does not allow previous commitments to stakeholders or Indigenous groups to be met, the Commission expects the applicant to provide notification to all stakeholders or Indigenous groups impacted by the change in circumstances.

## **8 Extended absences**

In some instances occupants, residents and landowners may be away for extended periods, such as on vacation, or they may reside out of the province. An applicant is expected to attempt to contact these stakeholders and [Indigenous groups](#) regardless of these extended absences.

When the applicant is expected to consult with stakeholders and Indigenous groups but is unable to do so, it is expected to send letters and project information to the address indicated on the most up-to-date land title documents.

If the applicant is unable to fulfill all PIP requirements, it must explain the efforts made to contact all necessary stakeholders and Indigenous groups.

## **9 Documenting the participant involvement program**

The applicant should document its PIP, including the elements specified in Section 3 and it should include all information provided and received through the notification and consultation process. The applicant is required to retain communications logs, including any registered mail and courier tracking information, to record feedback and objections received prior to filing an application and the applicant's responses and follow up to resolve objections. The applicant is also required to document commitments made during its PIP and have a process in place to monitor and follow up on those commitments.

When submitting an application, the applicant must include a written summary of any unresolved objections, its responses and its follow-up to these objections. Documentation may be requested in the event of a compliance audit.

Information requirements throughout this rule require a list of contact information for all [persons](#) who were contacted as part of the PIP in a Microsoft Excel spreadsheet with columns for name, company or organization name, address 1, address 2, city, province, postal code, country and

optional email address, as shown below. An email address is to be provided if a person indicates that they would prefer to be communicated with via email rather than mail.

*Table A1-3: Requirements for contact information*

<b>Name</b>	<b>Company Name</b>	<b>Address 1</b>	<b>Address 2</b>	<b>City</b>	<b>Province</b>	<b>Postal Code</b>	<b>Country</b>	<b>Email address (optional)</b>
Sally Sanderson		Unit 123	456 Maple Lane	Calgary	AB	T0M 0M0	Canada	sally@email.ca
Bob Boberson	Bob's Farm Ltd.		P.O. Box 126	Calgary	AB	T8H 8N6	Canada	bob@email.ca

## Appendix A1-B – Participant involvement program guidelines for Indigenous groups

### 1 Introduction

The AUC has the authority to consider and address potential adverse impacts to Aboriginal and treaty rights as set out in Section 35 of the *Constitution Act, 1982*, when deciding whether approval of an electric facility or gas utility project is in the public interest. The Commission is committed to ensuring that **Indigenous groups** whose constitutionally protected rights may be directly and adversely affected by development have the opportunity to have their concerns heard, considered, understood and accommodated (if required).

These guidelines list the factors that an applicant should consider when creating its participant involvement program (PIP) for Indigenous groups. It is designed to augment the guidelines for the PIP in Appendix A1 by providing additional guidance to applicants on consultation with Indigenous groups.

Project applicants are responsible for discussing the project with Indigenous groups, understanding their concerns, and exploring accommodation measures where those are needed or recommended to avoid, minimize or mitigate adverse impacts on Section 35 rights. It is helpful for the Indigenous groups to be notified early in project planning to provide sufficient time for relationship building, issue identification and mitigation exploration.

If resolution of concerns is not possible applicants are responsible for providing the AUC with the record of the consultation that was undertaken, including a summary of any objections received, mitigations discussed, and any outstanding objections.



## The duty to consult

Consultation is a process intended to understand the potential for adverse impacts of anticipated Crown decisions on Aboriginal and treaty rights as set out in Section 35 of the *Constitution Act, 1982*, with a view to substantially address any impacts on those rights.

Duty to consult activities occur on a spectrum that depends on the strength of the claim of proven or asserted Section 35 rights and the potential for adverse impact on those rights. The consultation activities required to fulfill the duty range from notification only to deep consultation, and in some instances may require accommodation.

The AUC acknowledges that a duty to consult arises in relation to a proposed utility development application filed with the AUC when the following factors are all present:

1. The Crown has real or constructive knowledge of a proven or asserted Section 35 right.
2. An AUC decision is contemplated that could affect land or natural resources, including air and water.
3. The AUC's decision has the potential to adversely affect the continued exercise of a Section 35 right.

The AUC's consultation process for Indigenous groups includes: (1) pre-application engagement by proponents, (2) AUC's notice of application and the opportunity for Indigenous groups to self-identify if they consider their rights may be directly and adversely affected, and (3) public hearings in accordance with Section 9 of the *Alberta Utilities Commission Act*.

If an Indigenous group asserts that Section 35 rights are potentially affected, the group can submit a statement of intent to participate in the proceeding. The Commission will review the statement of intent to participate and make a standing decision in the normal course.

## 2 Planning a participant involvement program for Indigenous groups

The Commission requires an applicant to inform the [Indigenous groups](#) of, and involve them in discussions about, the applicant's project if there is a potential for that project to impact Section 35 rights. The applicant must specifically address this as part of the PIP and identify the Indigenous groups it consulted. Section 35 rights may be practiced on unoccupied Crown land and other lands to which the members of an Indigenous group have a right of access for such purposes.

## Request feedback on PIP for Indigenous groups

An applicant can request feedback from the AUC on the PIP for Indigenous groups prior to submitting an application to the AUC, including determining a project category for consultation purposes (i.e., A, B or C).

Requests for feedback can be submitted to [IndigConsult@auc.ab.ca](mailto:IndigConsult@auc.ab.ca).

### 2.1 When should Indigenous groups be included in the PIP?

The following planning tool was developed to assist applicants in determining whether they should include [Indigenous groups](#) in the participant involvement program.

The Commission has identified three Indigenous consultation categories to improve regulatory consistency, predictable decision-making, and public transparency. The three categories are based on knowledge of the potential physical impacts of a project on land or resources that could affect Section 35 rights. However, they are not a definitive categorization of all potential adverse impacts on Section 35 rights and other credibly asserted or apparent impacts must also be considered. In the event that an application has characteristics that fall into two or more categories, the more stringent notification requirements should be followed.

#### **Category A projects: Crown has determined there is a duty to consult or there are reserve or settlement lands within the consultation radii**

AUC applications for which the government of Alberta requires consultation on related approvals:

- Electric facility or gas utility projects often require approvals from multiple regulators, including the provincial and federal Crown. Other provincial regulators that issue project-related approvals include Alberta Culture, Multiculturalism and Status of Women (i.e., *Historical Resources Act*), and Alberta Environment and Parks (AEP) for *Public Lands Act*, *Water Act*, and *Environmental Protection and Enhancement Act*. Approvals issued by AEP are often informed by recommendations from the Aboriginal Consultation Office.
- If the government of Alberta, through the Aboriginal Consultation Office or otherwise, directed consultation for a related approval, then those Indigenous groups must be included in the applicant's participant involvement program for the AUC application. The applicant is required to provide a copy of the pre-consultation assessment, the adequacy assessment, and the specific issues and response table (if prepared).

Additionally, the consultation radii for an application, as identified in Rule 007 [Table A1-1], may include lands set aside for or owned by an Indigenous group (i.e., [First Nation reserve](#) or [Metis Settlement](#)). In that case, the First Nation or Metis Settlement must be included in the

PIP and given AUC notice, regardless of whether the government of Alberta has required consultation in respect of a different approval.

**Category B projects: Small projects, projects on private land with little or no off-site impacts, or administrative changes**

Applications that do not ordinarily require Indigenous groups to be included in the participant involvement program:

- Applications on private land that have little or no off-site impacts, including: (1) transmission lines, (2) wind and solar power plants with Alberta Environment and Parks' wildlife risk assessment of moderate or lower, and (3) thermal power plants less than 10 megawatts.
- Expansions of existing projects that are within an existing site fenceline with little or no potential for additional off-site environmental impacts (e.g., the facility will operate within the levels of existing environmental approvals under the *Water Act*, *Public Lands Act*, or *Environmental Protection and Enhancement Act*).
- Projects within a defined transportation/utility corridor established under Section 4 of Schedule 5 of the *Government Organization Act*, unless consultation is required by Alberta Infrastructure or another government of Alberta department. If so, it would be a Category A project.
- Adjustments, repairs, replacements or maintenance made in the normal course of operations.
- Short-term testing or temporary modifications to machinery, equipment or processes that do not result in a new surface disturbance beyond the normal course of operations.
- Letters of enquiry and checklist applications.

If an Indigenous group contacts the applicant and requests consultation the applicant should include the Indigenous group in the PIP or provide an explanation why it declined to do so.

**Category C projects: Projects requiring further analysis**

Projects that are not in Category A or Category B will be reviewed by the Commission on a case-by-case basis using the following questions as a guide. Applicants may request pre-application feedback from AUC staff on the participant involvement for Indigenous groups, including determining the most suitable project category.



Please use the [Request for AUC staff feedback on participant involvement program for Indigenous group form](#) to request pre-application feedback from AUC staff on the participant involvement for Indigenous groups.

In reviewing Category C applications to determine if Indigenous groups should be included in the participant involvement program, the AUC considers the nature, scope, magnitude and duration of the potential adverse impacts on Section 35 rights. Some questions that the Commission considers during the assessment of Category C projects include, but are not limited to, the following:

- Is there the potential to affect Crown land within the consultation radii? For projects on private lands, consider off-site or downstream environmental impacts.
- Does the project have the potential to affect the environment (e.g., air, water, land, wildlife/waterfowl) and potentially impact a Section 35 right (e.g., hunting, fishing, trapping, traditional uses)? If yes:
  - How significant would the impacts be? Would the project constitute a use that is visibly incompatible with the exercise of the right (e.g., hunting near a staffed facility)?
  - Would the impacts be permanent or temporary?
- Are there Indigenous groups in the area with whom the Crown normally consults (assessed using government of Alberta’s Landscape Analysis Indigenous Relations Tool (LAIRT))?
- Does an Indigenous group have access to the site for the purpose of exercising Section 35 rights (e.g., hunting, fishing, trapping and traditional uses)?
- Is there a historic resources site that has the potential to be affected? Has the proponent received *Historical Resources Act* approval from Alberta Culture, Multiculturalism and Status of Women? Were any concerns identified and/or any mitigation required?
- Is the area known to be of significant importance to an Indigenous group?

The following table (Table A1-4) is a quick reference for the consultation categories.

Table A1-4: Quick reference - Indigenous consultation framework

Indigenous consultation category	Description	AUC notification requirements
Consultation Category A	<p>Crown has determined there is a duty to consult for related approvals (e.g., <i>Water Act</i>, <i>Public Lands Act</i>, <i>EPEA</i>).</p> <p>and/or</p> <p>A <a href="#">First Nation reserve</a> or Metis Settlement is within the consultation areas (Notification radius right).</p>	<p><a href="#">Indigenous groups</a> identified by the Crown must be included in the PIP.</p> <p>First Nations or Metis Settlements with reserves or Settlements within the consultation area must be included in the PIP.</p>
Consultation Category B	<p>Applications for new projects or alterations that are:</p> <ul style="list-style-type: none"> <li>• Small (e.g., thermal power plants &lt;10 MW).</li> <li>• On private land with limited to no off-site impacts (e.g., transmission lines, solar, wind).</li> <li>• In transportation/utility corridor.</li> <li>• Letters of enquiry.</li> </ul>	<p>Indigenous groups not ordinarily included in the PIP</p>
Consultation Category C	<p>Applications for new projects or amendments not captured by categories A and B.</p>	<p>Application category will be reviewed on a case-by-case basis to determine whether the Indigenous groups should be included in the PIP.</p>

## 2.2 Which Indigenous groups should be included in the participant involvement program?

If a [First Nation reserve](#) or Metis Settlement is located within the consultation radii for an application, as identified in Appendix A1 of Rule 007, then the First Nation or Metis Settlement must be included in the PIP.

If the government of Alberta, through the Alberta Consultation Office (ACO) or otherwise, directed consultation with any Indigenous groups for related approvals (i.e., *Public Lands Act*, *Water Act*, *Environmental Protection and Enhancement Act*, *Historical Resources Act*, *Government Organization Act*, etc.), the applicant must include those Indigenous groups in the PIP for the AUC application.

If advice from the government of Alberta on consultation was not sought by the applicant, the applicant must summarize the steps it took to identify and consult with Indigenous groups. Applicants are encouraged to use the government of Alberta's Landscape Analysis Indigenous Relations Tool ([LAIRT](#)) to inform their decisions about consultation. If no steps were undertaken to identify and consult with Indigenous groups, the applicant must provide an explanation.

If an Indigenous group contacts the applicant and requests consultation the applicant should include the Indigenous group in the PIP or provide an explanation why it declined to do so.

### 3 Specific considerations for consultation

The applicant must indicate if [Indigenous groups](#) were included the PIP. If so, the applicant must include a summary of the consultation undertaken including a description of the unresolved objections that it is aware of, and its responses and follow-up to these objections.

Notification to Indigenous groups should be provided to the official consultation contact(s) and by the method identified on the Aboriginal Consultation Office website.

It is helpful for the Indigenous groups to be notified early in project planning to provide sufficient time for relationship building, issue identification and mitigation exploration.

The applicant must retain documentation of potential mitigation measures for objections that were identified or considered through the notification and consultation process prior to filing an application.

The applicant is expected to document all commitments made during its PIP and have a process in place to monitor and follow up on those commitments.

The applicant is accountable for the outcomes of consultation, including consultation completed on its behalf by all personnel (including contracted personnel). Consequently, the applicant must ensure that individuals conducting consultation:

- i) Possess a sound understanding of regulatory requirements and expectations for participant involvement, including Indigenous consultation.
- ii) Possess full knowledge of the overall plan and direction of future development options.
- iii) Use appropriate language and terminology so that the Indigenous groups can clearly understand the details of the proposed project and the impact it may have on them.
- iv) Have sufficient training and experience in conducting consultation including awareness of [Alberta's Consultation Policy and Guidelines](#), the principles underlying the duty to consult and Section 35 rights, and the need for cultural sensitivity, courtesy and respect.

Applicants are encouraged to consider options to avoid, minimize, or mitigate impacts on Section 35 rights identified during consultation with Indigenous groups. Exploration of these concerns should be documented thoroughly in the consultation record.

Efforts to accommodate concerns may include:

- Modifying project design.
- Modifying project location or footprint.
- Modifying project timing.
- Seeking opportunities to mitigate impacts to traditional use.
- Exploring options to address concerns regarding access.

The applicant must keep a log containing information on the dates notification occurred or was attempted, whether project information was provided, and to whom the project information was given, as well as any follow-up discussions.

## **Appendix A2 – Independent System Operator (ISO) participant involvement program guidelines**

### **1 Purpose of the ISO stakeholder notification**

Prior to submitting a needs identification document application or an abbreviated needs identification document application to the Commission, the ISO must notify stakeholders and [Indigenous groups](#) in the area where the ISO has reasonably determined that facilities could be installed to implement the ISO's preferred option to meet the need.

### **2 Content of the ISO stakeholder notification**

For each application, the ISO will develop a notification approach that best aligns with the project size and location and will notify stakeholders and Indigenous groups in accordance with this approach. The ISO will explain the basis for its approach when filing a needs identification document application or an abbreviated needs identification document application with the Commission.

The ISO is not required to initiate consultation with stakeholders and Indigenous groups.

### **3 Responding to questions and concerns**

The ISO must be prepared to respond to questions and concerns from stakeholders and [Indigenous groups](#) regarding a needs identification document application or an abbreviated needs identification document application.

### **4 Changes to the ISO notification**

If the ISO revises the information provided in a notification following the ISO's issuance of a notification, the ISO must notify stakeholders and [Indigenous groups](#) of those changes.

In the event that the ISO decides not to proceed with a needs identification document application or an abbreviated needs identification document application for which a notification has been distributed, the ISO must notify stakeholders and Indigenous groups of this decision.



**Appendix B1 – Economic comparison format – requirement ISD9**

*Table B1: Economic comparison requirement for ISD9*

	Undiscounted values (year to year)		Discounted values (year to year)	
	Electrical supply from the AIES and purchased fuel	Internal electric supply through on-site generation	Electrical supply from the AIES	Internal electric supply through on-site generation
Capital cost				
Power production revenue				
Power consumption cost				
Fuel consumption cost				
Transmission (DTS) and distribution cost				
Transmission (STS) cost				
Operating and maintenance costs				
Total cost before tax				
Total cost after tax				
Net benefit from electrical supply from the AIES and purchased fuel versus internal supply through on- site power generation				