Alberta’s Energy Regulatory System

Including UCA’s role within the system
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- Electricity Agencies’ Roles
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Performance Based Regulation Model

**Generation**
- Competitive/market based
- Private investment
- Energy only market

**Transmission**
- Fully regulated
- Cost-of-service model
- One rate for Albertans

**Distribution**
- Fully regulated
- Supports retail competition

**Retail/Customer**
- Partially deregulated
- Competitive contracts
- Regulated rate option for small consumers
Electricity System Responsibilities

**System Design/Setting Policy**
*Government of Alberta*
Develop, review and implement policies and regulations to ensure a safe, reliable, efficient, affordable and environmentally responsible electricity system for Albertans.

**System Performance Management**
*Government of Alberta and Electricity Agencies*
Review system performance to ensure individual issues are addressed, rules are being followed, and regulated rates remain reasonable. When desired policy outcomes are not being achieved, legislation or regulation may be updated.

**Implement Policy**
*Electricity Agencies*
Develop and implement plans, rules, and make timely operational/technical/legal decisions that ensure effective and efficient implementation of Government legislation and regulation.

**Operate System**
*AESO and Utility Companies*
Alberta’s electricity grid connects generation, transmission, and distribution services to deliver electricity to markets and consumers. Consumers are accurately billed for their energy and the grid.
Electricity System Responsibilities

**Department of Energy**
- Enables sustainable and effective energy development that considers the social, economic and environmental outcomes Albertans want
- Develops strategic and integrated policies and plans for sustainable energy
- Ensures Alberta has adequate electricity generation, transmission and distribution

**Department of Agriculture and Forestry**
- Oversees governance of rural utility boards such as Rural Electrification Associations and natural gas co-operatives under the *Rural Utilities Act*

**Service Alberta**
- Regulates energy marketers under the Consumer Protection Act
- Includes the Office of the Utilities Consumer Advocate, mandated under the *Government Organizations Act* to:
  - Represent the interests of Alberta residential, farm and small business consumers of electricity and natural gas before proceedings of the Alberta Utilities Commission (AUC) and other bodies
  - Disseminate independent and impartial information about the regulatory process relating to electricity and natural gas
  - Inform and educate consumers about electricity and natural gas issues
  - Mediate of disputers between consumers and energy retailers
Power Sector Legal Framework in Alberta

**Relevant Acts**
- Electric Utilities Act, Alberta Utilities Commission Act, Alberta Land Stewardship Act, Environmental Protection and Enhancement Act, Consumer Protection Act

**Lieutenant Governor in Council**
- Approves Lieutenant Governor in Council regulations
- Appoints AUC Commissioners

**Minister of Energy**
- Approves Ministerial regulations
- Appoints Alberta Electric System Operator (AESO) and Balancing Pool board members, and the Market Surveillance Administrator
- Establish and operate programs within the Ministry’s mandate

**Regulations**
- Balancing Pool (BP)
- Alberta Utilities Commission (AUC)
- Alberta Electric System Operation (AESO)
- Market Surveillance Administrator (MSA)

**Rules – AUC & AESO**
- Generators
- Transmission Operators
- Distributors
- Retailers

Decision-making hierarchy
Electricity Agencies’ Roles

- Independent, quasi-judicial agency established under the *Alberta Utilities Commission Act*
  - Regulates the utilities sector, natural gas and electricity markets to protect the social, economic and environmental interests of Albertans where competitive market forces do not

- Not-for-profit organization created under the Electric Utilities Act mandated with four primary functions:
  - Operate an open and competitive wholesale market
  - Direct the safe and reliable operation of Alberta’s electricity system
  - Plan and develop the transmission system
  - Provide customer access to the transmission system

- Corporation established under the Electric Utilities Act mandated with:
  - Managing the financial accounts arising from the transition to a competitive generation market on behalf of electricity consumers
  - Meeting obligations and responsibilities relating to Power Purchase Agreements

- Enforcement agency that protects and promotes the fair, efficient and openly competitive operation of Alberta’s
  - wholesale electricity markets
  - retail electricity and natural gas markets
UCA role within AUC proceedings

The AUC regulates the utilities sector, and natural gas and electricity markets to protect social, economic and environmental interests of Alberta where competitive market forces do not.

Utilities companies apply for rates and other approvals from the AUC which they believe will allow them to provide reliable service to customers and a reasonable return to their shareholders.

The Utilities Consumer Advocate (UCA) intervenes in AUC proceedings to ensure small business, farm, and residential customers receive reliable utility services at reasonable prices.
## AUC Regulatory Oversight Responsibilities

<table>
<thead>
<tr>
<th>Electricity Supply Chain (Very similar oversight role for the natural gas supply chain)</th>
<th>Rates* Impacts customers (*UCA focus)</th>
<th>Facilities Impacts landowners &amp; generators</th>
<th>Markets Impacts generators and other market participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Surveillance Administrator</td>
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<tr>
<td>Alberta Electric System Operator</td>
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<tr>
<td>Generation companies</td>
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<tr>
<td>Transmission companies</td>
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<tr>
<td>Distribution companies</td>
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<tr>
<td>Regulated Rate Option providers</td>
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</tbody>
</table>

*Generation* | *Transmission* | *Distribution* | *Retail*
How are utility rates determined?

Alberta’s electricity and natural gas transmission and distribution systems are regulated monopolies

Why regulated monopolies?
- Electricity and natural gas grid infrastructure is extremely expensive to build and maintain.
- It is economically and environmentally more efficient and sensible to have one system of electricity and natural gas delivery infrastructure within a service area, than multiple competing systems of delivery infrastructure.
- These natural monopolies are carefully regulated in order to protect the interests of their captive customers for reliable service at reasonable cost.
How are utility rates determined?

Competitive Business Market vs Regulated Monopoly Model

- An inverse process exists between generic competitive business market models and regulated monopoly models.
- In the competitive business market model, return on equity and consumer costs are based on open market economic factors, such as supply and demand.
- In a regulated monopoly model, return on equity is set by an external regulator (e.g. AUC) and ensures delivery and costs of essential services are just, reasonable and in the public interest.

**Competitive Business Model**

- **Price (Competitive rates)**
  - Quantity
  - Revenue
  - Cost of Goods Sold
  - Depreciation
  - Interest
  - Taxes
  - Net Income

- **Equity**
  - Return on Equity (%)

**Regulated Monopoly Model**

- **Return on Equity (%)**
  - Equity (Common Shares)
  - Return $

- **Taxes**
- **Interest**
- **Depreciation**
- **Operating & Maintenance**
- **Revenue Requirement**

- **Quantity**
- **Price (Regulated rates)**
Rate proceedings involve a detailed examination (and cross-examination) of the evidence supporting the Applicants’ (e.g. utility company) financial estimates for each of the components of its rate model.

Interveners (e.g. organizations such as UCA representing consumer interests) will scrutinize the Applicants’ estimates using legal, technical, and financial experts. Interveners may ask for additional information, and may present evidence that challenges the Applicants’ estimates and assumptions.

The examination will be broken down into issues based on the component estimates and evidence provided.

The AUC must weigh evidence and arguments by all parties (e.g. Applicants, Interveners) before making decisions on the issues raised and on the overall rate application.

AUC decisions normally document the evidence and the rationale that led to the decision on the rate and its component parts.
AUC Review Process Steps for Rate Applications

1) Utility files Application

2) The Commission issues a filing announcement

3) The Commission issues a notice to participate

4) Those interested in participating in a proceeding may file a written statement of intent to participate

5) Information Requests (IR) and responses

6) Evidence and rebuttal evidence

7) Oral hearing (if required)

8) Argument and Reply Argument

9) Decision

10) Potential application by applicant or intervener for AUC to Review and Vary a decision

LEGEND

- AUC Review Process
- UCA intervention activity within AUC process

@ Step 4: UCA forms an intervention team if it decides to intervene in the AUC proceeding; team may include retained legal counsel and contracted technical experts

@ Steps 5 and 6: submissions from UCA team are managed by UCA staff, with technical work provided by experts, and legal support as required

@ Step 8: Argument and Reply Argument from UCA team are led by Legal counsel, with technical support from the contracted experts, and policy support from UCA staff.

AUC process from application to close of evidence typically ~6 months
Key AUC Statistics

- **915** Average number of proceedings per year, comprising facility and rate applications.
- **58** Average number of proceedings per year involving UCA as interveners.
- **$200+ million** Average annual cost disallowances per year from UCA interventions.
# UCA Cost Disallowance Statistics

Since 2013-2014, the UCA has been an intervener in an average 58 AUC rate proceedings per year, successfully contributing to over $1.37 billion in cost disallowances on behalf of Alberta’s electricity and natural gas consumers.

This represents a return on investment of $50.54 for every $1 spent on the UCA’s Regulatory Affairs program.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>UCA Regulatory Expenses</th>
<th>UCA Cost Disallowances</th>
<th>UCA Return on Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>$4,988,267</td>
<td>$58,194,156</td>
<td>$11.67</td>
</tr>
<tr>
<td>2014-15</td>
<td>$5,205,146</td>
<td>$525,895,925</td>
<td>$101.03</td>
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<tr>
<td>2015-16</td>
<td>$4,635,545</td>
<td>$30,135,941</td>
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<td>2016-17</td>
<td>$3,917,993</td>
<td>$240,290,051</td>
<td>$61.33</td>
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<tr>
<td>2017-18</td>
<td>$4,421,046</td>
<td>$251,460,814</td>
<td>$56.88</td>
</tr>
<tr>
<td>2018-19</td>
<td>$4,002,725</td>
<td>$267,316,471</td>
<td>$66.78</td>
</tr>
<tr>
<td>Total</td>
<td>$27,170,722</td>
<td>$1,373,293,358</td>
<td>$50.54</td>
</tr>
</tbody>
</table>
As an intervener on behalf of Alberta’s electricity and natural gas consumers, the UCA contributes on average to over \$200 million per year in cost disallowances.

### UCA Cost Disallowance Statistics

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Cost Disallowances ($Million)</th>
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</thead>
<tbody>
<tr>
<td>2013/2014</td>
<td>$58.19</td>
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<tr>
<td>2014/2015</td>
<td>$525.90</td>
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<tr>
<td>2015/2016</td>
<td>$30.14</td>
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<tr>
<td>2016/2017</td>
<td>$204.29</td>
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<tr>
<td>2017/2018</td>
<td>$251.46</td>
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<tr>
<td>2018/2019</td>
<td>$267.32</td>
</tr>
<tr>
<td>2019/2020</td>
<td>$8.35 *</td>
</tr>
</tbody>
</table>

*data from April 1 to August 16

Three Year Average: \$241 million
### Key AUC Statistics: Electricity Distribution

#### Electricity Distribution System Total Annual Revenue Requirement

All approved expenditures that utilities incur to operate the distribution system (e.g. power poles and wires, buildings, office equipment, salaries, debt, etc.).

**$2.0 billion**

- ATCO Electric: $850 million
- FortisAlberta: $550 million
- ENMAX: $430 million
- EPCOR: $208 million

#### Electricity Distribution System Rate Base

The value of property on which a utility company is permitted to earn a specified rate of return, in accordance with AUC rules.

**$9.1 billion**

- FortisAlberta: $3.3B
- ATCO Electric: $3.2B
- ENMAX: $1.4B
- EPCOR: $1.2B
Since 2013-14, the UCA has steadily decreased its regulatory, consultant and legal expenses, while building a strong internal team of regulatory affairs and market policy analysts.

### UCA Regulatory Affairs Cost Statistics

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>UCA Regulatory Expenses</th>
<th>UCA Consultant and Legal Costs</th>
<th>Ratio of Consultant/Legal Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-14</td>
<td>$4,988,267</td>
<td>$4,794,087</td>
<td>95.9%</td>
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<tr>
<td>2014-15</td>
<td>$5,204,514</td>
<td>$4,716,765</td>
<td>93.9%</td>
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<td>2015-16</td>
<td>$4,635,545</td>
<td>$4,051,643</td>
<td>87.4%</td>
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<tr>
<td>2016-17</td>
<td>$3,917,993</td>
<td>$2,915,909</td>
<td>74.4%</td>
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<td>2017-18</td>
<td>$4,421,046</td>
<td>$3,360,230</td>
<td>76.0%</td>
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<tr>
<td>2018-19</td>
<td>$4,002,725</td>
<td>$2,804,769</td>
<td>70.1%</td>
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</tbody>
</table>

#### UCA Regulatory Affairs and Consultant Costs

![Graph showing UCA Regulatory Expenses and Consultant/Legal costs from 2013-14 to 2018-19](image-url)
UCA Intervention Criteria

The UCA’s mandate is to represent the interests of Alberta residential, farm and small business consumers of electricity and natural gas. The UCA’s objective is to ensure consumers pay the lowest cost with safe and reliable utility service.

The UCA seeks to drive efficiencies and reduce regulatory burden in the utility sector to more closely align with competitive forces. Decisions to participate in AUC proceedings are made on a case-by-case basis, based on the following considerations:

- Impact on Alberta consumers
  - Potential harm or benefit
  - Costs appear excessive
  - Service reliability and quality
  - Terms and conditions of service
  - Intergenerational equity

- Past successes or failures

- Regulatory precedent or principles (including GOA policies)

- Resource Availability

- Are the UCA’s interests adequately addressed by other interveners?
There is a robust electricity regulatory system in place in Alberta to ensure the electricity system is safe, reliable, affordable, efficient and sustainable.

- The Government of Alberta sets the policy direction through legislation and regulation.
- The AUC has the principle regulatory oversight role in the system.
- The AUC has robust evidence-based regulatory processes in place to ensure utility and ratepayer interests are appropriately balanced within the broader public interest.
- The Utilities Consumer Advocate's role within the AUC process is to ensure residential, farm, and small business consumer interests are represented to the adjudicator (the Commission).
- AUC proceedings are resource-intensive processes. They rely on expert analysis that ensures complex technical, financial, and legal decisions are made in a timely fashion so the electricity system can operate efficiently.