

Alberta Capacity Market

Comprehensive Market Design (CMD 1)

Design Rationale Document

Section 1: Alberta Capacity Market Framework

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1. Alberta Capacity Market Framework

To supplement the Comprehensive Market Design proposal (CMD 1), this document discusses the input from the working groups and the feedback from industry stakeholders, as well as discusses the rationale for the AESO's proposed design.

Each working group developed and voted on recommendations on primary design elements, which were based on the submissions of the AESO, individual working group members, and external consultants. Working group recommendations were also summarized through the Straw Alberta Market (SAM) iterations and the broader stakeholder community had the opportunity to submit feedback on the content. This document details the analyses, rationale, working group feedback and broader stakeholder feedback used to arrive at the proposed design elements in CMD 1.

In 2017, the AESO, with input from industry stakeholders, identified design criteria that would drive the capacity market design. The proposed design is intended to satisfy the criteria. An assessment of alignment between the criteria and proposed design elements is also contained in this rationale document. These design criteria are outlined below:

Design Principles
Market
Capacity market should be fair, efficient, and openly competitive
Procurement of capacity should employ market-based mechanisms, and a competitive market for capacity should be developed
A wide variety of technologies should be able to compete to provide capacity, provided they are qualified to meet the eligibility criteria
Capacity market mechanisms, outcomes and relevant data should be transparent
There should be a well-defined product and an effective and efficient price signal
Cost and Risk
Investment risks should continue to be largely borne by investors rather than consumers
The market structure, which includes the capacity market, energy market and ancillary services market, should create conditions such that private investment can be reasonably expected
There should be an effective balance between capacity cost and supply adequacy
The term of the capacity obligation should be as short as possible, while ensuring supply adequacy objectives are achieved through sufficient investment in new capacity supply
The design should allow consumers to manage the cost of capacity, if and where appropriate
Supply Adequacy and Reliability

The capacity market should achieve desired reliability objectives by creating a measurable supply adequacy product designed to provide energy production or reduced consumption when needed
The capacity market should contribute to the reliable operation of the electricity grid, and implementation should be consistent with, and complementary to, existing measures aimed at reliability
Flexibility
Unique aspects of Alberta’s electricity system should be considered in the design of the capacity market
The capacity market should be compatible with other components of the electricity framework
Timely Development
Market should be targeted to open in 2019 with start of first capacity procurement for delivery of capacity starting in 2021
Changes to energy and ancillary services markets required to achieve the most efficient steady-state electricity market possible may need to be staged to ensure timely initial implementation
To the extent a staged implementation of the overall electricity market is pursued, the expected timing and nature of future changes should be provided before opening the first procurement
The risks of regulatory delay and need for re-design should be minimized
Common practices and lessons learned from other capacity market implementations should be leveraged as much as practicable and applicable
Simple and straightforward initial implementation should be a priority

Going forward, the AESO will continue to engage stakeholders – both through working groups and broadly – to continue to develop and refine the CMD. A final design recommendation will be provided by the AESO in June 2018.