

Capacity Market Rules Set 1 Consultation Session

Agenda

Time	Agenda Item
9:00 – 9:15	Welcome, Introductions and Housekeeping <ul style="list-style-type: none">- Overview of consultation process & timeline- Feedback matrices- Rules may have changed based on feedback & alternative wording
9:15 – 10:15	Comprehensive Market Design (CMD) Section 2 rules & definitions: discussion re: purpose and structure of each proposed ISO rule: <ul style="list-style-type: none">- Qualification of Capacity- Self-supply Configuration- Capacity Market Participant Registration- Appointment of an Agent for the Capacity Market
10:15 – 11:30	Q& A on CMD Section 2 ISO rules
11:30 – 12:30	Lunch
12:30 – 1:30	CMD Section 5, 6 & 9 rules & definitions: purpose and structure of each proposed ISO rule: <ul style="list-style-type: none">- Capacity Market Block Allocation- Capacity Market Clearing- Offers and Bids for the Capacity Market- Base and Rebalancing Auction- Capacity Payment Calculation
1:30 – 2:30	Q&A on CMD Section 5 & 6 ISO rules
2:30 – 2:45	CMD Section 10 rules & definitions: purpose of amendments to existing ISO rules
2:45 – 3:00	Q&A on Comprehensive Market Design Section 10 ISO rules

Market Transition Engagement Timeline



CAPACITY
MARKET RULES

DEMAND
CURVE RULES

COST ALLOCATION TARIFF DESIGN

FILING Q1 2019



AUC DECISION

MARKET ROADMAP – stage 1

stage 2

Market Transition Engagement Timeline



2018

2019

Q3

Q4

Q1

Q2

Q3

Q4

**CAPACITY
MARKET RULES**

**DEMAND
CURVE RULES**

FILING Q1 2019



AUC DECISION

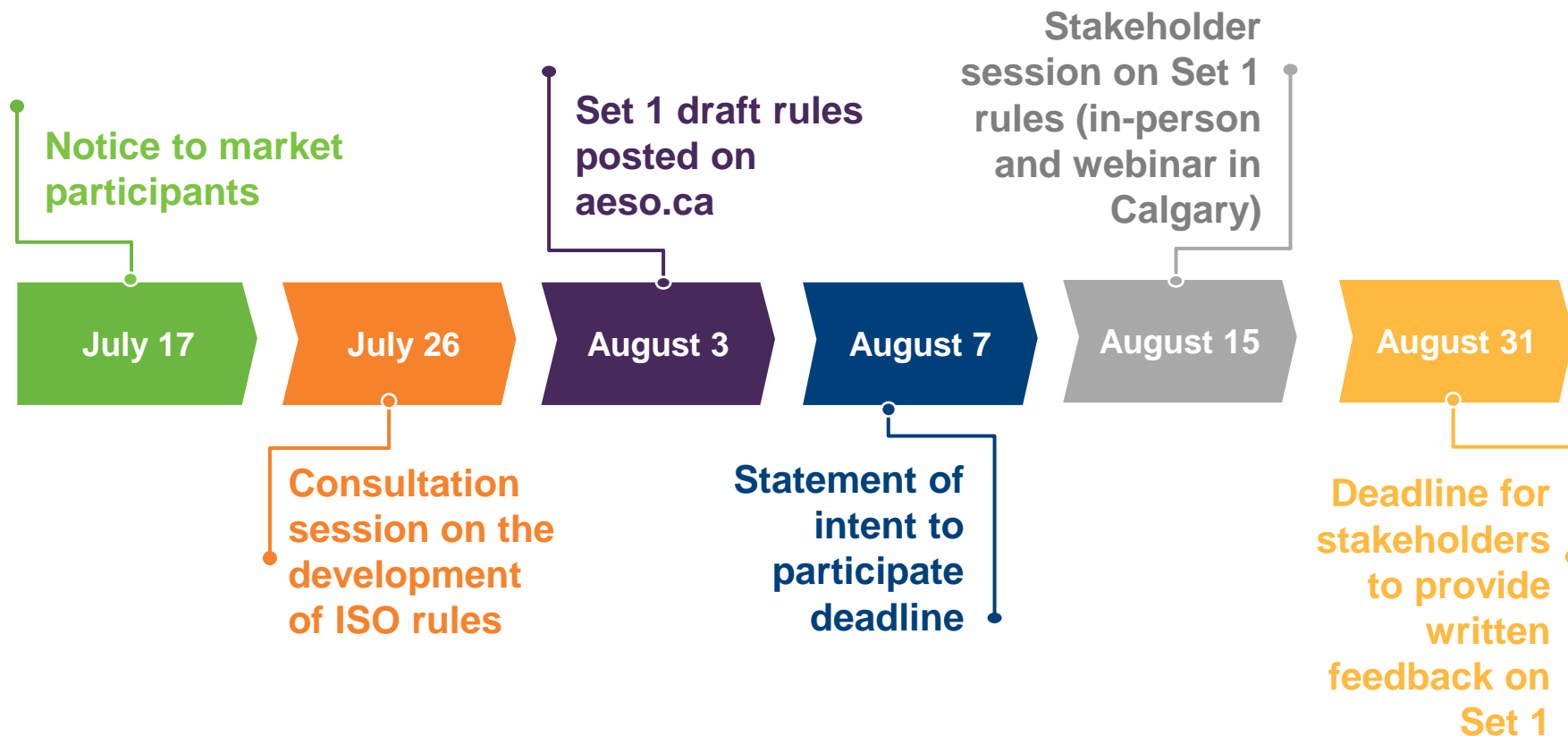
COST ALLOCATION TARIFF DESIGN

MARKET ROADMAP – stage 1

stage 2

ISO Capacity Market Rules – High Level Timeline





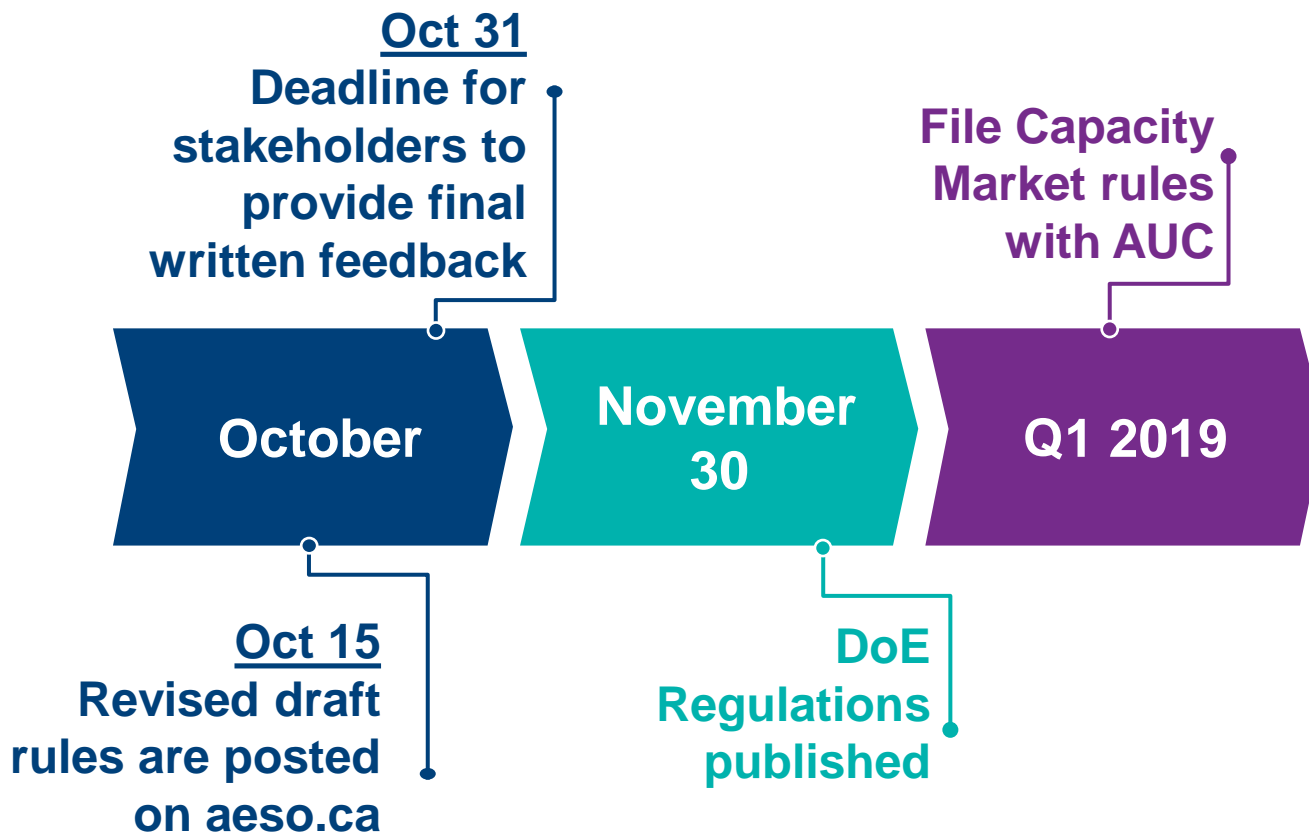
Set 2



Set 3



All sets – timeline



Comprehensive Market Design Section 2 rules & definitions:

- Qualification of Capacity
- Self-supply Configuration
- Capacity Market Participant Registration
- Appointment of an Agent for the Capacity Market

Comprehensive Market Design Section 5, 6 & 9 rules & definitions:

- Capacity Market Block Allocation
- Capacity Market Clearing
- Capacity Payment Calculation
- Offers and Bids for the Capacity Market
- Base and Rebalancing Auction

Comprehensive Market Design Section 10 rules & definitions:

- Amendments to existing ISO rules

Comprehensive Market Design

Section 2: ISO rules & definitions

CMD Section 2: Supply Participation

FINAL CMD PROVISION	RULE
<p>Section 2.1 Prequalification Applications</p> <ul style="list-style-type: none">• New capacity assets and import assets must be prequalified by the ISO/meet specific criteria.• Existing generating units in Alberta automatically prequalify.• REP and energy efficiency are not eligible to participate at this time.	<p>Section 206.1 of the ISO rules, <i>Qualification of Capacity</i> Section 201.10 of the ISO rules, <i>Capacity Market Participant Registration</i></p>
<p>Section 2.2 Self-supply designations</p> <ul style="list-style-type: none">• City of Medicine Hat, sites that are metered net-to-grid, and sites that cannot physically flow electricity to the interconnected electric system are required to self-supply capacity.• Sites that are metered gross-to-grid have the option to self-supply capacity. These sites may also participate in the capacity market with excess generation that is not serving onsite load.	<p>Section 206.2 of the ISO rules, <i>Self-supply configurations</i></p>
<p>Section 2.3 Delisting</p> <ul style="list-style-type: none">• Process for removing an asset from the capacity market, either temporarily or permanently.	<p>Set 2 Rules</p>

- The purpose of this ISO rule is to:
 - Set out the criteria that new entrants (i.e., “new capacity”), and existing assets that wish to provide incremental or refurbished capacity, are required to meet in order to enter the capacity market; and
 - Outline the application process for entering the capacity market.
- Associated definitions:
 - **“capacity”**
 - **“new capacity”**
 - **“incremental capacity”**
 - **“refurbished capacity”**

- Information Document content:
 - Guidance on content of a qualification application based on fuel-type
 - Additional details on the submission process and tool

- The purpose of this rule is to:
 - Prescribe what sites are obligated to self-supply capacity, rather than receive it from the capacity market;
 - Provide an option for sites with the appropriate metering to either self-supply capacity or participate in the capacity market; and
 - Require self-supply sites with excess generation to participate in the capacity market if UCAP of excess generation is 1 MW+;
 - Outline the application process to inform the AESO what self-supply configuration the site will be and any changes to the configuration

- Information Document content:
 - Guidance on content of a application to self-supply capacity
 - The difference between being metered net-to-grid and gross-to-grid
 - Examples of self-supply configurations
 - Additional details on process for changing self-supply status
 - Relationship between Section 206.2 and other capacity market rules

Section 201.10, *Capacity Market Participant Registration*

- The purpose of this rule is to:
 - Require a new entrant and, in respect of existing assets over 1 MW, a pool participant to register a single party as the capacity market participant who will have all the rights and obligations in the capacity market;
 - Require the ISO to maintain and publish a list of capacity market participants, and any associated agents, for each asset that is in the capacity market; and
 - Outline administrative requirements respecting capacity market participant registration and liability.
- Associated definitions:
 - **“capacity market participant”**

Section 201.10, *Capacity Market Participant Registration*

- Information Document content:
 - Guidance on the registration process
 - An explanation of related forms and supporting documents
 - When and how to update information
 - Where to find the ISO's capacity market participant information list and the information that will be included on it

Section 201.11, *Appointment of an Agent for the Capacity Market*

- The purpose of this rule is to describe the process for a capacity market participant to appoint an agent to act on behalf of the participant in the capacity market.

Questions?

Comprehensive Market Design

Sections 5, 6 & 9: ISO rules & definitions

CMD Section 5: Base Auction

FINAL CMD PROVISION	RULE
<p>Section 5.1 Auction Forward Period and Timeline</p> <ul style="list-style-type: none"> • Three-year forward period (after a transition period with shorter forward periods). 	<p>Section 206.6 of the ISO rules, <i>Base Auctions and Rebalancing Auctions</i></p>
<p>Section 5.2 Base Auction Guidelines and Schedule</p> <ul style="list-style-type: none"> • ISO to issue Capacity Market Auction Guidelines (5.2.1(a)). 	<p>Section 206.6 of the ISO rules, <i>Base Auctions and Rebalancing Auctions</i></p>
<p>Section 5.2 Base Auction Guidelines and Schedule</p> <ul style="list-style-type: none"> • Details on how to prequalify for the capacity auction (5.2.1(a)). 	<p>Section 206.1 of the ISO rules, <i>Qualification of Capacity</i> Section 201.10 of the ISO rules, <i>Capacity Market Participant Registration</i></p>
<p>Section 5.2 Base Auction Guidelines and Schedule</p> <ul style="list-style-type: none"> • Assigning a uniform capacity value once the prequalification is completed (5.2.2). • Offer control and capacity market mitigation (5.2.3). • Dispute determinations for control (5.2.5). 	<p>Set 2</p>
<p>Section 5.2 Base Auction Guidelines and Schedule</p> <ul style="list-style-type: none"> • Notice of demand curve parameters (5.2.4). 	<p>Set 3</p>
<p>Section 5.2 Base Auction Guidelines and Schedule</p> <ul style="list-style-type: none"> • Publishing auction results (5.2.6). 	<p>Section 206.6 of the ISO rules, <i>Base Auctions and Rebalancing Auctions</i></p>

CMD Section 5: Base Auction

FINAL CMD PROVISION	RULE
<p>Section 5.3 Dispute Resolution</p> <ul style="list-style-type: none"> A process will be established to resolve disputes related to prequalification assessments, UCAP determination, delisting, self-supply determinations and market power mitigation. 	<p>Set 2</p>
<p>Section 5.4 Obligation Period</p> <ul style="list-style-type: none"> One-year obligation period, running November 1 – October 31. 	<p>Section 206.6 of the ISO rules, <i>Base Auctions and Rebalancing Auctions</i></p> <p>Definitions</p>
<p>Section 5.5 Supply Participation and Offer Format</p> <ul style="list-style-type: none"> Content requirements for must offer requirements, submitting an offer, including flexibility, volume, and pricing. 	<p>Section 206.4 of the ISO rules, <i>Offers and Bids for the Capacity Market</i></p> <p>Section 201.12 of the ISO rules, <i>Capacity Market Block Allocation</i></p> <p>Set 2 (identifying offer control)</p>
<p>Section 5.6 Out of Market Capacity Payments</p> <ul style="list-style-type: none"> No adjustments for out-of-market payments for initial auction. 	<p>No obligations</p>
<p>Section 5.7 Single Round Uniform Price</p> <ul style="list-style-type: none"> Sealed bid, single round auction (5.7.1). 	<p>Section 206.6 of the ISO rules, <i>Base Auctions and Rebalancing Auctions</i></p>

CMD Section 5: Base Auction

FINAL CMD PROVISION	RULE
Section 5.7 Single Round Uniform Price <ul style="list-style-type: none">• Alberta will clear as a single capacity region with one capacity price (5.7.2).	Section 201.13 of the ISO rules, <i>Capacity Market Clearing</i>
Section 5.8 Auction Clearing and Price Setting <ul style="list-style-type: none">• Mechanics and principles for the auction clearing process including consideration of uplift payments due to transmission constraints.	Section 201.13 of the ISO rules, <i>Capacity Market Clearing</i>
Section 5.9 Addressing Intertie Transmission Constraints <ul style="list-style-type: none">• Identifying transmission constraints and principles for auction clearing with consideration to transmission constraints.	Section 201.13 of the ISO rules, <i>Capacity Market Clearing</i>
Section 5.10 Addressing Internal Transmission Constraints <ul style="list-style-type: none">• Identifying transmission constraints and principles for auction clearing with consideration to transmission constraints.	Section 201.13 of the ISO rules, <i>Capacity Market Clearing</i>

CMD Section 6: Rebalancing Auctions

FINAL CMD PROVISION	RULE
<p>Section 6.1 Rebalancing Auction Timeline and Procedure</p> <ul style="list-style-type: none">• Purpose of the rebalancing auction is to enable the purchase or sale of capacity to reflect changes to expected capacity volume due to various causes and reasons (6.1.1).	<p>Section 206.4 of the ISO rules, <i>Offers and Bids for the Capacity Market</i></p>
<p>Section 6.1 Rebalancing Auction Timeline and Procedure</p> <ul style="list-style-type: none">• Two rebalancing auctions will be held at 18 and 3 months before the obligation period; during the transitional period, one rebalancing auction will be held 3 months before the obligation period (6.1.2).	<p>Section 206.6 of the ISO rules, <i>Base Auction and Rebalancing Auction</i></p>

CMD Section 6: Rebalancing Auctions

FINAL CMD PROVISION	RULE
<p>Section 6.2 Bids and Offers by Capacity Market Participants</p> <ul style="list-style-type: none">• Rebalancing auctions will provide the opportunity for capacity suppliers to buy-back previously sold volumes or sell remaining uncommitted volumes.• Capacity suppliers who are required to buy-out in a rebalancing auction due to failure to meet development milestones or UCAP reductions will be priced above the price cap to ensure clearing.	<p>Section 206.4 of the ISO rules, <i>Offers and Bids for the Capacity Market</i></p>
<p>Section 6.3 AESO's Bids and Offers</p> <ul style="list-style-type: none">• The AESO's bids and offers are implied in the rebalancing auction demand curve.	<p>Section 206.4 of the ISO rules, <i>Offers and Bids for the Capacity Market</i></p>
<p>Section 6.4 Auction Clearing, Price Setting and Settlement</p> <ul style="list-style-type: none">• Rebalancing auctions will clear using the same mechanics as the base auction.	<p>Section 201.13 of the ISO rules, <i>Capacity Market Clearing</i></p>
<p>Section 6.5 Anticipated Transmission Constraints</p> <ul style="list-style-type: none">• Identifying transmission constraints and principles for auction clearing with consideration to transmission constraints.	<p>Section 201.13 of the ISO rules, <i>Capacity Market Clearing</i></p>

Section 206.4 Offers and Bids for the Capacity Market

The purpose of this ISO rule is to establish:

- the obligations requiring capacity market participants to offer the uniform capacity value in the base and rebalancing auctions;
- designation of block flexibility or inflexibility;
- the options available to a capacity market participant with respect to offers for refurbished capacity;
- the options for a capacity market participant to submit discretionary and obligatory bids in rebalancing auctions; and
- that the ISO will set the offering window and offer submission methods for the base and rebalancing auctions.

Associated definitions:

- “offer”; “bid”; “flexible”; and “inflexible”

Section 206.6 Base Auction and Rebalancing Auction

The purpose of this ISO rule is to establish:

- the timelines for the base and rebalancing auctions;
- the format of the capacity auction (sealed bid, single round);
and
- the publication requirements of capacity market auction guidelines and the auction results.

Associated definitions:

- “base auction”
- “rebalancing auction”
- “obligation period”

Information Document and Auction Guidelines – Section 206.4 and 206.6

- Information Document content:
 - Example of offers and bids into the base auction and rebalancing auction
 - Where to find auction results
 - Process for submitting offers and bids
 - Link to the Capacity Market Trading System Manual
- Auction Guidelines content:
 - Timelines for the offering window and other key activities
 - Timelines for concluding a base auction for the first 3 obligation periods

Section 201.12 Capacity Market Block Allocation

The purpose of this ISO rule is to establish:

- a unique identifier for each capacity market asset; and
- capacity block allocations for offers and bids for assets.

Associated Definitions:

- “capacity blocks”

The purpose of this ISO rule is to establish:

- that the auction will clear in a manner that maximizes social surplus;
- how transfer path limits (capacity volumes that can be delivered over the transfer paths) will be determined; and
- how the ISO must set the clearing price of a base or rebalancing auction.

Associated definitions:

- “available transfer capability”
- “transmission constraint”

- Information Document content:
 - Discuss concept of social surplus
 - Provide examples of the clearing process

CMD Section 9: Settlement and Financial Security Requirement

FINAL CMD PROVISION	RULE
Section 9.2 Settlements Applicable to Capacity Assets <ul style="list-style-type: none">The AESO will make monthly capacity payments to a capacity supplier for each of its assets	Section 103.10 of the ISO rules, <i>Capacity Payment Calculation</i>
Remainder of Section 9	Set 2

Section 103.10 Capacity Payment Calculation

The purpose of this ISO rule is to establish:

- a formula to determine monthly capacity payment for an asset.

Associated definitions:

- “obligation period”
- “capacity commitment”
- “base auction”
- “rebalancing auction”

Questions?

Comprehensive Market Design

Section 10: Amendments to existing ISO rules & definitions

“Electricity Market Participant”

- Amendments to existing ISO rules to align with the definition of “market participant” and “electricity market participant” in the *Electric Utilities Act*.

Section 202.7, *Markets Suspension or Limited Markets Operations*

- The requirement to estimate the anticipated termination of Limited Market Operation or Market Suspension when making the declaration has been removed. Declarations are made at the beginning of an event, and before problems have been investigated. Termination time is unknown.

- A requirement to consider load assets has been added in consideration of a load asset now submitting offers into the energy market.
 - The AESO expects to further amend subsection 2(1)(b) as follows: ~~increase or decrease~~ the real power consumption at a load asset.
- The addition of subsection 5 “Acknowledging Directives” to align with “Acknowledging Dispatches” in the Section 201.7 of the ISO rules, *Dispatches*.

Section 303.1 Load Shed Service

- Revision to remove the MW threshold for modification to the load shed service arming level during the scheduling hour. This revision was made in order to provide more flexibility with respect to intra-hour import dispatches.

Section 304.2, Electric Motor Start Requirements

- Revision to move area-specific requirements from Appendix 1 to an information document. This allows the AESO to update the list of those with motor start requirements, ensuring that safe and reliable operation of the AIES.
- The motor start requirements for Empress Area will be removed based on engineering studies showing motor starting in the area is no longer a concern. No change to the other two areas.

Section 304.8, Event Analysis

- A revision was made to add in missing information in the applicability section with respect to the size of generating unit in order to align with NERC's event analysis program.

Section 305.1, Energy Emergency Alerts

- The categories of Energy Emergency Alerts (EEA) have been removed from this rule because they no longer align with NERC.
- The AESO is continuing its analysis with respect to NERC's EOP-011, and depending on the outcome of that analysis, may remove Section 305.1 if the notification of an EEA event is included in the Alberta Reliability Standard.

Section 305.4, *System Security*

- Revision to unbold “system emergency”, which was inadvertently bolded. System emergency is not a defined term in the AESO’s *Consolidated Authoritative Document Glossary*.

Questions?

Thank you