

Industrial system designation application

Date:	Company name (if applicable):
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Information requirements

Industrial system designation application requirement (ISD1)

State the approvals that are being applied for from the Commission and include a complete list of all electric facilities and equipment of 25 kilovolts or more to be included in the industrial system designation:

Industrial system designation application requirement (ISD2)

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

Industrial system designation application requirement (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:

Industrial system designation application requirement (ISD4)

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

- A legible plant 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.

[Please submit along with your application].

Industrial system designation application requirement (ISD5)

Provide an electrical single-line diagram of the entire industrial complex. This diagram must clearly show existing facilities, future facilities and their ownership. [Please submit along with your application].

Industrial system designation application requirement (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. [Please submit along with your application].

Industrial system designation application requirement (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:
Industrial system designation application requirement (ISD8)
Provide an annual estimate of the gross amounts for generation, onsite load, import from and export to the Alberta Interconnected Electric System:
Industrial system designation application requirement (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 the 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.
[Please submit along with your application].
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:
Industrial system designation application requirement (ISD10)
Demonstrate that there is significant investment in: The expansion or extension of the industrial operations processes. The development of the electricity supply.

Industrial system designation application requirement (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:	
Industrial system designation application requirement (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:	
Industrial system designation application requirement (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:	
Industrial system designation application requirement (ISD14)	
Explain how the proposal meets the principles of an industrial system outlined in subsection 4(2) of the <i>Hydro and Electric Energy Act</i> :	
Industrial system designation application requirement (ISD15)	
Explain how the proposal meets the criteria of an industrial system outlined in Subsection 4(3) of the <i>Hydro and Electric Energy Act</i> :	

Participant involvement program

Industrial system designation application requirement (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):
Industrial system designation application requirement (ISD17)
Supply a list of contact information for all persons contacted as part of the participant involvement program in a spreadsheet in accordance with the template included in Appendix A1 – Participant involvement program guidelines. [Please submit along with your application].
Industrial system designation application requirement (ISD18)
ldentify all persons who expressed a concern(s) about the project. For each person include the following information: • The specifics of the concern(s). • Steps taken to try and resolve the concern(s). • Whether the concern(s) was resolved.