Alberta’s Electricity Regulatory System

April 14, 2016
Electricity System Overview

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

- **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
Power Sector Legal Framework in Alberta

Relevant Acts
(Electric Utilities Act, AUC Act, ALSA, EPEA, Fair Trading Act)

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

Minister of Energy
- Approve Ministerial regulations
  - Appoints AESO and Balancing Pool board members, and MSA
  - Establish & operate programs within the Ministry’s mandate

Regulations


Rules – AUC & AESO

Generators  Transmission operators  Distributors  Retailers
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 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 use of energy and the grid.
Government Department Roles

**Department of Energy**
- Enables sustainable and effective energy...development that considered 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 gas co-operatives under the *Rural Utilities Act*.

**Service Alberta**
- Regulates energy marketers under the *Fair Trading Act*.
- Includes the Office of the Utilities Consumer Advocate (UCA), mandated under *Government Organization 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 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.
  - Other responsibilities...as the Minister determines, ie. mediation of disputes between consumers and energy retailers.
Electricity Agencies’ Roles

**ALBERTA UTILITIES COMMISSION (AUC)**
- 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 Alberta where competitive market forces do not.

**ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)**
- 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 electric system
  - Plan and develop the transmission system
  - Provide customer access to the transmission system

**BALANCING POOL (BP)**
- 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.

**MARKET SURVEILLANCE ADMINISTRATOR (MSA)**
- Enforcement agency that protects and promotes the fair, efficient, and openly competitive operation of Alberta’s wholesale electricity markets and retail electricity and natural gas markets.
The Alberta Utilities Commission (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.

The Utilities Consumer Advocate (UCA) represents the interests of residential, farm, and small business consumers in regulatory proceedings.

AUC - Regulatory Process

- Utility company (shareholder) Interests
- Consumer (ratepayer) Interests
- Public Interest
- AUC

UCA advocates
Competitive vs Regulated Monopoly Model

- In a regulated monopoly model, an external regulator (ie. AUC) ensures delivery and costs of essential services are just, reasonable, and in the public interest.

<table>
<thead>
<tr>
<th>Competitive Business Model</th>
<th>Regulated Monopoly Model</th>
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<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
</tr>
<tr>
<td>Price (Competitive)</td>
<td>Return on Equity (%)</td>
</tr>
<tr>
<td>X Quantity</td>
<td>X Equity (Common Shares)</td>
</tr>
<tr>
<td>= Revenue</td>
<td>= Return $</td>
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<tr>
<td><strong>Step 2</strong></td>
<td></td>
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<tr>
<td>- Cost of Goods Sold</td>
<td>+ Taxes</td>
</tr>
<tr>
<td>- Depreciation</td>
<td>+ Interest</td>
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<tr>
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<td>+ Depreciation</td>
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<tr>
<td>- Taxes</td>
<td>+ O &amp; M</td>
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<tr>
<td>= Net Income</td>
<td>= Revenue Requirement</td>
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<tr>
<td><strong>Step 3</strong></td>
<td></td>
</tr>
<tr>
<td>+ Equity</td>
<td>+ Quantity</td>
</tr>
<tr>
<td>= Return on Equity (%)</td>
<td>= Price (Regulated-rates)</td>
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</table>
### Alberta Utilities Commission - Areas of Regulatory Oversight

#### Electricity Supply Chain

<table>
<thead>
<tr>
<th>Category</th>
<th>Rates</th>
<th>Facilities</th>
<th>Markets</th>
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<tbody>
<tr>
<td>Market Surveillance Administrator</td>
<td><img src="lightning" alt="Impact" /></td>
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<tr>
<td>Alberta Electric System Operator</td>
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<tr>
<td>Generation companies</td>
<td><img src="lightning" alt="Impact" /></td>
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<td>Transmission companies</td>
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<td>Distribution companies</td>
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<tr>
<td>Regulated Rate Option Retailers</td>
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AUC Regulatory Process – Rates Applications

1. Applicant (utility) files application.
2. AUC reviews the application [and ensures it is complete].
3. AUC issues a notice of application on its website, and sometimes in local newspapers.
4. Parties with concerns or objections respecting the application must register and submit a Statement of Intent to Participate (SIP).
5. Discovery Process – information is exchanged between the applicant, interested parties, and the AUC. Interveners may also submit evidence.
6. Resolution of the Process through:
   a. negotiation
   b. written submissions
   c. oral hearing and/or final written submissions
7. AUC issues decision. (usually within 90 days of the close of a hearing.)
8. Applicant or intervener may request a review and variance by the AUC, or file an appeal in court.
Regulatory Rate Proceeding – Content

• Most rate proceedings involve a detailed examination (and cross-examination) of the evidence supporting the applicant’s financial estimates for each of the component’s of its price model.

• Interveners (and AUC staff) will scrutinize these estimates using legal, technical, and financial experts; may ask for additional information, and may present evidence that challenges the applicant’s 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 before making decisions on the issues raised and on the overall rate application.

• AUC decisions will normally document the evidence and the rationale that led to the decision on the rate and its component parts.

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<td>Return on Equity (%) X Equity (Common Shares) = Return $</td>
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<td>÷ Quantity = Price (Regulated-rates)</td>
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CONCLUSION

• There is a robust electricity regulatory system in place in Alberta to ensure the electricity system is safe, reliable, affordable, efficient, and sustainable.

• Government 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.

• AUC proceedings are resource-intensive processes, reliant on expert analysis, that ensure complex technical, financial, and legal decisions are made in a timely fashion so the electricity system can operate efficiently.