



AUC
Alberta Utilities Commission

Gas utility pipeline licence application

Date:

Company name (if applicable):

Project description

Gas utility pipeline licence application requirement (GU12)

State the licence(s) being applied for from the AUC:

Gas utility pipeline licence application requirement (GU13)

Provide a description of the proposed project:

Gas utility pipeline licence application requirement (GU14)

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

Gas utility pipeline licence application requirement (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:

Gas utility pipeline licence application requirement (GU16)
If a capital cost forecast for the project has previously been provided to the Commission, confirm that current costs 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:
Gas utility pipeline licence application requirement (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. [Please submit along with your application].
Gas utility pipeline licence application requirement (GU18)
Provide the hydrogen sulphide (H ₂ S) content in the gas phase in mole/kilomole (mol/kmol):
Gas utility pipeline licence application requirement (GU19)
Confirm that the partial pressure of H ₂ S in the gas phase is less than 0.30 kilopascals (kPA). If not, please provide the partial pressure of H ₂ S in the gas phase:
Gas utility pipeline licence application requirement (GU20)
Confirm that the project meets all applicable Canadian Standards Association (CSA) Z662 design requirements:
Gas utility pipeline licence application requirement (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:
Gas utility pipeline licence application requirement (GU22)
Confirm that procedures for corrosion mitigation, monitoring, evaluation and record keeping will be implemented prior to operation:
Gas utility pipeline licence application requirement (GU23)
For pipeline installation applications, confirm that piping within the line heater is designed to meet American Society of Mechanical Engineers (ASME) B31.3:

Gas utility pipeline licence application requirement (GU24)

For pipeline installation applications, submit a process flow diagram (PFD) 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.

[Please submit along with your application].

Gas utility pipeline licence application requirement (GU25)

For pipeline installation applications, submit a plot plan that clearly indicates the on-lease location of all the equipment (with the exception of valves) as indicated on the PFD. [Please submit along with your application].

Emergency response plan

Gas utility pipeline licence application requirement (GU26)

Confirm the applicant has or will have a corporate-level emergency response plan that addresses the fundamentals for handling an emergency situation arising from the construction or operation of a gas utility pipeline or pipeline installation:

Environmental information

Gas utility pipeline licence application requirement (GU27)

If preparation of either a federal impact assessment or a provincial environmental impact assessment report was required, provide a copy as an appendix to the application and a separate environmental evaluation is not required. [Please submit along with your application].

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

- Describe the present (pre-project) environmental and land use conditions in the local study area.
- Identify and describe the project activities and infrastructure that may adversely affect the environment. In particular, describe any potential adverse effects on soils, terrain, vegetation species and communities, wetlands, wildlife species and habitat, aquatic species and habitat, groundwater, surface water bodies and hydrology, environmentally sensitive areas, and land use within the local study area, following and referencing published Alberta Environment and Parks' (AEP) guidelines if applicable.
- Describe the methodology used to identify, evaluate, and rate any adverse environmental effects and determine their significance, along with an explanation of the scientific rationale for choosing this methodology.
- Describe the mitigation measures the applicant proposes to implement during the life of the project to reduce the potential adverse effects.
- Describe the predicted residual adverse effects of the project and their significance after implementation of the proposed mitigation.
- Describe any monitoring activities the applicant proposes to implement during the life of the project to verify the effectiveness of the proposed mitigation.
- List the qualifications of the individual(s) who conducted or oversaw the environmental evaluation.
- Present an overall comparison of the proposed routes and identify the environmentally preferred route. In particular, identify the major environmental features and any potential environmental effects (e.g., on native vegetation communities, rare plants, wetlands,

topography, unique terrain features, sensitive soils, wildlife species setbacks and habitat, and environmentally significant areas), and identify land use and resource features (e.g., agricultural, residential, recreational, forestry, trapping and hunting areas, protective notations, and existing or potential archaeological sites) for each route in a table with stated units (kilometre, total number, etc.).

- 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.

[Please submit along with your application].

Gas utility pipeline licence application requirement (GU28)

For projects wholly or partially located on federal lands (First Nation reserves, national parks or military bases), provide a copy of the environmental impact analysis completed for the corresponding federal government department. [Please submit along with your application].

Indicate whether the project has the potential to cause effects that may cross into another jurisdiction. Environmental effects that originate on federal lands, but cross into another jurisdiction, must be addressed as part of the environmental review process. Projects on federal lands may be subject to provincial laws, standards and permits.

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

Gas utility pipeline licence application requirement (GU29)

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

Nitrogen oxides emissions

Gas utility pipeline licence application requirement (GU30)

When nitrogen oxides (NO_x) emissions are present at pipeline installations that require registration or approval with the Alberta Energy Regulator:

- Confirm that dispersion modelling has been conducted in accordance with the *AEP Air Quality Model Guideline*.
- Based on dispersion modelling, indicate whether the predicted NO₂ concentrations will be in compliance with the Alberta Ambient Air Quality Objectives and Guidelines using guidance from the *Air Quality Model Guideline*.
- Standby equipment used only for emergency purposes can be excluded from dispersion modelling.
- Confirm that the engine exhaust stack height is set in accordance with the direction given in the *AEP Code of Practice for Compressor and Pumping Stations and Sweet Gas Processing Plants*.
- NO_x emissions from steam generations 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

Gas utility pipeline licence application requirement (GU31)

Provide a noise impact assessment in accordance with Rule 012. [Please submit along with your application].

Approvals, reports and assessments from other agencies

Gas utility pipeline licence application requirement (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:

Gas utility pipeline licence application requirement (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. [Please submit along with your application].

Gas utility pipeline licence application requirement (GU34)

Confirm that an *Historical Resources Act* approval has been obtained or has been applied for:

If an historic resource impact assessment is required, briefly describe any known historical or archaeological sites, palaeontological sites, or traditional use sites of an historic resource nature:

If an historic resource impact assessment has been obtained, provide a copy of it. [Please submit along with your application].

Participant involvement program

Gas utility pipeline licence application requirement (GU35)

Identify the consultation and notification radius applicable to the project as set out in the consultation and notification table in Appendix A1 under Section 5:

Gas utility pipeline licence application requirement (GU36)

Provide the distance to the nearest residence in kilometres:

Gas utility pipeline licence application requirement (GU37)

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

Gas utility pipeline licence application requirement (GU38)

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

Gas utility pipeline licence application requirement (GU39)

Supply a list of contact information for all persons who had been contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines. [Please submit along with your application].

Gas utility pipeline licence application requirement (GU40)

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

Gas utility pipeline licence application requirement (GU41)

Confirm that all other Crown disposition holders, oil and gas reserve owners, and pipeline licencees that may be directly and adversely affected have been notified of the project:

Gas utility pipeline licence application requirement (GU42)

Identify all persons who expressed concerns about the project. For each person include the following information:

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

Supplemental application requirements for amendments to existing pipeline licences

Pipeline resumption

Gas utility pipeline amendment-specific application requirement (GU43)

Explain whether the pipeline has been discontinued or abandoned, and provide the date on which it was last in active flowing service:

Gas utility pipeline amendment-specific application requirement (GU44)

Confirm that the pipeline was discontinued or abandoned in accordance with the requirements of the pipeline rules:

Gas utility pipeline amendment-specific application requirement (GU45)

Confirm that the pipeline will operate under the same parameters approved by the Commission when it was last in active flowing service:

Gas utility pipeline amendment-specific application requirement (GU46)

Confirm that cathodic protection was maintained in accordance with Canadian Standards Association (CSA) Z662:

Gas utility pipeline amendment-specific application requirement (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. [Please submit along with your application].

Maximum operating pressure increase

Gas utility pipeline amendment-specific application requirement (GU48)

Describe what testing was undertaken to confirm capability for the increased maximum operating pressure increase (MOP):

Gas utility pipeline amendment-specific application requirement (GU49)

Confirm that the pipe, valves, flanges and fittings are suitable for the increased MOP:

Gas utility pipeline amendment-specific application requirement (GU50)

Confirm that an increase in MOP will not affect the existing overpressure protection on upstream and downstream pipelines:

Gas utility pipeline amendment-specific application requirement (GU51)

Describe whether any pipeline setbacks are affected by the increased MOP:

Gas utility pipeline amendment-specific application requirement (GU52)

Describe whether the increased MOP will necessitate any of the following:

- pipeline class re-designation
- pipeline level reclassification

Table 1 Substance categories

Substance	Substance category	Code	Priority code
Methane, natural gas with H ₂ S partial pressure ≤ 0.30 kPa.	Natural gas	NG	6

Table 2 Pipe material codes

Pipe material	Code
Aluminum	A
Composite	G
Fibreglass	F
Polyethylene	P
Polyvinyl chloride	V
Steel	S

Table 3 Steel pipe codes (examples only)

Pipe specification	Code	
	Type	Grade
API 5L Grade A	5L	A
API 5L Grade B	5L	B
API 5L Grade X42	5L	X42
API 5L Grade X60	5L	X60
ASTM A53 Grade B	A53	B
ASTM A106 Grade B	A106	B
ASTM A333 Grade 6	A333	6
CSA Z245.1 Grade 241 Category I	Z245.1	241 1
CSA Z245.1 Grade 290 Category II	Z245.1	290 2
CSA Z245.1 Grade 359 Category III	Z245.1	359 3
ASTM A539	A539	N/A *

*Not applicable for ASTM A539.

Table 4 Aluminum pipe codes (examples only)

Pipe specification	Code	
Aluminum Association Alloy No.	Type	Grade*
6063 T1A	6063	T1A
6063 T1B	6063	T1B

If clad aluminum, add C at the end of Grad Code (e.g.) T1AC).

Table.5 Fibreglass and fibre-reinforced composite pipe codes (examples only)

Pipe specification	Code	
	Type	Grade*
Ameron Bondstrand 3000	AMERON	3000
Star Fibreglass 500	STAR	500
Centron 800	CEN	800
Fibrespar 1500 E	FSLP	1500
Hydril ANSI 300	HDLP	300
Flexpipe (ANSI 300)	FPLP	750

Table 6 Polyethylene pipe codes (examples only)

Pipe specification	Code	
Aluminum Association Alloy No.	Type	Grade*
PE 2406 SDR 11	2406	11
PE 3408 SDR 9	3408	9

Table 7 Joint codes

Joint	Code
Thru-Kote Welded	A
Butt Fusion	B
Bonded	C
Flanged	F
Solvent Welded	G
High Energy Welded	H
Crimp Kote	K
Sure Lok	L
Mechanical Coupling	M
Pronto Lock	P
Socket Fusion	S
Threaded	T
Welded	W
Zap-Lok	Z
Twin Lock	E
Triple Seal	R

Table 8 Internal protection codes

Protection type	Code
Uncoated	U
Thin Film	T
Cement	C
Expanded Polyethylene	E
Grouted	G
Free Standing	L

Table 9 Facility codes*

Facility	Code
Compressor Station	CS
Meter/Regulation Station	MR
Meter Station	MS
Pipeline	PL
Regulator Station	RS
Line Heater	LH
Gas Processing Plant	GP
Blind End	BE
Petrochemical Plant	PP
Refinery	RF
Storage Cavern	SC
* If facility code is not set out above, use AER facility code.	

Table 10 Status codes

Status	Code
Abandoned	A
Discontinued	D
Operating	O
Removed	R
To Be Constructed	P
Delete from Licence	X
Not Constructed	N

Table 11 Environment codes

Crossing	Code
Creek	CC
Lake	LC
Overhead	OC
River	RC
Surface (surface line)	SC

Table 12 Pipeline installation codes

Facility	Code
Compressor Station	CS

Table 13 Driver power source codes

Facility	Code
Natural Gas	N
Electric	E

Table 14 Status codes for pipeline installations

Status	Code
Operating	O
Removed	R
To Be Constructed	P
Delete from Licence	X
Not Constructed	N