

Alberta Capacity Market

Comprehensive Market Design (CMD 1) Design Proposal Document

Section 9: Settlements and Credit Requirements

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9. Settlements and Credit Requirements

9.1 Capacity Market Statements

Capacity payments and charges will be invoiced monthly, consistent with the energy market invoicing cycle in the form of a capacity market statement. **The capacity market statements will be issued separate from the energy market statement and separate from cost allocation invoices.**

9.2 Settlements Applicable to Capacity Resources

9.2.1 Capacity Payments

- Capacity payments will not be made to capacity resources prior to the start of the delivery period.
- Capacity payments will be made by monthly payments to capacity resources for their commitment to meet a capacity obligation during a delivery period. Payments are based on the capacity cleared price achieved in the auction that the capacity obligation was awarded from.
- Monthly capacity payment is based on the following formula:

$$\text{Capacity payment} = \{ [O_b * P_b] - [(O_b - O_{r1}) * P_{r1}] - [(O_{r1} - O_{r2}) * P_{r2}] \} / \# \text{ months in term}$$

Where, for the delivery year:

O_b equals cleared obligation of the capacity resource in the base auction

P_b equals the capacity market price of the base auction

O_{r1} equals the cleared obligation of the capacity resource in the first rebalancing auction

P_{r1} equals the capacity market price of the first rebalancing auction

O_{r2} equals the cleared obligation of the capacity resource in the second rebalancing auction

P_{r2} equals the capacity market price of the second rebalancing auction

- Should the settlement result in a charge rather than a payment to the capacity resource, resulting from a buy back through the rebalancing auction, a further credit requirement will be assigned the capacity resource.
- Below is an example of a capacity market settlement where the capacity resource sells 80 MW in the base auction and buys back 50 MW in the first rebalancing auction and then buys back another 20 MW in the second rebalancing auction.

12-month term	Remaining Obligation (O)	Price (P)
Base (b)	80	20
1 st rebal (r_1)	30	15
2 nd rebal (r_2)	10	40

$$\text{Capacity Payment} = \{ [O_b * P_b] - [(O_b - O_{r1}) * P_{r1}] - [(O_{r1} - O_{r2}) * P_{r2}] \} / \# \text{ months in term}$$

$$\text{Capacity Payment} = \{ [80 * 20] - [(80 - 30) * 15] - [(30 - 10) * 40] \} / 12 = \$ 4.17 \text{ per month}$$

9.2.2 Settlement of the Failure to Deliver Payment Adjustment Mechanism for New Resources

- Payment adjustment mechanism for failure to deliver for a new resource is specified in Section 8.2.
- In the event that the capacity resource fails to bid in the rebalancing auction or register for asset substitution, the AESO will apply the failure to deliver payment adjustment mechanism.

9.2.3 Payment Adjustment Mechanism for Performance

- Payment adjustments for performance are as specified in Section 8.5.
- Non-performance payment adjustments are assessed in the same statement period for which the non-performance event occurred.
- Performance assessment will assess resource performance during energy emergency alert (EEA) events and will assess under-performance payment adjustments to resources that are unavailable relative to their obligations while providing the opportunity for over-performance payment adjustment for resources that over-perform relative to their obligations.
- If there is less over-performance than under-performance the remaining under-performance payment adjustments will be allocated to consumers.

9.2.4 Payment Adjustment Mechanism for Unavailability

- The payment adjustment mechanism for unavailability is specified in Section 8.4.
- Unavailability payment adjustments will be assessed at the end of the delivery period and applied to the settlements of the following delivery period whether or not the resource has a capacity obligation in that delivery period.

9.2.5 Settlement of Non-performance Payment Adjustment Mechanism to Existing Resources

- Additional payment adjustment amounts calculated in the statement period will be added to the outstanding payment adjustment balance for the capacity resource.
- The AESO will claw back capacity payments for payment adjustments.
- The AESO's settlement will limit the monthly payment adjustment claw back amount to 100 % of the capacity market payment each statement until the sum of all payment adjustments are collected.
- If the capacity resource does not receive a capacity market payment in the statement period, then the payment adjustment balance will be assessed against the proceeds from energy and ancillary services markets until the sum of all payment adjustments are collected.

9.3 Settlements Applicable for Consumers

- "Capacity market customer charges" means charges which electricity consumers are required to pay under electricity capacity tariff to meet the cost of funding capacity payments.
- The AESO must, as soon as reasonably practicable after the end of the first capacity market statement period:
 - Calculate the amount of the settlement costs to be paid by each applicable capacity market wholesale consumers; and
 - Issue an invoice to each applicable capacity market wholesale consumers for the amount to be paid by that consumer.
- The general concepts used to allocate costs to customers are not available yet.

9.4 Capacity Market Net Settlement Instructions (NSI)

- Net settlement instructions will not be facilitated within the capacity market.

9.5 Capacity Market Credit Requirements for Existing Capacity Resources

- Existing market participants comply with ISO Rules – Division 103, Section 103.3 – *Financial Security Requirements*.

- The AESO will not require financial security for capacity market non-performance and unavailability payment adjustments as long as the capacity resource is receiving capacity payments.
 - As stated above, the AESO will track the total payment adjustment owing for each capacity resource. This payment adjustment claw back will occur in each of the following months until the full balance is recovered.

9.6 Measurement and Verification of Capacity Resources

- The AESO will measure and verify the capabilities and performance of all capacity resources throughout the delivery year against their obligation. Each resource with a capacity obligation will be required to provide data sufficient to measure performance, and will be held to the same overall measurement and verification standards. The specific methods and data sources used to measure performance, however, will accommodate the differences across supply types.
- To facilitate AESO measurement, and verification, all capacity resources will participate in data collection or submission processes, and must meet certain requirements prior to the delivery year. Availability will be measured based on data collected for reliability purposes, and in the energy and ancillary services markets. Resources must also have the ability to measure production on a sub-hourly basis and provide that data to the AESO via SCADA.