

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. The dates with asterisks will be finalized in the implementation stage.

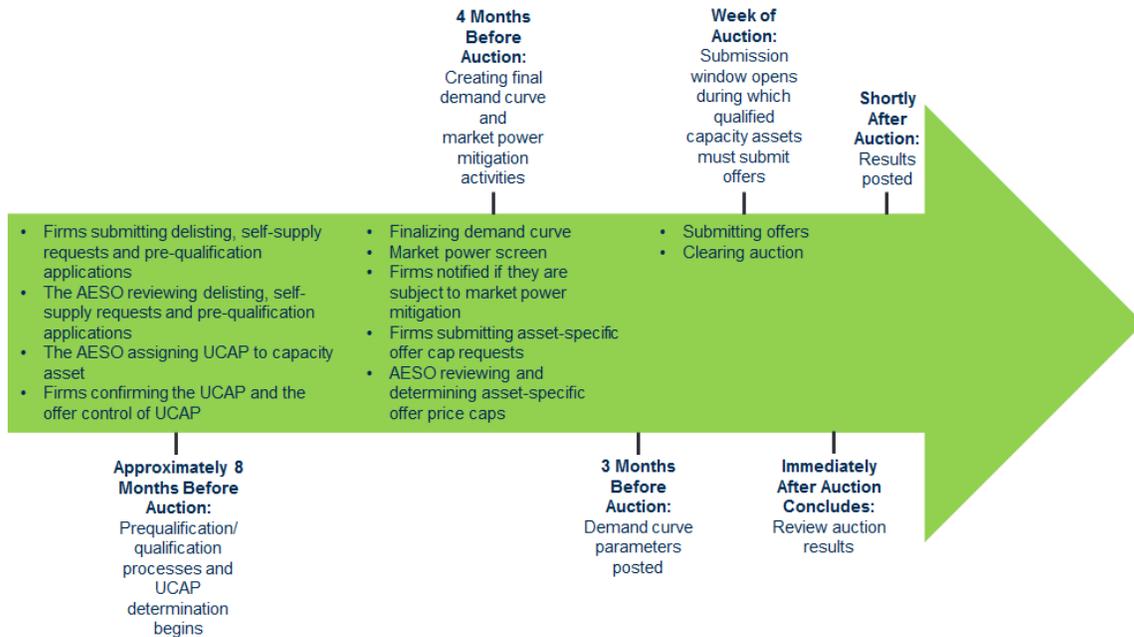
Table 1 – Timeline for base auction

| Pre-qualification Starts | Auction Date | Obligation Period |
|--------------------------|--------------|-----------------------|
| Nov. 2019 | Jun. 2020* | 2021/22 (Nov. – Oct.) |
| May 2020* | Jan. 2021 | 2022/23 (Nov. – Oct.) |
| Nov. 2020* | Jun. 2021 | 2023/24 (Nov. – Oct.) |
| Mar. 2021* | Oct. 2021 | 2024/25 (Nov. – Oct.) |

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 general auction information; and
 - (b) a schedule identifying the key activities that will be undertaken for each base auction. Figure 1 is an illustration of the key activities and the timeline of a base auction. The timeline will be refined in the implementation stage.

Figure 1 – Anticipated base auction timeline post transition period



- 5.2.2 Once the prequalification is completed, the AESO will assign each capacity asset a specific UCAP rating in accordance with Section 3, *Calculation of Unforced Capacity (UCAP)*.
- 5.2.3 The AESO will compile capacity offer control information declared by capacity market participants and notify capacity market participants if any portion of their capacity assets is under offer control of a firm that is subject to market power mitigation measures in accordance with the process outlined in Section 7, *Capacity 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 A capacity market participant or a firm which has offer control of a capacity asset may have an opportunity to dispute determinations made by the AESO, per the dispute resolution process outlined in subsection 5.3 below.
- 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 Dispute resolution

- 5.3.1 The AESO will determine a dispute resolution process such that a capacity market participant or a firm which has offer control of a capacity asset may have an opportunity to dispute determinations made by the AESO, such as determinations made in respect of the following:
 - (a) prequalification assessments;
 - (b) UCAP;
 - (c) Delisting;
 - (d) self-supply; and/or
 - (e) market power mitigation.
- 5.3.2 The AESO is continuing to assess and evaluate an appropriate framework with respect to the resolution of all capacity market related disputes.

5.4 Obligation period

- 5.4.1 Each obligation period will be one year in duration, starting on November 1 and continuing through to and including October 31 of the following year.

5.5 Supply participation and offer format

- 5.5.1 Each qualified capacity asset may submit up to seven blocks and 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 capacity asset ID is the unique identifier assigned to a capacity asset.
- (b) **Flexibility.** Whether a block is flexible or inflexible. The first block of a qualified capacity asset offer may be designated as inflexible or flexible. All the other offers from that qualified capacity asset with higher offer prices than the inflexible block must be flexible.

If both existing capacity and incremental capacity are offered from the same capacity asset, they may use up to seven blocks in total and the following rules will apply with respect to flexibility of blocks:

- the first block that contains existing capacity may be designated as inflexible or flexible;
- all blocks with higher offer prices containing existing capacity must be flexible;
- the first block that contains incremental capacity may be designated as inflexible or flexible; and
- all blocks with higher offer prices containing incremental capacity must be flexible.

- (c) **Price.** The price in \$/kW-year for each block.
- (d) **Quantity.** The quantity in UCAP MWs for each block.

- 5.5.2 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 of \$0/kW-year and a maximum of the price cap established by the demand curve;
- (b) the minimum block size will be one MW;
- (c) each offer block must identify the firm that has the capacity offer control of the block; and
- (d) the offer curve of each qualified capacity asset formed with price-quantity pairs is required to be monotonically increasing.

- 5.5.3 A capacity market participant must offer the entire qualified UCAP for its qualified capacity assets in each base auction.

5.6 Out-of-market capacity payments

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

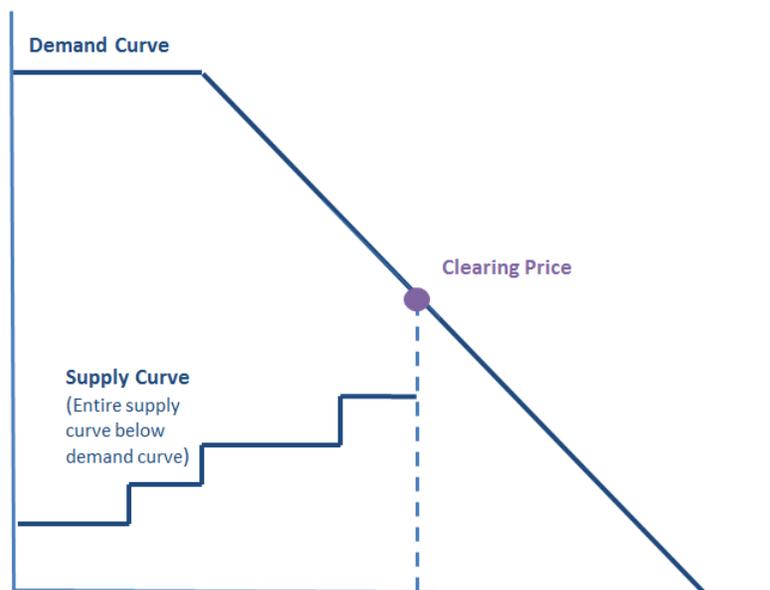
5.7 Single-round uniform price auction

- 5.7.1 A sealed-bid, single-round, uniform pricing auction will be utilized for each capacity auction.
- 5.7.2 When an auction clears in an unconstrained manner, a single capacity price will be established for all qualified capacity assets that clear the market.

5.8 Auction clearing and price setting

- 5.8.1 The AESO will utilize a capacity market auction clearing algorithm that will seek to maximize social surplus and in so doing, minimize deadweight loss.
- 5.8.2 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 offers that maximize social surplus.
- 5.8.3 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 capacity market clearing price will be set at the intersection between the vertical line drawn from the procured volume and the demand curve as set out in Figure 2 below:

Figure 2 – Auction price setting when entire supply curve is below demand curve



- 5.8.4 In the event that a capacity market participant submits offers as outlined in subsection 2.1.13 of Section 2, *Supply Participation*, the auction clearing process outlined in subsection 5.8.1-5.8.3 above may take multiple iterations before establishing the final clearing price. The procedures described in subsections 5.8.1- 5.8.3 would apply in each iteration.
- 5.8.5 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 clearing 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.

5.9 Addressing intertie transmission constraints

- 5.9.1 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 subsection 3.1.9 of Section 3, *Calculation of Unforced Capacity (UCAP)*. 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. Capacity offers will generally be cleared as follows subject to the principle of maximizing social surplus:
- (a) lower-priced capacity offers will be cleared with priority to higher-priced capacity offers;
 - (b) when there are multiple external capacity assets with the same capacity 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; and
 - (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 capacity market clearing price set in accordance with subsection 5.8.

5.10 Addressing internal transmission constraints

- 5.10.1 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.
- 5.10.2 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 generally be cleared as follows subject to the principle of maximizing social surplus:
- (a) lower-priced capacity offers will be cleared with priority to higher-priced capacity offers;
 - (b) when there are multiple external capacity assets with the same capacity 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; and
 - (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 capacity market clearing price set in accordance with subsection 5.8.