

# Glossary

This document is intended to supplement the CMD 2.0 and is subject to change. While these definitions may in the future be proposed by the AESO for use in future authoritative documents, they are currently provided for information and comment only. Please note that this draft does not reflect consideration of Bill 13 – *An Act to Secure Alberta's Electricity Future*.

Term	Definition
<b>Annual capacity payment adjustment cap</b>	means the combined payment adjustment exposure cap on availability and performance payment adjustments based on an asset's annual obligation price per MW.
<b>Asset substitution</b>	means, for the purposes of a capacity market, a mechanism for pool participants to manage performance risk by making arrangements to substitute performance requirements with other qualified capacity assets.
<b>Asset-specific offer price cap</b>	means the offer price cap applied to an asset that fails the market power screen and requests to offer capacity above the default offer price cap.
<b>Asset-specific reference price</b>	means the price to which an offer will be changed if the offer is mitigated in the energy market.
<b>Auction clearing</b>	means the process to select a capacity asset and set the clearing price.
<b>Availability assessment period</b>	means a period during which assets with a capacity obligation must demonstrate their ability to be available to their obligation volume. Availability will be assessed during a fixed number of the tightest supply cushion hours of the obligation period.
<b>Availability volume</b>	means the difference between a capacity asset's actual availability volume and its expected availability volume.
<b>Balancing ratio</b>	means the ratio of the energy and reserves produced by all capacity committed assets during a performance assessment period to the total committed capacity and is a number less than or equal to 1.
<b>Base auction</b>	means the first auction for capacity for a specific obligation period.
<b>Block</b>	means a price-quantity pair offered into a capacity auction.

Term	Definition
<b>Capacity</b>	means the ability to produce electric energy or reduce electric energy consumption as measured in MW.
<b>Capacity asset</b>	means a generating unit, aggregated generating facility, demand response (load), external asset (import), or storage, or an aggregation thereof.
<b>Capacity auction</b>	means a base auction or rebalancing auction.
<b>Capacity commitment</b>	means an obligation to deliver capacity to an obligation volume during an obligation period as a result of a capacity asset clearing a base auction, or a rebalancing auction.
<b>Capacity committed asset</b>	means a capacity asset that has cleared in a base auction, or in a rebalancing auction, and has an obligation to deliver an obligation volume.
<b>Capacity cost allocation</b>	means the method by which the costs of capacity are recovered from consumers (load).
<b>Capacity market price cap</b>	means the highest price that the AESO will pay for capacity as defined by the demand curve.
<b>Capacity supplier</b>	means the legal owner of a capacity committed asset who has an obligation to provide capacity in the capacity market.
<b>Clearing price</b>	means the clearing price of the capacity auction, paid to a capacity committed asset.
<b>Deadweight loss</b>	means the loss of social surplus when the market does not clear at the optimal (or economically efficient) equilibrium.
<b>Default offer price cap</b>	means the pre-established capacity offer price threshold that capacity offers for existing assets that fail the market power screen are mitigated to be at or below.
<b>Delisting</b>	means the mechanism to remove a capacity asset from participation in each of the capacity, ancillary services and energy markets.
<b>Demand curve</b>	means a downward sloping curve that sets the price and quantity demand parameters of a capacity auction.
<b>Demand response asset (load asset)</b>	means a capacity asset that can respond to a dispatch issued by the AESO system controller to reduce metered load either manually by the customer or automatically in response to a communication signal.
<b>Derate</b>	means a reduction in nameplate capacity of an asset due to planned maintenance, forced maintenance or seasonal temperature performance.

Term	Definition
<b>Economic delist offer price</b>	means the minimum clearing price required for a capacity asset to remain economic.
<b>Emergency event hours</b>	means the number of hours spent in EEA events (time from declaration of the EEA 1 - 3 until declaration of the EEA 0).
<b>Energy and ancillary services offset</b>	means the energy and ancillary services revenues less the variable costs associated with the reference technology.
<b>Energy emergency alert (EEA)</b>	means an alert declared by the AESO communicating energy emergency conditions on the system. There are three types of EEA events: EEA 1: All available assets in use; EEA 2: Load management procedure in effect; EEA 3: Firm load interruption imminent or in progress. EEA 0: termination of previous energy emergency alerts.
<b>Energy emergency alert (EEA) procedure</b>	means an emergency procedure used when the AESO has exhausted the energy merit order and can no longer provide the Alberta interconnected electric system (AIES) expected energy requirements and meet the AESO's contingency reserve obligations through the energy market.
<b>Estimated UCAP</b>	means an estimate of an asset's UCAP for the purposes of prequalifying for a capacity auction.
<b>Ex ante</b>	means, for the purpose of market power mitigation in the capacity or energy markets, taking action before the market clearing price is set.
<b>Ex post</b>	means, for the purpose of market power mitigation in the capacity or energy markets, taking action after the market clearing price is set, typically through surveillance and investigation.
<b>Existing capacity asset</b>	means a capacity asset that is: (a) operational and in service at the commencement of a capacity auction prequalification period; (b) mothballed at the beginning of a capacity auction prequalification period; or (c) not yet in service but has cleared a capacity auction for a previous obligation period.
<b>Expected availability</b>	means an amount that is equal to an asset's obligation volume.
<b>Expected performance</b>	means an amount that is equal to an asset's obligation volume adjusted for the balancing ratio.
<b>External capacity asset (import)</b>	means a capacity asset located outside of Alberta.
<b>Firm</b>	means a company that has control over a portfolio of assets.

Term	Definition
<b>Firm consumption level</b>	means the maximum MW that a demand response capacity asset will consume during a performance assessment period.
<b>Flexible block</b>	means a block that can be partially cleared in a capacity auction.
<b>Forward period</b>	means the time between the end of a capacity auction and the start of an associated obligation period.
<b>Gross clearing</b>	means in a rebalancing auction, a capacity asset that is cleared with the demand curve representing the entire AESO capacity requirement for that obligation period. All capacity asset offers and bids, including the previously cleared volumes, will be represented on the supply side. Previously cleared supply will be priced at \$0/kW year.
<b>Gross-CONE</b>	means the total annualized capital and fixed operating costs associated with the reference technology.
<b>Guaranteed load reduction</b>	means the level by which a demand response capacity asset commits to reducing consumption during a performance assessment period.
<b>Import limits</b>	means the amount of real power the ISO determines can be reliably transferred over the interconnected transmission network under specified system conditions from adjacent areas.
<b>Incremental capacity asset</b>	means a capacity asset as described in subsection 2.1.12 in the CMD.
<b>Inflexible block</b>	means a block that cannot be partially cleared in a capacity auction.
<b>Market power screen</b>	means a test that identifies a party that may be subject to market power mitigation.
<b>Monthly capacity payment adjustment cap</b>	means the exposure cap on performance payment adjustments based on an asset's monthly obligation price per MW.
<b>Negative performance volume</b>	means a volume that is observed when the actual performance volume of an asset is lower than its expected performance volume (under-performance).
<b>Net capacity payment</b>	means a capacity payment adjustment minus the lesser of the payment adjustment balance or the capacity payment.
<b>Net-CONE</b>	means gross-CONE adjusted by the expected energy and ancillary services offset.

Term	Definition
<b>Net-short capacity position</b>	means the net position of a firm if the total amount of capacity assets controlled by the firm is less than the total amount of the load served by the same firm.
<b>New capacity asset</b>	means: (a) an asset that has not qualified for a previous capacity auction or that is not currently operational; (b) is a refurbished capacity asset; or (c) the incremental volume of an incremental capacity asset.
<b>Non-performance payment adjustment</b>	means a payment adjustment that is assessed against capacity suppliers that do not deliver on their obligation volume during a performance assessment period.
<b>Obligation period</b>	means the length of time that a capacity supplier is required to meet its obligation volume.
<b>Obligation price per MW</b>	means an asset-specific price that is equal to a capacity asset's annual provider payment divided by the asset's total capacity obligation.
<b>Obligation volume</b>	means the asset-specific capacity that has cleared a capacity auction for a given obligation period.
<b>Offering window</b>	means the period in a capacity auction during which market participants can submit offers to sell capacity.
<b>Operating costs</b>	means the costs that can otherwise be avoided by not participating in the energy and ancillary services markets.
<b>Opportunity cost</b>	means the lost value of the best alternative decision that could have been made.
<b>Out-of-market payment</b>	means a payment or subsidy to a legal owner of an asset which is funded by rate-payers or taxpayers of Alberta.
<b>Over-availability payment adjustment</b>	means a payment adjustment provided to capacity committed assets that demonstrate greater than expected availability during availability assessment periods.
<b>Over-performance payment adjustment</b>	means a payment adjustment provided to capacity committed assets that deliver above their obligation volume during a performance assessment period.
<b>Payment adjustment balance</b>	means the total of all outstanding payment adjustments.

Term	Definition
<b>Performance assessment period</b>	means a period that will occur during EEA events. When the AESO declares an EEA 1, EEA 2 or EEA 3 event, the performance assessment period will begin and will last until the AESO declares an EEA 0 event, at which point the performance assessment period will end.
<b>Performance payment adjustment</b>	means a payment adjustment assessed based on an asset's performance volume.
<b>Performance volume</b>	means the difference between an asset's actual performance volume and its expected performance volume during a performance assessment period.
<b>Permanent delist notification</b>	means a notification to the AESO to permanently remove a capacity asset from each of the capacity, energy and ancillary services markets.
<b>Positive performance volume</b>	means a volume that is observed when actual performance volume of an asset is higher than its expected performance volume (over-performance).
<b>Prequalified capacity asset</b>	means a capacity asset that has been prequalified by the AESO to participate in a capacity auction.
<b>Procurement volume</b>	means the amount of capacity to be procured in a capacity auction.
<b>Qualified baseline</b>	means the consumption level of a demand response capacity asset when the capacity asset is not reducing energy consumption in response to a dispatch or directive.
<b>Qualified capacity asset</b>	means a capacity asset that has been qualified by the AESO to participate in a capacity auction for a specific obligation period.
<b>Rebalancing auction</b>	means an auction conducted after a base auction for a given obligation period.
<b>Reference technology</b>	means a notional power plant selected for the calculation of gross-CONE and net-CONE.
<b>Refurbished capacity asset</b>	means a capacity asset as described in subsection 2.1.11 of the CMD.
<b>Resource adequacy</b>	means a measure of society's tolerance for power outages due to a shortfall in bulk power supply.
<b>Resource adequacy standard</b>	means a standard established by the Government of Alberta with respect to the acceptable amount of demand not served in Alberta due to insufficient generation capability, expressed as a qualified expectation of when the desired resource adequacy level will not be met and measured in frequency, duration or magnitude of load-shed events

Term	Definition
<b>Self-supply</b>	means a form of restricted physical bilateral arrangement available to participants who have their own generation or demand response ability that can be used to satisfy (fully or partially) their capacity requirement or have a contract at the same electrical high voltage bus.
<b>Social surplus</b>	means the total value, to buyers and sellers, of transacting in the market and is represented by the area between the demand curve and the supply curve to the left of the cleared quantity.
<b>Supply curve</b>	means the collection of capacity offer price-quantity pairs ranked from the lowest offer price to the highest offer price.
<b>Temporary delist request</b>	means a request to remove a prequalified capacity asset (or a portion of the capacity asset) from the capacity, energy and ancillary services markets for an obligation period due to physical or economic reasons.
<b>Tightest supply cushion hours</b>	means a number of hours in which the tightest supply cushion hours were observed, defined by ranking all hourly supply cushion hours from smallest to largest and from which a number of hours are selected for assessment.
<b>UCAP</b>	means the MW volume representing the amount of capacity that a qualified capacity asset must offer into a capacity auction.
<b>Unavailability payment adjustment</b>	means a payment adjustment assessed against capacity assets that do not demonstrate expected availability during availability assessment periods.