

Restructuring Success: New Electricity Market and Transmission Policies in Alberta

Affordability and Utilities

Nicole Spears
June 3, 2025



Introduction

- The Government of Alberta enabled energy storage resources in Alberta's legislative framework
 - The *Electricity Statutes (Modernizing Alberta's Electricity Grid) Amendment Act (ESAA)* enabled energy storage resources within the electricity market framework
 - The *ESAA* also enabled the use of energy storage resources as transmission and distribution infrastructure with AUC approval
- In 2024, the Government of Alberta initiated reforms to the electricity market
 - Electricity reforms aim to promote reliability and affordability while incenting the efficient integration of flexible technologies such as energy storage

Markets Policy Redesign

March 2024:
Government of Alberta
initiates electricity
market reforms

- Short-Term: Supply Cushion Regulation and Market Power Mitigation Regulation
- Long term: Restructured Energy Market

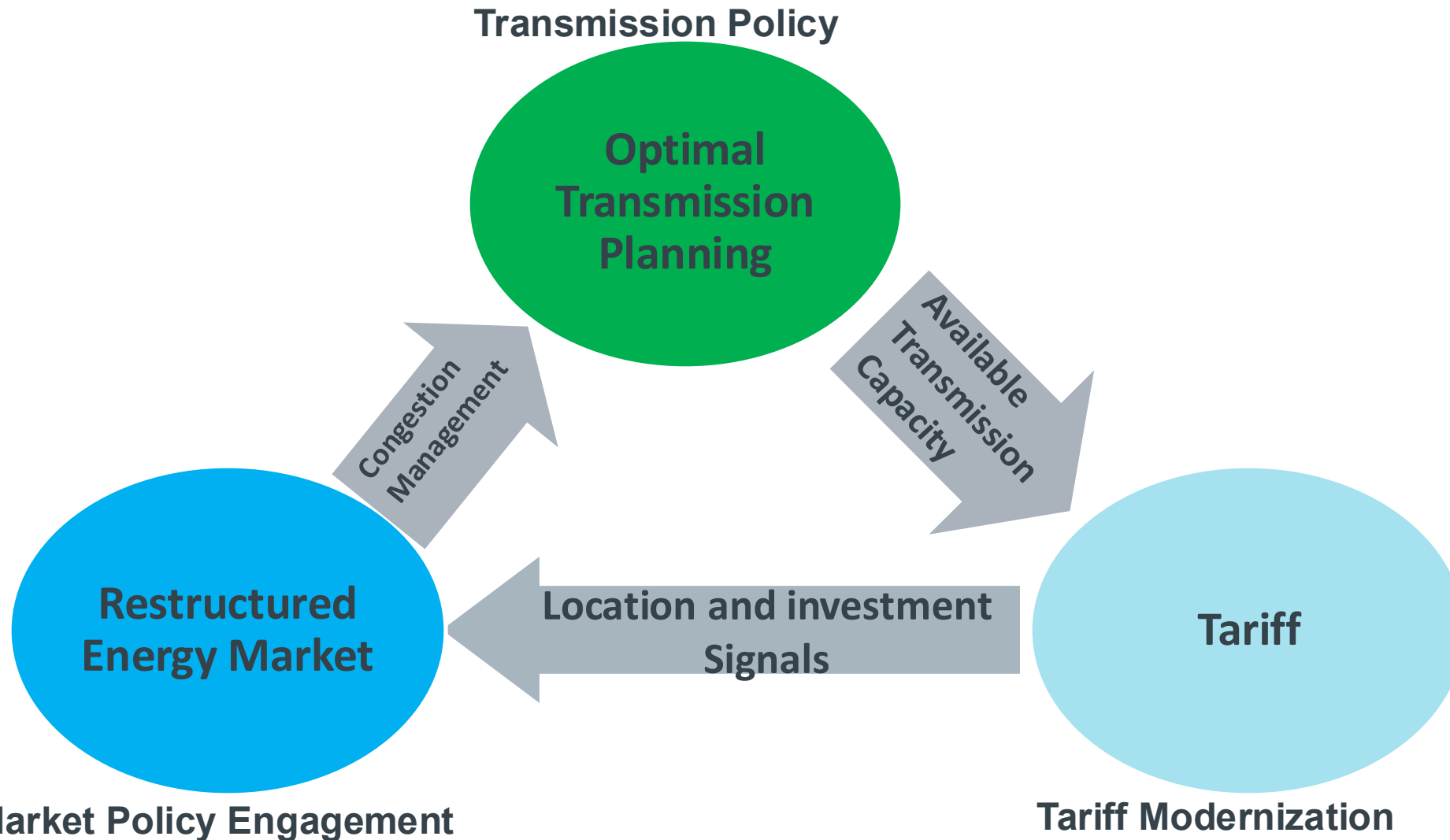
Government directs the
AESO to:

- Progress implementation of a Restructured Energy Market
- Maintain strategic bidding with appropriate guardrails to mitigate excessive market power
- Implement five-minute settlement for transmission connected loads and generators by 2032

Transmission Policy

- Comprehensive engagement and review of transmission policy, with a focus on:
 - Maximizing the use of the existing transmission system
 - Minimizing the need for transmission investments
- Government decisions:
 - Replace the zero-congestion policy with an optimal transmission planning standard
 - Assign ancillary services costs on a cost-causation basis
 - Manage congestion through a market-based mechanism that recognizes incumbent generators
 - Replace the Generating Unit Owner's Contribution with an upfront and nonrefundable Transmission Reinforcement Payment to incent better siting decisions
 - Require the AESO to procure sufficient levels of high availability ancillary services to enable full import flows on both the Alberta-BC Intertie and MATL

A Framework for Electricity



Legislative Implementation

On May 15, 2025, the *Energy and Utilities Statutes Amendments Act* (EUSAA) received royal assent

- The Act provides the legislative framework that will enable the implementation of the REM and modernization of current transmission policy.

The EUSAA legislative framework

- An enhanced day-ahead market for reliability
- New market mitigation framework
- New dispatch optimization tools
- Allocation of ancillary costs based on cost-causation principles
- Optimal transmission planning based on economic benefit and costs of transmission infrastructure
- Market-based congestion management mechanism

Opportunities for Energy Storage



Opportunities in the energy-only market

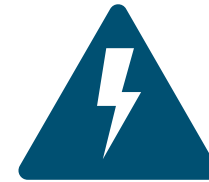
Energy arbitrage
Export opportunities
Balancing opportunities



Opportunities in transmission planning (ESAA)

Energy storage as transmission infrastructure

Energy storage as distribution infrastructure (e.g. Waterton battery energy storage)



Opportunities in ancillary services

Intertie restoration opportunities (fast frequency response procurement)

New fast ramp ancillary services (R30)

Next Steps

- Stakeholder engagement on REM technical design continues
 - Congestion Management framework
 - Recognition of incumbent investments
 - Development of ISO rules
- Legislative amendments
 - Amendment to reflect final market design
 - Congestion management implementation
 - Legislation for incumbent recognition