

Alberta's Energy Utilities Regulatory System

Including UCA's role within the system



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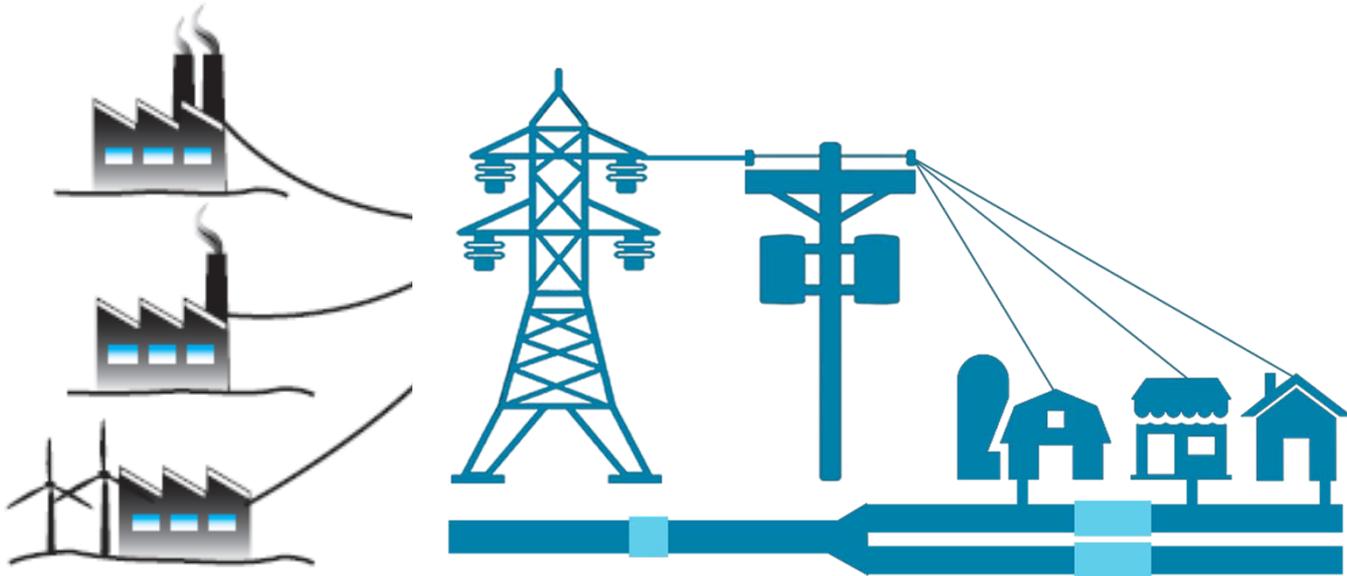


Alberta Utilities Commission



How are Rates Determined

Regulatory Model for Energy Utilities



Generation

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

Transmission

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

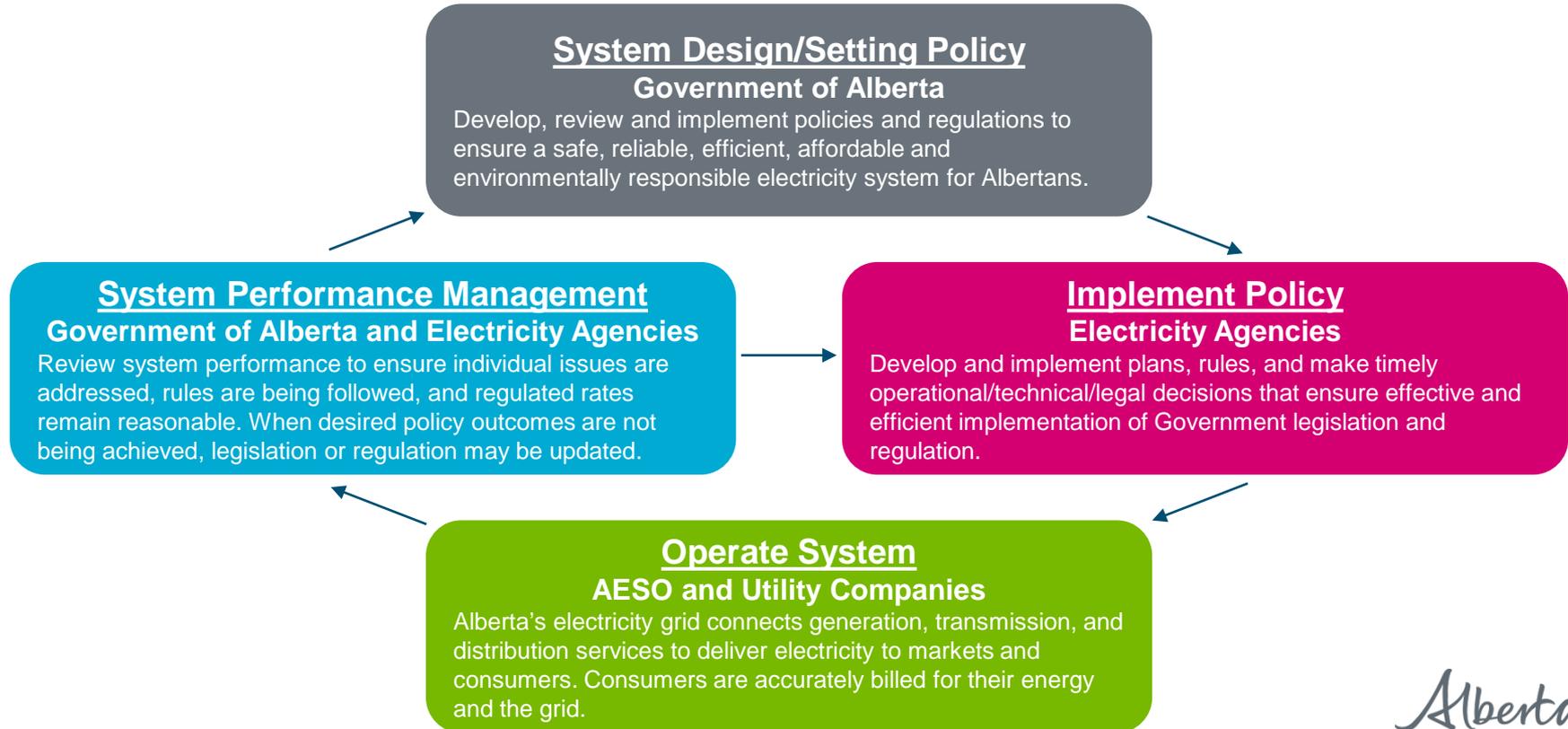
Distribution

- Fully regulated
- Supports retail competition

Retail/Customer

- Partially deregulated
- Competitive contracts
- Regulated rate option for small consumers

Electricity System Responsibilities



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.

Shareholder Interests



Ratepayer Interests



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

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



Generation



Transmission



Distribution



Retail

How are utility rates determined?

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

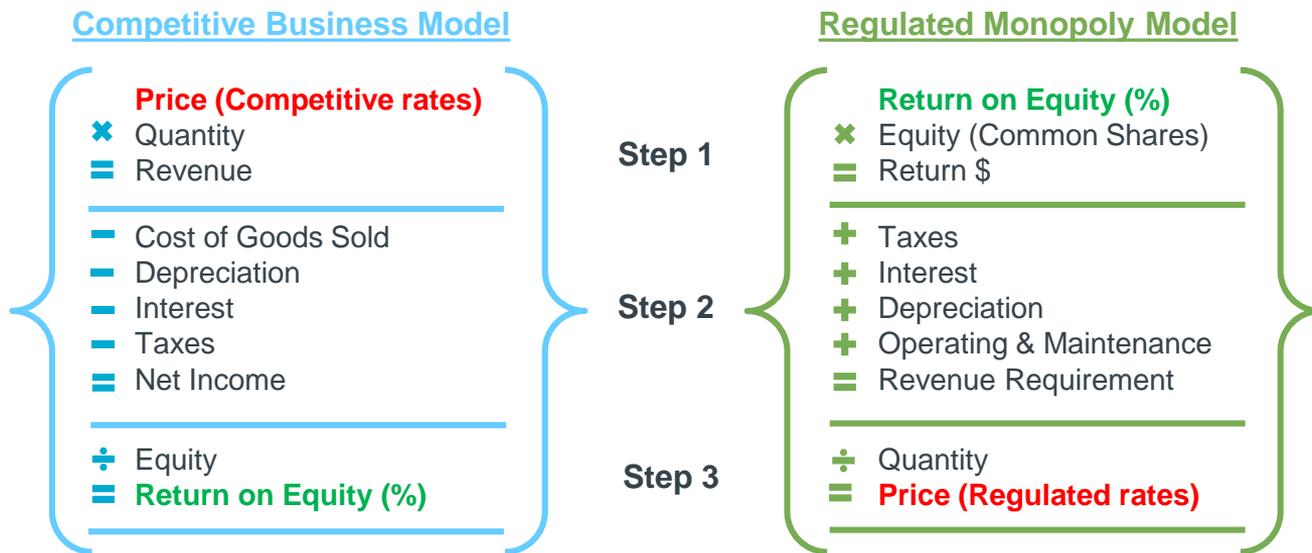
Why regulated monopolies?

- 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.



Regulatory Rate Proceedings Content

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.

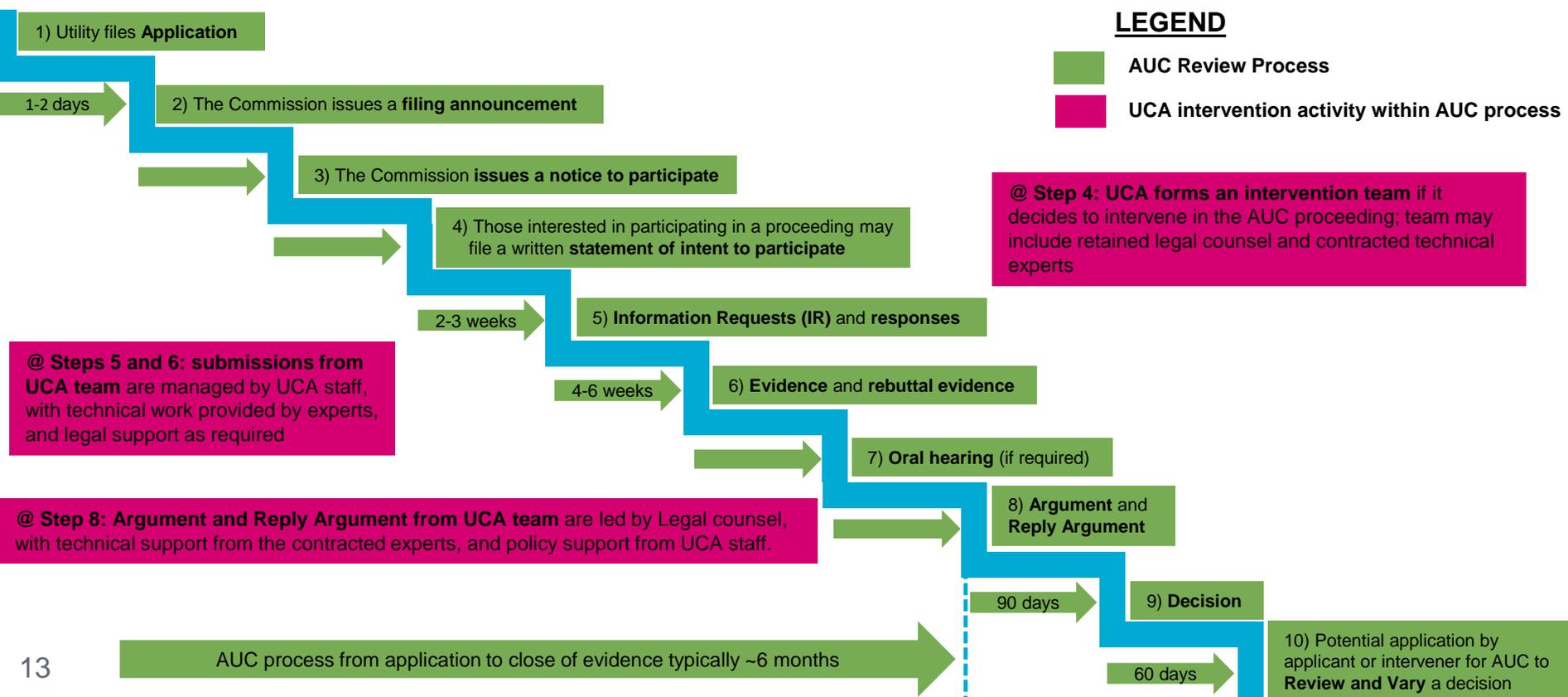
Interveners (e.g. organizations such as UCA representing consumer interests) will scrutinize the **Applicants'** estimates using legal, technical, and financial experts. **Interveners** may ask for additional information, and may present evidence that challenges the **Applicants'** estimates and assumptions.

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



Key AUC Statistics



915

Average number of proceedings per year, comprising facility and rate applications.

utilitiesconsumer
advocate

58

Average number of proceedings per year involving UCA as interveners.

\$200+ million

Average annual cost disallowances per year from UCA interventions.

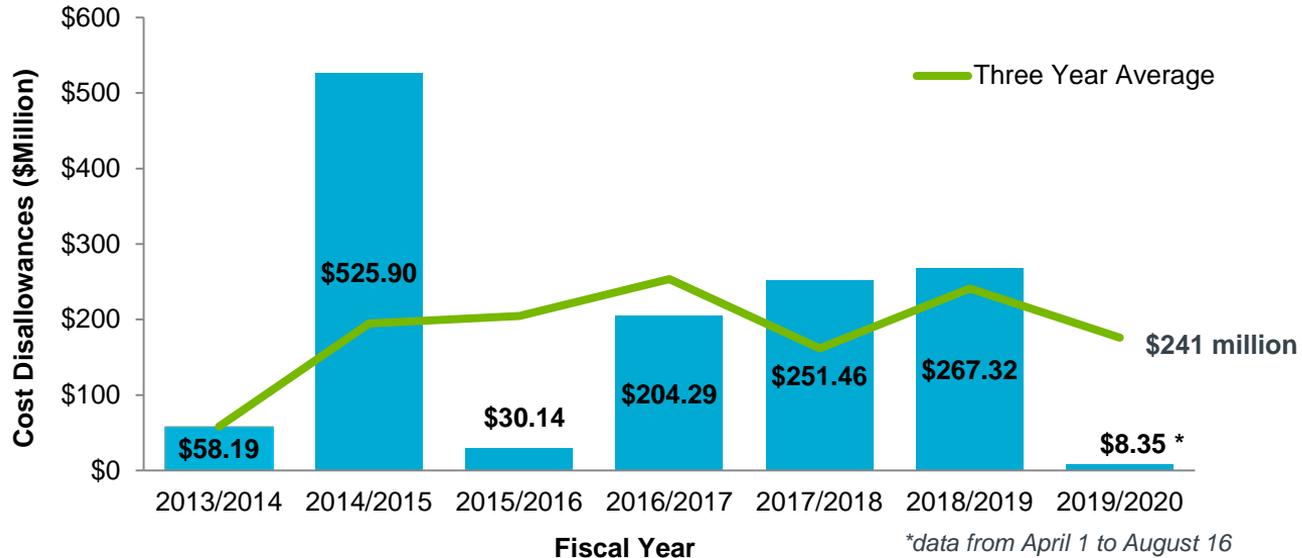
UCA Cost Disallowance Statistics

Fiscal Year	UCA Regulatory Expenses	UCA Cost Disallowances	UCA Return on Investment
2013-14	\$4,988,267	\$58,194,156	\$11.67
2014-15	\$5,205,146	\$525,895,925	\$101.03
2015-16	\$4,635,545	\$30,135,941	\$6.50
2016-17	\$3,917,993	\$240,290,051	\$61.33
2017-18	\$4,421,046	\$251,460,814	\$56.88
2018-19	\$4,002,725	\$267,316,471	\$66.78
Total	\$27,170,722	\$1,373,293,358	\$50.54

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.

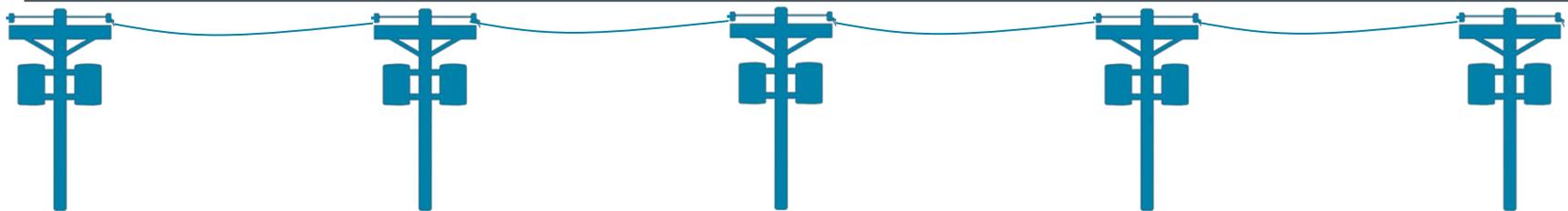
This represents a return on investment of **\$50.54** for every **\$1** spent on the UCA's Regulatory Affairs program.

UCA Cost Disallowance Statistics



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.

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.

In general, the rate base consists value of the property used by the utility company in providing service.

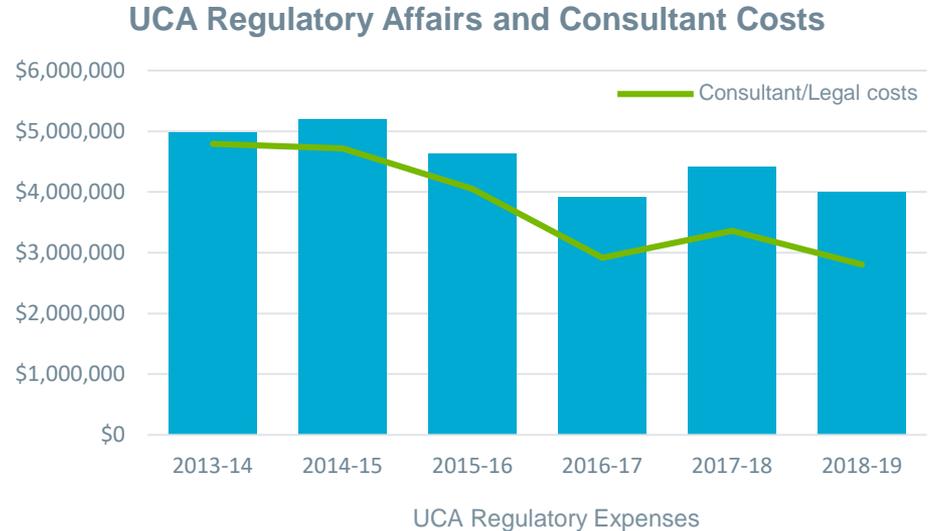
\$9.1 billion

FortisAlberta: \$3.3B
ATCO Electric: \$3.2B
ENMAX: \$1.4B
EPCOR: \$1.2B

UCA Regulatory Affairs Cost Statistics

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.

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



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?

Summary

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.