

# 5 Base Auction

This section addresses the specific timeline, format and mechanics for a base auction.

#### 5.1 Auction forward period and timeline

- 5.1.1 The AESO will conduct the base auction three years before the start of the obligation period with the exception of the transition period.
- 5.1.2 The AESO will commence the implementation of the Alberta capacity market by utilizing a transition period. This transition period will commence with prequalification for the first base auction in November 2019 and will continue until the conclusion of the October 2021 base auction.

Following the first base auction, two subsequent base auctions will be held at approximately six month intervals. One base auction will be completed in January 2021 with an approximately 21 month forward period, and another base auction will be completed in June of 2021 with an approximately 28 month forward period. The October 2021 base auction, for the 2024/25 obligation period, will be the first auction conducted with the full three-year forward period. The transition timeline to the three-year forward period is shown in Table 1 below:

Pre-qualification Starts	Auction Date	Obligation Period
Nov. 2019	June 2020	2021/22(NovOct.)
May 2020	Jan. 2021	2022/23(NovOct.)
Nov. 2020	June 2021	2023/24(NovOct.)
March 2021	Oct. 2021	2024/25(NovOct.)

Table 1 - Timeline for base auction

## 5.2 Base auction guidelines and schedule

- 5.2.1 Prior to the commencement of each capacity auction, the AESO will publish:
  - (a) auction guidelines that contain the auction format, details on how to prequalify for the capacity auction, the timetable for submission of applications, IT system information, provisional parameters and other such information; and
  - (b) a schedule identifying the key activities that will be undertaken for each base auction. See Figure 1 below for an example of such schedule.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> The list of key activities will be elaborated upon in future versions of the Comprehensive Market Design.



Figure 1 – Base auction timeline after transition period is completed



- 5.2.2 The AESO will complete the prequalification and qualification stages and assign each capacity asset a specific UCAP rating in accordance with the process outlined in Section 3, *Supply Participation*.
- 5.2.3 The AESO will notify firms if they fail the market power screen and are subject to market power mitigation measures in accordance with the process outlined in Section 7, *Market Monitoring and Mitigation*.
- 5.2.4 The AESO will provide notice of the base auction parameters in accordance with the process outlined in Section 4, *Calculation of Demand Curve Parameters*.
- 5.2.5 The legal owner of a prequalified or qualified capacity asset may have an opportunity to dispute determinations made by the AESO, including without limitation in respect of the following:
  - (a) prequalification assessments
  - (b) UCAP
  - (c) delisting
  - (d) self-supply
  - (e) market power mitigation
- 5.2.6 The AESO will review and report the auction results following auction clearing and post the results shortly after the auction is completed.

## 5.3 Obligation period

5.3.1 Each obligation period will be one year in duration, from Nov. 1 to Oct. 31 of the following year.

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## 5.4 Supply participation and offer format

- 5.4.1 Each qualified capacity asset must specify, in its offer, a number of characteristics that will be used to facilitate the clearing process. Offers must include the following:
  - (a) "Capacity asset ID" The unique identifier assigned to a capacity asset.
  - (b) "Flexibility" Whether a block is flexible or inflexible. If a qualified capacity asset offers an inflexible block, all the other offers from that qualified capacity asset with prices greater than the inflexible block have to be flexible.
  - (c) "Price" The price (in \$/kW-year) for each block.
  - (d) "Quantity" The quantity in UCAP MWs for each block.
- 5.4.2 Other requirements that will apply to the submission of offers in a capacity auction include:
  - (a) Offer prices in a base auction will be bound by a minimum at \$0/kW-year and a maximum of the price cap established for the demand curve. Offer prices in a rebalancing auction may be greater than the price cap, as discussed in Section 6.
  - (b) The minimum block size will be one MW.
  - (c) The offer curve of each qualified capacity asset formed with price-quantity pairs is required to be monotonically increasing.
- 5.4.3 A firm must offer the entire qualified UCAP for its qualified capacity assets in each base auction.

## 5.5 Out-of-market capacity payments

- 5.5.1 No adjustments will be made to capacity market offers from qualified capacity assets for the purposes of adjusting for out-of-market payments.
- 5.5.2 Resources from REP Rounds 1, 2, and 3 will not be eligible to participate in the capacity market.

#### 5.6 Single-round uniform price auction

- 5.6.1 A sealed-bid, single-round, uniform pricing auction will be utilized for each capacity auction.
- 5.6.2 When an auction clears in an unconstrained manner, a single capacity price will be established for all qualified capacity assets that clear the market.
- 5.6.3 In the event there are transmission constraints that limit the full selection of a capacity offer at or below the unconstrained clearing price, the capacity market price will be set at the unconstrained price level established without consideration of transmission constraints. A qualified capacity asset offering capacity volume at prices higher than the unconstrained price level, where such capacity volume is required to satisfy the total volume determined through unconstrained market clearing, will receive an uplift payment for such capacity volume equal to the difference between their offer price and the unconstrained clearing price.

# 5.7 Auction clearing and price-setting

- 5.7.1 The AESO will utilize a capacity market auction-clearing algorithm that will seek to maximize social surplus and in so doing, minimize deadweight loss.
- 5.7.2 The AESO will utilize a capacity market auction-clearing algorithm that will, where the market cannot clear at the intersection of the supply and demand curve, clear the capacity offer that maximizes social surplus.

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5.7.3 The AESO will set the capacity market clearing price at the demand curve where the entire supply curve is below the demand curve, or where the entire procurement volume is below the demand curve. For clarity, the market clearing price will be set at the intersection between the vertical line drawn from the procured quantity and the demand curve as set out in Figure 2 below:



Figure 2 – Clearing when entire supply curve is below demand curve

# 5.8 Addressing intertie transmission constraints

- 5.8.1 Prior to each base auction, the AESO will estimate the joint scheduling limits across interties expected during the relevant obligation period as per the methodology referenced in s. 3.1.9. Should a constraint be identified which prevents the simultaneous delivery of external capacity assets across multiple interties, external capacity assets will not have their individual UCAP ratings reduced, but rather will be cleared in the auction in accordance with the following methodology:
  - (a) Lower-priced offers will be cleared with priority to higher-priced capacity offers.
  - (b) When there are multiple external capacity assets with the same offer price at the constraint volume level, external capacity asset offers that maximize the social surplus in the auction will be cleared first. This will provide priority to offers that are composed of flexible blocks.
  - (c) Should qualified capacity asset volumes in addition to those in (a) and (b) be available then capacity offers will be cleared on a pro rata basis.
  - (d) Volumes remaining after the constraint level has been reached will be considered not to have cleared the market and will not receive a capacity obligation. All capacity-committed assets will receive the overall market clearing price set in accordance with s. 5.6.3.

## 5.9 Addressing internal transmission constraints

5.9.1 Prior to each auction, the AESO will identify the location and impact of any intra-Alberta transmission constraints that are anticipated to impact the ability for capacity to be delivered during the relevant obligation period.

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- 5.9.2 Clearing of qualified capacity assets that are located behind an identified transmission constraint will be done based on qualified capacity asset UCAP levels up until the level of the constraint. Capacity offers will be cleared as follows:
  - (a) Lower-priced offers will be cleared with priority to higher priced capacity offers.
  - (b) When there are multiple qualified capacity assets with the same capacity offer price at the constraint volume level, capacity offers that maximize the social surplus in the auction will be cleared first. This will provide priority to offers that are composed of flexible blocks.
  - (c) Should qualified capacity asset volumes in addition to those in (a) and (b) be available, then capacity offers will be cleared on a pro rata basis.
  - (d) Volumes remaining after the transmission constraint level has been reached will be considered not to have cleared the market and will not receive a capacity obligation. All capacity committed assets will receive the overall market clearing price set in accordance with s. 5.6.3.

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