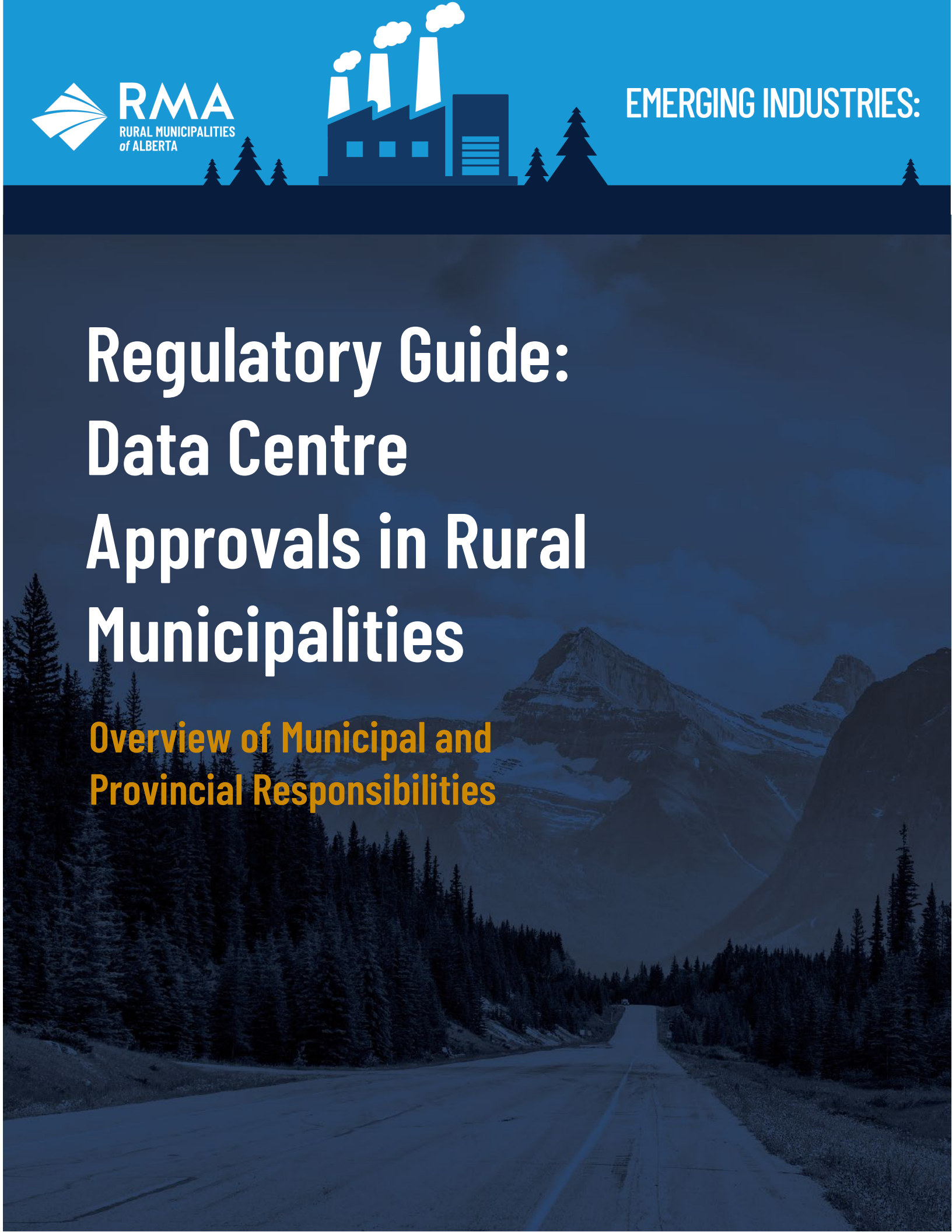
RMA
RURAL MUNICIPALITIES of ALBERTA

EMERGING INDUSTRIES:

Regulatory Guide: Data Centre Approvals in Rural Municipalities

Overview of Municipal and Provincial Responsibilities



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Introduction

Large and hyper-scale data centre projects, specifically those that are 75 megawatts or greater, can present significant economic development opportunities for rural municipalities. However, they are also accompanied by new challenges related to land-use planning, servicing, environmental impacts, and interactions with multiple provincial regulators.

RMA's Data Centre Primer, released in Spring 2026, provided members with background information on Alberta's emerging data centre sector, recent provincial announcements and legislative amendments to facilitate development, and early considerations for rural municipalities. That document offered high-level guidance on how municipalities could engage with proponents and the Government of Alberta, but it did not examine municipal land-use authority or provincial approval processes in detail.

As project proposals continue to be announced and developments begin moving towards construction, many rural municipalities are now facing regulatory questions that extend beyond the scope of RMA's first primer. This second report is intended to fill that gap by providing an overview of the regulatory processes that shape data centre development in rural Alberta. This includes outlining the interaction between provincial and municipal jurisdiction and offering context to help municipalities navigate an increasingly complex regulatory environment.

This document is intended as a policy resource for RMA members and does not constitute legal advice. The content within is based on RMA's interpretation and analysis of relevant regulatory processes and powers. Any project-specific questions should be directed to the appropriate regulatory body.

Data Centre Categories

For regulatory purposes, data centre projects in Alberta generally fall into two categories, with each triggering different regulators, approvals, and municipal obligations.

Grid-connected data centres (no on-site generation)
Data centre facilities that draw all required electricity from the provincial grid.

Co-located generation data centres
Data centre facilities with co-located, on-site electricity generation (generally natural-gas turbines but can also include renewable or hybrid systems) sized to supply some or all of the data centre load.

Overlapping Regulatory Jurisdictions

Large and hyperscale data centre projects intersect multiple regulatory systems, and no single authority or regulator oversees the entire project. Instead, each authority governs a distinct component under its own governing legislation and rules, and each of those regulators' various processes and approvals tend to run concurrently from the start of the project until final approvals and project completion.

Understanding these roles is essential for municipalities evaluating proposals and anticipating how provincial approvals will interact with municipal authority and municipal planning decisions.

Municipal Authority and Provincial Oversight

The *Municipal Government Act* (MGA) establishes the foundation for how municipalities regulate land use, development, and servicing for data centre projects. Using their authority under the MGA,

municipalities control land-use planning and development through statutory plans, including Municipal Development Plans (MDP), Intermunicipal Development Plans (IDPs), and Area Structure Plans (ASPs), as well as through their Land Use Bylaws (LUB).

For a data centre facility, municipalities may determine:

- Zoning and land-use districts, including whether a data centre is a permitted or discretionary use on the land in question
- Whether a development permit for the data centre is issued, issued with conditions, or refused
- Site design requirements, such as municipally determined setbacks, parking, landscaping, fencing, lighting, and noise controls
- Access and transportation impacts, including road upgrades, intersections, haul routes, and emergency access
- Water, wastewater, and stormwater servicing, including capacity assessments and infrastructure requirements
- Fire protection and emergency response considerations, including hydrant spacing, access routes, and suppression needs
- Off-site levies and infrastructure contributions for roads, utilities, and municipal servicing
- Road use agreements

However, municipal authority does not extend to the regulation of any utility infrastructure, including co-located power plants, electricity substations, power transmission lines, or the gas-utility pipelines that supply natural gas power plants. Rather, these fall under the jurisdiction of the Alberta Utilities Commission (AUC).

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As described above, not all data centre projects include a co-located power generation facility. This section addresses the regulatory process for facilities that will include a power generation component. The AUC regulates the construction and operation of Alberta's electricity and gas-utility infrastructure under the *Alberta Utilities Commission Act* (*AUC Act*)*,* the *Hydro and Electric Energy Act (HEEA)*, and the *Electric Utilities Act (EUA)*.

In addition to provincial legislation, the AUC's rules – specifically, *Rule 007: Facilities Applications* and *Rule 012: Noise Control* – govern the approval process for these power plants and associated substations, transmission lines, and gas supply pipelines they require. Proponents must obtain authorization from the AUC to construct and operate power plants by making an application to the AUC under *Rule 007* and *Rule 012.* However, in addition to gas-fired thermal power plants, *Rule 007* also covers the need for and siting of additional transmission lines, the establishment of energy storage facilities, battery systems, renewable energy operations, industrial systems, and gas utility pipelines.

Scope of AUC Review – *Rule 007*: Facilities Applications

When the AUC reviews an application for a power plant, gas supply line, or transmission line made under *Rule 007*, they consider:

- Need and public interest
- Environmental impacts
- Landowner and stakeholder impacts
- Emissions and air-quality considerations
- Consultation adequacy

As part of the *Rule 007* review, the AUC also applies *Rule 012: Noise Control* to evaluate potential noise effects on nearby residences. *Rule 012* uses standardized, formula-based ambient sound levels rather than site-specific measurements, and the AUC retains discretion to vary or waive portions of the rule where they deem that the circumstances warrant. Noise must be assessed, but it is unlikely to prevent approval where broader public-interest factors support the project.

While the AUC does not regulate the data centre building itself or any municipal land use decisions, AUC approvals under *Rule 007* do trigger mandatory municipal alignment under s. 619 of the MGA. In short, when a municipality receives an application for a statutory plan amendment, LUB amendment, subdivision approval, or development permit that actualizes an AUC approval, the municipality is required to approve the application to the extent necessary to comply with the AUC authorization. This includes amending the LUB or other statutory plans within 90 days; those amendments cannot revisit matters already decided by the AUC.

AUC Consultations – Intervener Status and the Participant Involvement Program

Section 22 of the *AUC Act* provides the ability for municipalities, described as "local interveners" in the legislation, to intervene in AUC hearings for power generation facilities. This is done by registering and filing a Statement of Intent to Participate form through the AUC's online eFiling system.

In addition to hearing participation, AUC *Rule 007* imposes consultation obligations on project proponents through the Participant Involvement Program (PIP). The PIP governs how proponents must notify, consult, document, and respond to stakeholders, municipalities, and Indigenous groups before filing a facilities application.

Under *Rule 007*'s PIP requirements, proponents must:

- Identify and notify all potentially affected stakeholders, including residents, landowners, local authorities, and Indigenous groups, using the AUC's minimum notification distances. Proponents may expand the notification radius if local circumstances warrant it and must explain any changes in their application.
- Provide all notified parties with project-specific information and allow a minimum of 14 days for stakeholders and Indigenous groups to receive, consider, and respond before the application is filed.
- Conduct one-on-one consultation with occupants, landowners, municipalities, and Indigenous groups using the consultation method preferred by the stakeholder.
- Make reasonable attempts to contact all required parties, and document attempts where contact is unsuccessful. If a stakeholder declines consultation, the refusal must be recorded for compliance purposes.
- Assess whether broader public notification is required, including open houses or information sessions, and ensure that the same project information is disclosed in all formats.
- Maintain a detailed consultation log, including dates of contact or attempted contact, information provided, and responses received.
- Ensure any personnel conducting consultations are properly trained, knowledgeable about regulatory requirements, and able to clearly explain project details, impacts, and alternatives.
- Update stakeholders when material project changes occur, unless the stakeholder is no longer within the notification boundary due to route changes or facility relocation.

Municipal Engagement

As referenced above, *Rule 007's* PIP requires proponents to engage directly with the municipality in which the proposed project is located. For all facilities applications, proponents must provide the

municipality with the Municipal Engagement Form, which allows municipalities to provide information on if the proposed project area complies with municipal development plans, intermunicipal development plans, LUBs, land use zoning, infrastructure consideration, community impacts, and development permit decisions, which the AUC incorporates into its review. The AUC is not obligated to base an approval decision on whether a proposal aligns with municipal plans.

The proponent must allow a minimum of 30 days for the municipality to complete the form before filing the application. While municipalities may choose whether to complete the form, if they decline, the proponent must document follow-up attempts and include these in their *Rule 007* application.

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Alberta Environment and Protected Areas (EPA) administers Alberta's environmental legislation, including the *Environmental Protection and Enhancement Act* (EPEA) and the *Water Act*. Both statutes may apply to standalone data centres and to facilities reviewed under AUC *Rule 007*, depending on the project's environmental triggers.

Environmental Protection and Enhancement Act (EPEA)

The EPEA governs environmental approvals for industrial facilities, including:

- Industrial approvals for emissions (e.g., CO_2, particulates from gas-fired generation)
- Operational environmental requirements, including monitoring, reporting, and compliance with emission limits
- Wastewater approvals for cooling water discharge, and sanitary flows

For standalone, grid-connected data centres, EPEA approvals may be limited to wastewater discharge or what could be classified as relatively minor air-emission sources (e.g., backup generators). However, for data centre facilities with co-located power plants, EPEA approvals are far more substantial and are likely to include full industrial approvals for the generation facility. These approvals typically run concurrently with *Rule 007* applications, and the AUC will not issue a final approval of a facilities application until EPA confirms that environmental requirements have been met.

An Environmental Impact Assessment (EIA) may be required under the EPEA if the project meets thresholds in the Regulations, if the Minister determines an EIA is required, if EPA determines that the project may cause significant environmental effects, or if a Director reviews submitted statements of concern and determines that an EIA is required for the project. If a proponent completes a provincial EIA report, then *Rule 007* requires the proponent to submit the EIA report in place of a separate environmental evaluation. The AUC then incorporates EPA's EIA findings into its determination.

Water Act

The provincial *Water Act* regulates:

- Water licenses for surface or groundwater withdrawals
- Temporary diversion licenses for construction or short-term use
- Wetland approvals and stormwater-related authorizations
- Alterations to watercourses (e.g., culverts, crossings, intake structures)

Standalone data centres may require *Water Act* authorizations depending on their cooling system design. Modern hyperscale facilities often rely on air-cooling or closed-loop systems, but these systems lose efficiency during high-temperature periods. As a result, some grid-connected data centres may

require additional water withdrawals for peak cooling, humidification, or other reasons, even in data centres with modernized closed-loop systems or systems that are primarily air-cooled. As a result, *Water Act* licenses can become a critical project-limiting factor, particularly in areas with constrained water availability or sensitive watersheds.

In addition to cooling the data centre itself, where a data centre includes gas-fired co-located generation, water demand can increase substantially. Thermal power plants may require water for turbine cooling, steam-cycle processes, auxiliary systems, or emissions control equipment. These withdrawals can be much more significant than those required for the data centre alone, and in many regions where available water allocations are already constrained, *Water Act* licenses can become a project-limiting factor.

Impact Assessment Agency of Canada (IAAC)

Federal impact assessments conducted by the IAAC are not common for data centre projects, but they may be triggered where a project or its associated infrastructure meets thresholds under the federal *Impact Assessment Act* or may cause adverse effects within federal jurisdiction. Relevant triggers include impacts to fish habitat (*Fisheries Act*) or navigable waters (*Canadian Navigable Waters Act*), effects on species at risk or critical habitat (*Species at Risk Act*), major watercourse alterations, or projects meeting thresholds in the federal *Physical Activities Regulations.* Most hyperscale data centres will not trigger a federal impact assessment on their own, but large co-located generation facilities, major water withdrawals, or significant transmission or pipeline works may.

If the IAAC determines that a federal impact assessment is required, the process proceeds through five main stages:

- Planning Phase: The proponent submits an Initial Project Description. IAAC posts it publicly, gathers comments, identifies federal issues, and decides whether a federal impact assessment is required.
- Impact Statement Phase: If required, IAAC issues Tailored Impact Statement Guidelines. The proponent must prepare a detailed Impact Statement assessing environmental, social, economic, health, and Indigenous impacts and proposed mitigation.
- Impact Assessment Phase: The IAAC evaluates the Impact Statement, considers Indigenous Knowledge and public input, and prepares an Impact Assessment Report with recommended conditions.
- Decision Phase: The Minister of Environment and Climate Change (or Governor in Council) decides whether the project may proceed and issues a Decision Statement with legally binding conditions.
- Post-Decision Phase: IAAC monitors compliance. Any changes to the project must be submitted to IAAC for review.

Federal impact assessments operate in parallel with AUC *Rule 007* reviews, and the findings take the place of the environmental work normally done under *Rule 007*. The proponent submits the federal assessment materials to the AUC in place of the *Rule 007* environmental evaluation, and the AUC cannot issue a final facilities approval until all federal requirements under the *Impact Assessment Act* have been met. Federal assessments may add studies, mitigation measures, or conditions that must be reflected in the AUC's final decision, and IAAC involvement can extend project timelines and influence the scope of the Rule 007 review.

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The Alberta Energy Regulator (AER) regulates pipelines and infrastructure associated with energy resource activities under the *Pipeline Act, Responsible Energy Development Act*, EPEA, and the *Water Act*. While the AUC regulates and approves the power generation facility itself, primarily through *Rule 007,* the high-pressure natural gas pipelines supplying a co-located power plant frequently fall under AER jurisdiction, depending on how the pipeline is classified under the *Pipeline Act* and *Gas Utilities Act.*

Under *Rule 007*, natural gas utility pipelines generally require AUC approval. However, many of the pipelines that tie into Alberta's broader natural gas distribution or transmission system are classified as AER-regulated transportation pipelines due to having significant operating pressures; the *Pipeline Act* exempts pipelines operating under 700 kPa from the application of its legislative requirements*,* but the natural gas lines supplying large natural gas power plants are operating at considerably higher pressures, typically in the thousands of kPa.

These high-pressure pipelines, for which separate *Rule 007* applications are filed by the pipeline operator, must comply with CSA Z662, the *Pipeline Rules*, and AER *Directive 056*, which governs pipeline licensing, construction, operations, tie ins, and ongoing reporting. This is reflected in recent co-located generation applications, where proponents state that gas supply pipelines will be permitted and operated under *Directive 056* requirements rather than AUC processes.

Beyond pipelines, the AER may also have a direct role when a pipeline project triggers environmental approvals under EPEA or the *Water Act*. In practice, co-located generation projects with high-pressure gas supply lines often involve dual regulatory oversight; if the pipeline constitutes an energy resource activity, the AER becomes the decision maker for EIAs, water licenses, and water diversion approvals, and in these cases, the AUC cannot finalize a *Rule 007* approval until AER administered environmental requirements have been satisfied.

While municipalities do not regulate either component, pipeline routing may affect roads, rights of way, crossings, and construction access. AER and AUC processes typically proceed concurrently, and the environmental approvals issued by the AER must be complete before AUC issues a *Rule 007* decision.

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The AESO is Alberta's Independent System Operator (ISO), responsible for the safe, reliable, and economic planning and operation of the Alberta Interconnected Electric System (AIES). AESO's mandate is established under the EUA, ISO Rules, and the ISO Tariff.

For hyperscale data centre projects, AESO's role extends beyond simple "connection approval" and now includes large-load integration, transmission planning, and coordination with co-located generation. AESO processes run in parallel with AUC approvals and municipal land-use decisions, and although municipalities do not regulate transmission or system access, AESO decisions can significantly influence the scale, location, and timing of transmission infrastructure that later requires AUC approval.

Large-Load Connection Limit

In June 2025, the AESO introduced an interim large-load connection limit in response to an unprecedented surge of hyperscale data centre and AI-driven load requests. The AESO determined that the grid could accommodate up to 1,200 MW of new large loads before 2027/2028 without compromising reliability; according to AESO's announcement, the entire City of Edmonton has a load of approximately 1,400 MW.

For more information on Phase 1 of the Large Load Integration Program, see RMA's first Data Centre Primer. Phase 2 is still underway as of September 2026 and is exploring long-term frameworks, including

bring-your-own-generation (BYOG) models and integrated planning across connections, operations, markets, tariff, and reliability.

System Access and Transmission Planning

For both grid-connected and co-located projects, AESO manages:

- System-access service requests
- Technical studies
- Connection assessments and identification of required transmission upgrades
- Coordination with transmission facilities' owners on substation and line work

Where new transmission facilities are required (e.g., substations, switching stations, transmission lines), AESO's planning work defines what infrastructure is required and where it should be located, while separate AUC approvals are still needed for each transmission project.

ISO Tariff and Connection Costs

The AESO administers the ISO Tariff, which sets out how the costs of connecting a project to the grid are classified and shared. This includes how connection projects are paid for, how system-access service can change over time, and what financial obligations a proponent may face after the project is connected. For data centre developers, this means decisions about connection options, substation cost-sharing, and who pays for what are determined by the ISO Tariff, not by municipal bylaws or municipal negotiations. Municipalities may be affected indirectly through land requirements for substations and transmission corridors, but they do not control tariff design or cost allocation.

Limits on AESO Authority

Despite their role in determining connection requirements, AESO does not approve data centre developments or the power plants, substations, transmission lines, or gas utility pipelines needed to power data centres. All utility generation and transmission infrastructure requires AUC approval.

Interaction with Municipalities

Although municipalities do not regulate transmission or access to the grid, municipalities may be indirectly affected by AESO decisions through AESO planning studies, which outlines land requirements for substations and transmission corridors. Also, while municipalities do not control the ISO tariff design or system-access approvals, AESO's decisions can shape the scale, footprint, and timing of transmission infrastructure that later requires AUC approval under *Rule 007* and municipal coordination.

Appeals and Regulatory Framework

Although appeals are not necessarily part of the standard approval pathway for data centre projects, municipalities should be aware of the relevant appeal mechanisms within the data centre regulatory framework.

AUC Approvals (*Rule 007*)

AUC approvals for power plants, substations, transmission lines, energy-storage facilities, and gas-utility pipelines are final decisions of a quasi-judicial tribunal. The *AUC Act* provides that the AUC's approvals can only be appealed to the Alberta Court of Appeal on questions of law or jurisdiction, and the Court will not rehear evidence or reconsider the merits of the project.

Importantly, an appeal does not suspend the AUC approval, and municipalities must continue to comply with s. 619 of the MGA even while an appeal is pending.

Environmental Appeals (EPEA and *Water Act*)

Environmental approvals issued by Alberta Environment and Protected Areas (AEPA) under the EPEA or the *Water Act* have separate appeal pathways through the Environmental Appeals Board. These appeals do not involve municipalities directly and do not alter municipal obligations under s.619, though they may affect the timing of AUC approvals.

Municipal Obligations Under s.619 MGA and Proponents' Appeals to the LPRT

Once the AUC approves utility infrastructure, section 619 of the MGA provides that municipalities must amend statutory plans and land-use bylaws to align with the AUC authorization and must approve consistent development applications. Failure to do so (whether by refusing an amendment, delaying beyond 90 days, issuing an inconsistent decision, or revisiting matters already decided by the AUC) constitutes non-compliance.

If a municipality does not comply with s. 619, the proponent may appeal directly to the provincial Land and Property Rights Tribunal (LPRT). Here, the LPRT's role is narrow: it determines only whether the municipal decision aligns with the AUC approval. If not, the Tribunal may order the municipality to amend its statutory plans or land-use bylaws. These amendments are not subject to public-hearing requirements, and the Tribunal's decision is final except for limited appeals on questions of law.

Development Permit Appeals

Pursuant to Part 17, Division 10 of the MGA, both permitted and discretionary use development permit decisions can be appealed within 21 days of being issued. However, there are limitations on who can appeal a development permit decision. For discretionary use development permits, anyone affected by the decision to issue the permit can file an appeal. However, a development permit issued for a permitted use cannot generally be appealed, unless a person was affected due to the local LUB being relaxed, varied, or misinterpreted by the development authority.

If the land to which the development permit refers is the subject of a licence, permit, approval, or other authorization granted by the AER, AUC, Natural Resources Conservation Board, the Minister of Environment and Protected Areas, or the Minister of Forestry and Parks, then the appeal must be filed with the LPRT. Otherwise, permit decisions are appealed to the local Subdivision and Development Appeal Board (SDAB).

Approval Pathways

Data centre development in Alberta follows two distinct regulatory pathways depending on whether the facility relies solely on the provincial electrical grid or incorporates co-located power generation. While standalone grid-connected data centres proceed through a conventional municipal approval process with associated AUC and AESO approvals for transmission infrastructure, facilities with on-site generation activate a complex, multi-regulator process involving the AUC, AESO, AER, provincial EPA, or even the federal IAAC. Understanding these pathways is essential for municipalities evaluating proposals and anticipating their regulatory obligations, as well as for land use planning and other purposes.

Note that while the following explanation of how the approval sequences unfold appears to be in a step-by-step or chronological order, in practice, many of these processes happen concurrently.

Grid-Connected Data Centres Without On-Site Generation

Facilities that do not include on-site power generation follow a relatively straightforward, municipally-led approval pathway, with provincial approvals occurring only where environmental, transmission, or grid access issues arise. They are typically treated as ordinary land uses under the MGA and their development is governed almost exclusively by municipal authority unless they pose significant environmental risks or if *Water Act* licensing or federal impact assessments become a part of the process.

Step 1: Municipal Land-Use and Development Approvals

Municipalities retain full jurisdiction over all aspects of the data centre building and site development. Typical municipal decisions include:

- Land-use redesignation (if required)
- Subdivision approvals (if applicable)
- Development permits
- Servicing agreements
- Site-planning requirements (parking, landscaping, fencing, access, stormwater)
- Road-use agreements and construction traffic management
- Municipal water and wastewater servicing
- Business licensing

Generally, the primary approval relates to the municipality's LUB. Some municipalities may choose to list data centres as a permitted use in specific industrial or commercial districts; others may treat them as discretionary uses requiring case-by-case review to have more control over the project. If the land is already zoned appropriately, no redesignation or statutory plan amendment is required.

- If the data centre is classified as a **permitted use** in the applicable land-use district, the development permit is generally issued administratively with no public hearing (aside from engaging on the enabling amendments to the LUB). Once the LUB is amended, public engagement is not required when a proposed development is considered a permitted use under the local LUB; if an application complies with all LUB requirements, the local Development Authority is required to issue the permit. For permitted uses, development conditions are limited to those already contained in the municipality's LUB.
- If the data centre is classified as a **discretionary use** in the applicable land-use district, the proponent must apply for the development permit. Once the application is submitted,

neighbours will be notified and, depending on the municipality's bylaws, the municipality may hold a public hearing to discuss the application. Municipalities have more control over discretionary use developments and can impose additional conditions on the development permit other than those in the LUB, such as conditions addressing servicing, access, noise, lighting, or other local impacts, or the municipality may ultimately deny the proponent's application and not issue a development permit at all.

As outlined in the previous section, appeals of development permit decisions must be filed with either the local SDAB or provincial LPRT within 21 days of the permit being issued.

Step 2: AESO System-Access Process

Grid-connected data centres must engage with the Alberta Electric System Operator (AESO) to secure access to the grid and confirm that sufficient electrical load is available.

AESO requirements may include:

- Load studies to assess system impacts
- Connection studies to determine whether transmission upgrades are required
- System-access service agreements
- Compliance with AESO technical standards

Generally, if AESO allocates sufficient power to a facility for which a municipality has already issued a development permit, then it is likely to proceed to the next stage. However, for large-load projects (data centres larger than 75 MW), AESO allocation is often the primary feasibility constraint; if grid capacity is unavailable, the project cannot proceed regardless of municipal approval, and until Phase 2 of AESO's Large Load Integration Program is completed, new large-load allocations remain uncertain.

Step 3: AUC Transmission-Facility Approvals (If Required)

Although standalone grid-connected data centres do not require AUC approval for a power plant, they are likely to require AUC approval for transmission facilities needed to connect the data centre to the provincial grid. These approvals arise under the EUA, the *Transmission Regulation*, the HEEA, and AUC *Rule 007*.

Under Section 34 of the EUA, the AESO is responsible for identifying the need for new or modified transmission facilities. When AESO determines that a data centre requires a new substation, switching station, transmission line, or other transmission infrastructure, AESO must file a Needs Identification Document (NID) or Abbreviated NID (ANID) with the AUC. These outline the technical studies, connection requirements, system impacts, and rationale for the proposed transmission development.

Once AESO files the NID, the Transmission Facility Owner (TFO) must file a corresponding Facility Application under *Rule 007*. This application seeks approval to construct and operate the specific transmission facilities required to serve the data centre. The Facility Application must include detailed engineering information, routing and siting analysis, environmental evaluations, consultation records, cost estimates, and construction schedules.

The AUC reviews the NID and Facility Application in a single Rule 007 proceeding, considering:

- the need for transmission (EUA + NID),
- the siting and construction of the facilities (HEEA + *Rule 007*),
- environmental impacts, including potential EIA or IAAC requirements
- noise (*Rule 012*),
- landowner and municipal consultation,

- Indigenous consultation where directed, and
- public interest considerations.

If the AUC approves the transmission facilities, section 619 of the MGA applies, and municipalities must amend statutory plans and land-use bylaws to align with the AUC authorization. These amendments cannot revisit matters already decided by the AUC, including routing, siting, noise, or environmental mitigation. As transmission facility approvals can significantly impact local land use, road networks, and community impacts, municipalities must plan accordingly even though they do not regulate the transmission infrastructure.

Step 4: Environmental Approvals (If Triggered)

Standalone data centres may require environmental approvals from EPA if:

- cooling systems require *Water Act* licenses or Temporary Diversion Licenses,
- stormwater infrastructure affects wetlands or watercourses, or
- emissions or waste streams trigger minor approvals under EPEA.

These approvals operate independently of municipal and AESO processes and are appealed to the Environmental Appeals Board (EAB) if contested. It is also possible that the IAAC requires a federal impact assessment to be completed, but this is unlikely for standalone, grid-connected facilities.

End State

Because grid-connected data centres do not involve power-generation infrastructure, no AUC approval is required for a power plant, and section 619 of the MGA does not apply to the data centre building itself. However, where new transmission facilities are required, AUC approvals under Rule 007 may still be necessary, and section 619 applies to those transmission components once approved. Therefore, the project proceeds to the construction phase once municipal approvals and development permits are issued, AESO confirms system access and allocates power to the project, any required AUC transmission approvals are granted and municipalities have aligned their statutory plans accordingly, and any required EPA approvals are obtained.

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Co-located generation activates a dual-track pathway. Municipalities retain authority over the data centre building and site, while the AUC regulates the utility infrastructure. These tracks run in parallel but converge once the AUC issues its decision, triggering mandatory municipal alignment under section 619 of the MGA.

This pathway is more complicated than the grid-connected pathway above as it involves more regulators and statutes, multiple environmental processes, and multiple utility approvals, all operating concurrently but converging in the AUC's *Rule 007* decision on the co-located power plant. The actual timing of and relationship among the various components below is complex and likely varies among projects. **As a reminder, the components below should not be considered chronological.**

Step 1: Municipal Review of the Data Centre Component

Municipalities retain authority over all non-utility components of the project, such as:

- the building,
- site design,
- access to the site,
- site servicing, and

- land use zoning, including whether the data centre is a permitted or discretionary use.

This happens in effectively the same way as a grid-connected data centre. However, this review proceeds completely independently of the AUC's consideration of the power plant, as municipalities have no authority over utility projects, including power plants, substations, transmission lines, or gas supply lines.

Step 2: AUC *Rule 007* Facilities Application

This is the core provincial approval for co-located generation projects. The power plant proponent must obtain AUC approval under *Rule 007* for the power plant, while each utility operator responsible for the associated infrastructure (such as gas-utility pipelines or any associated substations or transmission facilities required for the project) must file their own *Rule 007* application for the facilities they own and operate. All of these applications are heard together in a single AUC proceeding, but approvals are issued to the entity responsible for each utility asset.

Proponents' applications under *Rule 007* must include:

- Technical and engineering details, such as generating technology (turbines, engines, solar, battery), capacity (MW), fuel type and supply, plant layout, auxiliary systems, and interconnection design.
- Siting and routing information for gas utility supply lines and any transmission lines or collector systems, include site selection rationale and alternative sites that have been considered.
- Noise assessments (under *Rule 012*) for generation infrastructure, which require baseline ambient noise measurements, predicted operational noise levels, compliance with AUC noise limits, and any mitigation measures taken. These form part of the *Rule 007* evaluation process.
- Environmental evaluation pursuant to *Rule 007* requirements, including wildlife, vegetation, wetlands, hydrology, and cumulative effects analysis and assessments. If an aspect of the project triggered a provincial EIA or a federal impact assessment pursuant to the IAAC's requirements, then these studies can replace the *Rule 007* environmental assessment requirements. However, the AUC cannot finalize approval under *Rule 007* until EPA confirms that all required EPEA, *Water Act* authorizations, or federal IAAC requirements have been met.
- Evaluation of the proponent's consultation records for adequacy, including landowner consultation, Indigenous consultation (if directed by the Crown), municipal engagement (through the AUC's municipal engagement form), and public engagement.
- Emergency response and safety, including fire protection, hazardous materials handling, emergency access, and coordination with municipal fire services.

The AUC may hold a hearing regarding the application if the project may directly and adversely affect nearby residents or landowners. While municipalities may participate as interveners, they do not control the outcome and are beholden to the AUC's decision on the project.

Step 3: AER Pipeline Approvals

Co-located natural-gas power plants require a high-pressure natural gas supply pipeline, and these pipelines often fall under the jurisdiction of the AER rather than the AUC. Under the *Pipeline Act*, pipelines operating at pressures above 700 kPa are regulated by the AER. Because most gas-fired co-located power plants require natural gas delivered at pressures well above this threshold, their supply pipelines are typically licensed and overseen by the AER.

AER approvals include:

- Pipeline licensing under the *Pipeline Act*

- Compliance with the *Pipeline Rules*
- *Directive 056* applications, covering engineering and design, routing and right-of-way, construction and operations, emergency response, landowner notification, and tie-ins to existing distribution or transmission systems
- Environmental impacts – EPEA approvals or IAAC approvals where applicable

Under section 24 of the *Responsible Energy Development Act* (REDA), the AER administers, interprets, and enforces all specified enactments for energy-resource activities, including pipelines under its jurisdiction. When a pipeline forms part of an energy-resource activity, any reference in legislation to a government department or official is understood to refer to the AER. This includes EIAs required under the EPEA or *Water Act* when the pipeline is part of the energy-resource component of the project.

While *Rule 007* requires proponents to identify and describe gas-utility pipelines within the facilities application, pipelines classified as AER-regulated transportation pipelines are licensed exclusively by the AER. The AUC still considers landowner impacts, routing, siting, and environmental interactions as part of its *Rule 007* review, but pipeline licensing and conducting the associated environmental authorizations remain the responsibility of the AER.

The AUC cannot issue an approval under *Rule 007* until the AER has completed any required environmental reviews and issued the necessary pipeline authorizations. For these supply pipelines, the pipeline operator – rather than the power plant proponent – must file a separate *Rule 007* application. The AUC reviews that application alongside the power plant application, but each approval is issued to the party responsible for owning and operating the respective utility infrastructure.

Step 4: AESO System-Access and Generation Studies

Given that most co-located data centre and power plant facilities will require a grid connection for backup, reliability, or exporting electricity back into the grid, they must satisfy AESO's system access requirements. AESO's review runs concurrently with the AUC's *Rule 007* process and focuses on whether the provincial grid can safely and reliably accommodate both the data centre load and the on-site generation.

AESO 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 EUA and *Transmission Regulation* and evaluates the project's electrical footprint through technical studies. These include assessing the size and stability of the proposed load, determining how on-site generation will interact with the grid, and identifying if new transmission infrastructure or upgrades are required.

If transmission upgrades are required, AESO identifies the scope and location of those upgrades, and these findings will form part of the *Rule 007* application to the AUC. In this way, AESO's planning work directly shapes the utility infrastructure that eventually appears before the AUC for approval.

For co-located projects, AESO's assessment is a critical step: without system-access approval, the project cannot connect to the grid, and the on-site generation cannot operate in the manner proposed. Municipalities should understand that AESO's decisions can materially affect project timelines, design, and viability, even if local land-use approvals are in place.

Step 5: Provincial EPA Environmental Impact Assessments or Federal Impact Assessments

Environmental review for co-located power plants is not handled solely through the AUC's Rule 007 process. While *Rule 007* does include fairly comprehensive environmental evaluation processes, when a project triggers a provincial EIA under the EPEA or the *Water Act*, or a federal impact assessment under the *Impact Assessment Act*, those processes generally replace the environmental evaluation outlined by

Rule 007. In these cases, the AUC relies on the findings of AEPA or IAAC and cannot finalize a Rule 007 approval until those regulators have issued all required authorizations.

For most gas-fired co-located facilities, EPA requires a full industrial approval under the EPEA, including emissions modelling, monitoring plans, and mitigation strategies. *Water Act* licensing can also be a major constraint, especially where water withdrawals or wetland impacts are involved. In water-scarce areas, EPA may impose strict limits or refuse licenses, which can impact whether the project is viable.

If the project meets provincial EIA thresholds or EPA determines that significant environmental effects are possible, the proponent must complete a formal EIA. Similarly, a federal impact assessment may be required if the project affects fish habitat, species at risk, major watercourses, or other areas of federal jurisdiction. IAAC's process begins with an Initial Project Description and ends with a Ministerial Decision Statement that sets legally binding conditions.

Both the EPA and IAAC continue to oversee environmental compliance after approvals are issued. Any changes to the project must be reviewed by the relevant environmental regulator, and federal or provincial conditions remain enforceable throughout the life of the facility.

Step 6: Municipal Alignment Under s.619 MGA

Once the AUC issues an approval for the power plant or utility component, the municipality must amend its statutory plans and land-use bylaws to align with the AUC approval, must approve consistent development applications, must complete required amendments to statutory plans within 90 days, and cannot revisit matters already decided by the AUC.

End State

As outlined above, co-located data centre and power plant projects proceed to construction only when:

- Municipal approvals for the data centre building are issued,
- AUC Rule 007 approval is granted for all utility elements
- AESO confirms that the project can connect to the provincial grid,
- AEPA issues all required environmental approvals and/or IAAC conditions (if any) are satisfied,
- The municipality aligns their statutory plans for utility approvals under section 619 of the MGA.

Navigating Regulatory Uncertainty and Data Centre Development

Recent changes to Alberta's regulatory landscape

Recent and ongoing changes related to Alberta's restructured electricity market and data centres show that the regulatory landscape is still in flux. For example, the *Data Centre Regulation* came into force under the *Electric Utilities Act* in June 2026, and other legislative and policy changes made throughout 2025 and 2026 have been discussed at length in RMA's first Data Centre Primer.

However, amendments to regulatory, environmental, electrical, or other rules, processes, regulations, or legislation could continue to happen as this evolves, especially in the context of the province's implementation of the Restructured Electricity Market.

Hyperscale data centre projects can engage many regulatory processes

Hyperscale data centre projects can engage the MGA, *AUC Act,* AUC Rules, AESO ISO Rules and tariff, EPA's EPEA and *Water Act* processes, the AER's directives, and potentially the federal *Impact Assessment Act,* in addition to other provincial and federal legislation, rules, best practices, guides, and policies.

As no single regulator oversees the entire project, and approvals often proceed in parallel, this fragmentation increases the risk of inconsistent timelines, overlapping conditions, and gaps in accountability.

Lack of transparency in regulatory process is a primary issue

Stakeholders and the public at large have highlighted a perceived lack of transparency in this regulatory process as a primary issue. This perception subsequently impacts the ability for proponents to proceed with projects and for the province and rural municipalities to capitalize on development opportunities due to pushback against the project from multiple sides.

Unresolved issue if AUC approves power plant but municipality refuses data centre

One major unresolved issue in Alberta's data centre framework is what happens if the AUC approves a power plant under *Rule 007,* but the municipality refuses to approve the data centre building. This is fully within both parties' authority and could happen for any number of reasons, including public pushback, political concerns, a lack of perceived local benefit, or changing local circumstances and priorities. The result is a situation where the power plant is legally approved, but the data centre development that it was meant to serve cannot proceed.

For most hyperscale projects, the data centre and the power plant are wholly reliant on each other. Large amounts of additional grid power may not be available, so standalone data centres cannot proceed without on-site generation; at the same time, a 1,000 MW power plant built primarily to serve one large industrial customer may not be economically viable if all of its power is sold into the provincial grid. This creates a project in which the two components are interdependent, but each is reviewed and approved by a different regulator under different frameworks.

Right now, Alberta's legislation and policy landscape does not explain how this kind of conflict should be resolved, and this gap is a key uncertainty in Alberta's developing data-centre regulatory system.

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Municipal Council: Sets land use districts, permitted/discretionary uses, and statutory plans under the MGA. Amends land use bylaws and approves rezoning. Must align statutory plans with AUC approvals under section 619.

Municipal Administration/Development Authority: Issues development permits and site development approvals for the data centre building and site. Reviews applications against the land use bylaw; permitted uses must be approved if compliant. Monitors construction and local bylaw compliance.

Alberta Utilities Commission (AUC): Approves power plants, substations, transmission lines, and gas utility pipelines under *Rule 007*. Conducts environmental, noise (*Rule 012*), routing, siting, and public interest review. Holds hearings only when a decision may directly and adversely affect a person. Municipalities may intervene but cannot veto utility approvals.

Alberta Electric System Operator (AESO): Allocates load and determines whether the grid can support a project. Identifies need for new or modified transmission facilities (EUA s. 34). Issues functional specifications that shape *Rule 007* applications.

Alberta Environment and Protected Areas (AEPA): Issues *Water Act* licenses, Temporary Diversion Licenses, and EPEA industrial approvals. Conducts provincial environmental impact assessments when triggered. AUC and AER cannot finalize approvals until AEPA authorizations are complete.

Alberta Energy Regulator (AER): Regulates upstream oil and gas infrastructure and high pressure natural gas pipelines (>700 kPa), including abandonment, reclamation, and liability. Issues pipeline licenses under the *Pipeline Act, Pipeline Rules,* and *Directive 056*. Conducts environmental review for pipelines; approvals are prerequisites for gas supply to co-located power plants.

Federal Government/Impact Assessment Agency of Canada (IAAC): Conducts federal impact assessments when triggers are met (fish habitat, species at risk, major watercourses, federal lands). Issues binding conditions through Ministerial Decision Statements.

Government of Alberta (Policy Role): Sets provincial policy on electricity, environment, and data centre strategy. Establishes the regulatory framework governing municipalities and provincial regulators.

Developer/Proponent: Designs the project, funds studies, and submits applications to municipalities, AUC, AER, AESO, AEPA, and IAAC. Must demonstrate compliance with all applicable statutes and regulations. Claims in applications are not approvals; only regulators can issue authorizations.

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RSA 2000, c M-26 | Municipal Government Act | CanLII (“MGA”)

SA 2007, c A-37.2 | Alberta Utilities Commission Act | CanLII (“AUC Act”)
Alta Reg 203/2024 | Electric Energy Land Use and Visual Assessment Regulation | CanLII (“EELUVAR”)

AUC Rule 007 - Facility Applications (“AUC Rule 007”)

AUC Rule 012 - Noise Control (“AUC Rule 012”)

AUC Rule 017 Procedures and Process for Development of ISO Rules and Filing of ISO Rules with the Alberta Utilities Commission (“AUC Rule 017”)

SA 2003, c E-5.1 | Electric Utilities Act | CanLII (“EUA”)
Alta Reg 117/2026 – Data Centre Regulation

RSA 2000, c G-5 | Gas Utilities Act | CanLII (“GUA”)

RSA 2000, c H-16 | Hydro and Electric Energy Act | CanLII (“HEEA”)
Alta Reg 32/2024 | Hydro and Electric Energy Regulation | CanLII (“HEER”)

RSA 2000, c E-12 | Environmental Protection and Enhancement Act | CanLII (“EPEA”)

SA 2012, c R-17.3 | Responsible Energy Development Act | CanLII (“REDA”)

SC 2019, c 28, s 1 | Impact Assessment Act | CanLII (“IAA”)

RSA 2000, c W-3 | Water Act | CanLII

RSA 2000, c P-15 | Pipeline Act | CanLII
Alta Reg 125/2023 | Pipeline Rules | CanLII

ISO Rules

AUC One-Pager - AUC's role in data centre projects

Alberta's AI Data Centre Strategy - Powering the future of artificial intelligence

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