Rule 007

Facility 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~~ September 25~~18~~, 2025~~2~~, and is effective on ~~March 28~~November 6, 2025~~4~~.

Contents

1 Purpose

This rule applies to applications for the construction, alteration, operation and connection of power plants, hydro developments, substations, transmission lines, energy 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, energy storage facilities, ~~or~~ industrial system designations, ~~including ownership changes and construction or alteration, time extensions, or construct, operate or modify a~~ gas utility pipelines or pipeline installations must file an application with the Alberta Utilities Commission in accordance with this rule. As well, an application must be filed for time extensions and approval transfers for facilities previously approved by the AUC.

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.

The Commission may dispense with, vary or supplement all or any part of this rule if it is satisfied that the circumstances of any proceeding require it.

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~~Before 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~~describe~~ing~~ its notification and consultation program in its application.

To assist with compiling the information requirements for an application, applicants can find application forms hyperlinked in each section of this rule. The forms are also listed on the Rule 007 related information page on the AUC website.

2.2 Submission via the eFiling System

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.

All applicants must request a new proceeding and add applications electronically. Applications include online 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.~~ All documents filed must be in a searchable format to the best of an applicant's ability.

A scanned page is an image and cannot be searched for specific words. Optical character recognition (OCR) converts the contents of a file to a searchable format to provide accurate output in the eFiling System search results.

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~~before 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.

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.

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 participant involvement information, a renewable energy referral report from Alberta Environment and Protected Areas Fish and Wildlife Stewardship (AEPA-FWS) for a new or amended 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
Process	• no notice • no objections • no information requests	• no notice • no objections • one round of AUC information requests	• notice • no objections/ no person with standing • one or more rounds of AUC information requests	• notice • objections • no participant information requests • written/oral hearing	• notice • objections • participant information requests • written/oral hearing
Record development timeline	5 business days*	35 days	90 days	120 days	205 days
Performance standard	90 per cent			80 per cent	
Decision writing timeline	15 days	20 days	30 days	75 days	90 days
Performance standard	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

Applicants are responsible for the costs of notifying the public about their proposed project. Applicants will be charged for publication costs associated with the AUC's notices of application or notices of hearing.

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 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.

checklist application and will issue a decision within five business days of receiving a properly completed checklist application.

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)~~,~~ to be connected to the transmission system,~~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~~should be 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, energy storage facility, or connection ~~order~~to the Alberta Interconnected Electric System is also part of the ~~project~~proposed development, a separate application form for each component ~~should~~must be added ~~for each component~~ to the proceeding in eFiling ~~prior to~~before 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 3(3) of the *Hydro and Electric Energy Regulation* are met.

4.1.3 Isolated generating unit

If the power plant is an isolated generating unit as defined in the *Isolated Generating Units and Customer Choice Regulation* with a total capability of less than 10 MW, the owner may proceed without filing an application if the requirements of subsection 4(3) 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 Protected Areas ~~(AEPA)~~ Fish and Wildlife Stewardship (AEPA-FWS)~~.~~ and the Renewable Energy Project Submission report. 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.

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).

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~~before 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. If the vendors have not been selected or the equipment has not been finalized, provide:

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

- The total capability of the power plant in MW.
- The anticipated maximum hub height and maximum rotor-swept area of the individual turbines.

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~~ boundary (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~~reflects the information shown on the drawings and maps submitted to address information requirement WP6. The file should contain the geo~~graphic~~spatial data (geometry, location and attributes) 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.~~ See the glossary definition for .kml/.kmz files for detailed specifications.

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~~ project boundary.

ii. Legible maps showing:

- The power plant ~~site~~ project boundary.

- Land ownership of surrounding lands, including any residences and dwellings within the notification ~~radius~~ and consultation radii 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.

WP8) Describe any public benefits that will be generated by the proposed project.

Project connection

~~WP8)~~WP9) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted, if available.

~~WP9)~~WP10) 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)~~WP11) 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.

While detailed routing information may not always be available at the power plant application stage, applicants should make best efforts to identify conceptual routes.

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.

Cumulative effects

WP12) Confirm whether the applicant is aware of other existing developments in the project area that could cumulatively affect the rural setting/landscape due to their proximity and/or number.

WP13) Discuss any potential positive or negative cumulative social, economic or environmental impacts or effects that may occur considering the proposed project, existing developments and any other currently planned developments. This discussion may include, but is not limited to, any economic spinoffs, community and employment benefits, visual impacts, proliferation, land fragmentation (including fragmentation of agricultural uses, wildlife habitat fragmentation, etc.), the impact of adherence to municipal planning documents, wildlife, species at risk, air quality impacts, recreational or tourism impacts, impacts to existing or anticipated resource development, wetlands, native grasslands, watersheds and water quality impacts, and surface management.

WP14) Discuss the applicant's alignment, or efforts to align, with Alberta's Land-use Framework and the economic, orderly and efficient development of industrial facilities including efficient land use principles.

Emergency response plan

~~WP11)~~WP15) 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)~~WP16) 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)~~WP17) Confirm that local responders and authorities have been ~~contacted or~~ notified and given an opportunity to provide feedback 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)~~WP18) 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 height of a shadow flicker receptor shall reflect the living room height (based on the consultation with receptor's occupants or residents or reasonable assumption). 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

If requested by the owner or occupant of a receptor (that has located within 1.5 kilometres of a turbine), the applicant mus assessment report and communicate the results specific to t

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

duration of shadow flicker for each receptor.

WP19) The shadow flicker assessment must provide prediction results for two scenarios:

- Worst-case scenario: sunlight is present from sunrise to sunset, each turbine is always operating and facing the sun at all times of the day.
- Adjusted-case scenario: statistical weather data (e.g., sunshine, wind direction and turbine height wind speed) is used to produce more representative predictions. Identify and describe the source of the weather data used in the modelling including justification for its use.

WP20) Provide a table comparing predicted shadow flicker durations to 30 hours per year for the adjusted-case scenario and 30 minutes per day for the worst-case scenario.

WP21) If predicted shadow flicker durations exceed the above thresholds for one or more receptors, determine mitigation measures that could be implemented to reduce the duration of shadow flicker to comply with threshold values, and evaluate the effectiveness and feasibility of the mitigation measures via modelling. Confirm in the application that shadow flicker mitigation measures will be implemented in the event of complaints or concerns regarding shadow flicker when the project commences operation.

Municipal land use information

WP22) Confirm whether the proposed project area complies with the applicable municipal planning documents including municipal development plans, intermunicipal development plans, area structure plans, land use bylaws (including applicable setbacks) and other municipal bylaws.

Identify any instances where the proposed project area does not comply with applicable municipal planning documents and provide a justification for any non-compliance.

WP23) Provide the current land use zoning for the proposed project area. If applicable, provide the land use amendment and/or development permit status for the proposed project area.

Environmental information

The Commission does not require applicants to submit confidential information such as the exact location of nests to meet these requirements. If applicants are directed to file confidential information on the record, they should follow the process specified in the "Confidential filings" section of Rule 001: Rules of Practice.

~~WP15)~~WP24) 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. Provide all definitions and standards (i.e., *Alberta Wetland Identification and Delineation Directive*) used to prepare this description.

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

- Identify and describe the project activities and infrastructure that may adversely affect the environment. Include a description and the area (hectares) of permanent and temporary project activities and infrastructure.
- 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.

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 any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the key environmental regulations and guidelines applicable to the project and provide rationale for any deviations from the guidelines. While not an exhaustive list, some common regulations and guidelines applicable to wind projects include:
  - *Wildlife Directive for Alberta Wind Energy Projects*
  - *Alberta Wetland Policy*
  - *Alberta Management of Contaminated Sites*
  - *Conservation and Reclamation Directive for Renewable Energy Operations*
  - *Guidelines to evaluate agricultural land for renewable generation*
  - *Canada Fish and Fish Habitat Protection Program*
  - *Species at Risk Act*
- List the qualifications of, or provide a curriculum vitae (CV) for, the individual(s) who conducted or oversaw the environmental evaluation and indicate any respective practice areas, practice standards or standards of competence demonstrated by these individuals.

~~WP16)~~WP25) 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~~If not contained within the impact analysis, include information describing all~~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~~effects of the project. 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)~~WP26) 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 AEPA-FWS and the AUC pursuant to Rule 033: *Post-approval Monitoring Requirements for Wind and Solar Power Plants.*

Agricultural information

WP27) Using the current version of the Agricultural Regions of Alberta Soil Inventory Database (AGRASID), please describe the agricultural capability of soils intersecting the project footprint as provided in the spring-seeded small grains (SSSGRAIN) attribute of the Land Suitability Rating System (LSRS) table. Provide a table showing the amount of area for each LSRS class impacted by the project in hectares (e.g., 80 hectares of Class 2).

Applicants can conduct a field assessment to validate the primary LSRS class impacted by the project, following standard 200.2 of the Guidelines to evaluate agricultural land for renewables generation.

Applicants may also note if AGRASID is unavailable for their project or if their project is not used for agricultural purposes

WP28) For the project footprint, identify whether:

a) The project lands contain irrigation infrastructure.

b) The project lands are within an irrigation district. If so, whether:

- The project has been discussed with the applicable irrigation district.

- Irrigation acres (either permanent, terminable or annual) are or have been assigned to the project lands.

- An application for water rights or irrigation acres has been made for the project lands.

c) The landowners have obtained a Private Irrigation Water Licence for irrigating the project lands.

WP29) List the professional qualifications of the author(s) who prepared or reviewed the above information regarding agricultural land.

WP30) Submit an agricultural impact assessment, as defined in the *Guidelines to evaluate agricultural land for renewable generation*, if any LSRS Class 1 or Class 2 land is reported within the project footprint, or if any Class 3 land is reported within the project footprint and the project is within a municipality identified in "Schedule 1 - Class 3 Land Municipalities" in the *Electric Energy Land Use and Visual Assessment Regulation*.

To assess adherence to the Guidelines, the AUC requests the following information for inclusion in an agricultural impact assessment:

- If the current agricultural activities are not feasible, explain why. Provide a co-existence plan as described in the Guidelines.

- Provide the terms of reference for future reporting to the Commission as defined by the Guidelines.

- Describe how the agricultural impact assessment does not meet the Guidelines, if applicable, and provide reasons why.

To assess impacts to soils, the AUC requests the following information for inclusion in an agricultural impact assessment:

Soils component

a) Describe the dominant soil series within the project area and report predicted potential impacts to:

- Soil quality (i.e., compaction, rutting, salinity, sodicity, fertility, contamination, clubroot).

- Soil quantity (i.e., wind erosion, water erosion).

- Hydrology and hydrogeology (i.e., topography, soil drainage, depth to groundwater).

b) Describe how potential impacts to soil quality, quantity, hydrology and hydrogeology will be adequately mitigated during construction, operation and reclamation.

c) Describe all earthworks (e.g., stripping and grading) planned for the project, including the following information:

- Methodology to anchor structures (e.g., screw piles, concrete footings).

- The extent of stripping and grading, with an estimate of the area of agricultural land impacted.

- Description of how these activities have been reduced in both extent and intensity (as practical) to protect the quality, quantity and hydrology of impacted soils.

- Description of how and where stripped soils will be stockpiled and what steps will be taken to preserve the quality and quantity of stockpiled soils prior to project reclamation.

- Description of how soils will be returned to preserve the quality, quantity and hydrology of the disturbed soils.

Visual impact assessment

WP31) The Commission shall not accept any applications for the construction or operation of a wind power plant in a buffer zone as defined in Schedule 2 of the *Electric Energy Land Use and Visual Assessment Regulation*.

If the project is located within a visual impact assessment zone, as defined in Schedule 3 of the *Electric Energy Land Use and Visual Assessment Regulation*, and in the *Pristine Viewscapes and Visual Impact Assessment Zones* map, submit a visual impact assessment. The visual impact assessment must include:

- An evaluation of the anticipated visual impacts on the buffer zone or visual impact assessment zone.

- Visual simulations from key vantage points illustrating the potential visual impact of the project.

- Key vantage points should include locations with viewscapes determined to have a major or major/moderate severity of impact ranking in the visual impact assessment. If desired, visual simulations may also be provided for other viewpoints in the project area so that a range of views at different distances and in different landscapes may be presented. Some of these additional visual simulations can include viewpoints from nearby residences.

- Visual simulations must include an accurate representation of the viewscape:

  - Before project construction has commenced.

  - After project construction has been completed, but without any mitigation measures implemented.

  - After project construction has been completed, and any proposed mitigation measures have been implemented.

- The visual simulations should include an explanation of how they were prepared, how they are to be viewed, and what was done to ensure they were prepared accurately. A map must be provided that shows the location and direction of each visual simulations.

- Proposed mitigation measures to minimize or offset any adverse visual effects on the buffer zone or visual impact assessment zone.

- Where mitigation is proposed, describe the mitigation measures that will be implemented, including their location, predicted effectiveness during the project's full life cycle and whether the mitigation measures have been discussed with adjacent landowners. If vegetation screening is planned, confirm that the final plan has also been or will be discussed with local authorities.

End-of-life management and reclamation security

~~WP18)~~WP32) 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*. The plan should include a description of key roles and responsibilities, timelines for subsequent site assessments, and preliminary plans for decommissioning, salvage and reclamation.

~~WP19)~~WP33) ~~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*.~~Confirm whether the applicant will: (i) provide reclamation security to the Government of Alberta; (ii) provide reclamation security to hosting landowners; or (iii) a combination of both. If either (ii) or (iii) is chosen, provide sufficient information to confirm whether the applicant intends to follow the *Reclamation security guidelines for wind and solar power plants* and if not, explain any differences. (See Appendix C1 – *Reclamation security guidelines for wind and solar power plants*, for additional guidelines).

Noise

~~WP20)~~WP34) Provide a noise impact assessment in accordance with Rule 012. If mitigation measures are recommended in the assessment, confirm the mitigation measures the applicant will implement.

WP35) Confirm that the applicant will comply with the construction noise requirements in Section 2.10 of Rule 012, or explain why it is not feasible or practical to implement them.

Approvals, reports and assessments from other agencies

~~WP21)~~WP36) 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)~~WP37) Submit both the Renewable Energy Project Submission report, and a signed renewable energy referral report from Alberta Environment and Protected Areas ~~(AEPA)~~ Fish and Wildlife Stewardship (AEPA-FWS). ~~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.~~

As noted in Section 2.3, the Commission will close any applications filed without an AEPA-FWS renewable energy referral report.

~~WP23)~~WP38) Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a *Historical Resources Act* approval has been obtained, provide a copy of it. 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)~~WP39) If the government of Alberta, through the Aboriginal Consultation Office (ACO) or otherwise, directed consultation with an Indigenous group for related approvals (~~i.~~e.g., *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, both Transport Canada and NAV CANADA have separate requirements. ~~: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.~~

Participant involvement program

~~WP25)~~WP40) 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)~~WP41) List all ~~occupants, residents and landowners on~~ landspersons 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 notified or consulted as part of the participant involvement program.

Table 4.1: Notification and consultation radi~~us~~ for wind 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	N/A
	rural	1,500 metres	N/A
≥ 10 MW	urban or rural	1,500 metres	800 metres

~~WP27)~~WP42) Supply a list of contact information for all persons listed in WP41 ~~who had been contacted as part of the participant involvement program~~in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

~~WP28)~~WP43) Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

WP44) As described in Section 6.3 of Appendix A1, confirm that the municipal engagement form was provided to the applicable municipality to complete for a minimum of 30 days, before filing the application. If the municipality completed the municipal engagement form, provide this form. If the municipality declined to complete the municipal engagement form, confirm what steps were taken to follow up with the municipality, including submitting copies of correspondence.

~~WP29)~~WP45) 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~~before the operation of the power plant.

~~WP30)~~WP46) Summarize consultation with Alberta First Responder Radio Communications System, identify potential interference with other radar/radio frequency towers and provide mitigation measures agreed upon.

~~WP31)~~WP47) Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person,~~that includes the following information:

- The name and land location of the person(s).
- 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.

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~~before 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 Protected Areas 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.	Cannot increase ~~or decrease~~ by more than ~~+/-~~10 per cent or ~~+/-~~10 MW, whichever is less.	Confirm total capability of power plant in MW. Confirm that the ISO has no concerns with the change.
Project layout.	Number of turbines cannot increase.	Confirm final turbine locations. Confirm eliminated turbine locations.
Extent of land use disturbance within the approved power plant project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) within the approved power plant project boundary.
Total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Protected Areas' minimum setbacks for wildlife habitat features; or~~,~~ any encroachments into Alberta Environment and Protected Areas' minimum setbacks for ~~permanent~~ class III (seasonal) or above wetlands.	Cannot increase.	Confirm total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Protected Areas' minimum setbacks for wildlife habitat features; or~~,~~ any encroachments into Alberta Environment and Protected Areas' minimum setbacks for ~~permanent~~ class III (seasonal) or above wetlands have not increased over what has been approved.

Project element	Allowance relative to approved element	Requirement for project update
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 that will be 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 under Rule 012, there cannot be any unresolved objections arising from the final project update.	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. 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 power plant project boundary as long as an experienced wildlife biologist has confirmed that these changes do not infringe on any wildlife habitat or any wildlife	Provide a final plant site drawing and map showing the location of the project's turbines, ~~collector~~ substation(s), access roads, collector lines and the power plant project boundary. ~~and~~ Also provide a ~~-~~Keyhole Markup Language (.kml/.kmz) file that contains the geospatial data of each major component as explained in WP5. Confirm that the location of each turbine and collector

Project element	Allowance relative to approved element	Requirement for project update
	features, or alter any mitigation commitments.	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 power plant project boundary.
Power plant project boundary.	Approved power plant project boundary cannot increase.	Confirm that the approved power plant 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 but do not have potential adverse impacts on the environment or any person, 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 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~~ before 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. If the vendors have not been selected or the equipment has not been finalized, provide:

- The total capability of the power plant in MW.

- 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~~ boundary (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 reflect~~contain~~s the information shown on the drawings and maps submitted to address information requirement SP6. The file should contain the geospatial~~graphic~~ data (geometry, location and attributes) 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.~~ See the glossary definition for .kml/.kmz files for detailed specifications.

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~~ project boundary.

ii. Legible maps showing:

- The power plant ~~site~~ project boundary.

- Land ownership of surrounding lands, including any residences and dwellings within the notification and consultation radi~~us~~ 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~~ project 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.

SP8) Describe any public benefits that will be generated by the proposed project.

Project connection

~~SP8)~~SP9) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted, if available.

~~SP9)~~SP10) 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)~~SP11) 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.

While detailed routing information may not always be available at the power plant application stage, applicants should make best efforts to identify conceptual routes.

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.

Cumulative effects

SP12) Confirm whether the applicant is aware of other existing developments in the project area that could cumulatively affect the rural setting/landscape due to their proximity and/or number.

SP13) Discuss any potential positive or negative cumulative social, economic or environmental impacts or effects that may occur considering the proposed project, existing developments and any other currently planned developments. This discussion may include, but is not limited to, any economic spinoffs, community and employment benefits, visual impacts, proliferation, land fragmentation (including fragmentation of agricultural uses, wildlife habitat fragmentation, etc.), the impact of adherence to municipal planning documents, wildlife, species at risk, air quality impacts, recreational or tourism impacts, impacts to existing or anticipated resource development, wetlands, native grasslands, watersheds and water quality impacts, and surface management.

SP14) Discuss the applicant's alignment, or efforts to align, with Alberta's Land-use Framework and the economic, orderly and efficient development of industrial facilities including efficient land use principles.

Emergency response plan

~~SP11)~~SP15) 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)~~SP16) 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.

SP17) ~~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

SP18) ~~SP14~~ Submit a solar glare assessment for the project. The solar glare assessment must:

- Predict potential glare impacts from the project at the following types of receptors:
  - ~~-~~Residential receptors within 800 metres from the ~~receptors within 800 metres from the~~power plant project boundary. The height of a residential receptor shall reflect the height of living rooms or balconies (based on the consultation with receptor's occupants or residents or reasonable assumption).
  - Heavily travelled roads, local roads, railways and associated intersections within 800 metres from the power plant project boundary.
  - Registered and known unregistered aerodromes within 4,000 metres from the power plant project boundary, and associated runways, flight paths and air traffic control towers.
- Confirm that within the glare model, the height of route receptors (e.g., highways, roadways and railways) and associated intersections reflects the eye level for road users as follows:
  - passenger vehicle (1.08 metres),
  - single-unit truck and bus (1.8 metres), and
  - large truck and trailer combination (2.3 metres).

- Predict glare within a critical field of view (FOV) and a conservative FOV for route receptors (e.g., highways, roadways and railways), runways and flight paths, as described in the table below.

Table 4.3 FOVs for glare receptors

Receptor	Field of view (degrees)	
	Critical FOV	Conservative FOV
Heavily travelled road Railway Runway Flight path	25	50
Local road	15	25
Dwelling Air traffic control tower	Assume sensitive to glare in all directions	

- Confirm that the project will use solar panels with anti-reflective coating or equivalent technology.

- Describe the software or tools used in the assessment, the assumptions and the input parameters (equipment-specific and environmental) utilized.

- Provide prediction results in terms of daily glare (in minutes) and annual glare (in hours) from the entire project for each receptor. The prediction results must distinguish different types of glare effects (e.g., green glare: glare with low potential for temporary after-image, or yellow glare: glare with potential for temporary after-image).

It is an applicant's responsibility to be aware of Transport Canada's document TP1247E, *Aviation: Land Use ~~i~~In ~~T~~the Vicinity of Aerodromes*, and to be aware of Alberta Transportation's document, *Assessment Requirements for Solar Developments near Provincial Highways*.

- Include a map (or maps) showing the project layout and identifying the solar glare receptors that were assessed.

- Describe the qualifications of the individual(s) performing the assessment.

SP19) Predicted glare levels shall be compared to the following limits.

Applicants are to design their solar power plants with an aim to eliminate or mitigate predicted glare on transportation routes, runways, flight paths and residences as much as possible.

Table 4.4 Limits on acceptable glare impacts

Receptor	Field of view (degrees)	Limit (yellow glare)
Heavily travelled road	25	0
Railway Runway Flight path	50	30 minutes per day and 30 hours per year
Local road	15	0
	25	30 minutes per day and 30 hours per year
Dwelling (Assume sensitive to glare in all directions)		30 minutes per day and 30 hours per year
Air traffic control tower (Assume sensitive to glare in all directions)		0 (any glare)

Note: The Commission retains the discretion to determine or establish an acceptable glare limit that is different than the values identified in Table 4.4 based on case-specific application evidence and submissions.

SP20) The solar glare assessment must determine and describe potential mitigation measures as explained below.

- If predicted glare impacts exceed the limits for route receptors and/or receptors related to aerodromes in Table 4.4, determine mitigation measures that could be implemented to reduce glare within the glare limits, and evaluate the effectiveness and feasibility of the mitigation measures via modelling. Provide predicted glare from the mitigated project. Confirm in the application that these mitigation measures will be implemented during the project construction. For example,
  - For a project with rotating solar panels, describe the minimum resting angle that will be used during project operation to eliminate or mitigate the predicted glare on route receptors and receptors related to aerodromes.
  - For a project with fixed-tilt solar panels, describe physical screenings as mitigation measures to eliminate or mitigate the predicted glare on route receptors and receptors related to aerodromes.

- If predicted glare impacts exceed the limits for residential receptors in Table 4.4, or if glare is predicted on any receptors but predicted glare levels do not exceed the limits in Table 4.4, describe potential mitigation measures that could be implemented to eliminate or mitigate glare from the project in the event of a complaint or concern. Mitigation may be required to address the complaint or concern during project operation.

Glare effects and the need for mitigation must be assessed by comparing predicted glare from a project to limits from Table 4.4. Sun masking may be considered as a mitigating factor in cases where applicants can provide a clear explanation of when (i.e., how many minutes per day and/or per year) project glare to a receptor will be masked by the sun itself.

~~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.~~

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.

If requested by the occupant of a receptor (that has the potential for solar glare and is located within 800 metres of the power plant 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~~

Municipal land use information

SP21) Confirm whether the proposed project area complies with the applicable municipal planning documents including municipal development plans, intermunicipal development plans, area structure plans, land use bylaws (including applicable setbacks) and other municipal bylaws.

Identify any instances where the proposed project area does not comply with applicable municipal planning documents and provide a justification for any non-compliance.

SP22) Provide the current land use zoning for the proposed project area. If applicable, provide the land use amendment and/or development permit status for the proposed project area.

Environmental information

The Commission does not require applicants to submit confidential information such as the exact location of nests to meet these requirements. If applicants are directed to file confidential information on the record, they should follow the process specified in the "Confidential filings" section of Rule 001: Rules of Practice.

SP23) ~~SP15)~~ 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. Provide all definitions and standards (i.e., *Alberta Wetland Identification and Delineation Directive*) used to prepare this description.

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

- Identify and describe the project activities and infrastructure that may adversely affect the environment. Include a description and the area (hectares) of permanent and temporary project activities and infrastructure.
- 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.

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.

- List the key environmental regulations and guidelines applicable to the project and provide rationale for any deviations from the guidelines. Some common regulations and guidelines applicable to wind solar projects include:
  - Wildlife Directive for Alberta Solar Energy Projects
  - Alberta Wetland Policy
  - Alberta Management of Contaminated Sites
  - Conservation and Reclamation Directive for Renewable Energy Operations
  - Guidelines to evaluate agricultural land for renewable generation
  - Canada Fish and Fish Habitat Protection Program
  - Species at Risk Act

- List the qualifications of, or provide a CV for, the individual ~~or individual~~(s) who conducted or oversaw the environmental evaluation~~.~~ and indicate the respective practice areas, practice standards or standards of competence demonstrated by these individuals.

SP24) ~~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.~~ If not contained within the impact analysis, include information describing all potential environmental effects of the project. 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.

SP25) ~~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

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

and operation to minimize any adverse effects of the project on the environment.

Agricultural information

SP26) Using the current version of the Agricultural Regions of Alberta Soil Inventory Database (AGRASID), pleasedescribe the agricultural capability of soils intersecting the project footprint as provided in the spring-seeded small grains (SSSGRAIN) attribute of the Land Suitability Rating System (LSRS) table. Provide a table showing the amount of area for each LSRS class impacted by the project in hectares (e.g., 80 hectares of Class 2).

Applicants can conduct a field assessment to validate the primary LSRS class impacted by the project, following standard 200.2 of the *Guidelines to evaluate agricultural land for renewables generation*.

Applicants may also note if AGRASID is unavailable for their project or if their project is not used for agricultural purposes.

SP27) For the project footprint, identify whether:

a) The project lands contain irrigation infrastructure.

b) The project lands are within an irrigation district. If so, whether:

- The project has been discussed with the applicable irrigation district.

- Irrigation acres (either permanent, terminable or annual) are or have been assigned to the project lands.

- An application for water rights or irrigation acres has been made for the project lands.

c) The landowners have obtained a Private Irrigation Water Licence for irrigating the project lands.

SP28) List the professional qualifications of the author(s) who prepared or reviewed the above information regarding agricultural land.

SP29) Submit an agricultural impact assessment, as defined in the Guidelines to evaluate agricultural land for renewable generation, if any LSRS Class 1 or Class 2 land is reported within the project footprint, or if any Class 3 land is reported within the project footprint and the project is within a municipality identified in "Schedule 1 - Class 3 Land Municipalities" in the *Electric Energy Land Use and Visual Assessment Regulation*.

To assess adherence to the Guidelines, the AUC requests the following information for inclusion in an agricultural impact assessment:

- If the current agricultural activities are not feasible, explain why. Provide a co-existence plan as described in the Guidelines.

- Provide the terms of reference for future reporting to the Commission as defined by the Guidelines.

- Describe how the agricultural impact assessment does not meet the Guidelines, if applicable, and provide reasons why.

To assess impacts to soils, the AUC requests the following information for inclusion in an agricultural impact assessment:

Soils component

a) Describe the dominant soil series within the project area and report predicted potential impacts to:

- Soil quality (i.e., compaction, rutting, salinity, sodicity, fertility, contamination, clubroot).

- Soil quantity (i.e., wind erosion, water erosion).

- Hydrology and hydrogeology (i.e., topography, soil drainage, depth to groundwater).

b) Describe how potential impacts to soil quality, quantity, hydrology and hydrogeology will be adequately mitigated during construction, operation and reclamation.

c) Describe all earthworks (e.g., stripping and grading) planned for the project, including the following information:

- Methodology to anchor structures (e.g., screw piles, concrete footings).

- The extent of stripping and grading, with an estimate of the area of agricultural land impacted.

- Description of how these activities have been reduced in both extent and intensity (as practical) to protect the quality, quantity and hydrology of impacted soils.

- Description of how and where stripped soils will be stockpiled and what steps will be taken to preserve the quality and quantity of stockpiled soils prior to project reclamation.

- Description of how soils will be returned to preserve the quality, quantity and hydrology of the disturbed soils.

Visual impact assessment

SP30) If the project is located within a buffer zone or a visual impact assessment zone, as defined in Schedule 2 and Schedule 3 of the *Electric Energy Land Use and Visual Assessment Regulation* and in the *Pristine Viewscapes and Visual Impact Assessment Zones map*, submit a visual impact assessment. The visual impact assessment must include:

a) An evaluation of the anticipated visual impacts on the buffer zone or visual impact assessment zone.

b) Visual simulations from key vantage points illustrating the potential visual impact of the project.

- Key vantage points should include locations with viewscapes determined to have a major or major/moderate severity of impact ranking in the visual impact assessment. If desired, visual simulations may also be provided for other viewpoints in the

project area so that a range of views at different distances and in different landscapes may be presented. Some of these additional visual simulations can include viewpoints from nearby residences.

- Visual simulations must include an accurate representation of the viewscape:
  - Before project construction has commenced.
  - After project construction has been completed, but without any mitigation measures implemented.
  - After project construction has been completed, and any proposed mitigation measures have been implemented.
- The visual simulations should include an explanation of how they were prepared, how they are to be viewed, and what was done to ensure they were prepared accurately. A map must be provided that shows the location and direction of each visual simulation.

c) Proposed mitigation measures to minimize or offset any adverse visual effects on the buffer zone or visual impact assessment zone.

SP31) Where mitigation is proposed, describe the mitigation measures that will be implemented, including their location, predicted effectiveness during the project's full life cycle and whether the mitigation measures have been discussed with adjacent landowners. If vegetation screening is planned, confirm that the final plan has also been or will be discussed with local authorities.

End-of-life management and reclamation security

SP32) ~~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*. The plan should include a description of key roles and responsibilities, timelines for subsequent site assessments, and preliminary plans for decommissioning, salvage and reclamation.~~.~~

~~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.~~

SP33) Confirm whether the applicant will: (i) provide reclamation security to the Government of Alberta; (ii) provide reclamation security to hosting landowners; or (iii) a combination of both. If either (ii) or (iii) is chosen,

provide sufficient information to confirm whether the applicant intends to follow the *Reclamation security guidelines for wind and solar power plants* and if not, explain any differences. (See Appendix C – *Reclamation security guidelines for wind and solar power plants*, for additional guidelines)

Noise

SP34) ~~SP20)~~ Provide a noise impact assessment in accordance with Rule 012. If mitigation measures are recommended in the assessment, confirm the mitigation measures the applicant will implement.

SP35) Confirm that the applicant will comply with the construction noise requirements in Section 2.10 of Rule 012 or explain why it is not feasible or practical to implement them.

Approvals, reports and assessments from other agencies

SP36) ~~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.

SP37) ~~SP22)~~ Submit both the Renewable Energy Project Submission report, and a signed renewable energy referral report from Alberta Environment and Protected Areas ~~(AEPA)~~ Fish and Wildlife Stewardship (AEPA-FWS). ~~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.~~

SP38) ~~SP23)~~ Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a Historical Resources Act approval has been obtained, provide a copy of it. 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.

SP39) ~~SP24)~~ 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,

An applicant is responsible for fulfilling the requirements of all other agencies with jurisdiction over a project. For example, both Transport Canada and NAV CANADA have separate requirements.~~:~~

- ~~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.~~

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

SP40) ~~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~~.~~).

SP41) ~~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 power plant project boundary were consulted and provide a summary of any objections received, mitigations discussed, and any outstanding objections.

If the glare assessment includes runways, flight paths and/or highways as receptors, the applicant must confirm that it has provided a copy of the glare assessment to Transport Canada, Alberta Transportation and the local municipality, and has consulted these parties about potential glare impacts.

SP42) ~~SP27)~~ List all ~~occupants, residents and landowners on~~ landspersons 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 notified or consulted as part of the participant involvement program.

Table 4.~~35~~: Notification and consultation radi~~us~~ for solar power plants

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

SP43) ~~SP28)~~ Supply a list of contact information for all persons listed in SP42~~who had been contacted as part of the participant involvement program~~ in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

SP44) ~~SP29)~~ Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

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.

SP45) As described in Section 6.3 of Appendix A1, confirm that the municipal engagement form was provided to the applicable municipality to complete for a minimum of 30 days, before filing the application. If the municipality completed the municipal engagement form, provide this form. If the municipality declined to complete the municipal engagement form, confirm what steps were taken to follow up with the municipality, including submitting copies of correspondence.

SP46) Describe how the applicant engaged with applicable municipalities to modify the proposed power plant or to mitigate any of its potential adverse impacts to the municipality, prior to filing the application.

SP47) ~~SP30)~~ Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person,~~ that includes the following information:

- The name and land location of the person(s).
- The specifics of the concern(s).

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

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~~ before 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~~6: 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~~

Project element	Allowance relative to approved element	Requirement for project update
		~~that the changes do not cause added solar glare to occur at critical points along highways, major roadways and railways and any registered and known unregistered aerodromes.~~
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. Confirm that the ISO has no concerns with the change.
Extent of land use disturbance located within the approved power plant project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) located within the approved power plant project boundary.
Total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Protected Areas' minimum setbacks for wildlife habitat features; or~~,~~ any encroachments into Alberta Environment and Protected Areas' minimum setbacks for class III (seasonal) or above~~permanent~~ wetlands.	Cannot increase.	Confirm total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Protected Areas' minimum setbacks for wildlife habitat features; or~~,~~ any encroachments into Alberta Environment and Protected Areas' minimum setbacks for class III (seasonal) or above~~permanent~~ wetlands ha~~s~~ve not increased over what ~~was~~ 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 that will be implemented to ensure that permissible sound levels will be met.
Glare	N/A	Confirm that the changes do not cause additional solar glare at residential receptors, route receptors and any registered and

Project element	Allowance relative to approved element	Requirement for project update
		known unregistered aerodromes (i.e., glare receptors specified in SP18). Confirm that the glare mitigations described in the original application are still valid and effective, or provide any new or additional glare mitigation measures that could be implemented in the event of a complaint/concerns and verify the effectiveness of these new or additional glare mitigation measures via modelling
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.	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. Confirm that there are no unresolved objections to the project arising from the final project update.
Final plant site layout.	The solar array and ~~collector~~ substation cannot be relocated more than 100 metres from the approved location.	Provide a final plant site drawing and map showing the location of the project's solar arrays, ~~collector~~ substation(s), access roads, collector lines and the ~~site~~ power plant project boundary. ~~and~~ Also provide a Keyhole Markup Language. (.kml/.kmz) file that contains the geospatial data of each major component as explained in SP5. 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 experienced wildlife biologist that the changes do not infringe on any wildlife habitat or any wildlife

Project element	Allowance relative to approved element	Requirement for project update
		features, or alter any mitigation commitments. Confirm that the changes all occur within the approved power plant project boundary.
Power plant project boundary.	Approved power plant project boundary cannot increase.	Confirm that the approved power plant 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 4.46, but do not have potential adverse impacts on the environment or any person, 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 solar power plant that exceed the final project update allowances outlined in Table 4.46 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~~ before 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.
- 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~~ boundary (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~~reflects the information shown on the drawings and maps submitted to address information requirement TP6. The file should contain the geo~~graphics~~spatial data (geometry location, and attributes)~~for~~ 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 TP6.~~See the glossary definition for .kml/.kmz files for detailed specifications.

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~~ project boundary.

ii. Legible maps showing:

- The power plant ~~site~~ project boundary.
- Land ownership of surrounding lands, including any residences and dwellings within the notification ~~radius~~ and consultation radii 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), design pressure (in kilopascals), wall thickness, pipe specification, pipe grade and length of the natural gas pipelines proposed within the power plant ~~site~~boundary.
- 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~~before 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.

TP10) Describe any public benefits that will be generated by the proposed project.

Project connection

TP11) ~~TP10)~~ If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted, if available.

TP12) ~~TP11)~~ Provide the asset identification code assigned by the independent system operator (ISO) and the ISO Project ID number related to the~~your~~ system access service request, if available.

TP13) ~~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.

Cumulative effects

TP14) Confirm whether the applicant is aware of other existing developments in the project area that could cumulatively affect the rural setting/landscape due to their proximity and/or number.

TP15) Discuss any potential positive or negative cumulative social, economic or environmental impacts or effects that may occur considering the proposed project, existing developments and any other currently planned developments. This discussion may include, but is not limited to, any economic spinoffs, community and employment benefits, visual impacts, proliferation, land fragmentation (including fragmentation of agricultural uses, wildlife habitat fragmentation, etc.), the impact of adherence to municipal planning documents, wildlife, species at risk, air quality impacts, recreational or tourism impacts, impacts to existing or anticipated resource development, wetlands, native grasslands, watersheds and water quality impacts, and surface management.

TP16) Discuss the applicant's alignment, or efforts to align, with Alberta's Land-use Framework and the economic, orderly and efficient development of industrial facilities including efficient land use principles.

Emergency response plan

TP17) ~~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.

TP18) ~~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.

TP19) ~~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.

Municipal land use information

TP20) Confirm whether the proposed project area complies with the applicable municipal planning documents including municipal development plans, intermunicipal development plans, area structure plans, land use bylaws (including applicable setbacks) and other municipal bylaws.

Identify any instances where the proposed project area does not comply with applicable municipal planning documents and provide a justification for any non-compliance.

TP21) Provide the current land use zoning for the proposed project area. If applicable, provide the land use amendment and/or development permit status for the proposed project area.

Environmental information

The Commission does not require applicants to submit confidential information such as the exact location of nests to meet these requirements. If applicants are directed to file confidential information on the record, they should follow the process specified in the "Confidential filings" section of Rule 001: Rules of Practice.

TP22) ~~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 (NOx), sulphur dioxide (SO2), 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*.

TP23) ~~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.

TP24) ~~TP18)~~ Provide a summary of any feedback received to date from AEPA addressing the environmental aspects of the project and any mitigation measures and monitoring activities recommended by AEPA.

TP25) ~~TP19)~~ Provide ~~a copy of~~ the emissions modelling report that was prepared for the *Environmental Protection and Enhancement Act* application to AEPA.

TP26) ~~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. Provide all definitions and standards (i.e., *Alberta Wetland Identification and Delineation Directive*) used to prepare this description.

- Identify and describe the project activities and infrastructure that may adversely affect the environment. Include a description and the area (hectares) of permanent and temporary project activities and infrastructure.

- 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.

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 any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.

- List the key environmental regulations and guidelines applicable to the project and provide rationale for any deviations from the guidelines.

- List the qualifications of, or provide a CV for, the individual ~~or individual~~(s) who conducted or oversaw the environmental evaluation~~.~~ and indicate the respective practice areas, practice standards or standards of competence demonstrated by these individuals.

TP27) ~~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.~~ If not contained within the impact analysis, include information describing all potential environmental effects of the project. 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.

TP28) ~~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.

Visual impact assessment

TP29) If the project is located within a buffer zone or a visual impact assessment zone, as defined in Schedule 2 and Schedule 3 of the *Electric Energy Land Use and Visual Assessment Regulation* and in the *Pristine Viewscapes and Visual Impact Assessment Zones map*, submit a visual impact assessment. The visual impact assessment must include:

- An evaluation of the anticipated visual impacts on the buffer zone or visual impact assessment zone.
- Visual simulations from key vantage points illustrating the potential visual impact of the project.
- Key vantage points should include locations with viewscapes determined to have a major or major/moderate severity of impact ranking in the visual impact assessment. If desired, visual simulations may also be provided for other viewpoints in the project area so that a range of views at different distances and in different landscapes may be presented. Some of these additional visual simulations can include viewpoints from nearby residences.
- Visual simulations must include an accurate representation of the viewscape:
  - Before project construction has commenced.
  - After project construction has been completed, but without any mitigation measures implemented.
  - After project construction has been completed, and any proposed mitigation measures have been implemented.
- The visual simulations should include an explanation of how they were prepared, how they are to be viewed, and what was done to ensure they were prepared accurately. A map must be provided that shows the location and direction of each visual simulation.
- Proposed mitigation measures to minimize or offset any adverse visual effects on the buffer zone or visual impact assessment zone.

- Where mitigation is proposed, describe the mitigation measures that will be implemented, including their location, predicted effectiveness during the project's full life cycle and whether the mitigation measures have been discussed with adjacent landowners. If vegetation screening is planned, confirm that the final plan has also been or will be discussed with local authorities.

End-of-life management and reclamation security

TP30) ~~TP23) Provide~~ Describe~~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 security plan for the proposed power plant. The plan should include~~.~~:

- A cost estimate prepared by a third party which describes the estimated costs of reclaiming the proposed project.
- Confirmation that the operator will have sufficient funds at the project end of life to meet its reclamation security plan.
- How the amount of the reclamation security will be calculated.
- The year of initial posting and when each subsequent amount will be added.
- The frequency with which the reclamation security estimate will be updated or re-assessed.
- What form the reclamation security will take (e.g., letter of credit, surety bond, other). Include an explanation of why the form of security was selected, having regard to its attributes and priority in bankruptcy, including how the secured party would be able to realize on the reclamation security should the project owner and operator be in default.
- The security beneficiaries to whom the reclamation security will be committed.
- When and how the beneficiary can access the security and any constraints on such access.
- The estimated salvage value of project components, including any supporting calculations and assumptions used to substantiate the salvage value.
- The standard to which the project site will be reclaimed upon decommissioning.

Noise

TP31) ~~TP24)~~ Provide a noise impact assessment in accordance with Rule 012. If mitigation measures are recommended in the assessment, confirm the mitigation measures the applicant will implement.

TP32) Confirm that the applicant will comply with the construction noise requirements in Section 2.10 of Rule 012 or explain why it is not feasible or practical to implement them.

Approvals, reports and assessments from other agencies

TP33) ~~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.

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

TP34) ~~TP26)~~ Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a Historical Resources Act approval has been obtained, provide a copy of it. 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.~~

TP35) ~~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.g., *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

TP36) ~~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).

TP37) ~~TP29)~~ List all ~~occupants, residents and landowners on~~ landspersons 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 notified or consulted as part of the participant involvement program.

Table 4.~~5~~7: Notification and consultation radi~~us~~ for thermal 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

TP38) ~~TP30)~~ Supply a list of contact information for all persons listed in TP37~~who had been contacted as part of the participant involvement program~~ in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

TP39) ~~TP31)~~ Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

TP40) As described in Section 6.3 of Appendix A1, confirm that the municipal engagement form was provided to the applicable municipality to complete for a minimum of 30 days, before filing the application. If the municipality completed the municipal engagement form, provide this form. If the municipality declined to complete the municipal engagement form, confirm what steps were taken to follow up with the municipality, including submitting copies of correspondence.

TP41) Describe how the applicant engaged with applicable municipalities to modify the proposed power plant or to mitigate any of its potential adverse impacts to the municipality, prior to filing the application.

TP42) ~~TP32)~~ Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person, that~~ include~~s~~ the following information:

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

Community generation

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

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.

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~~before 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~~8: 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. Confirm that the ISO has no concerns with the change.
Extent of land use disturbance located within the approved power plant project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) located within the approved power plant project boundary.
Total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Protected Areas' minimum setbacks for wildlife habitat features~~; or, any encroachments into Alberta Environment and Protected Areas' 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 Protected Areas' minimum setbacks for wildlife habitat features; or~~,~~ any encroachments into Alberta Environment and Protected Areas' minimum setbacks for ~~permanent~~class III (seasonal) or above 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 that will be implemented to ensure that permissible sound levels will be met.
Air emissions.	Cannot increase.	Confirm that air emissions associated with the updated project do not exceed

Project element	Allowance relative to approved element	Requirement for project update
		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.	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. Confirm that there are no unresolved objections to the project arising from the final project update.
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~~ Also provide a Keyhole Markup Language (.kml/.kmz) file that contains the geospatial data of each major component as explained in TP5.

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~~8 but do not have potential adverse impacts on the environment or any person, 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~~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 4.5.2.

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~~,~~ and 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~~before 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.
- 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~~ boundary (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 reflects the information shown on the drawings and maps submitted to address information requirement OP6. The file should contain~~s~~ the geospatial~~graphic~~ data (geometry location, and attributes) ~~for~~ 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 OP6~~. See the glossary definition for .kml/.kmz files for detailed specifications.

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~~project boundary.

ii. Legible maps showing:

- The power plant ~~site~~project boundary.

- Land ownership of surrounding lands, including any residences and dwellings within the notification and consultation radi~~us~~ 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~~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~~boundary.

- 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~~before 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.

OP10) Describe any public benefits that will be generated by the proposed project.

Project connection

OP11) ~~OP10)~~ If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted, if available.

OP12) ~~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.

OP13) ~~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.

Cumulative effects

OP14) Confirm whether the applicant is aware of other existing developments in the project area that could cumulatively affect the rural setting/landscape due to their proximity and/or number.

OP15) Discuss any potential positive or negative cumulative social, economic or environmental impacts or effects that may occur considering the proposed project, existing developments and any other currently planned developments. This discussion may include, but is not limited to, any economic spinoffs, community and employment benefits, visual impacts, proliferation, land fragmentation (including fragmentation of agricultural uses, wildlife habitat fragmentation, etc.), the impact of adherence to municipal planning documents, wildlife, species at risk, air quality impacts, recreational or tourism impacts, impacts to existing or anticipated resource development, wetlands, native grasslands, watersheds and water quality impacts, and surface management.

OP16) Discuss the applicant's alignment, or efforts to align, with Alberta's Land-use Framework and the economic, orderly and efficient development of industrial facilities including efficient land use principles.

Emergency response plan

OP17) ~~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.

OP18) ~~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.

OP19) ~~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.

Municipal land use information

OP20) Confirm whether the proposed project area complies with the applicable municipal planning documents including municipal development plans, intermunicipal development plans, area structure plans, land use bylaws (including applicable setbacks) and other municipal bylaws.

Identify any instances where the proposed project area does not comply with applicable municipal planning documents and provide a justification for any non-compliance.

OP21) Provide the current land use zoning for the proposed project area. If applicable, provide the land use amendment and/or development permit status for the proposed project area.

Environmental information

The Commission does not require applicants to submit confidential information such as the exact location of nests to meet these requirements. If applicants are directed to file confidential information on the record, they should follow the process specified in the "Confidential filings" section of Rule 001: Rules of Practice.

OP22) ~~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 (NOx), sulphur dioxide (SO2), 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.

OP23) ~~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.

OP24) ~~OP18)~~ Provide a summary of feedback received to date from AEPA addressing the environmental aspects of the project and any mitigation measures and monitoring activities recommended by AEPA.

OP25) ~~OP19)~~ Provide ~~a copy of~~ the emissions modelling report that was prepared for the *Environmental Protection and Enhancement Act* application to AEPA, if applicable.

OP26) ~~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. Provide all definitions and standards (i.e., *Alberta Wetland Identification and Delineation Directive*) used to prepare this description.

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

- Identify and describe the project activities and infrastructure that may adversely affect the environment. Include a description and the area (hectares) of permanent and temporary project activities and infrastructure.

- 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.

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 any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.

- List the key environmental regulations and guidelines applicable to the project and provide rationale for any deviations from the guidelines.

- List the qualifications of, or provide a CV for, the individual ~~or individual~~(s) who conducted or oversaw the environmental evaluation~~.~~ and indicate the respective practice areas, practice standards or standards of competence demonstrated by these individuals.

OP27) ~~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.~~ If not contained within the impact analysis, include information describing all potential environmental effects of the project. 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.

OP28) ~~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.

Visual impact assessment

OP29) If the project is located within a buffer zone or a visual impact assessment zone, as defined in Schedule 2 and Schedule 3 of the *Electric Energy Land Use and Visual Assessment Regulation* and in the *Pristine Viewscapes and Visual Impact Assessment Zones map*, submit a visual impact assessment. The visual impact assessment must include:

- An evaluation of the anticipated visual impacts on the buffer zone or visual impact assessment zone.
- Visual simulations from key vantage points illustrating the potential visual impact of the project.
- Key vantage points should include locations with viewscapes determined to have a major or major/moderate severity of impact ranking in the visual impact assessment. If desired, visual simulations may also be provided for other viewpoints in the project area so that a range of views at different distances and in different landscapes may be presented. Some of these additional visual simulations can include viewpoints from nearby residences.

- Visual simulations must include an accurate representation of the viewscape:
    - Before project construction has commenced.
    - After project construction has been completed, but without any mitigation measures implemented.
    - After project construction has been completed, and any proposed mitigation measures have been implemented.
- The visual simulations should include an explanation of how they were prepared, how they are to be viewed, and what was done to ensure they were prepared accurately. A map must be provided that shows the location and direction of each visual simulation.
- Proposed mitigation measures to minimize or offset any adverse visual effects on the buffer zone or visual impact assessment zone.
- Where mitigation is proposed, describe the mitigation measures that will be implemented, including their location, predicted effectiveness during the project's full life cycle and whether the mitigation measures have been discussed with adjacent landowners. If vegetation screening is planned, confirm that the final plan has also been or will be discussed with local authorities.

End-of-life management and reclamation security

OP30) ~~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~~Submit 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*. The plan should include a description of key roles and responsibilities, timelines for subsequent site assessments, and preliminary plans for decommissioning, salvage and reclamation.

OP31) Describe the reclamation security plan for the proposed power plant. The plan should include:

- A cost estimate prepared by a third party which describes the estimated costs of reclaiming the proposed project.
- Confirmation that the operator will have sufficient funds at the project end of life to meet its reclamation security plan.

- How the amount of the reclamation security will be calculated.
- The year of initial posting and when each subsequent amount will be added.
- The frequency with which the reclamation security estimate will be updated or re-assessed.
- What form the reclamation security will take (e.g., letter of credit, surety bond, other). Include an explanation of why the form of security was selected, having regard to its attributes and priority in bankruptcy, including how the secured party would be able to realize on the reclamation security should the project owner and operator be in default.
- The security beneficiaries to whom the reclamation security will be committed.
- When and how the beneficiary can access the security and any constraints on such access.
- The estimated salvage value of project components, including any supporting calculations and assumptions used to substantiate the salvage value.
- The standard to which the project site will be reclaimed upon decommissioning.

Noise

OP32) ~~OP24)~~ Provide a noise impact assessment in accordance with Rule 012. If mitigation measures are recommended in the assessment, confirm the mitigation measures the applicant will implement.

OP33) Confirm that the applicant will comply with the construction noise requirements in Section 2.10 of Rule 012 or explain why it is not feasible or practical to implement them.

Approvals, reports and assessments from other agencies

OP34) ~~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.

OP35) ~~OP26)~~ Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a *Historical Resources Act* approval has been obtained, provide a copy of it. 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.

OP36) ~~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.g., *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

OP37) ~~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).

OP38) ~~OP29)~~ List all ~~occupants, residents and landowners on landspersons~~ 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 notified or consulted as part of the participant involvement program.

Table 4.~~79~~: Notification and consultation radi~~us~~ for other 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

OP39) ~~OP30)~~ Supply a list of contact information for all persons ~~who had been contacted as part of the participant involvement program~~listed in OP38 in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

OP40) ~~OP31)~~ Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

OP41) As described in Section 6.3 of Appendix A1, confirm that the municipal engagement form was provided to the applicable municipality to complete for a minimum of 30 days, before filing the application. If the municipality completed the municipal engagement form, provide this form. If the municipality declined to complete the municipal engagement form, confirm what steps were taken to follow up with the municipality, including submitting copies of correspondence.

OP42) Describe how the applicant engaged with applicable municipalities to modify the proposed power plant or to mitigate any of its potential adverse impacts to the municipality, prior to filing the application.

OP43) ~~OP32)~~ Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person that,~~ includes the following information:

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.

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

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~~before 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~~10: 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. Confirm that the ISO has no concerns with the change.
Extent of land use disturbance located within the approved power plant project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) located within the approved power plant 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 Protected Areas' minimum setbacks for wildlife habitat features~~; or, any encroachments into Alberta Environment and Protected Areas' 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 Protected Areas' minimum setbacks for wildlife habitat features; or~~,~~ any encroachments into Alberta Environment and Protected Areas' minimum setbacks for ~~permanent~~ class III (seasonal) or above wetlands ha~~s~~ve not increased over what ~~was~~ 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 that will be implemented to ensure that permissible sound levels will be met.
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.	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. Confirm that there are no unresolved objections to the project arising from the final project update.
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~~ Also provide a Keyhole Markup Language (.kml/.kmz) file that contains the geospatial data of each major component as explained in OP5.

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~~10 but do not have potential adverse impacts on the environment or any person, 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~~10 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.

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

Hydro development applications are made pursuant to ~~s~~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*.

4.7.1 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 hydroelectric 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 hydroelectric 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 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 4.7.2. An applicant must submit a final project update to the Commission at least 90 days before the start of construction, in accordance with the requirements set out in subsection 4.7.3.

~~4.7.1~~4.7.2 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 reflects the information shown on the drawings and maps submitted to address information requirement HE6.The file should contain~~s~~ the geospatial~~graphic~~ data (geometry, location and attributes) 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~~See the glossary definition for .kml/.kmz files for detailed specifications.

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~~ project boundary.

ii. Legible maps showing:

- The proposed hydro development ~~site~~ project boundary.
- Land ownership of surrounding lands, including any residences and dwellings within the notification and consultation radii~~us~~ 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.

HE8) Describe any public benefits that will be generated by the proposed project.

Project connection

~~HE8)~~HE9) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted, if available.

~~HE9)~~HE10) 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)~~HE11) 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.

Cumulative effects

HE12) Confirm whether the applicant is aware of other existing developments in the project area that could cumulatively affect the rural setting/landscape due to their proximity and/or number.

HE13) Discuss any potential positive or negative cumulative social, economic or environmental impacts or effects that may occur considering the proposed project, existing developments and any other currently planned developments. This discussion may include, but is not limited to, any economic spinoffs, community and employment benefits, visual impacts, proliferation, land fragmentation (including fragmentation of agricultural uses, wildlife habitat fragmentation, etc.), the impact of adherence to municipal planning documents, wildlife, species at risk, air quality impacts, recreational or tourism impacts, impacts to existing or anticipated resource development, wetlands, native grasslands, watersheds and water quality impacts, and surface management.

HE14) Discuss the applicant's alignment, or efforts to align, with Alberta's Land-use Framework and the economic, orderly and efficient development of industrial facilities including efficient land use principles.

Emergency response plan

~~HE11)~~HE15) 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)~~HE16) 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.

HE17) ~~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.

Municipal land use information

HE18) Confirm whether the proposed project area complies with the applicable municipal planning documents including municipal development plans, intermunicipal development plans, area structure plans, land use bylaws (including applicable setbacks) and other municipal bylaws.

Identify any instances where the proposed project area does not comply with applicable municipal planning documents and provide a justification for any non-compliance.

HE19) Provide the current land use zoning for the proposed project area. If applicable, provide the land use amendment and/or development permit status for the proposed project area.

Environmental information

The Commission does not require applicants to submit confidential information such as the exact location of nests to meet these requirements. If applicants are directed to file confidential information on the record, they should follow the process specified in the "Confidential filings" section of Rule 001: Rules of Practice.

HE20) ~~HE14)~~ Provide a summary of feedback received to date from AEPA addressing the environmental aspects of the project and any mitigation measures and monitoring activities recommended by AEPA.

HE21) ~~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. Provide all definitions and standards (i.e., *Alberta Wetland Identification and Delineation Directive*) used to prepare this description.

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

- Identify and describe the project activities and infrastructure that may adversely affect the environment. Include a description and the area (hectares) of permanent and temporary project activities and infrastructure.
- 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.

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 any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the key environmental regulations and guidelines applicable to the project and provide rationale for any deviations from the guidelines.

- List the qualifications of, or provide a CV for, the individual(s) ~~or individuals~~ who conducted or oversaw the environmental evaluation~~.~~ and indicate the respective practice areas, practice standards or standards of competence demonstrated by these individuals.

HE22) ~~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.

HE23) ~~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.~~ If not contained within the impact analysis, include information describing all potential environmental effects of the project. 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.

Visual impact assessment

HE24) If the project is located within a buffer zone or a visual impact assessment zone, as defined in Schedule 2 and Schedule 3 of the *Electric Energy Land Use and Visual Assessment Regulation* and in the *Pristine Viewscapes and Visual Impact Assessment Zones map*, submit a visual impact assessment. The visual impact assessment must include:

- An evaluation of the anticipated visual impacts on the buffer zone or visual impact assessment zone.
- Visual simulations from key vantage points illustrating the potential visual impact of the project.
- Key vantage points should include locations with viewscapes determined to have a major or major/moderate severity of impact ranking in the visual impact assessment. If desired, visual simulations may also be provided for other viewpoints in the

project area so that a range of views at different distances and in different landscapes may be presented. Some of these additional visual simulations can include viewpoints from nearby residences.

- Visual simulations must include an accurate representation of the viewscape:
  - Before project construction has commenced.
  - After project construction has been completed, but without any mitigation measures implemented.
  - After project construction has been completed, and any proposed mitigation measures have been implemented.
- The visual simulations should include an explanation of how they were prepared, how they are to be viewed, and what was done to ensure they were prepared accurately. A map must be provided that shows the location and direction of each visual simulation.
- Proposed mitigation measures to minimize or offset any adverse visual effects on the buffer zone or visual impact assessment zone.
- Where mitigation is proposed, describe the mitigation measures that will be implemented, including their location, predicted effectiveness during the project's full life cycle and whether the mitigation measures have been discussed with adjacent landowners. If vegetation screening is planned, confirm that the final plan has also been discussed or will be discussed with local authorities.

End-of-life management and reclamation security

HE25) Submit 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*. The plan should include a description of key roles and responsibilities, timelines for subsequent site assessments, and preliminary plans for decommissioning, salvage and reclamation.

HE26) ~~HE18)~~ Describe the reclamation security plan for the proposed power plant. The plan should include~~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.~~:

- A cost estimate prepared by a third party which describes the estimated costs of reclaiming the proposed project.
- Confirmation that the operator will have sufficient funds at the project end of life to meet its reclamation security plan.
- How the amount of the reclamation security will be calculated.
- The year of initial posting and when each subsequent amount will be added.
- The frequency with which the reclamation security estimate will be updated or re-assessed.
- What form the reclamation security will take (e.g., letter of credit, surety bond, other). Include an explanation of why the form of security was selected, having regard to its attributes and priority in bankruptcy, including how the secured party would be able to realize on the reclamation security should the project owner and operator be in default.
- The security beneficiaries to whom the reclamation security will be committed.
- When and how the beneficiary can access the security and any constraints on such access.
- The estimated salvage value of project components, including any supporting calculations and assumptions used to substantiate the salvage value.
- The standard to which the project site will be reclaimed upon decommissioning.

Noise

HE27) ~~HE19)~~ Provide a noise impact assessment in accordance with Rule 012. If mitigation measures are recommended in the assessment, confirm the mitigation measures the applicant will implement.

HE28) Confirm that the applicant will comply with the construction noise requirements in Section 2.10 of Rule 012 or explain why it is not feasible or practical to implement them.

Approvals, reports and assessments from other agencies

HE29) ~~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.

HE30) ~~HE21)~~ Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a *Historical Resources Act* approval has been obtained, provide a copy of it. 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.

HE31) ~~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.g., *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

HE32) ~~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.)

HE33) ~~HE24)~~ List all ~~occupants, residents and landowners on~~ landspersons 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 notified or consulted as part of the participant involvement program.

Table 4.~~9~~11: Notification and consultation radi~~us~~ 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.

HE34) ~~HE25)~~ Supply a list of contact information for all persons listed in HE33 ~~who had been contacted as part of the participant involvement program~~ in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

HE35) ~~HE26)~~ Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

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.

HE36) As described in Section 6.3 of Appendix A1, confirm that the municipal engagement form was provided to the applicable municipality to complete for a minimum of 30 days, before filing the application. If the municipality completed the municipal engagement form, provide this form. If the municipality declined to complete the municipal engagement form, confirm what steps were taken to follow up with the municipality, including submitting copies of correspondence.

HE37) Describe how the applicant engaged with applicable municipalities to modify the proposed power plant or to mitigate any of its potential adverse impacts to the municipality, prior to filing the application.

HE38) ~~HE27)~~ Provide a feedback summary table to ~~I~~identify all persons who expressed a concern(s) about the project~~. For each person,~~ that includes the following information:

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

Community generation

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

4.7.3 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 hydroelectric 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 before the start of construction. The allowances and requirements for a final project update are outlined below.

For hydroelectric 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 Hydroelectric 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 4.12: Final project update for Hydroelectric 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 by more than 10 per cent or 10 MW, whichever is less.	Confirm total capability of power plant in MW. Confirm that the ISO has no concerns with the change.
Extent of land use disturbance located within the approved power plant project boundary.	May increase or decrease.	Confirm extent of land use disturbance (in hectares) located within the approved power plant project boundary.

Total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Protected Areas' minimum setbacks for wildlife habitat features	Cannot increase.	Confirm total disturbance (in hectares) to native grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Protected Areas' minimum setbacks for wildlife habitat features; or any encroachments into Alberta Environment and Protected Areas' minimum setbacks for class III (seasonal) or above 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 that will be 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 under Rule 012, there cannot be any unresolved objections to the project arising from the final project update.	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. Confirm that there are no unresolved objections to the project arising from the final project update.
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 that contains the geospatial data of each major component as explained in HE5.

Letter of enquiry

If an applicant is making minor alterations to an existing or approved but not yet constructed hydroelectric power plant that exceed the final project update allowances set out in Table 4.12 but do not have potential adverse impacts on the environment or any person, 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 hydroelectric power plant that exceed the final project update allowances outlined in Table 4.12 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 4.7.2.

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 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.

- 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 3(3) of that regulation.

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.

Projects will be granted up to seven years to finish construction - this does not mean every project will be granted seven years as a matter of course. Applicants are expected to provide an estimated construction completion date along with rationale for the requested date.

5.1 Initial period to construct

From the power plant's initial approval date, applicants will have up to seven years to finish construction, absent unusual or extraordinary circumstances.

After the seven-year period to construct has passed, if a power plant has not been completed, applicants must file a new power plant application.

Time extension requests of short duration beyond that seven-year period will only be available in limited and exceptional circumstances. This may include situations where substantial progress has been made toward the completion of construction but a limited delay is required due to circumstances outside the proponent's control (e.g., a flaw is discovered in equipment requiring it to be re-ordered, or a new environmental feature is discovered requiring the avoidance of construction during a restricted activity period). The AUC emphasizes the limited nature of these exceptions and cautions parties not to expect timelines to construct longer than seven years in the normal course.

~~5.1~~5.2 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~~before 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.

If mitigation measures are recommended in the assessment, provide a statement in the application confirming the measures the applicant proposes to implement.

TEP4) Confirm that the applicant will implement the construction noise mitigation measures outlined in Section 2.10 of Rule 012, or explain why it is not feasible or practical to implement any of these construction noise mitigation measures.

TEP5) ~~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.

TEP6) ~~TEP5)~~ Supply a list of contact information for all persons who were contacted as part of the participant involvement program in an Excel spreadsheet in accordance with the template included in Section 9 of Appendix A1 – Participant involvement program guidelines.

TEP7) ~~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 Protected Areas ~~(AEPA)~~ Fish and Wildlife Stewardship (AEPA-FWS), 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.

TEP8) ~~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.

TEP9) ~~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.

TEP10) ~~TEP9)~~ Provide any available updates on outstanding directions associated with the existing approvals.

TEP11) Provide the initial approval date of the power plant and confirm that the requested construction completion date is within seven years of the initial approval date.

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*. Application requirements for those units are found in Section 9.1 of this rule.

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 $15 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~~before 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.g., 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~~before 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

Where an energy storage facility is proposed in a needs identification document application, please provide the information required from NID1 to NID6, where applicable.

in the NID application. If a facility application is not filed concurrently with a NID application, explain how stakeholders were contacted and supply a postal code drop list or a list of contact information for all persons contacted as part of the participant involvement program in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

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~~shortened to "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~~before 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~~before 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 power plant or energy storage facility is also part of the proposed development, a separate application must be added in eFiling before registering the 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 and use of structure guy wire anchors; 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, including only transmission-level equipment (equipment equal to or greater than 69 kV) 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~~the methodology for routing/siting the proposed transmission facility, including the principles and criteria used in identifying and assessing routes/sites, and how information and stakeholder feedback was incorporated.~~alternatives to the proposal, and compare the relative effects (environmental, social and economic, including any associated distribution costs) of these alternatives with the proposal.~~

TS17) Describe the process used for routing/siting the proposed transmission facility, including identification of a study area, preliminary route/site identification, subsequent route/site revisions, and selection of final route(s)/site(s). Provide rationale for siting decisions, such as adding, modifying or removing route(s)/site(s).

TS18) Identify the preferred proposed transmission facility route/site and provide quantitative (e.g., metric tables) and qualitative descriptions of the potential effects and comparisons to any other proposed routes/sites. If the route alternatives are segmented, include a comparison of the effects of each segment to the effects of its corresponding alternative segments.

~~TS17)~~TS19) 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 items and the fenced boundary of the substation, with units of measure/scale.

~~TS18)~~TS20) Discuss the construction schedule, equipment and method of construction, and method of eventual right-of-way maintenance.

~~TS19)~~TS21) 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)~~TS22) 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)~~TS23) 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.
- Consultation and notification radius boundaries described in Appendix A1 – Participant involvement program guidelines, Table A1-1: Electric facility application notification and consultation requirements.

iii. Legible maps and air photo mosaics upon which the proposed transmission line route(s) and/or substation site(s) have been imposed and showing the residences, landowner names, and major land use and resource features along the route(s) and/or adjacent to the substation site(s) (e.g., agricultural crops or pasture, topography, soil type, existing land use, existing rights-of-way, aerodromes, telecommunication towers, 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~~A legible transmission facilities structure and cross-section drawing series showing the dimensions or range of dimensions for each of the following~~.~~:

- Proposed right-of-way width.
- Proposed structure type.
- Proposed structure height and width.
- Proposed transmission line conductor height.
- Maximum equipment height restriction associated with line clearances in question

TS24) ~~TS22)~~ Provide a Keyhole Markup Language (.kml/.kmz) file that reflects the information shown on the drawings and maps submitted to address information requirement TS23. ~~that~~ The file should contain~~s~~ the geospatial~~graphic~~ data (geometry, location and attributes) of each of the major components. See the glossary definition for .kml/.kmz files for detailed specifications ~~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~~.

TS25) ~~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

The Commission does not require applicants to submit confidential information such as the exact location of nests to meet these requirements. If applicants are directed to file confidential information on the record, they should follow the process specified in the "Confidential filings" section of Rule 001: Rules of Practice.

TS26) ~~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. Provide all definitions and standards (i.e., *Alberta Wetland Identification and Delineation Directive*) used to prepare this description.

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

- 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 Protected Areas (AEPA) guidelines if applicable. Include a description and the area (hectares) of permanent and temporary project activities and infrastructure.

- 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.

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 any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.

- List the key environmental regulations and guidelines applicable to the project and provide rationale for any deviations from the guidelines.

- List the qualifications of, or provide a CV for, the individual(s) who conducted or oversaw the environmental evaluation and indicate the respective practice areas, practice standards or standards of competence demonstrated by these individuals.

- 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 historical, archaeological or paleontological sites) for each route in a table with stated units (~~kilometre, total number,~~ length, area, count, 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.~~

- Provide a legible environmental map series with air photo mosaics showing:

  - The proposed transmission facilities including centrelines, right-of-ways, site boundaries, fence boundaries, temporary/permanent workspace areas, and/or access roads.

  - Relevant topography, soil type, environmental features, wildlife and aquatic habitat, ecological communities, environmentally sensitive areas, protected areas and designations present in the local study area.

- 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.

TS27) ~~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~~If not contained within the impact analysis, include information describing all potential environmental effects of the project. 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.

TS28) ~~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.

TS29) ~~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

TS30) ~~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. If mitigation measures are recommended in the assessment, confirm the mitigation measures the applicant will implement.

Confirm in the application that the applicant will implement the construction noise mitigation measures outlined in Section 2.10 of Rule 012, or explain why it is not feasible or practical to implement any of these construction noise mitigation measures.

TS31) Confirm that the applicant will comply with the construction noise requirements in Section 2.10 of Rule 012 or explain why it is not feasible or practical to implement them.

Approvals from other agencies

TS32) ~~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.

TS33) ~~TS30)~~ For the preferred route and possible alternatives, applicants must provide a summary of feedback received to date from AEPA (including the local wildlife biologist of AEPA) addressing the environmental aspects of the project, and confirmation that AEPA is satisfied with any proposed mitigation measures and monitoring activities, or identify any unresolved project aspects where agreement with AEPA was not achieved.

TS34) ~~TS31)~~ Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a *Historical Resources Act* approval has been obtained, provide a copy of it. 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~~.~~ site.

TS35) If the government of Alberta, through the Aboriginal Consultation Office (ACO) or otherwise, directed consultation with an Indigenous group for related approvals (e.g., *Public Lands Act*, *Water Act*, *Environmental Protection and Enhancement Act*, *Historical Resources Act*, *Government Organization Act*) the applicant must provide 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 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.

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

Participant involvement program

TS36) ~~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).

TS37) ~~TS33)~~ List all ~~occupants, residents and landowners~~persons 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.

TS38) ~~TS34)~~ Supply a list of contact information for all persons listed in TS37 ~~who had been contacted as part of the participant involvement program~~ in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

TS39) ~~TS35)~~ Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

TS40) ~~TS36)~~ Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~.~~ that ~~For each person,~~ includes the following information:

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

Economic assessment

TS41) ~~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.

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.

Market participant choice

TS42) ~~TS38) In addition to the above, i~~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.

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~~before energization.

- 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 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~~before 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.

~~Energy storage facility~~

~~TS39) If an energy storage facility is to be constructed and operated as part of a transmission line, the applicant must also submit the information specified in Section 10.~~

~~TS40) An applicant seeking to construct and operate an energy storage facility as part of a transmission line must provide the approval number for the associated needs identification document application.~~

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. If the amendment is related to an energy storage facility that is to be constructed and operated as part of a transmission line, applications must include the information outlined in subsection 10.4 as applicable.

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~~checklist 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 of an individual or small number of transmission structures with no change to the transmission line's approved right-of-way. A marginal increase, up to 25 per cent, from the height of the existing structure, or adjustment of final structure placement by up to 5 metres side-to-side within the right-of-way is allowable.
- 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.

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~~ facilities 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~~.

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.

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. 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 time extension for a transmission facility.

If a time extension is related to an energy storage facility that is to be constructed and operated as part of a transmission line, applications must include the information outlined in subsection 10.7 as applicable.

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. If the decommission and salvage is related to an energy storage facility that is to be constructed and operated as part of a transmission line, applications must include the information outlined in subsection 10.5 as applicable.

An application to cancel a transmission facility permit and licence must include the information outlined in subsection 9.2. If the cancellation is related to an energy storage facility that is to be constructed and operated as part of a transmission line, applications must include the information outlined in subsection 10.6 as applicable.

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 accordance~~lignment~~ with any clean up and reclamation plan in place.

DST5) Provide a cost estimate and the schedule for the decommission and 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~~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).

DST7) List all persons within the appropriate notification radius as described in Appendix A1 – Participant involvement program guidelines, as well as Indigenous groups, owners of aerodromes or other interested persons that were notified or consulted as part of the participant involvement program.

DST8) Supply a list of contact information for all persons listed in DST7 in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

DST9) Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties,). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

DST10) ~~DST7)~~ Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person,~~that includes the following information:

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

DST11) Provide a Keyhole Markup Language (.kml/.kmz) file that contains the geographic data of the proposed decommission and salvage locations of transmission lines. See the glossary definition for .kml/.kmz files for detailed specifications.

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 and connection order number (if applicable) to be cancelled.

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

CT3) Provide a letter from the ISO endorsing the cancellation.

CT4) 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.

CT5) If any work on the construction of the transmission line or substation has been started, describe how the site will be reclaimed.

CT6) 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 Energy storage facilities

If an applicant is applying to construct and operate a new energy storage facility or to alter an approved energy storage facility, the application must include the information requirements listed in subsection 10.3 or 10.4.

The applicant for a pumped hydro energy storage facility should also submit information required under Section 4.7 Hydroelectric power plants and hydro developments.

If a substation, power plant or connection to the Alberta Interconnected Electric System~~order~~ is also part of the project, a separate ~~interconnection~~ application form for each component should be added to the proceeding in eFiling ~~prior to~~before registering the proceeding.

10.1 Energy storage facility as part of an electric distribution system

If an energy storage facility is to be constructed and operated as part of an electric distribution system, in addition to the information requirements ~~ES1 to ES32~~ in subsection 10.~~3~~4, the applicant must provide information demonstrating that:

- it is not able to competitively procure non-wires services;
- there is only one provider of a non-wires service available;
- competitively procuring non-wires services is not economic; or
- the proposed use of an energy storage facility would provide superior safety and reliability to the electric distribution system.

The following types of ownership may apply to an energy storage facility:

Merchant - Private ownership with ~~unlimited~~ full market participation. An application should be made under Section 13.01(1) of the *Hydro and Electric Energy Act*.

Distribution facility owner (DFO) – Requires certain DFO-specific criteria to be met and no market participation. An application should be made under Section 25.1 of the *Hydro and Electric Energy Act*.

Transmission facility owner– Requires an approved needs identification document application and no market participation. An application should be made under sections 14 and 15 of the *Hydro and Electric Energy Act*.

10.2 Exemption

If the energy storage facility is less than one MW, the owner may proceed without filing an application if the requirements of subsection 3(3) of the *Hydro and Electric Energy Regulation* are met.

10.3 Energy storage facility information requirements

Please use the *Energy storage facility application form* to assemble the information requirements for the project. Energy storage facility is abbreviated as ES below.

Project description

ES1) State the approvals that are being applied for from the AUC.

ES2) Provide the total capability in MW and storage capacity in megawatt hour (MWh) of the project.

ES3) Describe where the proposed energy storage facility is charged from and discharged to.

ES4) Summarize the discussions held with the ISO, transmission facility owner, and/or distribution facility owner regarding the interconnection of the proposed energy storage facility, including any concerns indicated and solutions proposed.

ES5) Provide a single-line diagram for the project including the metering points for the proposed project.

ES6) Describe the recycling plan, based on current regulations, for the energy 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.

ES7) Provide a list of existing approvals for facilities directly affected by this project, if any.

ES8) 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.

ES9) Provide documentation confirming compliance with Section 95 of the *Electric Utilities Act*, if applicable.

ES10) 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 reflects the information shown on the drawings and maps submitted to address information

requirement ES11. The file should contains the geospatialgraphic data (geometry, location and attributes) for of 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 ES11See the glossary definition for .kml/.kmz files for detailed specifications.

ES11) 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 and consultation radiius 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.

ES12) 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.

ES13) Describe any public benefits that will be generated by the proposed project.

Project connection

~~ES13)~~ES14) If a connection order is not concurrently being applied for, provide the expected date when the connection order application will be submitted, if available.

~~ES14)~~ES15) 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.

~~ES15)~~ES16) If the energy 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 energy storage facility to the Alberta Interconnected Electric System.

While detailed routing information may not always be available at the power plant application stage, applicants should make best efforts to identify conceptual routes.

If the energy 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 energy storage facilities.

Cumulative effects

ES17) Confirm whether the applicant is aware of other existing developments in the project area that could cumulatively affect the rural setting/landscape due to their proximity and/or number.

ES18) Discuss any potential positive or negative cumulative social, economic or environmental impacts or effects that may occur considering the proposed project, existing developments and any other currently planned developments. This discussion may include, but is not limited to, any economic spinoffs, community and employment benefits, visual impacts, proliferation, land fragmentation (including fragmentation of agricultural uses, wildlife habitat fragmentation, etc.), the impact of adherence to municipal planning documents, wildlife, species at risk, air quality impacts, recreational or tourism impacts, impacts to existing or anticipated resource development, wetlands, native grasslands, watersheds and water quality impacts, and surface management.

ES19) Discuss the applicant's alignment, or efforts to align, with Alberta's Land-use Framework and the economic, orderly and efficient development of industrial facilities including efficient land use principles.

Emergency response plan

~~ES16)~~ES20) Confirm the applicant has or will have a corporate or site-specific emergency response plan for the construction and operation of the proposed energy storage 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.

~~ES17)~~ES21) 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.

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.

ES22) Describe the location and the extent of available capacity of the emergency responders to address an emergency

ES23) 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.

ES24) Describe how the applicant will continually update and improve its emergency response program including the site-specific emergency response plans during construction and through the life of the project. Include how the applicant plans to continue to solicit, consider and incorporate input from local fire departments and nearby landowners/residents.

ES25) Confirm that the site-specific response plan will be finalized two months prior to construction commencement.

ES26) ~~ES18)~~ 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.

Additional requirements for battery energy storage facilities

ES27) Describe the selected or proposed battery chemistry, for example, Nickel Manganese Cobalt (NMC) or Lithium Iron Phosphate (LFP).

ES28) Provide the name of the vendor if available.

ES29) Explain the systems that will be used by the applicant to monitor the site and what will be monitored for example, 24/7 remote monitoring, mechanism to trigger a protection mode for isolation, the use of infrared cameras or smoke detectors.

ES30) Submit a report that provides air quality dispersion modelling and a risk assessment using the best available information on the battery type to be used (e.g., select the characteristics of the most likely or most representative choice of battery vendor). The report should include, but is not limited to:

- The assumptions and methodologies used in the modelling.
- The chemistry and toxicity of the emissions to adjacent residents and animals at the closest residence and the proposed project boundary.
- A map or visual depiction illustrating the conclusions of the report.
- The credentials and qualifications of the individual(s) who performed the modelling and prepared the report.
- Describe what training (initial and ongoing) will be provided to emergency responders and indicate whether the emergency responders have requested training.
- The mitigation measures that should be included in the site-specific emergency response plan.

ES31) Confirm that the proposed battery storage system complies with the most recent version of CSA/ANSI C800:25 Testing protocol for energy storage system reliability and quality assurance program and/or National Fire Protection Association (NFPA) 855 Standard for the Installation of Stationary Energy Storage.

ES32) Describe how the applicant plans to continually implement ongoing upgrades to improve the safety of the project, including but not limited to firmware and software enhancements, monitoring capability enhancements, process changes and safety standards as they are developed.

ES33) Provide a preliminary site-specific emergency response plan that, at a minimum:

- Incorporates the vendor specific procedures that are set out related to emergency response.
- Describes the proposed fire extinguishing agent, fire-fighting approach and any signage or instructions that will be proposed at the site to warn passing by persons.
- Describes who, in the event of a fire, will undertake third party air monitoring, what will be monitored and how the monitoring will be conducted

Municipal land use information

ES34) Confirm whether the proposed energy storage facility complies with the applicable municipal planning documents including municipal development plans, intermunicipal development plans, area structure plans, land use bylaws (including applicable setbacks) and other municipal bylaws.

Identify any instances where the proposed energy storage facility does not comply with applicable municipal planning documents and provide a justification for any non-compliance.

ES35) Provide the current land use zoning for the proposed energy storage facility. If applicable, provide the land use amendment and/or development permit status for the proposed energy storage facility.

Environmental information

The Commission does not require applicants to submit confidential information such as the exact location of nests to meet these requirements. If applicants are directed to file confidential information on the record, they should follow the process specified in the "Confidential filings" section of Rule 001: Rules of Practice.

ES36) ~~ES19)~~ Provide a summary of feedback received to date from AEPA addressing the environmental aspects of the project and any

mitigation measures and monitoring activities recommended by AEPA.

ES37) ~~ES20)~~ 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. Provide all definitions and standards (i.e., *Alberta Wetland Identification and Delineation Directive*) used to prepare this description.
- Identify and describe the project activities and infrastructure that may adversely affect the environment. Include a description and the area (hectares) of permanent and temporary project activities and infrastructure.
- 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 key environmental regulations and guidelines applicable to the project and provide rationale for any deviations from the guidelines.

- List the qualifications of, or provide a CV for, the individual(s) ~~or individuals~~ who conducted or oversaw the environmental evaluation and indicate the respective practice areas, practice standards or standards of competence demonstrated by these individuals.

ES38) ~~ES21)~~ 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. If not contained within the impact analysis, include information describing all potential environmental effects of the project~~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*.

ES39) ~~ES22)~~ 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 and reclamation security

ES40) ~~ES23) 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~~Describe the reclamation security plan for the proposed power plant. The plan should include~~.~~:

- A cost estimate report prepared by a third party which describes the estimated costs of reclaiming the proposed project.
- Confirmation that the operator will have sufficient funds at the project end of life to meet its reclamation security plan.
- How the amount of the reclamation security will be calculated.
- The year of initial posting and when each subsequent amount will be added.

- The frequency with which the reclamation security estimate will be updated or re-assessed.

- What form the reclamation security will take (e.g., letter of credit, surety bond, other). Include an explanation of why the form of security was selected, having regard to its attributes and priority in bankruptcy, including how the secured party would be able to realize on the reclamation security should the project owner and operator be in default.

- The security beneficiaries to whom the reclamation security will be committed.

- When and how the beneficiary can access the security and any constraints on such access.

- The estimated salvage value of project components, including any supporting calculations and assumptions used to substantiate the salvage value.

- The standard to which the project site will be reclaimed upon decommissioning.

Noise

ES41) ~~ES24)~~ Provide a noise impact assessment in accordance with Rule 012. If mitigation measures are recommended in the assessment, confirm the mitigation measures the applicant will implement.

ES42) Confirm that the applicant will comply with the construction noise requirements in Section 2.10 of Rule 012 or explain why it is not feasible or practical to implement them.

Approvals, reports and assessments from other agencies

ES43) ~~ES25)~~ 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.

ES44) ~~ES26)~~ Confirm that a *Historical Resources Act* approval has been obtained or has been applied for. If a *Historical Resources Act* approval has been obtained, provide a copy of it. 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.

ES45) ~~ES27)~~ If the government of Alberta, through the Aboriginal Consultation Office (ACO) or otherwise, directed consultation with an Indigenous group for related approvals (~~i.~~e.g., *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

ES46) ~~ES28)~~ 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).

ES47) ~~ES29)~~ List all ~~occupants, residents and landowners on landspersons~~ 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 notified or consulted as part of the participant involvement program.

Table 10.1: Notification and consultation radius for energy storage facilities

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

ES48) ~~ES30)~~ Supply a list of contact information for all persons listed in ES47 ~~who had been contacted as part of the participant involvement program~~ in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

ES49) ~~ES31)~~ Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

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.

ES50) As described in Section 6.3 of Appendix A1, confirm that the municipal engagement form was provided to the applicable municipality to complete for a minimum of 30 days, before filing the application. If the municipality completed the municipal engagement form, provide this form. If the municipality declined to complete the municipal engagement form, confirm what steps were taken to follow up with the municipality, including submitting copies of correspondence.

ES51) Describe how the applicant engaged with applicable municipalities to modify the proposed energy storage facility or to mitigate any of its potential adverse impacts to the municipality, before filing the application.

ES52) ~~ES32)~~ Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person,~~that includes the following information:

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

10.4 Amendment process for energy storage facilities

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 energy storage facility 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~~before the start of construction. The allowances and requirements for a final project update are outlined below.

For energy storage 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 *Energy storage facility 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 10.2: Final project update requirements for energy storage facilities

Project element	Allowance relative to approved element	Requirement for project update
Total capability of energy storage facility in MW.	Cannot increase ~~or decrease~~ by more than ~~+/-~~10 per cent or ~~+/-~~10 MW, whichever is less.	Confirm total capability of energy storage facility in MW. Confirm that the ISO has no concerns with the change.
Chemistry of the batteries, where applicable	Cannot change.	Confirm that the selected battery chemistry is the same as approved.
Vendor of the batteries, where applicable	Cannot change.	Confirm that the vendor is the same as approved.
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 grasslands or other types of wildlife habitat, encroachment into Alberta Environment and Protected Areas' minimum setbacks for wildlife habitat features~~; or, any encroachments into Alberta Environment and Protected Areas' 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 Protected Areas' minimum setbacks for wildlife habitat features; or~~,~~ any encroachments into Alberta Environment and Protected Areas' minimum setbacks for class III (seasonal) or above ~~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 that will be 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 under Rule 012, there cannot be any unresolved	Confirm that new or additional notification or consultation either was not required or that it was undertaken. Provide a summary of

Project element	Allowance relative to approved element	Requirement for project update
	objections arising from the final project update.	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 site layout.		Provide a final site drawing and map with the locations and descriptions of the project's major components and the site- boundary, and provide a .kml/.kmz file that contains the geospatial data of each major component as explained in ES10.
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 energy storage facility that exceed the final project update allowances set out in Table 10.2 but do not have potential adverse impacts on the environment or any person, 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 energy storage facility that exceed the final project update allowances outlined in Table 10.2 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 10.~~3~~4.

10.5 Decommission and salvage of energy storage facilities

Please use the Energy storage facility *decommission and salvage application form* to assemble the information requirements if applications to decommission and salvage an energy storage facility are made pursuant to sections 21 or 30(1) of the *Hydro and Electric Energy Act*. Decommission and salvage of energy storage facility is abbreviated as DSES below.

DSE1) Provide the approval of the facility to be decommissioned or salvaged.

DSE2) Provide a letter from the ISO or distribution facility owner endorsing the project.

DSE3) Provide information on the salvage, remediation and reclamation work to be performed; an assessment of contamination; and the legislative requirements or other published guidelines that will be adhered to or considered.

DSE4) Confirm that decommissioning will take place in alignment with any cleanup and reclamation plan in place.

DSE5) Provide a cost estimate and the schedule for the salvage.

DSE6) ~~Confirm that personal notification was provided to occupants, residents, landowners, Indigenous groups and other utilities directly adjacent to the project boundary~~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).

DSE7) Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person,~~ that includes the following information:

- The name and land location of the person(s).
- The specifics of the concern(s).
- Steps taken to resolve the concern(s).
- Whether the concern(s) was resolved.

If notifications to decommission and salvage energy storage facilities are made pursuant to Section 22 of the *Hydro and Electric Energy Act*, the notices should be filed as a letter of enquiry application through the eFiling System.

10.6 Cancellation of energy storage facilities

Please use the *Energy storage facility cancellation form* to assemble the information requirements if the energy storage facility contains an isolating generating unit, is part of a transmission line or electric distribution system. Cancellation of energy storage facility is abbreviated as CES below.

CES1) Provide the approval number to be cancelled.

CES2) Provide the connection order number to be cancelled, if applicable.

CES3) Provide a letter from the ISO or distribution facility owner endorsing the cancellation.

CES4) Describe whether any work on the construction of the energy storage facility has been started, and if so, describe the extent of the work.

CES5) If any work on the construction of the energy storage facility has been started, describe how the site will be reclaimed.

CES6) Confirm that personal notification was provided to occupants, residents, landowners, Indigenous groups, and other utilities directly adjacent to the project boundary.

Cancellation of an approval for an unconstructed energy storage facility that does not contain an isolated generating unit, is not part of a transmission line or electric distribution system does not require an application. Instead, the energy storage facility 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 energy storage facility and provided the reason why the project is being cancelled.

10.7 Time extension applications for energy storage facilities

Projects will be granted up to seven years to finish construction - this does not mean every project will be granted seven years as a matter of course. Applicants are expected to provide an estimated construction completion date along with rationale for the requested date.

10.7.1 Initial period to construct

From the energy storage facility's initial approval date, applicants will up to seven years to finish construction, absent unusual or extraordinary circumstances.

After the seven-year period to construct has passed, if an energy storage facility has not been completed, applicants must file a new energy storage facility application.

Time extension requests of short duration beyond that seven-year period will only be available in limited and exceptional circumstances. This may include situations where substantial progress has been made toward the completion of construction but a limited delay is required due to circumstances outside the proponent's control (e.g. a flaw is discovered in equipment requiring it to be re-ordered, or a new environmental feature is discovered requiring the avoidance of construction during a restricted activity period). The AUC emphasizes the limited nature of these exceptions and cautions parties not to expect timelines to construct longer than seven years in the normal course.

10.7.2 Information requirements

Please use the *Energy storage facility time extension application form* to assemble the information requirements for the project. Time extension application for energy storage facility is abbreviated as TEES below.

TEES1) Provide a list of the existing approvals for facilities affected.

TEES2) Explain whether construction of the approved energy storage facility has commenced. If it has not yet commenced, explain whether it will commence ~~prior to~~before 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.

TEES3) 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.

TEES4) 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.

TEES5) Supply a list of contact information for all persons who were contacted as part of the participant involvement program in an Excel spreadsheet in accordance with the template included in Section 9 of Appendix A1 – Participant involvement program guidelines.

TEES6) Provide confirmation that the project does not require a wildlife survey or that the project wildlife surveys remain current and do not require updating.

TEES7) Confirm that the Alberta Electric System Operator or the distribution facility owner has no concerns with the new construction or alteration completion date.

TEES8) Provide any available updates on outstanding directions associated with the existing approvals.

TEES9) Provide the initial approval date of the energy storage facility and confirm that the requested construction completion date is within seven-years of the initial approval date.

11 Interconnection applications

An application to interconnect a power plant or an energy storage facility 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.

If a power plant, energy storage facility, substation or transmission line is also part of the proposed development being applied for, a separate application form for each component should be added to the proceeding in eFiling before registering the proceeding.

If the proposed development includes multiple components 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 applications.

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) Describe the connection that is being applied for.

~~IC1)~~IC2) Provide a statement that the local distribution facility owner has agreed to the interconnection, the legal land location (included 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

IC3) Describe the connection that is being applied for.

~~IC2)~~IC4) 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 IC~~2~~4 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 a power plant, energy storage facility, substation or transmission line is also part of the project being applied for, a separate application form for each component should be added to the proceeding in eFiling before registering the proceeding.

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 an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

ISD18) Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person,~~ that includes the following information:

- The name and land location of the person(s).
- 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 the *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 a 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 subsections lists ~~s~~ gas utility pipelines, installations and activities that ~~may~~ do 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~~ Exempt 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~~ Exempt 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~~s~~ 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 comparisons 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~~consultation, 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 process~~es~~ 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 scope and associated maximum project cost ~~or scope~~for eligibility. ~~and~~ ~~w~~Where a project falls into two or more categories, the lower threshold applies.

Table 13.1: Abbreviated need thresholds

Project scope	Maximum project cost
New growth projects.	$1,000,000
Pipeline replacement 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~~

~~The category type of a gas utility pipeline is dependent on the pipe diameter and the hydrogen sulphide (H_2S) content of the transported product.~~

~~how the project's design, construction and operational considerations nevertheless address public safety and environmental concerns.~~

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. Also submit a Keyhole Markup Language (.kml/.kmz) file that contains the geospatial data (geometry, location and attributes) of each pipeline segment. See the glossary definition for .kml/.kmz files for detailed specifications.

GU18) Provide the H_2S content in the gas phase in mol/kmol.

GU19) Confirm that the partial pressure of H_2S in the gas phase is less than 0.30 kilopascals. If not, ~~please~~ provide the partial pressure of H_2S in the gas phase.

GU20) Confirm that the project meets all applicable Canadian Standards Association (CSA) Z662 design requirements. This includes confirming 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. If a gas utility is not able to confirm that a 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.

~~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)~~GU21) Confirm that procedures for corrosion mitigation, monitoring, evaluation and record keeping will be implemented ~~prior to~~before operation.

~~GU23)~~GU22) For pipeline installation applications, confirm that piping within the line heater is designed to meet American Society of Mechanical Engineers (ASME) B31.3.

~~GU24)~~GU23) 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)~~GU24) 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_2S in the gas phase is determined by multiplying the mole fraction of H_2S 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)~~GU25) 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

The Commission does not require applicants to submit confidential information such as the exact location of nests to meet these requirements. If applicants are directed to file confidential information on the record, they should follow the process specified in the "Confidential filings" section of Rule 001: Rules of Practice.

~~GU27)~~GU26) 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. Provide all definitions and standards (i.e., *Alberta Wetland Identification and Delineation Directive*) used to prepare this description.

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

- 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 AEPA guidelines if applicable. Include a description and the area (hectares) of permanent and temporary project activities and infrastructure.

- 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, or provide a CV for, the individual(s) who conducted or oversaw the environmental evaluation and indicate the respective practice areas, practice standards or standards of competence demonstrated by these individuals.

> 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.

- 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.).

- 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)~~GU27) 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~~If not contained within the impact analysis, include information describing all potential environmental effects of the project. 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)~~GU28) 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)~~GU29) When nitrogen oxides (NO_x) 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 AEPA *Air Quality Model Guideline*.
- Based on dispersion modelling, indicate whether the predicted NO_2 concentrations will be in compliance with the *Alberta Ambient Air Quality Objectives and Guidelines* using guidance from the AEPA *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 *AEPA Code of Practice for Compressor and Pumping Stations and Sweet Gas Processing Plants*.
- NO_x 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_x emissions.

Noise

~~GU31)~~GU30) Provide a noise impact assessment in accordance with Rule 012. If mitigation measures are recommended in the assessment, confirm the mitigation measures the applicant will implement.

GU31) Confirm that the applicant will comply with the construction noise requirements in Section 2.10 of Rule 012 or explain why it is not feasible or practical to implement them.

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 *Historical Resources Act* approval has been obtained, provide a copy of it. 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~~s~~.

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. For pipeline installations, also provide the distance to the nearest surface development in kilometres.

~~GU37) For pipeline installations, provide the distance to the nearest surface development in kilometres.~~

~~GU38)~~GU37) 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)~~GU38) Supply a list of contact information for all persons who had been contacted as part of the participant involvement program in an Excel spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines.

~~GU40)~~GU39) Summarize consultation with local municipal jurisdictions (e.g., cities, towns, municipal districts, counties). Describe any concerns or requests identified by the local municipality(ies) and steps taken to resolve those concerns or requests.

~~GU41)~~GU40) 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)~~GU41) Provide a feedback summary table to ~~i~~identify all persons who expressed a concern(s) about the project~~. For each person,~~ that includes the following information:

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

Operational and storage requirements

GU42) Confirm in the application that the applicant will comply with the operational and storage requirements set out in sections 13.6 and 13.7 of this rule, as applicable.

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~~before 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 Alberta Energy Regulator, 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~~ application type eligibility ~~and application requirements~~

	Checklist amendment application	Complete amendment application
~~Description~~Scope	• ~~No decision report issued because the a~~Amendments to existing pipelines that reflect~~s~~ record updates due to an error, a review of as-built information or a discontinuation or abandonment notification. • Approval for the amendment or related activity is set out in an earlier decision or the amendment is administrative in nature. • Minimal or no capital cost implications to customers.	• Amendments to existing pipelines that involve ground disturbance and construction activities. • Cost allocation to customers greater than $10,000.
Pipeline amendment application examples	• Record amendments. • Pipeline splits due to as-built review. • Abandonment applications filed within 90 days of completing the abandonment operation. • Low-pressure conversion (also known as deletion). • Maximum operating pressure (MOP) decrease. • Pipeline splits and abandonments requested and paid for by a third party.	• Pipeline removals or partial removals ~~and~~ • Pipeline replacements > 100 metres in length~~projects~~. • Pipeline splits applied for in conjunction with removal and replacement projects. • Maximum operating pressure (MOP) increase. • Compressor addition • Removal of a surface pipeline in operation for more than 21 days, etc. • All other application types not mentioned in checklist amendment application column. ~~including:~~ • ~~compressor addition or removal of a surface pipeline in operation for more than 21 days, etc.~~

	Checklist amendment application	Complete amendment application
~~Application process~~	• ~~An applicant files its application using the eFiling system.~~ • ~~The Commission reviews the application for eligibility for a checklist amendment.~~ • ~~If the Commission determines that a checklist amendment application is sufficient, the Commission reviews the application for completeness, accuracy and technical correctness.~~ • ~~If the Commission approves the application, it issues an amended licence but no decision report.~~ • ~~The applicant files a related OneStop application with the AER.~~ • ~~The AER follows up directly with the applicant on any errors found on the OneStop application.~~ • ~~The applicant files confirmation of the OneStop update with the AUC within 90 days of AUC approval.~~	• ~~An applicant files its application using the eFiling System.~~ • ~~The Commission reviews the application for completeness, accuracy and technical correctness.~~ • ~~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.~~ • ~~If the Commission approves the application, it will issue a decision report and a licence.~~ • ~~The applicant files a related OneStop application with the AER.~~ • ~~The AER follows up directly with the applicant on any errors found on the OneStop application.~~ • ~~The applicant files confirmation of the OneStop update with the AUC within 90 days of AUC approval.~~

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. All checklist amendment applications must be filed using the checklist form. The checklist form contains questions respecting the need, nature and extent of the alterations and confirmations that the proposed alterations do not have any adverse impacts on the environment and people.

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 and Appendix A1-B - Participant involvement program guidelines for Indigenous groups.

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~~before 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~~before 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 applicable information requirements contained in subsection 13.~~5.4~~3.1 as well as any additional information requirements subsection 13.4.4 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 and in Appendix A1-B – Participant involvement program guidelines for Indigenous groups.

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~~before the licence expiring, a time extension 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~~before the licence expiry date ~~in order~~ to give the Commission proper time to consider the application.

~~Prior to~~Before initiating new construction when a licence is nearing expiry, the gas utility must conduct a new resident and landowner search and include these persons in the participant involvement program for the time extension to 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.

New pipeline licences and amendments expire one year from the date of issue if right-of-way clearing, construction or operation ~~i~~has 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.

Please use the *Gas utility pipeline time extension checklist application form* to assemble the information requirements for the time extension application.

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* and provide the expected flaring/incineration volumes and durations.

13.7.2 Temporary ~~V~~venting and fugitive emissions management requirements

~~GU54)~~ Temporary, short-term venting is allowed at gas utility pipelines and pipeline installations on the following conditions:

~~(~~i~~a~~) Gas must be sweet.

~~(b~~ii) 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~~iii) 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~~iv) Total gas volume must not exceed 2 10^3 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^3. Venting volumes in excess of 500 m^3 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_2S must not be vented to the atmosphere. Venting must not result in H_2S 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

A gas utility pipeline licensee must keep records as follows and submit the records to the Commission upon request:

- ~~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 for each pipeline and pipeline installation 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, energy storage 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 of the transfers may be requested in a single proceeding.

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~~before the end of the temporary period for which the market participant expects to hold the operating licence.

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 ISO and 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, and that it will take over the existing reclamation security plan for the facilities. Provide a declaration from the transferee confirming they will assume the security obligations or that the security in place will be transferred to them.

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
AEPA	Alberta Environment and Protected Areas
AEPA-FWS	Alberta Environment and Protected Areas Fish and Wildlife Stewardship
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_2S	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_x	nitrogen oxides
PIP	participant involvement program
SO_2	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	Any area of land or other supporting surface used, designed, prepared, equipped or set apart for use, either in whole or in part, for the arrival, departure, movement or servicing of aircraft. 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.
Curriculum vitae or CV	A brief account of a person's education, qualifications and previous occupations.
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~~ project 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: (i) The ability to positively identify target species by sight and/or sound. (ii) Familiarity with the species biology, including habitat requirements of the species and experience in identifying the species habitat features. (iii) Familiarity with survey methods as described in the Sensitive Species Inventory Guidelines. (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.

Term	Definition
	(v) Multiple years of wildlife and surveying experience.
~~Gas utility pipeline~~	~~A gas pipeline of a gas utility designated by regulation or of its affiliate, as set out in the *Gas Utilities Act*.~~
~~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~~ His Majesty, that has been set apart by ~~Her~~ His Majesty for the use and benefit of a band subject to the *Indian Act* and to the terms of any treaty or surrender. Also known as 'Indian reserve'.
First row of development surrounding	The first row of houses surrounding, or other developments facing, the proposed development that are also within 200 metres of the right-of-way boundary and includes property that is across the road from the right-of-way.
Gas utility pipeline	A gas pipeline of a gas utility designated by regulation or of its affiliate, as set out in the *Gas Utilities Act*.
Heavily travelled road	Includes highways and any other road where 810 or more vehicles travel during the daytime period (7 a.m. to 10 p.m.) consistently for any one-month period in a year.
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 ways required in connection with that project.
Indigenous group	First Nation, Metis Settlement or other group that has an Aboriginal or treaty right as provided in Section 35 of the *Constitution Act, 1982.*
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.
.kml/.kmz files	A key markup language file is a file format used to display geographic data in a browser such as Google Earth. The file should contain the geospatial data (geometry, location and attributes) of each of the major components, including: • Point geometry for wind turbine, inverter, substation, compressor station and energy storage facility locations (if applicable). • Line geometry for transmission line centrelines for all applied for transmission route options, or nearby electric transmission and distribution lines, and gas pipelines (if applicable). • Polygon geometry for the proposed power plant project boundary or for nearby power plant project boundaries (if applicable).

Term	Definition
	• If the map scale is greater than 1:100,000, then use polygon geometry for substation area and energy storage facility footprint (if applicable). Attributes should clearly describe each component, for example: ○ Name: "Line 123L", Description: "Proposed transmission line – preferred route"; or ○ Name: "Turbine 12", Description: "Proposed wind turbine"; or ○ Name: "Licence 1234", Description: "Relocated pipeline segment – line 99") and similar type components should have the same attributes (e.g., all transmission lines, or all turbines or all pipeline segments have a name and description).
Life of the project	The length of time required to construct, operate, decommission and reclaim all phases of a development.
Local authority	The municipality and other relevant municipal parties such as emergency services, infrastructure services, and planning services.
Local road	Includes any public roads that do not qualify as a heavily travelled road.
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, transmission-level 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 capaebility of a single generating unit.
Partial pipeline removal	The physical removal of part of a pipeline or a pipeline where crossings are not being removed.
Person	Includes an municipality or local authority, agency, 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 *Pipeline Rules*.
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.

Term	Definition
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.
Power plant project boundary	The limits of a power plant project defined using all quarter sections of land on which permanent project infrastructure is sited (above and below ground), including collector lines. If any portion of a project is sited within a quarter section, that quarter section should be included in the project boundary.
Qualified owner	An owner of an asset that falls under one of the following categories: a) Registered under the *Companies Act*. b) Registered, incorporated or continued under the *Business Corporations Act*. c) Registered, incorporated or continued under the *Cooperatives Act*. 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. e) A bank. f) A railway company incorporated under an act of the Parliament of Canada. g) A loan corporation or trust corporation. h) An insurer licensed under the *Insurance Act*. i) A municipal corporation. j) A co-operative association.
Receptors	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. 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

Term	Definition
	examples of seasonally occupied dwellings, while a holiday trailer simply pulled onto a site is not
Reclamation (for the purposes of this document, decommissioning is included as part of the process of reclamation)	The process of reconverting disturbed land to its former or other productive uses. All practical and reasonable methods of designing and conducting an activity to ensure: ▪ stable, non-hazardous, non erodible, favourably drained soil conditions, and ▪ equivalent land capability. (1) The removal of equipment or buildings or other structures and appurtenances, (2) The decontamination of buildings or other structures or other appurtenances, or land or water, (3) The stabilization, contouring maintenance, conditioning or reconstruction of the surface of land, Any other procedure, operation or requirement specified in the regulations.
Rural	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.
Sensitive areas	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 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.

Term	Definition
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~~before ~~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~~ must 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~~ conducting 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 natural 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~~ AUC 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.

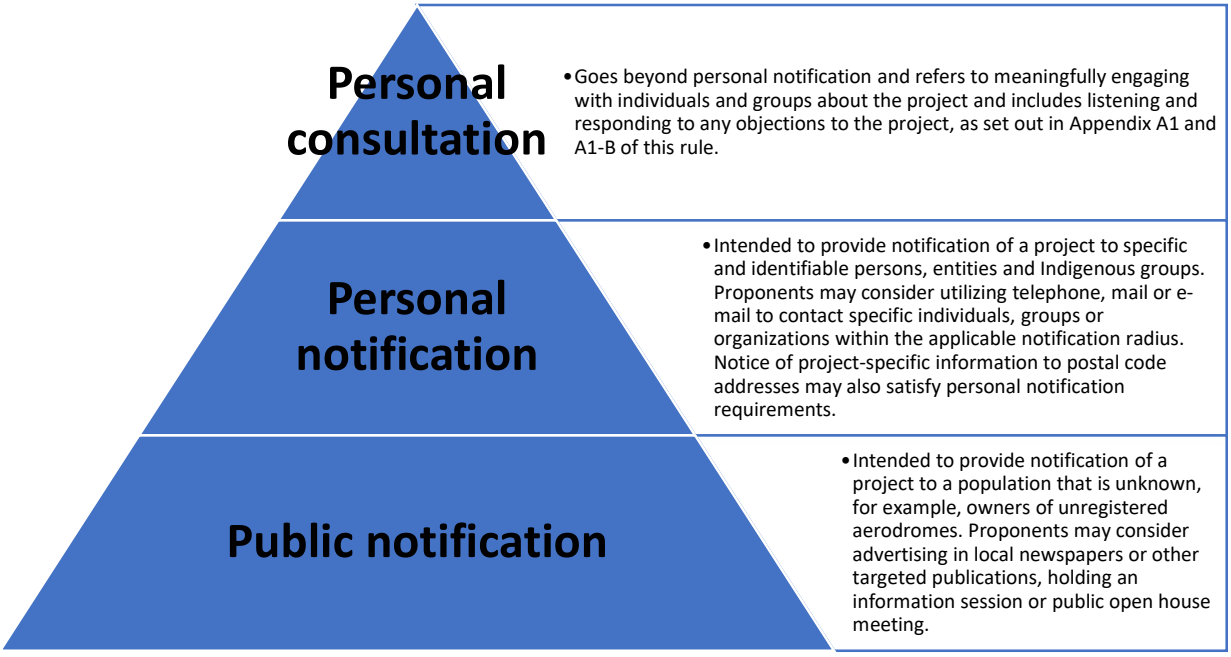
d. Potential sources of emissions and odours during normal operating conditions (including trucking operations) and measures to control or eliminate them.

5 Consultation and notification

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

Who to include – electric facility and gas utility applications

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.~~The notification and consultation distances set out in Tables A1-1 and A1-2 are the minimum distances to which notification and consultation is to occur.



If there is Crown land within the distances identified in the following table, the applicant~~s~~ 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~~should 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 energy 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 energy storage facilities, less than one megawatt – urban.	Provide personal notification to occupants, residents, landowners, local authorities, 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. 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~~ project 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~~ project boundary, respectively.	N/A
Power plants or energy storage facilities, one to 10 megawatts – urban.	Provide personal notification to occupants, residents, landowners, local authorities, 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. 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	Applicants should consider personal consultation to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within the first row of occupied properties surrounding the proposed development, as the circumstances require.

Type of facility application	Notification	Personal consultation
	property, additional efforts to notify them should be considered. 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~~ project 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.	
Wind power plants, 10 megawatts or greater - urban and rural.	Provide public notification to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within 1,500 metres measured from the edge of the proposed power plant ~~site~~ project boundary. 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. 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. 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, landowners, local authorities, First Nation reserves, and Metis Settlements within 800 metres measured from the edge of the proposed power plant ~~site~~ project boundary.
Solar power plants or energy 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).	Provide personal notification to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within 400 metres from the edge of the power plant~~site~~ project boundary of the proposed development. 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~~ project boundary and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the edge of the proposed power plant ~~site~~ project boundary.	N/A

Type of facility application	Notification	Personal consultation
Solar power plants or energy storage facilities, one to 10 megawatts – rural (large rural industrial parks in this category can be administered as urban).	Provide personal notification to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within 800 metres from the edge of the proposed ~~site~~ power plant project boundary, as the circumstances require. 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~~ project boundary and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the edge of the proposed power plant ~~site~~ project boundary.	N/A
Solar power plants or energy storage facilities, 10 megawatts or greater - urban and rural.	Provide personal notification to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within 800 metres measured from the edge of the proposed site boundary. 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~~ project boundary and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the edge of the proposed power plant ~~site~~ project boundary. 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. 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, landowners, local authorities, First Nation reserves, and Metis Settlements within 400 metres measured from the edge of the proposed power plant project ~~site~~ boundary.
Wind, thermal, hydro or other power plants or pumped hydro energy storage, less than one megawatt – rural (large rural industrial parks or large residential multi-parcel acreage subdivisions in this	Provide personal notification to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within 1,500-metre measured from the edge of the ~~site~~ power plant project boundary of the proposed development, as the circumstances require. For wind power plants, provide personal notification to the owners of any registered aerodrome within 4,000 metres from the proposed	N/A

Type of facility application	Notification	Personal consultation
category can be administered as urban).	turbine locations and provide public notification to owners of unregistered aerodromes within 4,000 metres measured from the proposed turbine locations.	
Wind, thermal, hydro or other power plants or pumped hydro energy storage, one to 10 megawatts – rural (large rural industrial parks in this category can be administered as urban).	Provide personal notification to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within 1,500-metres measured from the edge of the proposed power plant ~~site~~ project boundary, as the circumstances require. 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.	N/A
Thermal, hydro or other power plants, or pumped hydro energy storage 10 megawatts or greater, urban and rural.	Provide personal notification to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within 2,000 metres measured from the edge of the proposed power plant ~~site~~ project boundary. 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. 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, landowners, local authorities, First Nation reserves, and Metis Settlements within 800 metres measured from the edge of the proposed power plant ~~site~~ project boundary.
Overhead transmission line and new substation development – rural or industrial setting.	Provide personal notification to occupants, residents, landowners, local authorities, 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. 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,	Personal consultation with occupants, residents, landowners, local authorities, 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.

Type of facility application	Notification	Personal consultation
	additional efforts to notify them should be considered.	
New underground transmission lines or burying of existing transmission lines- rural.	Provide personal notification to occupants, residents, landowners, local authorities, First -Nation reserves, and Metis Settlements within 200 metres measured from the centre of the proposed right-of-way for the transmission line. 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, landowners, local authorities, First Nation reserves, and Metis Settlements on or directly adjacent to the right-of-way for the transmission line.
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.	Provide personal notification to occupants, residents landowners, local authorities, First -Nation reserves, and Metis Settlements within the first row of development surrounding the proposed project. 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, landowners, local authorities, 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 industrial.	Provide personal notification to occupants, residents landowners, local authorities, First Nation reserves, and Metis Settlements within 200 metres from the edge of the existing right-of-way. 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, landowners, local authorities, 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 fenceline or which create visual or noise impact – rural and industrial.	Provide personal notification to occupants, residents, landowners, local authorities, First -Nation reserves, and Metis Settlements within 800 metres from the edge of the existing substation site boundary.	Personal consultation with occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements on or directly

Type of facility application	Notification	Personal consultation
	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.	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 minimal visual or noise impact – rural and industrial.	Provide personal notification to occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within 200 metres from the edge of the existing 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 substation landowners.
Minor substation developments within existing facilities, where there is no change in the substation fence line and no increase in operating noise – urban	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
New substation developments for customers that are wholly contained within the customer's industrial complex.	Provide personal notification to occupants, residents, landowners, local authorities, 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, local authorities, First Nation reserves, and Metis Settlements and other	N/A

Type of facility application	Notification	Personal consultation
	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.	
Decommission and salvage – power plant.	Provide personal notification to occupants, residents, landowners, local authorities, 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
New pipeline construction, H_2S partial pressure ≤ 0.3 kPa, and OD ≤ 323.9mm (Type 100)	Provide personal notification to Crown disposition holders, local authorities along the right-of way and urban authorities within 1.5 km. In a rural or industrial setting, provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 0.1 km of the pipeline. 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.	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). Confirmation of non-objection is required from occupants, residents, landowners, local authorities, First Nation reserves, and Metis Settlements within the pipeline right-of-way
New pipeline construction, H_2S partial pressure ≤ 0.3	Provide personal notification to Crown disposition holders, local authorities	Occupants, residents, landowners, First Nation reserves, and Metis

Type of facility application	Notification	Personal consultation
kPa, and OD > 323.9mm (Type 101)	along the right-of way and urban authorities within 1.5 km. Provide personal notification to occupants, residents, landowners, First Nation reserves, and Metis Settlements within 0.2 km of the pipeline.	Settlements within or directly adjacent to the pipeline right-of-way, and those who request consultation after receiving notification (or otherwise convey objections). Confirmation of non-objection is required from occupants, residents, landowners, First Nation reserves, and Metis Settlements within the pipeline right-of-way
Construction, or removal of a compressor station	Provide personal notification to Crown disposition holders, local authorities and occupants, residents, landowners, First Nation reserves, and Metis Settlements within 1.5 km.	Occupants, residents, landowners, First Nation reserves, and Metis Settlements within 0.5 km. Confirmation of non-objection is required from occupants, residents, landowners, First Nation reserves, and Metis Settlements ~~adjacent to~~within 0.5 km of the compressor station site.
Pipeline licence amendment - Complete removal (including all crossings) or partial removal	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~~ before filing the application.	N/A
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~~before 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	N/A

Type of facility application	Notification	Personal consultation
	within the associated setbacks only if the proposed activity decreases or eliminates setbacks.	
Pipeline licence amendment - Resumption of discontinued pipeline	N/A	N/A
Pipeline licence amendment - Resumption of abandoned pipeline/pipeline installations	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~~before filing the application.	N/A

6 ~~General c~~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~~ the 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~~before 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 group~~s~~, it should be able to demonstrate reasonable attempts to establish contact. An applicant is encouraged to refresh its list of stakeholders and Indigenous groups prior to major project notification milestones and prior to filing the application with the AUC to mitigate against missing those who may have moved within the notification boundary during the consultation period.

An applicant must ensure that any local authority is included in a PIP.

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~~ notification information may be made available electronically or forwarded by courier, mail, fax, email or other means as agreed upon by the applicant and occupant, resident, landowner, local authorities 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, local authorities and Indigenous groups as outlined in the Who to include in ~~s~~Section 5, 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. An applicant is encouraged to inquire with a landowner or

occupant if there are any other occupants or interest holders not listed on land title that should be included in the consultation.

The applicant should use the method of consultation preferred by the occupant, resident, landowner, local authorities ~~or~~and 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).

6.3 Engagement with local municipal jurisdictions

For any power plant and energy storage facility application, the applicant must provide the Municipal Engagement Form to the applicable municipality to complete for a minimum of 30 days before the application is filed. The municipal engagement form provides an opportunity for an applicable municipality to share information regarding the project with the Commission. However, it is a municipality's choice whether it decides to complete the municipal engagement form. The applicant must clearly explain to the municipality that it has 30 days to complete the municipal engagement form and must also explain that the applicant will be providing responses to the same questions as part of its application.

It is the responsibility of the applicant to make attempts to follow up with the municipality regarding the municipal engagement form. If the municipality declines to complete the form within the 30 day period, the applicant must provide documentation as part of its application that shows the attempts to contact the municipality.

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, local authorities 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~~ must 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~~ before 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. This information should be provided 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~~in Table A1-3. An email address is to be provided if a person indicates that they would prefer to be communicated with via email rather than mail. Applicants are encouraged to use Canada Post's Precision Targeting tool to populate addresses if they are not available through other means.

Table A1-3: Requirements for contact information

Name	Company Name	Address 1	Address 2	City	Province	Postal Code	Country	Email address (optional)
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.

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.

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.

Request feedback on PIP for Indigenous groups

An applicant can request feedback from the AUC on the PIP for Indigenous groups ~~prior to~~before 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.

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 or Canada 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's Ministry of Arts, Culture~~, Multiculturalism~~ and Status of Women (i.e., *Historical Resources Act*), and Alberta Environment and Protected Areas (AEPA) for *Public Lands Act*, *Water Act*, and *Environmental Protection and Enhancement Act*. Approvals issued by AEPA 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.

- If the government of Canada, through the Impact Assessment Agency, Indigenous Services Canada 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 any consultation related direction or decision made by the government of Canada for related approvals (if prepared).

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 Protected Areas' 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's Ministry of Arts, 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	Crown has determined there is a duty to consult for related approvals (e.g., *Water Act*, *Public Lands Act, EPEA*). and/or A First Nation reserve or Metis Settlement is within the consultation areas (Notification radius right).	Indigenous groups identified by the Crown must be included in the PIP. First Nations or Metis Settlements with reserves or Settlements within the consultation area must be included in the PIP.
Consultation Category B	Applications for new projects or alterations that are: • Small (e.g., thermal power plants <10 MW). • On private land with limited to no off-site impacts (e.g., transmission lines, solar, wind). • In transportation/utility corridor. • Letters of enquiry.	Indigenous groups not ordinarily included in the PIP
Consultation Category C	Applications for new projects or amendments not captured by categories A and B.	Application category will be reviewed on a case-by-case basis to determine whether the Indigenous groups should be included in the PIP.

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.g., *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 the government of Canada, through the Impact Assessment Agency, Indigenous Services Canada 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 any consultation related direction or decision made by the government of Canada for related approvals (if prepared).

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 in the PIP. If so, the applicant must include a summary of the consultation undertaken with each Indigenous group 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~~before 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.

4 Benefits to Indigenous groups

When deciding if a project is in the public interest the Commission considers all relevant factors, including potential impacts and benefits to Indigenous groups. (*AltaLink Management Ltd v Alberta (Utilities Commission), 2021 ABCA 342*; *Ermineskin Cree Nation v Canada (Environment and Climate Change)*, 2021 FC 758).

If an applicant would like the Commission to consider the benefits of a proposed project to an Indigenous group, the applicant should provide information clearly describing the benefits that the Indigenous group will receive and implications of not approving the project. This information should identify all Indigenous groups who may benefit from the project and should describe the nature of the expected benefits (e.g., social, environmental and economic benefits, or benefits related to Section 35 rights and traditional land use such as cultural, ceremonial and spiritual benefits). Supporting documentation such as community letters of support should be provided if available.

If the benefits to an Indigenous group derive, in whole or in part, from the Indigenous group's ownership of, or direct involvement in the project development, the applicant should explain this arrangement. This could include identifying the business structure and any formal instrument(s) through which benefits will be secured.

Information on potential benefits to Indigenous groups is not mandatory for the Commission to accept an application.

5 Projects on a First Nation reserve

A pre-application meeting with AUC technical staff can be requested by emailing IndigConsult@auc.ab.ca.

An applicant for an electric facility or gas utility project on a First Nation reserve must apply to the AUC for approval and meet the application requirements listed in Rule 007, Rule 012 and Rule 033. Two exceptions are that a *Historical Resources Act* approval and an Alberta Environment and Protected Areas Fish and Wildlife Stewardship(AEPA-FWS) renewable energy referral report (wind and solar projects) are not required for on-reserve projects. Applicants must still provide sufficient or equivalent information for the Commission to understand the project's potential environmental impacts, and impacts on cultural and historic resources.

While an AEPA-FWS renewable energy referral report is not required for wind and solar projects on-reserve, the Commission expects applicants to demonstrate that the project complies with the standards and best management practices outlined in the provincial *Wildlife Directive for Alberta Solar Energy Projects* and the *Wildlife Directive for Alberta Wind Energy Projects* (Wildlife Directives) to minimize effects to wildlife and wildlife habitat. If the project does not comply with the standards and best management practices in the Wildlife Directives, rationale for any noncompliance must be provided to the Commission for consideration.

Applicants are required to obtain the necessary consent and approvals from the First Nation and, if applicable, the federal government for on-reserve projects. The applicant should provide evidence that demonstrates they have applied for the necessary consent and approvals (e.g., band council resolution, communication from the federal government) and the expected timing of these approvals. Applicants must provide a summary of concerns raised and mitigations discussed. For more information about the on-reserve land designation process, contact Indigenous Services Canada.

Environmental impacts

It is the responsibility of the applicant to provide sufficient information to demonstrate that an on-reserve project has been sited and will be constructed and operated in a manner that minimizes environmental impact. This could, for example, include an environmental assessment completed by a qualified biologist or evidence of review (e.g., an email) from Indigenous Services Canada. Indigenous, traditional and community knowledge can be used to support an application. Additional guidance on environmental information for wind and solar projects is available in WP24, 25 and 26, and in SP23, 24 and 25.

While an AEPA-FWS renewable energy referral report is not required for wind and solar projects on-reserve, the Commission expects applicants to demonstrate that the project complies with the standards and best management practices outlined in the provincial *Wildlife Directive for Alberta Solar Energy Projects* and the *Wildlife Directive for Alberta Wind Energy Projects* (Wildlife Directives)

to minimize effects to wildlife and wildlife habitat. If the project does not comply with the standards and best management practices in the Wildlife Directives, rationale for any noncompliance must be provided to the Commission for consideration.

If the project footprint extends beyond reserve lands, applicants are required to determine if an AEPA-FWS renewable energy referral report is required.

Historic resources

Applicants must consult with the First Nation to ensure that historic resources that may be affected by an on-reserve project are identified, and that appropriate measures are taken to protect these sites. First Nation knowledge holders play an important role in this process.

While a *Historical Resources Act* approval is not required for on-reserve projects, First Nations and on-reserve applicants can contact Alberta's Ministry of Arts, Culture and Status of Women (ACSW) for assistance and advice.

If the project footprint extends beyond reserve lands, applicants are required to determine if a *Historical Resources Act* approval is required by referring to information provided by ACSW.

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

1 Purpose of the ISO stakeholder notification

~~Prior to~~Before 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				

Appendix C1 - Reclamation security guidelines for wind and solar power plants

Background

The Commission expects all power plant applicants to demonstrate that they have taken reasonable steps to ensure that sufficient funds are available to reclaim their proposed project at end of life, including thermal, wind, solar, hydro and energy storage facilities. The Commission will continue to assess whether an application for any power plant is in the public interest, and whether the facility can be properly reclaimed is a relevant factor in that analysis.

In February 2024, the Minister of Affordability and Utilities indicated the Government of Alberta's intention to develop reclamation security requirements for wind and solar power plants, in which security could be: (i) provided directly to the government; or (ii) negotiated with landowners if sufficient evidence is provided to the AUC. Recent amendments to the *Conservation and Reclamation Regulation* and *Activities Designation Regulation* enable Alberta Environment and Protected Areas (AEPA) to implement mandatory reclamation security for wind and solar power plants.

On June 4, 2025, the Government of Alberta issued the *Code of Practice for Solar and Wind Renewable Energy Operations*, setting out the requirements for reclamation security provided directly to the government, among other requirements.

These guidelines are intended to assist applicants for wind and solar power plants in understanding what the Commission looks for when assessing the adequacy of a reclamation security program where the security has been negotiated with the hosting landowner (the registered owner of a parcel on which project infrastructure is located).

Guidelines

Applicants are required by Rule 007 to describe the reclamation security program for a proposed power plant. Applicants should confirm whether the applicant will: (i) provide reclamation security to the Government of Alberta, (ii) provide reclamation security to hosting landowners, or (iii) a combination of both.

If a portion or the entirety of the reclamation security will be provided directly to hosting landowners, an applicant should consider the following guidelines in developing its program.

Amount of security

The Commission considers that the best practice for substantiating a reclamation security cost estimate is to submit a security estimate report which includes, at a minimum, the third-party cost and description of the information used to support each cost as specified in Schedule 1 of the *Code of Practice for Solar and Wind Renewable Energy Operations*.

In general, the amount of security to be provided to the hosting landowner(s) before registration with AEPA should be no less than 40 per cent of the total estimated reclamation costs included within the security estimate that is prepared in accordance with Schedule 1 of the *Code of Practice for Solar and Wind Renewable Energy Operations*.

The amount of security to be provided to the hosting landowner(s) on the 15th year from the AEPA registration anniversary date should be no less than 70 per cent of the most recent estimate of reclamation costs within the security estimate in accordance with Schedule 1 of the *Code of Practice for Solar and Wind Renewable Energy Operations*.

In arriving at these amounts, the Commission has taken guidance from the standards established by the Government of Alberta for government-held security, as prescribed in the *Code of Practice for Solar and Wind Renewable Energy Operations*. The Commission has taken into account the additional complexities and risks associated with landowner-held security, including the complexity involved for a hosting landowner to complete reclamation work themselves if a proponent fails to meet its reclamation obligations.

While the Commission considers each application on a case-by-case basis, and retains discretion to depart from these guidelines, an applicant whose reclamation security program does not align with these guidelines should explain how its landowner-held reclamation security is sufficiently protective of the public interest, given: (i) the mandatory standards that apply to government-held security; and (ii) AEPA's expertise in the subject matter including undertaking the reclamation work if a proponent fails to meet its reclamation obligations.

Type of security

The Commission's preferred type of reclamation security instrument is an irrevocable standby letter of credit with automatic renewal, obtained through a qualified financial institution (as defined in the Alberta Treasury Board and Finance Guidelines for Letters of Credit: Qualified Financial Institutions). Where an applicant proposes to use a less protective security instrument, the applicant should explain why its chosen instrument is sufficient, and how it provides assurance that sufficient funds will be available including in the case of insolvency.

Longevity of security

An applicant should be prepared to demonstrate that its reclamation security instrument will remain in place until a reclamation certificate has been issued, including in the event that the project, or the land on which the project is located, is sold or transferred.

If an applicant has discussed with the municipality in which the project is located the willingness of the municipality to be a co-beneficiary to the letter(s) of credit for the security, the applicant should describe these discussions and confirm if the municipality will be a co-beneficiary of the security for the project.