AUC
Alberta Utilities Commission

Alberta Electric System Operator

Final Approval of Interim Market Power Mitigation Rules

February 19, 2025

Alberta Utilities Commission
Decision 29093-D02-2025
Alberta Electric System Operator
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Proceeding 29093

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1 Decision summary

1. On March 11, 2024, the *Market Power Mitigation Regulation* and *Supply Cushion Regulation* (the regulations) came into force. The regulations are intended to mitigate the exercise of market power by electricity market participants in Alberta.[1] The regulations require the Alberta Electric System Operator (AESO) to make or amend any Independent System Operator (ISO) rules to facilitate the requirements and objectives of the regulations.

2. In response to the regulations, the AESO applied to the Alberta Utilities Commission for approval of two new ISO rules, and amendments to certain existing ISO rules. The AESO's application raised objections from several market participants and the Market Surveillance Administrator. A common argument made by interveners was that elements of the ISO rule made under the *Supply Cushion Regulation* are technically deficient due to insufficient information.

3. After considering an ISO rule, the Commission may approve the ISO rule; refuse to approve the ISO rule; or direct the ISO to revise the ISO rule or a provision of the ISO rule, and approve the rule subject to the Commission being satisfied that the ISO rule has been revised in accordance with its directions.

4. The Commission may approve an ISO rule only if the Commission is satisfied that the ISO rule: (i) is not technically deficient; (ii) supports the fair, efficient and openly competitive operation of the electricity market; and (iii) is in the public interest.

5. For the reasons set out in this decision, the Commission approves, on a final basis, the new Section 206.1 of the ISO rules: *Interim Secondary Offer Cap* (ISO Rule 206.1), the proposed amendments to the existing Section 202.4 of the ISO rules: *Managing Long Lead Time Assets* (ISO Rule 202.4) and Section 203.1 of the ISO rules: *Offers and Bids for Energy* (ISO Rule 203.1), as well as the new Consolidated Authoritative Document Glossary (CADG) definitions to effect the changes proposed in these rules. The Commission approves the new Section 206.2 of the ISO rules: *Interim Supply Cushion Directives* (ISO Rule 206.2) subject to one directed revision, explained below.

6. The Commission requires the AESO to revise ISO Rule 206.2 to provide for notification in real time when a unit commitment directive (UCD) is issued and when it is terminated. The Commission will leave the real-time notification method for the AESO to determine. The AESO is to file ISO Rule 206.2, as revised to reflect this direction, for the Commission's review no later than 30 days after this decision is issued. The Commission will issue notice of the revised ISO Rule 206.2 and, subject to the Commission confirming that ISO Rule 206.2 has been revised in accordance with its direction, the provision(s) of ISO Rule 206.2 dealing with real-time notification of UCDs issuance and termination will take effect 60 days after this decision is

[1] The Commission refers to "electricity market participants" and "pool participants," as those terms are used in the regulations, as "market participants" in this decision.

issued (i.e., the provision(s) is effective April 20, 2025). Otherwise, the approved ISO rules and amendments are effective immediately.

2 Application background and process

7. In March 2024, the *Market Power Mitigation Regulation*[2] and *Supply Cushion Regulation*[3] directed the AESO to make or modify any ISO rules required to facilitate the requirements and objectives of the regulations. Broadly, the regulations are intended to mitigate the exercise of market power by electricity market participants. Both regulations are interim, expiring on November 30, 2027.

8. On June 14, 2024, the AESO applied for interim approval of the following new and amended ISO rules, on an expedited basis, under the *Electric Utilities Act*:[4]

(a) New Section 206.1 of the ISO rules, Interim Secondary Offer Cap, Appendix 3.

(b) New Section 206.2 of the ISO rules, Interim Supply Cushion Directives, Appendix 4.

(c) Proposed amendments to the following, existing ISO rules:

(i) Section 202.4 of the ISO rules, Managing Long Lead Time Assets, Appendix 5.

(ii) Section 203.1 of the ISO rules, Offers and Bids for Energy, Appendix 6.

(d) New Consolidated Authoritative Document Glossary definitions to effect the above changes, Appendix 7.

(collectively, the Interim Market Power Mitigation ISO Rules).

9. The Commission's consideration of an ISO rule can be conducted under an expedited process in certain circumstances.[5] Under the expedited process, the Commission must first consider an ISO rule and make an order either approving or rejecting the ISO rule within two or five Commission business days, depending on the case; then the Commission must issue notice and begin considering the rule under the normal process for consideration of ISO rules.[6]

10. On June 19, 2024, the Commission issued Order 29093-D01-2024,[7] approving the Interim Market Power Mitigation ISO Rules on an interim and expedited basis, with Section 2 of ISO Rule 206.2 effective June 21, 2024, and the balance of the Interim Market Power Mitigation ISO Rules effective July 1, 2024.

11. On June 19, 2024, the Commission also issued a notice of application to begin consideration of approval of the Interim Market Power Mitigation ISO Rules on a final basis.

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2 Alberta Regulation, 43/2024.
3 Alberta Regulation, 42/2024.
4 Exhibit 29093-X0001, application, PDF page 3, paragraph 3.
5 Section 20.6(1), *Electric Utilities Act.*
6 Section 20.6, *Electric Utilities Act.*
7 Order 29093-D01-2024: Alberta Electric System Operator, Expedited Approval of Interim Market Power Mitigation Rules, Proceeding 29093, June 19, 2024.

12. The following parties filed statements of intent to participate in response to the Commission's notice:

- ATCO Renewables Ltd.
- Capital Power Corporation
- ENMAX Energy Corporation
- Heartland Generation Ltd.
- Market Surveillance Administrator (MSA)
- Renewable Generators Alliance (RGA)
- Suncor Energy Inc.
- TransAlta Corporation
- TransCanada Energy Ltd. (TCE)

13. On August 22, 2024, the AESO filed an amendment to ISO Rule 206.2.

14. The remainder of the proceeding included the following process steps: one round of information requests (IRs) to the AESO, written argument and reply argument. The close of record date of this proceeding is November 13, 2024.

3 Commission consideration of ISO rules

15. Under the *Electric Utilities Act*, the AESO must apply to the Commission for approval of a proposed ISO rule.[8] After considering an ISO rule, the Commission may, by order, approve the ISO rule, direct the ISO to revise the ISO rule, or refuse to approve the ISO rule.[9]

16. The Commission may approve an ISO rule only if the Commission is satisfied:

> (a) that the ISO rule
>
> (i) is not technically deficient,
>
> (ii) supports the fair, efficient and openly competitive [FEOC] operation of the market to which it relates, and
>
> (iii) is in the public interest,
>
> and
>
> …
>
> (c) that the Independent System Operator, in developing the rule, complied with the Commission rules made under section 20.9.[10]

17. The Commission has assessed the AESO's application with a view to determining whether the criteria contained in Section 20.21(2) are satisfied. The Commission reviewed the entire record in coming to this decision. While the Commission has focused its written reasons

[8] Section 20.2(1), *Electric Utilities Act*.
[9] Section 20.21(1), *Electric Utilities Act*.
[10] Section 20.21(2), *Electric Utilities Act*.

on addressing the concerns raised by interveners, the Commission emphasizes that it is the AESO who bears the onus of satisfying the Commission that an ISO rule should be approved.[11]

18. Several interveners argued that the ISO rules were technically deficient. The Commission's assessment of whether a rule is technically deficient occurs on a case-by-case basis. In general, the Commission assesses whether the rule is:

- consistent with the statutory scheme and authorized by the legislative scheme;
- complete and reasonably self-contained; and
- drafted to be clear, concise and cohesive to facilitate stakeholder understanding.

19. AUC Rule 017: *Procedures and Process for Development of ISO Rules and Filing of ISO Rules with the Alberta Utilities Commission* sets out consultation requirements for the development of proposed ISO rules and informational requirements for applications for proposed ISO rules. The AESO submitted that while the Interim Market Power Mitigation ISO Rules are not subject to the consultation process required by Rule 017, it consulted with stakeholders[12] as it drafted the rules.[13] The Commission confirms that Section 20.21(2)(c) of the *Electric Utilities Act* is satisfied.

20. At times during this proceeding, interveners appeared to take issue with the policies codified in the regulations, rather than the proposed ISO rules. Such challenges are outside the scope of this proceeding. The regulations are validly enacted legislative instruments. Under both regulations, the AESO has a legal duty to make or amend any ISO rules to enable the requirements and the objectives of the regulations and, under the *Electric Utilities Act*, the Commission must consider the ISO rule applications under the legislative framework established under the *Electric Utilities Act*.

4 ISO Rule 206.1: Interim Secondary Offer Cap

21. The AESO made ISO Rule 206.1 to facilitate the requirements and objectives of the *Market Power Mitigation Regulation*. The *Market Power Mitigation Regulation* imposes a secondary offer cap on market participants that have offer control equal to or greater than five per cent of the total maximum capability of generating units in Alberta. This cap is triggered once a net revenue threshold is reached within any given month. The *Market Power Mitigation Regulation* includes a detailed formula and reference values by which the threshold for the activation of the secondary offer cap, and the amount of the cap, are to be set.[14] The formula and reference values determining the activation of the secondary offer cap are intended to be a measure of a generator's revenue in excess of the cost of running the generating unit. If a market participant is notified by the AESO that the secondary offer cap is in effect in a given month, the market participant must restate all previously submitted offer prices,[15] excluding those for the

[11] Section 20.21(4), *Electric Utilities Act.*
[12] Exhibit 29093-X0002.01, Appendix A – Stakeholders Engagement Record.
[13] Exhibit 29093-X0001, application, PDF page 6, paragraph 20.
[14] *Market Power Mitigation Regulation*, Section 3.
[15] An "offer price" means a price, expressed in dollars per MWh, at which a market participant offers electric energy from a generating unit into the power pool.

next two settlement intervals, to comply with the cap. Offer prices must be equal to or less than the cap limit until the first settlement interval in the first day of the following month.[16]

22. For the reasons that follow, the Commission approves ISO Rule 206.1 on a final basis.

4.1 Is ISO Rule 206.1 unsupportive of the FEOC operation of the market or technically deficient because it does not exempt certain assets from the must-offer obligation?

23. ISO Rule 206.1 establishes the parameters of the secondary offer cap limit in accordance with the *Market Power Mitigation Regulation*. Both the *Market Power Mitigation Regulation* and ISO Rule 206.1 state that, when certain conditions are met,[17] market participants must offer at a price equal to the greater of: (i) $125 per megawatt hour (MWh); or (ii) an amount equal to 25 times the day-ahead natural gas price.[18] [19] Both the *Market Power Mitigation Regulation* and ISO Rule 206.1 do not include any exemptions for generators from their existing must-offer obligation.[20]

24. Suncor argued that ISO Rule 206.1 is technically deficient and does not support the FEOC operation of the market because the secondary offer cap could require: (i) a generating unit to offer energy into the power pool even if that would result in the unit receiving a price below its variable costs;[21] or (ii) a generating unit to offer energy into the power pool even if that would result in the unit prematurely exhausting its operating capability.[22] Suncor submitted that it is necessary for the AESO to exempt energy from such units from the must-offer obligation under these circumstances for ISO Rule 206.1 to support the FEOC operation of the market and not be technically deficient.[23]

25. The AESO agreed that ISO Rule 206.1, along with existing must-offer obligations, could result in the scenarios described by Suncor. However, the AESO interprets the *Market Power Mitigation Regulation* as expressly prescribing the amount and the applicability of the secondary offer cap.[24] Suncor countered that the *Market Power Mitigation Regulation* dictates "how" market participants are to offer, but not "when." Referencing the AESO's explicit discretion under the *Fair, Efficient and Open Competition Regulation* to establish when electric energy is required to be offered to the power pool, and the AESO's broad rule-making authority, Suncor asserted the AESO has the authority to determine whether a market participant has to offer electric energy.[25]

26. The AESO did not dispute that it has the statutory authority to make ISO rules respecting when energy offers must be made.[26] Rather, the AESO argued that there is no basis in the

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16 *Market Power Mitigation Regulation*, Section 2.
17 The conditions that must be met are summarized in the *Market Power Mitigation Regulation*.
18 *Market Power Mitigation Regulation*, Section 3(6)(b); ISO rules, Section 206.1, *Interim Secondary Offer Cap*, Section 3(4)(b).
19 Determined by the ICE NGX AB NIT DAY AHEAD contract price, which is a cash-settled futures contract for natural gas.
20 ISO rules, Section 203.1, *Offers and Bids for Energy*, Section 3.
21 Exhibit 29093-X0075, Suncor argument, PDF page 4, paragraph 7.
22 Exhibit 29093-X0075, Suncor argument, PDF page 5, paragraphs 11-14.
23 Exhibit 29093-X0099, Suncor sur-reply argument, PDF page 5, paragraphs 15-16.
24 Exhibit 29093-X0093, AESO reply argument, PDF page 16, paragraph 62.
25 Exhibit 29093-X0099, Suncor sur-reply argument, PDF pages 4-5, paragraphs 11-14.
26 Exhibit 29093-X0103, AESO response to Suncor sur-reply argument, PDF page 6, paragraph 19.

statutory scheme for it to provide the exemption Suncor seeks. Had there been any legislative intent to create a new exemption from a well-established generator obligation (being that the must-offer applies to all generators), then the regulation would have explicitly done so.[27]

27. The AESO's discretion in proposing ISO Rule 206.1 is necessarily constrained by the *Market Power Mitigation Regulation*. Nevertheless, any rule the ISO proposes to facilitate the regulation must satisfy the requirements of the *Electric Utilities Act.* For the reasons discussed below, the Commission finds that ISO Rule 206.1 satisfies the *Electric Utilities Act* and is supportive of FEOC and not technically deficient.

28. The Commission recognizes the potential for some inefficiencies associated with requiring certain market participants to make energy available from high-variable cost or energy-constrained resources. However, promoting the FEOC operation of the market requires legislators and statutory bodies to balance a variety of considerations.

29. Suncor is essentially arguing that the AESO must supplement the limited exemptions specified in the regulation with additional exemptions so as to achieve compatibility with the objectives of the broader statutory scheme.

30. The Commission must interpret the broader statutory scheme in context, with close attention being paid to the legislative text, which remains the anchor of the interpretive exercise.[28] The proposed rule mirrors the text of the regulation, which is drafted broadly to capture certain energy constrained and high-variable costs assets. There is no indication in the *Market Power Mitigation Regulation* that the legislature intended to exempt these types of assets, or that it expected or intended for the AESO to expand on the list of exemptions it provided. In the Commission's view, the AESO has demonstrated that the proposed ISO Rule 206.1 reflects the specific guidance provided by the legislature regarding its chosen means to achieve its objectives, as expressed by the *Market Power Mitigation Regulation.*

31. The Commission considers that the potential negative consequences of this choice on the FEOC operation of the market are outweighed by the benefits to FEOC associated with the mitigation of market power. As acknowledged by Suncor, the instances with which Suncor is concerned are likely to occur only infrequently,[29] further limiting the potential negative impacts on the FEOC operation of the market.

32. On balance, the Commission finds that the proposed rule supports the FEOC operation of the market and is not technically deficient.

5 ISO Rule 206.2: Interim Supply Cushion Directives

33. The AESO made ISO Rule 206.2 to facilitate the requirements and objectives of the *Supply Cushion Regulation*. The *Supply Cushion Regulation* requires the AESO to forecast, based on prescribed criteria, the anticipated supply cushion (the energy in the merit order that remains available for dispatch after system load is served) for a settlement interval[30] and take

[27] Exhibit 29093-X0103, AESO response to Suncor sur-reply argument, PDF page 6, paragraphs 17-18.
[28] *Quebec (Commission des droits de la personne et des droits de la jeunesse) v Directrice de la protection de la jeunesse du CISSS A*, 2024 SCC 43, paragraph 24.
[29] Exhibit 29093-X0089, Suncor reply argument, PDF page 6, paragraph 11.
[30] *Supply Cushion Regulation*, Section 4.

reasonable steps to maintain a supply cushion threshold of 932 MW by issuing UCDs to eligible long lead time assets.[31] [32] A UCD requires a long lead time asset to be online and to synchronize to the interconnected electric system so that it is capable of dispatching power. The *Supply Cushion Regulation* requires market participants for a long lead time asset to inform the AESO of the physical constraints of generating units as well as their estimated variable costs so that the AESO can issue UCDs based on relative economic merit and physical constraints. The AESO must pay the market participants for a long lead time asset the incremental and prudent generation costs incurred by the market participant from operating the long lead time asset, subject to certain constraints.

34. For the reasons that follow, the Commission approves ISO Rule 206.2, subject to one directed revision, described in Section 5.2.1 of this decision.

5.1 Issues related to the anticipated supply cushion

35. Section 4 of the *Supply Cushion Regulation* identifies the variables that the AESO must consider when forecasting the anticipated supply cushion for a settlement interval. These variables are: (a) the available capability of applicable source assets (i.e., a generating unit, or an aggregation of generating units situated in the same proximate location)[33]; (b) estimated output from wind and solar generating units; (c) estimated total net imports and exports on all interties; (d) estimated Alberta internal load; and (e) any other relevant variable as determined by the AESO. Section 4 of ISO Rule 206.2 duplicates these variables and states that the AESO will publish the anticipated supply cushion methodology on its website, as well as provide reasonable notice to market participants of any methodology changes.

5.1.1 Is ISO Rule 206.2 technically deficient because it does not codify the complete anticipated supply cushion methodology?

36. In addition to publishing the anticipated supply cushion methodology on its website, the AESO also prepared an information document for ISO Rule 206.2 (titled: Information Document Interim Supply Cushion Directives ID #2024-005),[34] describing in more detail how the AESO forecasts the anticipated supply cushion, among other things.[35]

37. Some interveners argued that ISO Rule 206.2 is technically deficient because it does not codify the complete anticipated supply cushion methodology within the rule itself,[36] but in the non-authoritative information document. These interveners suggested that the contents of the information document related to the AESO's forecast of the anticipated supply cushion should be

[31] Under Section 1(1)(d) of the *Supply Cushion Regulation*, a long lead time asset means a source asset that requires more than one hour to synchronize to the interconnected electric system.

[32] *Supply Cushion Regulation*, sections 4 and 5.

[33] Under Section 1(1)(h) of the *Supply Cushion Regulation*, a source asset means a generating unit, or an aggregation of generating units situated in the same proximate location, that (i) has been assigned a unique identifier by the ISO for the purpose of enabling transactions in the power pool, and (ii) is registered with the ISO to a pool participant.

[34] Exhibit 29093-X0036, Attachment – Information Document 2024-005.

[35] Exhibit 29093-X0036, Attachment – Information Document 2024-005, Section 4 and Appendix 1.

[36] Exhibit 29093-X0085, Capital Power argument, PDF page 4, paragraph 7; and Exhibit 29093-X0086, RGA argument, PDF pages 4-5, paragraph 8.

codified within the rule, because information documents can be modified without approval by the Commission.[37]

38. The AESO submitted that an ISO rule must set out what is necessary or advisable to carry out the AESO's duties with respect to a particular matter.[38] The AESO advised that an ISO rule should articulate the obligations the AESO is required to meet in a clear, concise and enforceable way; however, an ISO rule does not need to contain every detail of how the AESO is to meet its obligations.[39]

39. The Commission has previously approved ISO rules or denied complaints regarding ISO rules in cases where the calculations underlying the rule were contained in information documents.[40] The Commission continues to be of the view that calculations underlying ISO rules can be included in information documents, if appropriate. This determination is made on a case-by-case basis.

40. Section 4 of ISO Rule 206.2 duplicates the language in the *Supply Cushion Regulation*, which precisely describes what variables the AESO is required to use to forecast the anticipated supply cushion. In the Commission's view, the prescriptive language in Section 4 of ISO Rule 206.2 is sufficiently complete and self-contained. Further details related to the forecast of the anticipated supply cushion, such as how the forecasts of net interchange, wind, solar and constrained down generation are calculated, are not needed to understand Section 4 of ISO Rule 206.2. The Commission finds the AESO's approach of including these specific details related to the forecast of the anticipated supply cushion in a separate information document is appropriate in this context and does not amount to a technical deficiency.

5.1.2 Is ISO Rule 206.2 technically deficient because it allows the AESO to include additional, non-specified variables in the forecast of the anticipated supply cushion?

41. Section 4 of the *Supply Cushion Regulation* identifies the variables that the AESO must consider when calculating the anticipated supply cushion for a settlement interval, one of the variables being "(e) any other relevant variable as determined by the AESO." The AESO included this variable, *verbatim*, in Section 4(1)(a)(v) of ISO Rule 206.2.

42. The RGA argued that the AESO failed to "comply with the obligation to develop or modify an ISO Rule that identifies 'any other relevant variable' to the anticipated supply cushion determination."[41] The RGA submitted that it is inappropriate and technically deficient for the AESO to maintain explicit and unlimited discretion for itself, and requested that Section 4(1)(a)(v) be deleted from ISO Rule 206.2.[42]

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37 Exhibit 29093-X0085, Capital Power argument, PDF page 7, paragraph 13; and Exhibit 29093-X0086, RGA argument, PDF page 7, paragraph 14.

38 Exhibit 29093-X0093, AESO reply argument, PDF page 3, paragraph 5.

39 Exhibit 29093-X0093, AESO reply argument, PDF page 3, paragraphs 5-6.

40 See, for example, Decision 27604-D01-2022: Alberta Electric System Operator, Approval of Proposed Amended Sections 202.6, 306.5 and 306.7 of the ISO Rules, Proceeding 27604, Application 27604-A001, October 26, 2022; Decision 2013-025: Alberta Electric System Operator, Objections to ISO rules Section 203.6, Available Transfer Capability and Transfer Path Management, Proceeding 1633, Applications 1607958, 1607986, 1607987, 1607988, 1607993 and 1608013, February 1, 2013, paragraph 307.

41 Exhibit 29093-X0086, RGA argument, PDF page 5, paragraph 10.

42 Exhibit 29093-X0086, RGA argument, PDF pages 4-5, paragraphs 7 and 9.

43. The AESO argued that, given the regulations create a new and time-limited scheme, it is beneficial for it to have flexibility to implement changes in this timeframe to improve methodologies associated with the ISO rules to carry out its duties as the operator of the power pool and the interconnected electric system.[43]

44. In the Commission's view, Section 4(e) of the *Supply Cushion Regulation* is not drafted to compel the AESO to codify all variables it may consider. Rather, it gives the AESO discretion to determine relevant variables, as emphasized by the statutory language "as determined by the ISO." This grant of discretion is duplicated in Section 4(1)(a)(v) of ISO Rule 206.2. The Commission notes that similar discretion to consider "any other factors the ISO considers relevant" is found in other ISO rules.[44]

45. In addition, the Commission observes that, under Section 4(2) of the rule, the AESO must provide reasonable notice of any changes to the anticipated supply cushion methodology referenced in Section 4(1). Further, if the AESO identifies a new variable, then the Commission understands that the AESO would necessarily have to include that variable, and its impact on operational details, in the accompanying information document, as well as communicate these changes to market participants, in accordance with Section 4(2) of ISO Rule 206.2. For these reasons, the Commission finds that Section 4(1)(a)(v) does not need to be removed from ISO Rule 206.2 and that the inclusion of Section 4(1)(a)(v) does not amount to a technical deficiency.

5.1.3 Is ISO Rule 206.2 inconsistent with the requirements of the Electric Utilities Act because the anticipated supply cushion methodology may underestimate the actual supply cushion due to the AESO's forecast of total net interchange and the exclusion of certain variables?

46. ISO Rule 206.2 sets out the variables the AESO must consider when forecasting the anticipated supply cushion, and the associated information document provides more details on the process by which the AESO will forecast the anticipated supply cushion. The forecast of the anticipated supply cushion determines whether the AESO will issue a UCD.

47. Interveners raised concerns that the AESO's forecast of the anticipated supply cushion may underestimate the actual supply cushion. The effects of underestimating the supply cushion would result in unnecessary UCDs being issued to eligible long lead time assets, and impacts to the price signal, leading to loss of revenue for some market participants and undermining the FEOC operation of the market.[45]

48. TCE was the only party that recommended specific changes to the AESO's anticipated supply cushion methodology to address supply cushion underestimation concerns. TCE's recommended changes include: (i) changes to the AESO's forecast of total net interchange, Section 4(1)(a)(iii) of ISO Rule 206.2; and (ii) the inclusion of price responsive load and curtailable load for demand opportunity service.[46]

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43 Exhibit 29093-X0093, AESO reply argument, PDF page 5, paragraph 12.

44 See for example: ISO rules 205.4: *Regulating Reserve Technical Requirements and Performance Standards*, Section 4(2)(e); 205.5: *Spinning Reserve Technical Requirements and Performance Standards*, Section 4(2)(d); and 205.6: *Supplemental Reserve Technical Requirements and Performance Standards*, Section 4(2)(d).

45 Exhibit 29093-X0081, TCE argument, PDF pages 5-6, paragraphs 11-15.

46 Exhibit 29093-X0081, TCE argument, PDF pages 9-10, paragraph 26.

49. The AESO submitted that prior to the *Supply Cushion Regulation* being enacted, in the government's view, the electricity market was not functioning in accordance with FEOC principles and needed to be corrected. The *Supply Cushion Regulation* was enacted to respond to the unprecedented use by market participants of ISO Rule 202.4: *Managing Long Lead Time Assets* to exercise market power. Specifically, the AESO argued that ISO Rule 202.4 was being used by market participants to remove supply from the market during periods of low supply cushion and high prices to exercise market power (i.e., physical withholding). In the AESO's view, it is incorrect to assume that UCDs distort FEOC market prices or that ISO Rule 206.2 should "err on the side of not issuing a UCD." While an underestimated anticipated supply cushion may negatively impact pool prices if a UCD is issued, an overestimation of the anticipated supply cushion and failure to issue UCDs may lead to inappropriately high pool prices due to the exercise of market power by market participants. The AESO submitted that interveners in this proceeding focused on the possibility of revenue losses due to lower pool prices if UCDs are unnecessarily issued, but ignored the possibility of negative effects on efficiency and affordability when prices are inflated due to the exercise of market power if UCDs are not issued when needed.[47]

50. TCE did not specify whether its concerns with the AESO's proposed anticipated supply cushion methodology amount to a technical deficiency, are contrary to FEOC, or are otherwise not in the public interest. For the purpose of assessing TCE's arguments, the Commission has considered all of these possibilities.

51. Section 4(1)(a)(iii) of ISO Rule 206.2 requires the AESO to base the anticipated supply cushion methodology on "estimated total net imports and exports on all interties." The AESO explained that it uses a three-step process to forecast the net interchange:[48]

> First, a regression formula is used to estimate anticipated interchange from the interties via the consideration of fundamental variables from Alberta, Mid-Columbia electricity region, and California. In this context, "fundamental variables" includes import offers, day-ahead and real-time pricing of Alberta and neighbouring jurisdictions, hydro flows in Mid-Columbia, load forecasts, outage reports, renewable generation forecasts, and Alberta intertie outages.
>
> Second, the AESO uses posted future available transmission capability (ATC) values to ensure the forecast determined in Step 1 is within transmission capability limits.
>
> Finally, the AESO undertakes a true-up of the final anticipated import value using actual submitted interchange offers, as available.

52. TCE argued that, instead of using fundamental variables to forecast net interchange, the AESO should use available transmission capability on the interties in its forecast, and reduce the import estimate to zero MW if the Mid-Columbia day-ahead price is above Alberta's price cap. TCE advised that this method will account for anomalous events when it may not be possible to rely on imports at the available transmission capability value. TCE also suggested a mechanism

[47] Exhibit 29093-X0093, AESO reply argument, PDF pages 6-7, paragraphs 16-19.
[48] Exhibit 29093-X0064, AESO-TCE-2024SEP04-001, PDF page 2.

to raise Alberta's price cap in anomalous events scenarios to attract imports from neighbouring jurisdictions.[49]

53. The AESO responded that TCE's proposal to only use available transmission capability, except when the Mid-Columbia day-ahead price is above Alberta's offer price cap, is flawed because: (i) the AESO needs to incorporate sufficient market fundamentals and granularity such that the anticipated supply cushion can be calculated for each settlement interval of all seven days in its report; and (ii) available transmission capability is not the best predictor of import volumes.[50] In addition, any assumption that import volumes will equal available transmission capability introduces a bias into the anticipated supply cushion methodology because while imports can be below available transmission capability, they can never be above available transmission capability. To adopt a methodology that causes a forecasting error is not consistent with the AESO's duty to accurately forecast the anticipated supply cushion under the *Supply Cushion Regulation*.[51] Although the AESO disagreed with TCE's proposal, the AESO indicated that it is open to considering stakeholder suggestions that would improve estimates.[52]

54. The Commission notes that the AESO's approach to forecasting the anticipated supply cushion in ISO Rule 206.2 is not new, and generally reflects similar approaches used in other ISO rules, such as the short-term adequacy of supply in ISO Rule 202.6: *Adequacy of Supply*.[53]

55. The Commission accepts the AESO's explanation that available transmission capability is not the best predictor of import volumes, and relying solely on it to forecast import volumes (except when the Mid-Columbia day-ahead price is above Alberta's offer price cap) is insufficient for calculating the anticipated supply cushion. The Commission considers that there is not a universally accepted way to forecast import volumes as part of the net interchange when forecasting the anticipated supply cushion, but finds that the AESO's three-step process for forecasting net interchanges provides an acceptable degree of specificity and accuracy.

56. With respect to TCE's suggestion to establish a mechanism to raise Alberta's price cap to attract imports from neighbouring jurisdictions, the Commission finds the suggestion to be beyond the scope of ISO Rule 206.2 and, consequently, this proceeding.

57. TCE also argued that price responsive load and curtailable load for demand opportunity service should be included in the anticipated supply cushion methodology because these loads curtail consumption as the supply cushion tightens, reducing the Alberta internal load.[54]

58. The AESO explained that Section 4(1)(a)(iv) of ISO Rule 206.2, which requires the AESO to consider the estimated Alberta internal load in the anticipated supply cushion methodology, accounts for both price responsive load and demand opportunity service curtailments. The AESO also submitted that, regarding demand opportunity service curtailments, the AESO will revise the anticipated supply cushion methodology as needed to make sure it

49 Exhibit 29093-X0081, TCE argument, PDF page 9, paragraph 23.
50 Exhibit 29093-X0093, AESO reply argument, PDF page 9, paragraphs 27-28.
51 Exhibit 29093-X0093, AESO reply argument, PDF page 9, paragraph 28.
52 Exhibit 29093-X0093, AESO reply argument, PDF page 9, paragraph 29.
53 Exhibit 29093-X0055, AESO-AUC-2024SEP04-002, PDF page 6.
54 Exhibit 29093-X0081, TCE argument, PDF page 9, paragraphs 24-25.

accounts for the significant changes to the demand opportunity service rate that are being implemented in accordance with the Commission's decision[55] in Proceeding 28989.[56]

59. The Commission finds that changes to the AESO's proposed anticipated supply cushion methodology to account for price responsive loads and demand opportunity service curtailments are not required, as these factors are considered when the AESO estimates Alberta internal load under Section 4(1)(a)(iv) of ISO Rule 206.2.

60. In accordance with its findings above, the Commission denies TCE's requested changes to the anticipated supply cushion methodology. The Commission finds that section 4 of ISO Rule 206.2 is not technically deficient, supports the FEOC operation of the market and is in the public interest.

61. The Commission notes that it will take time to observe how the proposed anticipated supply cushion methodology functions in practice. Going forward, it would benefit market participants' confidence in the AESO's anticipated supply cushion methodology if it can be observed to be working. Accordingly, the Commission strongly encourages the AESO to provide a quarterly report comparing its forecast supply cushion and actual supply cushion values on its website, allowing market participants an opportunity to review the accuracy of the AESO's anticipated supply cushion forecast.

5.1.4 Does ISO Rule 206.2 not support the FEOC operation of the market, or otherwise fail to uphold the public interest, because the AESO does not report when the supply cushion forecast is at or below the threshold?

62. Under ISO Rule 206.2, the AESO will issue UCDs when it forecasts that the supply cushion will fall below the threshold of 932 MW, set in the *Supply Cushion Regulation.* ISO Rule 206.2 does not require the AESO to provide any indication of when the 932 MW supply cushion threshold is at risk of being breached. As a result, some interveners argued that ISO Rule 206.2 is contrary to FEOC principles or is not in the public interest because it results in information asymmetry in the market.

63. The *Supply Cushion Regulation* does not mandate when or how frequently the AESO must report on anticipated supply cushion values. Section 4(3) of ISO Rule 206.2 states that the AESO must report on the anticipated supply cushion on its website. Currently, the AESO reports on the anticipated supply cushion in increments of 200 MW, between zero and 1,000 MW+,[57] in the Market Supply Cushion Report published on the AESO's Energy Trading System website.

64. Some interveners submitted that reporting on the anticipated supply cushion in increments of 200 MW is not transparent and creates information asymmetry in the market because only those market participants who received a UCD would know that the supply cushion threshold of 932 MW was breached.[58]

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55 Decision 28989-D02-2024: Alberta Electric System Operator, Updates to Rate Demand Opportunity Service, Proceeding 28989, October 23, 2024.

56 Exhibit 29093-X0093, AESO reply argument, PDF page 8, paragraphs 24-25.

57 Exhibit 29093-X0001, application, PDF page 9, footnote 35.

58 Exhibit 29093-X0085, Capital Power argument, PDF page 8, paragraph 16; Exhibit 29093-X0082, Heartland argument, PDF page 9, paragraph 35; and Exhibit 29093-X0077, ENMAX argument, PDF page 8, paragraph 28.

65. The AESO argued that more detailed or precise anticipated supply cushion reporting could harm the FEOC operation of the market because market participants would be able to infer the availability or the commitment of specific assets from the Market Supply Cushion Report, influencing market participants' offer behaviour.[59]

66. The AESO submitted that the Market Supply Cushion Report mirrors the Supply Adequacy Report, which is published under the existing ISO Rule 202.6: *Adequacy of Supply*.[60] The Supply Adequacy Report forecasts the AESO's short-term ability to maintain reserve margins and similarly reports supply cushion information in increments of 200 MW. The AESO also noted that the Supply Adequacy Report was developed prior to the *Supply Cushion Regulation*. Accordingly, reporting on supply cushion information in 200 MW increments is not new.

67. As noted above, the *Supply Cushion Regulation* does not indicate when or how frequently the AESO must report on anticipated supply cushion values. However, Section 4(3) of ISO Rule 206.2 states that the AESO must report on the anticipated supply cushion on its website. The Commission accepts the AESO's concerns that anticipated supply cushion reporting on a real-time basis at a more detailed level, as part of the Market Supply Cushion Report, could negatively impact the FEOC operation of the market.

68. The AESO indicated that it is willing to provide more detailed reporting than it initially proposed, if the Commission finds that such reporting would be more supportive of a FEOC market. The AESO also indicated a willingness to explore the addition of increments above 1,000 MW to the Market Supply Cushion Report.[61]

69. While the Commission does not find that ISO Rule 206.2 as drafted is contrary to FEOC or otherwise not in the public interest, the Commission considers that providing detail above 1,000 MW is a reasonable measure to enhance transparency to market participants of when the 932 MW threshold is at risk of being breached. The Commission acknowledges the AESO's willingness to explore more detailed reporting, and expects the AESO to explore options to report additional increments above 1,000 MW as part of the Market Supply Cushion Report, posted on its website.

5.2 Issues related to unit commitment directives

70. Section 5(1)(b) of the *Supply Cushion Regulation* requires the AESO to determine the order in which it issues UCDs to eligible long lead time assets according to relative economic merit and physical constraint parameters of the eligible long lead time assets.

71. Relative economic merit is determined based on the cost parameters for a long lead time asset that market participants must submit to the AESO in accordance with Section 3(1) of the *Supply Cushion Regulation*. These cost parameters are: (a) all variable charges under the ISO tariff applicable to the long lead time asset, including any applicable loss factor charge or credit; (b) variable operational and maintenance charges; (c) fuel cost to start and run the long lead time asset; (d) emission costs; and (e) any other information requested by the AESO. Physical constraints are determined based on the physical constraint parameters for a long lead time asset

[59] Exhibit 29093-X0079, AESO argument, PDF page 10, paragraph 28.
[60] Exhibit 29093-X0064, AESO-TCE-2024SEP04-005(8), PDF page 12.
[61] Exhibit 29093-X0093, AESO reply argument, PDF page 14, paragraph 49.

that markets participants must submit to the AESO in accordance with Section 3(2) of the *Supply Cushion Regulation*. These physical constraint parameters are: (a) initial start-up time; (b) minimum off time; (c) ramp rate; (d) minimum stable generation level; (e) maximum run-up time; and (f) minimum on time; as defined in the ISO rules. These sections of the *Supply Cushion Regulation* are included in Section 2(1) of ISO Rule 206.2.

72. Section 7(1) of the *Supply Cushion Regulation* requires the AESO to pay a market participant the incremental and prudent generation costs incurred for operating their long lead time asset in compliance with a UCD. Paying costs is conditional on the market participant submitting a written request and attesting to the accuracy, prudency and completeness of the actual incremental costs incurred as a result of and following compliance with a UCD. Section 7(2) sets out the information the market participant must provide to the AESO, which consists of the following: (a) the actual costs of all variable charges under the ISO tariff applicable to the long lead time asset, including any applicable loss factor charge or credit; (b) variable operational and maintenance charges; (c) fuel costs to start and run the long lead time asset; and (d) emission costs. These sections of the *Supply Cushion Regulation* are included in Section 7 of ISO Rule 206.2.

5.2.1 Does ISO Rule 206.2 not support the FEOC operation of the market because it does not require the AESO to report on unit commitment directives in real time?

73. Some interveners argued that ISO Rule 206.2 does not support FEOC because not requiring the AESO to provide notice when a UCD is issued creates an information asymmetry in the market.[62] As an example, ENMAX explained that the owner of a long lead time asset who receives a UCD is given a competitive advantage over other market participants because it is provided with information that is unavailable to other market participants.[63]

74. Neither the *Supply Cushion Regulation* nor ISO Rule 206.2 specify any UCD reporting requirements. Currently, the AESO releases information regarding the issuance of UCDs 60 days after a UCD was issued, in the Energy Trading System. The AESO submitted that publishing UCD issuance information in real time could reveal information about the offer behaviour of the market participant who received the UCD.[64] The AESO argued that its practice of making this information available 60 days after a UCD is issued is in line with the 60-day delay for other reporting on the behaviour of market participants required under Section 6(3) of the *Fair, Efficient and Open Competition Regulation*.[65] For example, the AESO referred to Decision 21115-D01-2017 where the Commission found that earlier release of the Historical Trading Report, which reported the price and quantity of MW offered by each market participant, may result in a less competitive market, in certain circumstances.[66] Despite this, the AESO submitted

[62] Exhibit 29093-X0086, RGA argument, PDF page 10, paragraph 24; Exhibit 29093-X0082, Heartland argument, PDF pages 9-10, paragraph 37; Exhibit 29093-X0077, ENMAX argument, PDF page 8, paragraphs 28-29; and Exhibit 29093-X0081, TCE argument, PDF pages 10-11, paragraphs 27-28.

[63] Exhibit 29093-X0077, ENMAX argument, PDF page 8, paragraph 29.

[64] Exhibit 29093-X0093, AESO reply argument, PDF page 14, paragraph 51.

[65] Exhibit 29093-X0064, AESO-TCE-2024SEP04-002, PDF page 6.

[66] Decision 21115-D01-2017: Market Surveillance Administrator, Application by the Market Surveillance Administrator Regarding the Publication of the Historical Trading Report, Proceeding 21115, Application 21115-A001, May 17, 2017, paragraph 214.

that it is willing to report on UCDs in real time if the Commission found that doing so would better support FEOC principles.[67]

75. ENMAX submitted that the circumstances that led the Commission to its findings on the Historical Trading Report in Decision 21115-D01-2017 were different from the circumstances in this proceeding because: (i) unlike the Historical Trading Report, UCD information does not contain the price and quantity of each offer; and (ii) the Historical Trading Report was shown to have facilitated the exercise of market power in certain circumstances, while the lack of release of relevant market information proposed in ISO Rule 206.2 gives market participants an unfair competitive advantage over other market participants.[68]

76. The Commission is not persuaded by the AESO's submission that publishing real-time notice of UCD issuance could harm the FEOC operation of the market. The Commission considers that the current circumstances differ from the circumstances in Decision 21115-D01-2017. In this case, the issue is public disclosure of more limited information in real time; namely, that a UCD has been issued and/or terminated. Interveners are not requesting that the AESO disclose any economic or physical constraint parameters of the long lead time asset that receives a UCD, which the AESO has stated it will not publish.[69] Interveners are also not requesting that the AESO publish the price and quantity of MW offered by a long lead time asset. Accordingly, the Commission finds that granting the interveners' request is not inconsistent with the Commission's findings in Decision 21115-D01-2017.

77. The Commission is of the view that a UCD is an external market intervention by the AESO to ensure the supply cushion at a certain settlement interval is maintained at 932 MW. The Commission finds there is benefit to participants in a competitive market to being aware when an external intervention is occurring in the market so they can make fully informed competitive decisions.

78. In Section 5.1.4 of this decision, the Commission accepts the AESO's concern that reporting when the supply cushion would be at or below the threshold of 932 MW could negatively impact the FEOC operation of the market. In that case, all market participants are still exposed to the same information (i.e., supply cushion forecasts in increments of 200 MW), resulting in a level playing field. In this case, if the AESO fails to publicly report on UCD issuance in real time, then a market participant who receives a UCD has more information than others who didn't receive one; namely, that the supply cushion would otherwise have been at or below 932 MW.

79. The Commission agrees that this information asymmetry has the potential to affect the FEOC operation of the market. However, the Commission also considers that it can be rectified relatively simply by requiring UCDs to be reported in real time. Accordingly, the Commission directs the AESO to revise ISO Rule 206.2 to provide for notification in real time when a UCD is issued and when it is terminated. The Commission will leave the real-time notification method for the AESO to determine. The AESO is to file ISO Rule 206.2, as revised to reflect this direction, for the Commission's review no later than 30 days after this decision is issued. The Commission will issue notice of the revised ISO Rule 206.2 and, subject to the Commission confirming that ISO Rule 206.2 has been revised in accordance with its direction, the

[67] Exhibit 29093-X0093, AESO reply argument, PDF page 14, paragraph 52.
[68] Exhibit 29093-X0077, ENMAX argument, PDF page 9, paragraph 32.
[69] Exhibit 29093-X0064, AESO-TCE-2024SEP04-002, PDF page 6.

provision(s) of ISO Rule 206.2 dealing with real-time notification of UCDs issuance and termination will take effect 60 days after this decision is issued.

80. ENMAX also requested that the AESO provide more detailed reporting on UCDs at a similar level of reporting required by ISO Rule 202.4: *Managing Long Lead Time Assets* and ISO Rule 306.5: *Source Asset Outage Reporting and Coordination*, such as an explanation of the circumstances that caused a UCD to be issued, as well as chronological events and material market impacts.[70] ENMAX submitted that ISO Rule 206.2 has "similar effects on market participants' operation in the market" as ISO rules 202.4 and 306.5 because these rules also provide authority for the AESO to require commitment or maintain the commitment of certain assets.[71]

81. The Commission agrees with the AESO's assessment that UCDs are a separate type of directive that do not have the same triggers or requirements as the ones contemplated in ISO rules 202.4 and 306.5, and therefore should not be subject to the same reporting requirements outlined in those rules.[72] Overall, the Commission finds that notifying market participants in real time when a UCD is issued and when it is terminated is a sufficient level of reporting.

5.2.2 Is ISO Rule 206.2 technically deficient or unsupportive of the FEOC operation of the market because it does not fully codify how the AESO determines the order of unit commitment directives?

82. Some interveners argued that ISO Rule 206.2 is technically deficient because it does not adequately describe or lacks specifics as to the methodology used by the AESO to determine the order of UCD issuance.[73] The MSA argued that, in addition to being technically deficient, ISO Rule 206.2 is not supportive of the FEOC operation of the electricity market because the perceived lack of detail related to the process the AESO follows to determine the order of UCDs creates a risk that the AESO will make decisions that are arbitrary, inconsistent and contrary to FEOC principles.[74]

83. In an IR response, the AESO provided a step-by-step guide on how it determines the order of UCD issuance, as well as more details on the process, including: (i) how start-up costs are estimated; (ii) how fuel costs are estimated; (iii) the UCD optimization process, which uses a software called Power Optimisation (PowerOp) to help the AESO identify the least-cost UCD (or combination of UCDs) that minimizes the supply cushion deficit, and is available within the eligible long lead time assets' physical constraint parameters; and (iv) the UCD dispatch process.[75]

84. To correct this alleged technical deficiency, ENMAX suggested that the contents of the IR response be included within the rule,[76] while the MSA suggested that the rule should include

[70] Exhibit 29093-X0077, ENMAX argument, PDF pages 7-8, paragraph 26.
[71] Exhibit 29093-X0077, ENMAX argument, PDF page 8, paragraph 27.
[72] Exhibit 29093-X0057, AESO-EEC-2024SEP04-003, PDF page 10.
[73] Exhibit 29093-X0077, ENMAX argument, PDF pages 5-6, paragraphs 12-15; and Exhibit 29093-X0078, MSA argument, PDF pages 4-8, paragraphs 8-18.
[74] Exhibit 29093-X0078, MSA argument, PDF page 7, paragraph 16.
[75] Exhibit 29093-X0055, AESO-AUC-2024SEP04-003(a), PDF pages 8-11.
[76] Exhibit 29093-X0077, ENMAX argument, PDF page 6, paragraph 14.

the complete mathematical problem that PowerOp solves to optimize the order of UCD issuance.[77]

85. The Commission does not agree with the argument that ISO Rule 206.2 is technically deficient because the rule does not include specifics as to the methodology used by the AESO to determine the order of UCD issuance, such as the step-by-step guide provided in the AESO's IR response, or the mathematical problem that PowerOp solves. While the Commission has affirmed that a proposed rule must be reasonably self-contained, this does not mean that every aspect of how the rule will be implemented must necessarily be codified within the rule. The Commission agrees with the AESO that it is unreasonable to require ISO rules to be a complete "operations manual" of how the AESO is to fulfil its duties with respect to a particular matter. This is particularly so in the current circumstances, where the practical reality of implementing the rule requires the AESO to make use of a software tool whose operation cannot practicably or reasonably be reduced to the text of a rule.

86. The Commission also does not agree that the rule is technically deficient on the basis that it is not sufficiently clear or cohesive to facilitate stakeholder understanding. The Commission notes that, as a general proposition, there is a high threshold for challenging subordinate legislation on the basis of vagueness or uncertainty.[78] In the case of the proposed ISO Rule 206.2, the rule clearly articulates the factors that the AESO must assess in determining the relative economic merit of UCDs and physical constraint parameters of the long lead time assets. The Commission considers that the rule itself provides sufficient information for stakeholders to understand the principles of how UCD directives will be prioritized.

87. Finally, the Commission also disagrees that the proposed ISO Rule 206.2 is unsupportive of the FEOC operation of the market on the basis that the AESO may make arbitrary or inconsistent decisions. While the AESO retains the onus of satisfying the Commission that the proposed rule is consistent with the requirements of the *Electric Utilities Act*, the MSA has not identified any evidentiary basis to support its assertion that the AESO is at risk of acting inconsistently or arbitrarily, simply because the rule does not provide the mathematical problem that PowerOp solves. Rather, the existence of the information document ID #2024-005 and the AESO's explanation of the PowerOp software functionality on the record of this proceeding[79] suggest that the AESO's methodology is internally consistent and predictable.

88. Taken together, the Commission considers that the AESO has met its burden of demonstrating that the proposed ISO Rule 206.2 is not technically deficient and is supportive of FEOC, despite the rule not detailing every aspect of the methodology relied on by the AESO to determine the order of UCD issuances.

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[77] Exhibit 29093-X0078, MSA argument, PDF page 7, paragraph 15.

[78] See for example: Donald J.M. Brown and John M. Evans, *Judicial Review of Administrative Action in Canada* (Toronto: Canvasback Publishing, 2008), pages 15-158 to 15-159, and Sara Blake, *Administrative Law in Canada*, 4th ed. (LexisNexis: Markham, Ont., 2006), page 149.

[79] Exhibit 29093-X0061, Attachment 2 AESO-MSA-2024SEP04-001(b).

5.2.3 Is ISO Rule 206.2 technically deficient because it does not consider transmission constraints in the ordering of unit commitment directives?

89. ENMAX argued that ISO Rule 206.2 is technically deficient because it fails to consider transmission system constraints in the ordering of UCDs, which could undermine the reliability of the interconnected electric system.[80]

90. The AESO submitted that transmission congestion management does not need to be addressed in ISO Rule 206.2 because it makes no difference to how transmission congestion is managed whether an asset is committed through a UCD or is self-committed. In addition, the AESO submitted that ISO rules work as an integrated scheme, and any congestion arising from the provision of energy under a UCD is dealt with under ISO Rule 302.1: *Real Time Transmission Constraint Management*.[81]

91. The Commission observes that neither the *Supply Cushion Regulation* nor ISO Rule 206.2 mention transmission congestion considerations.

92. The Commission finds that incorporating transmission congestion within ISO Rule 206.2 is unnecessary and redundant to ISO Rule 302.1. The Commission concurs with the AESO that transmission congestion does not need to impact the ordering of UCDs, and any congestion arising from the provision of energy under a UCD is addressed under ISO Rule 302.1.[82] The Commission considers that ISO Rule 206.2 is consistent with the statutory scheme and the specific requirements of the *Electric Utilities Act*, and a mechanism to deal with congestion constraints exists under ISO Rule 302.1.

5.2.4 Is ISO Rule 206.2 technically deficient because it does not order unit commitment directives according to initial start-up time?

93. The RGA submitted that ISO Rule 206.2 is technically deficient because the AESO does not prioritize initial start-up time, which is one of the physical constraint parameters the AESO must consider when issuing UCDs to eligible long lead time assets.[83] In order to accommodate long lead time assets, the AESO must issue UCDs 36 to 48 hours in advance of the time the AESO anticipates there to be a supply cushion deficiency. The RGA suggested that the further ahead in time that forecasts for wind, solar and load are made, the more uncertain they become. As a result, the RGA argued that issuing a UCD to a long lead time asset that requires dispatch 36 to 48 hours in advance, based solely on relative economic merit, will lead to more UCDs being issued than is necessary to address a deficiency in the supply cushion. Accordingly, the RGA suggested that the AESO should instead prioritize initial start-up time and issue UCDs to eligible long lead time assets with shorter dispatch times.[84]

94. The AESO agreed that it is preferable to issue UCDs as close to a generator's start-up time as possible. However, the AESO also argued that prioritizing initial start-up time is not compatible with the *Supply Cushion Regulation*; the regulation directs the AESO to order UCDs according to relative economic merit but prioritizing initial start-up time may mean dispatching a

[80] Exhibit 29093-X0077, ENMAX argument, PDF page 6, paragraph 16.
[81] Exhibit 29093-X0093, AESO reply argument, PDF pages 11-12, paragraph 39.
[82] Exhibit 29093-X0093, AESO reply argument, PDF pages 11-12, paragraph 39.
[83] The Commission notes that the RGA used the term "startup time" in its argument submission. The Commission assumes that the RGA is referring to "initial start-up time."
[84] Exhibit 29093-X0086, RGA argument, PDF pages 9-10, paragraphs 21-22.

higher-cost UCD. Further, prioritizing initial start-up time may leave the AESO in a situation where there are not enough generating assets left to address the supply cushion deficit because other assets that might otherwise have contributed to minimizing the supply cushion deficit could no longer be issued UCDs in time.[85]

95. The *Supply Cushion Regulation* and ISO Rule 206.2 require the AESO to determine the order of UCDs according to relative economic merit and physical constraint parameters of the eligible long lead time assets. The Commission notes that neither the *Supply Cushion Regulation* nor ISO Rule 206.2 expressly require the AESO to prioritize any of the physical constraint parameters.

96. The Commission accepts the AESO's concerns with respect to prioritizing assets with shorter initial start-up times and the conflicts this may cause with the AESO's obligation to issue UCDs according to relative economic merit, as well as potentially creating a situation in which the resources to address a deepening deficit are not available. In view of the above, the Commission finds that ISO Rule 206.2 is consistent with the statutory scheme and is not technically deficient on the basis of a failure to order UCDs according to initial start-up time.

5.2.5 Is ISO Rule 206.2 technically deficient because it does not require the AESO to determine whether physical withholding is taking place before issuing a unit commitment directive?

97. Suncor argued that the primary purpose of ISO Rule 206.2 is to mitigate market distortions caused by physical withholding.[86] Suncor noted that the AESO currently makes no assessment in ISO Rule 206.2 as to whether a unit is being physically withheld prior to issuing a UCD. Suncor submitted that the wording in Section 5(1)(a) of the *Supply Cushion Regulation*, being "minimize the deficit to the extent reasonable," requires the AESO to add this step to ISO Rule 206.2. Suncor argued that, without a substantive assessment of whether an asset is being physically withheld, ISO Rule 206.2 is technically deficient,[87] and proposed that the AESO conduct an assessment to ascertain that the asset is being physically withheld before issuing a UCD. Suncor acknowledged that targeting relative economic merit makes it more likely that a UCD will target an asset that is being physically withheld but also asserted that there is no guarantee that the targeted asset will have been physically withheld.

98. The AESO agreed with Suncor's submission that physical withholding is one of the policy issues behind the *Supply Cushion Regulation*. However, the AESO submitted that the *Supply Cushion Regulation* expressly requires that once the decision to issue a UCD has been made, the UCD is to be issued based on the "relative economic merit" of the generator.[88] Accordingly, in the AESO's view, Suncor's proposed amendment to ISO Rule 206.2 to require the AESO to conduct a case-by-case assessment of physical withholding prior to issuing a UCD is incompatible with the *Supply Cushion Regulation.*

99. The opening words of Section 5(1) of the *Supply Cushion Regulation* set out the circumstances in which the rule operates; in other words, the condition, if met, obligates the AESO to take action. Section 5(1) is satisfied when the anticipated supply cushion determined

[85] Exhibit 29093-X0093, AESO reply argument, PDF page 12, paragraph 40.
[86] Exhibit 29093-X0075, Suncor argument, PDF page 7, paragraph 21.
[87] Exhibit 29093-X0075, Suncor argument, PDF pages 6-7, paragraphs 17-22.
[88] Exhibit 29093-X0093, AESO reply argument, PDF page 12, paragraph 42.

under Section 4 of that regulation will be less than the supply cushion threshold of 932 MW for any settlement interval, in which case the AESO must, under paragraphs (a) and (b), do the following:

> (a) minimize the deficit to the extent reasonable for the safe, reliable and economic operation of the interconnected system by issuing unit commitment directives to pool participants for long lead time assets, and
>
> (b) determine the order of unit commitment directives according to relative economic merit and physical constraint parameters.

100. In the Commission's view, Suncor's proposed amendment would be inconsistent with the legislature's intent that the AESO undertake the actions prescribed in paragraphs (a) and (b) if the circumstances in Section 5(1) are satisfied. Accordingly, the Commission finds that ISO Rule 206.2 is consistent with the statutory scheme and is not technically deficient because the AESO can issue a UCD without confirming whether physical withholding is taking place.

5.2.6 Is ISO Rule 206.2 technically deficient and not in the public interest because it does not incorporate "maximum number of cycles" as a physical constraint?

101. Heartland argued that ISO Rule 206.2 is technically deficient and not in the public interest because it does not consider the number of UCDs an eligible long lead time asset may receive within a given period (which Heartland characterized as "cycles") as a relevant physical constraint under Section 2(1)(b).[89] This stems from Heartland's concern that frequent cycling (which Heartland characterized as repetitive activation and deactivation) of a thermal power plant in response to the AESO's UCDs could compromise operational integrity of the asset and create risks related to personnel, safety and equipment lifecycle.[90] Heartland submitted that these issues could lead to increased unplanned outages and jeopardize both its interests and Alberta's grid reliability.[91]

102. Heartland submitted that there is no established legal test for determining whether an ISO rule is technically deficient or not in the public interest, and that this determination is a fact-specific exercise,[92] but emphasized that the Commission has previously looked to factors such as whether a rule can be implemented in a practical and effective manner, and whether the rule maintains the safe, reliable and economic functioning of the interconnected electric system.[93]

103. Heartland submitted that consideration of the public interest is closely linked to evaluating whether an ISO rule is technically deficient and supports FEOC, but also encompasses broader considerations than the other criteria in Section 20.21 of the *Electric Utilities Act*.[94] Within its argument, Heartland emphasized the importance of promoting sustainable practices that protect both generating assets and the reliability of the energy supply.[95]

104. To address its concerns, Heartland recommended that Section 2(1)(b) of ISO Rule 206.2 be revised to explicitly include the number of UCDs that can be issued to an eligible long lead

89 Exhibit 29093-X0082, Heartland argument, PDF page 4, paragraph 10.
90 Exhibit 29093-X0082, Heartland argument, PDF pages 5-6, paragraphs 15, 17 and 19.
91 Exhibit 29093-X0082, Heartland argument, PDF pages 5-6, paragraphs 15 and 19.
92 Exhibit 29093-X0082, Heartland argument, PDF page 3, paragraph 5.
93 Exhibit 29093-X0082, Heartland argument, PDF pages 4-5, paragraph 12.
94 Exhibit 29093-X0082, Heartland argument, PDF page 3, paragraph 8.
95 Exhibit 29093-X0082, Heartland argument, PDF page 5, paragraph 15.

time asset within a 48-hour period as a physical constraint.[96] It also proposed introducing two categories of constraints – normal operations and emergency reliability events – to reflect its position that cycling may be acceptable under specific circumstances. Heartland suggested that key terms are lacking adequate definitions within the rule, but did not identify particular terms or propose definitions.

105. Heartland also expressed concerns that it is not eligible to recover costs under ISO Rule 206.2 for: (i) expenses associated with repairs and forced outages resulting from excessive cycling of thermal power plants; and (ii) increases in fixed maintenance expenses incurred when thermal power plants are cycled multiple times within a 48-hour period.[97]

106. The Commission disagrees with Heartland that Section 2(1)(b) of ISO Rule 206.2 is technically deficient and not in the public interest, for the following reasons.

107. The Commission disagrees that the rule is not capable of practical and effective execution. The Commission also does not accept Heartland's suggestion that the rule jeopardizes Alberta's grid reliability.

108. With respect to Heartland's concerns about the physical risk of frequent cycling, the Commission notes the AESO's clear position that the *Supply Cushion Regulation* is not intended to damage generating units or jeopardize safety. The AESO explicitly stated it "assumes that pool participants would not submit physical constraints that could result in a UCD being issued in those circumstances."[98] The Commission understands this to mean that market participants can communicate physical constraints, such that their eligible long lead time assets will not face any legitimate and material operational integrity issues. Accordingly, Heartland can and should communicate with the AESO and provide accurate physical constraints that will address the potential for any legitimate and material operational integrity issues that may arise from responding to a UCD. Effective communication will ensure the AESO can adequately consider these constraints, thereby mitigating the risks associated with cycling without needing to amend ISO Rule 206.2.

109. Additionally, a market participant is not obligated to comply with any UCD that compromises safety, due to the compliance exception in ISO Rule 103.12: *Compliance Monitoring*.[99] This exception ensures that generators are not bound to follow UCDs that could lead to unsafe conditions.

110. Overall, the Commission finds that the provisions of ISO Rule 206.2 as proposed by the AESO, along with the compliance exception outlined in ISO Rule 103.12; the clarification provided by the AESO; and the responsibility of market participants to accurately communicate physical constraints, are collectively sufficient to safeguard the operational integrity of power plants. The Commission finds that the revisions proposed by Heartland to ISO Rule 206.2 are not necessary, and is satisfied that the proposed Section 2(1)(b) of ISO Rule 206.2 is not technically deficient or otherwise not in the public interest on the basis of Heartland's concerns about the physical integrity of assets.

[96] Exhibit 29093-X0082, Heartland argument, PDF page 4, paragraph 11.
[97] Exhibit 29093-X0082, Heartland argument, PDF pages 7-8, paragraphs 23-30.
[98] Exhibit 29093-X0093, AESO reply argument, PDF page 10, paragraph 33.
[99] Exhibit 29093-X0093, AESO reply argument, PDF page 10, paragraph 33.

111. The Commission also does not share Heartland's cost concerns related to cycling. The AESO clarified that under ISO Rule 206.2, market participants are guaranteed to recover any prudent and incremental maintenance costs that increase due to the issuance of a UCD.[100] This assurance addresses Heartland's concerns by confirming that the framework under ISO Rule 206.2 provides a mechanism for generators to recover prudent and incremental maintenance costs that could increase due to cycling. The AESO's clarification demonstrates that the intent of ISO Rule 206.2 is to not financially disadvantage market participants for complying with a UCD, thus supporting fairness and efficiency within the market.

5.2.7 Should the Commission accept Heartland's proposal to include a provision in ISO Rule 206.2 that requires advance notice for unit commitment directive "extensions"?

112. This issue relates to circumstances in which the AESO, after issuing a UCD for a specific period, determines that a deficit to the anticipated supply cushion exists following the duration of the initial UCD, and issues a subsequent UCD to remedy the deficit.[101] Heartland argued that ISO Rule 206.2 fails to provide adequate notice to an eligible long lead time asset of UCD extensions.[102] Heartland proposed that if a long lead time asset is under a UCD, the AESO must notify the market participant at least three hours before the directive expires that the directive is being extended, to give personnel time to plan shutdowns. Heartland selected three hours, because this is outside of the two-hour period in advance of a settlement interval in which market offers are locked.

113. The Commission does not accept Heartland's proposal, because it is not consistent with the mechanics of how a UCD is issued.

114. The Commission accepts the AESO's explanation that, technically, UCDs are not extended; rather, UCDs are issued for a specific period.[103] If an anticipated supply cushion deficit is identified following the initial UCD, another UCD might be issued to the same asset – but only if the asset is ranked first according to relative economic merit and physical constraint parameters.

115. The AESO also explained that a UCD is only issued to an asset that is out of merit, and that this determination is made in real time at the point of dispatch.[104] Accordingly, it would not be possible to issue notice of a subsequent UCD three hours ahead, because it is unclear at this point whether an asset will be out of merit. Furthermore, the AESO explained that giving longer notice of a UCD may result in the UCD being issued erroneously to an asset, because the asset could have self-committed instead. Accordingly, the Commission accepts the AESO's argument that it is not possible to issue three-hour advance notices of subsequent UCDs because of uncertainty, and that it would not be desirable to do so because it could unnecessarily distort the market.

[100] Exhibit 29093-X0093, AESO reply argument, PDF page 10, paragraph 34.
[101] Exhibit 29093-X0093, AESO reply argument, PDF page 11, paragraph 37.
[102] Exhibit 29093-X0082, Heartland argument, PDF page 8, paragraph 31.
[103] Exhibit 29093-X0093, AESO reply argument, PDF page 11, paragraph 37.
[104] Exhibit 29093-X0093, AESO reply argument, PDF page 11, paragraphs 37-38.

5.2.8 Is ISO Rule 206.2 technically deficient, not supportive of FEOC, or not in the public interest because it could cause a cascade of shutdown notifications if unit commitment directives are not sent to all eligible long lead time assets at the same time?

116. Suncor raised a concern that ISO Rule 206.2 could distort market behaviour and cause market participants who do not receive a UCD to shut down their long lead time asset when a UCD is issued, out of concerns that the costs they could recover from the market would not be sufficient to justify remaining online. Suncor argued that to resolve this issue, when the AESO issues a UCD, it should issue UCDs to all eligible long lead time assets.[105] Suncor, at various points in its argument, suggested that ISO Rule 206.2 is contrary to each of the requirements of Section 20.21(2) of the *Electric Utilities Act*. The Commission has therefore assessed whether the rule is not technically deficient, supportive of FEOC and in the public interest.

117. The AESO responded that Suncor's suggested amendment to ISO Rule 206.2 is incompatible with the *Supply Cushion Regulation* because the order of UCDs should be determined according to physical constraint parameters and relative economic merit. The AESO further noted that adopting Suncor's suggestion would increase costs because assets that had already committed to operating would be issued a cost guarantee that they would not have received otherwise.[106]

118. Although the scenario posited by Suncor is possible, the opportunity to avoid cascading shutdowns would still exist because the AESO can issue further UCDs if the deficit in the anticipated supply cushion worsens.

119. Section 5(1)(b) of the *Supply Cushion Regulation* requires the AESO to issue UCDs to pool participants for eligible long lead time assets in order "according to relative economic merit and physical constraint parameters." The terms "order" and "relative" signal that UCDs are to be issued sequentially and that the AESO must assess the economic merit of eligible long lead time assets in relation to each other. The Commission considers that Suncor's proposed amendment, which would require the AESO to issues UCDs to all eligible long lead time assets at once, is incompatible with the express requirements in Section 5(1)(b) of the regulation. Accordingly, the Commission finds that ISO Rule 206.2 is consistent with the statutory scheme, is not technically deficient, is supportive of FEOC and is in the public interest.

5.2.9 Is ISO Rule 206.2 technically deficient because it does not require the AESO to audit its processes?

120. ENMAX expressed concern that there is a lack of visibility into the optimization formula that the AESO will use to calculate the order in which UCDs are issued.[107] Recognizing that the inputs to the optimization process contain commercially sensitive information, ENMAX requested that the Commission direct revisions to ISO Rule 206.2 to require the AESO to conduct regular audits to assess whether it issues UCDs that are compliant with any AUC-approved methodologies for determining UCDs. In the context, the Commission understands that the reference to "AUC-approved methodologies" would be the wording of ISO Rule 206.2.

[105] Exhibit 29093-X0075, Suncor argument, PDF pages 9-10, paragraphs 32-34.
[106] Exhibit 29093-X0093, AESO reply argument, PDF page 13, paragraph 43.
[107] Exhibit 29093-X0077, ENMAX argument, PDF page 6, paragraphs 19-20.

121. As indicated in Section 5.2.2 of this decision, in an IR response,[108] the AESO provided a step-by-step guide on how it determines the order of UCD issuance, as well as more details on the UCD optimization process, which uses PowerOp to help the AESO identify the least-cost UCD (or combination of UCDs) that minimizes the supply cushion deficit and is available within the eligible long lead time assets' physical constraint parameters.

122. The Commission disagrees that ISO Rule 206.2 requires ENMAX's requested audit revision to avoid a technical deficiency.

123. First, the *Supply Cushion Regulation* does not include a requirement for the AESO to conduct an audit of its processes for determining and issuing UCDs. Therefore, introducing such an audit requirement would be beyond the scope of the existing regulatory framework and could unnecessarily impose additional administrative burdens on the AESO without clear legal justification.

124. Second, the Commission notes that, in Section 5.2.1 of this decision, it is directing the AESO to report on UCDs in real time. This should make the AESO's processes in relation to issuing UCDs more transparent.

125. Third, the AESO is bound by obligations under ISO Rule 206.2 and the *Supply Cushion Regulation*, which require UCDs to be issued based on relative economic merit and physical constraints.[109] The AESO also regularly reviews its conduct to ensure compliance with all applicable ISO rules. The existing legal framework and the AESO's own compliance checks serve as sufficient mechanisms to ensure that UCDs are determined and issued appropriately, making additional audits redundant.

126. Lastly, the AESO submitted that if a non-compliance with an ISO rule is identified, it is reported to the MSA.[110] In the Commission's view, this provides an additional safeguard against potential misconduct or non-compliance by the AESO.

127. For the reasons above, the Commission finds that ISO Rule 206.2 is not technically deficient because it does not require the AESO to audit its processes.

5.2.10 Is ISO Rule 206.2 technically deficient and not in the public interest because it does not require the AESO to conduct a prudence review of cost recovery requests?

128. The MSA argued that ISO Rule 206.2 is technically deficient and not in the public interest because: (i) it does not obligate the AESO to evaluate the prudence of submitted costs prior to payment; and (ii) the information market participants are obligated to provide to the AESO is insufficient for the AESO to meet its obligation to ensure costs claimed are prudently incurred prior to payment.[111] The MSA expressed concern that ISO Rule 206.2 says nothing about how the AESO will ensure that costs submitted by market participants are actually

[108] Exhibit 29093-X0055, AESO-AUC-2024SEP04-003(a), PDF pages 8-11.
[109] Exhibit 29093-X0093, AESO reply argument, PDF page 13, paragraph 45.
[110] Exhibit 29093-X0093, AESO reply argument, PDF page 13, paragraph 45.
[111] Exhibit 29093-X0078, MSA argument, PDF pages 8 and 12, paragraphs 19 and 30.

prudent. The MSA submitted the AESO's explanation that it would rely on the attestation of the market participant to determine whether costs are prudent and incremental is inadequate.[112]

129. The Commission is not persuaded by the MSA's arguments for the reasons set out below.

130. While the definition of prudence is not included in the rule, the AESO confirmed that it understands the meaning of "prudence" in Section 7(1) of ISO Rule 206.2 to be reasonable decisions made with good judgment based on information available at the time.[113] The Commission finds this definition of prudence affords the AESO with discretion and aligns with the ordinary meaning of prudence under the statutory scheme.[114]

131. The Commission finds the AESO's discretion in its prudency assessment is supported by the express language of the rule. Under Section 7(2)(c) of ISO Rule 206.2, the AESO's obligation to pay a market participant is conditional on several factors, one being provision by the market participant of any information the AESO requests to ensure that it has a full and satisfactory understanding of the costs claimed.[115] [116] The Commission finds Section 7(2)(c) of ISO Rule 206.2 gives the AESO necessary discretion to request information additional to the attestation to assess the prudency of the claimed costs, and to deny payment for costs that are not adequately justified to the AESO's satisfaction.

132. Based on the above, the Commission concludes that the AESO's prudency assessment described in ISO Rule 206.2 is not technically deficient and adequately protects the public interest.

6 Amendments to ISO rules 202.4 and 203.1 and new Consolidated Authoritative Document Glossary definitions

133. Interveners did not raise concerns with the proposed amendments to ISO rules 202.4[117] and 203.1[118] and with the new definitions added to the CADG.[119]

134. The Commission finds that the proposed amendments to these documents are administrative in nature: the changes to the CADG are limited to adding terms defined in the new ISO rules, and the changes to ISO rules 202.4 and 203.1 are consequential amendments to reflect the fact that the term "initial start-up time" is now defined in the CADG. The Commission finds that the amended ISO rules 202.4 and 203.1 comply with Section 20.21 of the *Electric Utilities Act*. ISO rules 202.4 and 203.1, and the new definitions in the CADG, are approved as filed.

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112 Exhibit 29093-X0078, MSA argument, PDF page 8, paragraph 20.
113 Exhibit 29093-X0059, AESO-MSA-2024SEP04-001 to 003, IR response AESO-MSA-2024SEP04-002(b), PDF pages 6-7.
114 Decision 25369-D01-2020: AltaLink Management Ltd. and TransAlta Corporation, Direct Assigned Capital Deferral Account for the Edmonton Region Project, Proceeding 25369, December 10, 2020, PDF page 19, paragraph 99.
115 Exhibit 29093-X0008.01, Appendix B.2 - New Section 206.2 Interim Supply Cushion Directives – Clean, PDF pages 4-5.
116 Exhibit 29093-X0093, AESO reply argument, PDF page 15, paragraph 55.
117 Exhibit 29093-X0011.
118 Exhibit 29093-X0012.
119 Exhibit 29093-X0013.

7 Order

135. Under Section 20.21(1) of the *Electric Utilities Act*, it is hereby ordered that:

(1) The Alberta Utilities Commission approves, on a final basis, the new Section 206.1 of the ISO rules: *Interim Secondary Offer Cap*, the proposed amendments to the existing Section 202.4 of the ISO rules: *Managing Long Lead Time Assets* and Section 203.1 of the ISO rules: *Offers and Bids for Energy*, and the new Consolidated Authoritative Document Glossary definitions to effect the changes proposed in these rules.

(2) The Alberta Utilities Commission directs the AESO to revise Section 206.2 of the ISO rules: *Interim Supply Cushion Directives* to provide for notification in real time when a unit commitment directive is issued and when it is terminated. The AESO is to file Section 206.2 of the ISO rules: *Interim Supply Cushion Directives*, as revised to reflect this direction, for the Commission's review no later than 30 days after this decision is issued. Subject to the Commission confirming that the rule has been revised in accordance with its direction, the provision(s) of Section 206.2 of the ISO rules: *Interim Supply Cushion Directives* dealing with real-time notification of unit commitment directives issuance and termination will take effect 60 days after this decision is issued (i.e., the provision(s) is effective April 20, 2025). Otherwise, the approved sections of the ISO rules and amendments are effective immediately.

Dated on February 19, 2025.

Alberta Utilities Commission

(original signed by)

Cairns Price
Panel Chair

(original signed by)

Renée Marx
Commission Member

Appendix 1 – Proceeding participants

Name of organization (abbreviation) **Company name of counsel or representative**
Alberta Electric System Operator (AESO) Norton Rose Fulbright LLP
ATCO Renewables Ltd.
Capital Power Corporation Dentons Canada LLP
ENMAX Energy Corporation (ENMAX or EEC) Regulatory Law Chambers
Heartland Generation Ltd. (Heartland)
Market Surveillance Administrator (MSA)
Renewable Generators Alliance (RGA) Blake, Cassels & Graydon LLP
Suncor Energy Inc. (Suncor)
TransAlta Corporation
TransCanada Energy Ltd. (TCE)

Alberta Utilities Commission Commission panel C. Price, Panel Chair R. Marx, Commission Member Commission staff J. Graham (Commission counsel) M. Anderson (Commission counsel) F. Alonso C. Fuchshuber M. McJannet A. Starkov C. Young

Appendix 2 – Summary of Commission directions

This section is provided for the convenience of readers. In the event of any difference between the directions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

1. The Commission agrees that this information asymmetry has the potential to affect the FEOC operation of the market. However, the Commission also considers that it can be rectified relatively simply by requiring UCDs to be reported in real time. Accordingly, the Commission directs the AESO to revise ISO Rule 206.2 to provide for notification in real time when a UCD is issued and when it is terminated. The Commission will leave the real-time notification method for the AESO to determine. The AESO is to file ISO Rule 206.2, as revised to reflect this direction, for the Commission's review no later than 30 days after this decision is issued. The Commission will issue notice of the revised ISO Rule 206.2 and, subject to the Commission confirming that ISO Rule 206.2 has been revised in accordance with its direction, the provision(s) of ISO Rule 206.2 dealing with real-time notification of UCDs issuance and termination will take effect 60 days after this decision is issued..... paragraph 79

Appendix 3 – Section 206.1 Interim Secondary Offer Cap

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Appendix 3 -
Interim Secondary O

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Appendix 4 – Section 206.2 Interim Supply Cushion Directives

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Appendix 4 -
Interim Supply Cush

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Appendix 5 – Section 202.4 Managing Long Lead Time Assets

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Appendix 5 -
Managing Long Lea

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Appendix 6 – Section 203.1 Offers and Bids for Energy

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Appendix 6 - Offers and Bids for Energy

(consists of 3 pages)

Appendix 7 – New Consolidated Authoritative Document Glossary definitions

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Appendix 7 - New Consolidated Autho

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ISO Rules
Part 200 Markets
Division 206 Interim Market Power Mitigation
Section 206.1 Interim Secondary Offer Cap

Applicability

1 Section 206.1 applies to:

(a) the **pool participant** for a **market participant** that has **offer** control equal to or greater than 5% of the total **maximum capability** of **generating unit**s in Alberta, as determined by the **Market Surveillance Administrator** under section 5(3) and (4) of the *Fair, Efficient and Open Competition Regulation*, AR 159/2009; and

(b) the **ISO**

in accordance with the *Market Power Mitigation Regulation*, AR 43/2024.

Requirements

Secondary Offer Price Limit

2(1) A **pool participant** must, upon notification from the **ISO**:

(a) not submit **offer**s for any **settlement interval** in the current month that are greater than the **offer** price limit communicated by the **ISO** under subsection 3(4)(c);

(b) restate all previously submitted **offer**s, excluding those for the next two **settlement intervals**, to conform with the **offer** price limit communicated by the **ISO** under subsection 3(4)(c); and

(c) maintain all **offer**s equal to or less than the **offer** price limit communicated by the **ISO** under subsection 3(4)(c) until the first **settlement interval** in the first day of the following month.

(2) Subsection 2(1) does not apply to:

(a) a **generating unit** that produces electric energy from a renewable energy resource as defined in the *Renewable Electricity Act*; or

(b) an **energy storage resource** that:

(i) derives its electric energy input from a renewable energy resource, as defined in the *Renewable Electricity Act*, or

(ii) derives its electric energy input from the **power pool**.

(3) The **ISO** must notify the **pool participant** when the secondary **offer** price limit comes into effect on the AESO website.

Modelling the Reference Generating Unit

3(1) The **ISO** must, for each year, determine the value of the annualized unavoidable costs as the summation of the annualized capital investment costs and the annual fixed operating costs associated with operating the **reference generating unit**, in accordance with the methodology set out in Appendix 1.

(2) The **ISO** must, as soon as practicable, after each **settlement interval** in a month, determine the monthly cumulative settlement interval net revenue of the **reference generating unit**, expressed in dollars, in accordance with the methodology set out in Appendix 1.

(3) The **ISO** must not, notwithstanding subsection 3(2), determine the monthly cumulative settlement interval net revenue within the final 20 minutes of a **settlement interval**.

(4) The **ISO** must, in any month, when the value of the monthly cumulative settlement interval net revenue of the **reference generating unit** exceeds 1/6 of the annualized unavoidable costs of the **reference generating unit**:

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Section 206.1 Interim Secondary Offer Cap

(a) notify the **pool participant** to align its **offer**s in accordance with subsection 2 on the AESO website;

(b) determine, on a daily basis, an **offer** price limit equal to the greater of:

(i) $125 per megawatt hour, or

(ii) an amount equal to 25 times the ICE NGX Canada Inc.'s ICE NGX AB-NIT Day Ahead Index; and

(c) notify the **pool participant** of the **offer** price limit determined in subsection 3(4)(b), at least two hours prior to the time it becomes effective, and henceforth daily while the offer price limit remains in effect, on the AESO website.

(5) The **ISO** must, when determining the monthly cumulative settlement interval net revenue, set the tax rate to zero for the applicable **settlement interval** if the monthly cumulative settlement interval net revenue of the **reference generating unit** calculated in subsection 3(2) is negative.

(6) The **ISO** must adjust any dollar amounts listed in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024), which are expressed in 2022 dollars, for inflation each year using the annual Canada Consumer Price Index for the previous year.

(7) The **ISO** must publish what is determined as 1/6 of the annualized unavoidable costs of the **reference generating unit** at the start of each month on the AESO website.

(8) The **ISO** must publish the updated value of the monthly cumulative settlement interval net revenue at least once a day on the AESO website.

Effective Date and Expiry

4(1) This Section 206.1 is effective July 1, 2024.

(2) This Section 206.1 expires on November 30, 2027.

Appendices

Appendix 1 – *Calculation of Annualized Capital Investment Costs, Annual Fixed Operating Costs, and Monthly Cumulative Settlement Interval Net Revenue of the Reference Generating Unit*

Revision History

Date	Description
2024-XX-XX	Initial release.

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Part 200 Markets
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Section 206.1 Interim Secondary Offer Cap

Appendix 1

Calculation of Annualized Capital Investment Costs, Annual Fixed Operating Costs, and Monthly Cumulative Settlement Interval Net Revenue of the Reference Generating Unit

(1) The annualized capital investment costs, expressed in dollars, is determined in accordance with the following formula:

$$\mathrm{ACIC} = \frac{\left((\mathrm{NC_G} \times \mathrm{CC_G} \times 1000) \times \mathrm{R}\right)}{(1 - (1 + \mathrm{R})^{-\mathrm{N}})}$$

Where:

ACIC is the annualized capital investment costs;

$\mathrm{NC_G}$ is the net capacity of the **generating unit** listed as item 3 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

$\mathrm{CC_G}$ is the capital cost of the **generating unit** listed as item 4 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

R is the pretax weighted average cost of capital listed as item 5 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

N is the **generating unit** useful life listed as item 11 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024).

(2) The annual fixed operating costs, expressed in dollars, is determined in accordance with the following formula:

$$\mathrm{AFOC} = (\mathrm{NC_G} \times \mathrm{FOM} \times 1000)$$

Where:

AFOC is the annual fixed operating costs;

FOM is the fixed operating and maintenance costs of the **generating unit** listed as item 8 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

$\mathrm{NC_G}$ is the net capacity of the **generating unit** listed as item 3 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024).

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Division 206 Interim Market Power Mitigation
Section 206.1 Interim Secondary Offer Cap

(3) The monthly cumulative settlement interval net revenue of the **reference generating unit**, expressed in dollars, is determined in accordance with the following formula:

$$\mathrm{MCSINR} = \sum_{i=1}^{n} \left\{ \left[\left(\mathrm{PP_i} \times (1 - \mathrm{L}) \right) - \left(\left(\mathrm{P_C} \times \left((\mathrm{EI_{NG}} \times \mathrm{HR_G}) - \mathrm{HPB_E} \right) \right) + (\mathrm{P_{NG}} \times \mathrm{HR_G}) + \mathrm{VOM} + \mathrm{TC} \right) \right] \times (1 - \mathrm{T}) \times \left(\mathrm{NC_G} \times \mathrm{CF_G} \times \left(\frac{\mathrm{min_i}}{60} \right) \right) \right\}$$

Where:

MCSINR is the monthly cumulative settlement interval net revenue of the **reference generating unit**;

i is each **settlement interval** within the current month;

n is the number of **settlement intervals** that have occurred within the current month;

PP_i is the **pool price** posted publicly by the **ISO** for each **settlement interval**;

L is the **loss factor** listed as item 13 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

P_C is the price per tonne of CO_2e for the applicable month determined in accordance with the *Technology Innovation and Emissions Reduction Regulation* (AR 133/2019);

EI_{NG} is the emissions intensity of natural gas listed as item 16 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

HR_G is the combined cycle heat rate of the **generating unit** listed as item 10 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

HPB_E is the high-performance benchmark for electricity for the applicable month determined in accordance with section 6(1) of the *Technology Innovation and Emissions Reduction Regulation* (AR 133/2019);

P_{NG} is the price of natural gas listed as item 15 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

VOM is the variable operating and maintenance costs of the **generating unit** listed as item 9 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

TC is the **ISO** trading charge for the applicable month as published by the **ISO**;

T subject to subsection 3(3), is the tax rate listed as item 15 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

NC_G is the net capacity of the **generating unit** listed as item 3 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

CF_G is the capacity factor of the **generating unit** listed as item 12 in the Schedule of the *Market Power Mitigation Regulation* (AR 43/2024);

min_i is the number of minutes in the **settlement interval**.

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Division 206 Interim Market Power Mitigation
Section 206.2 Interim Supply Cushion Directives

Applicability

1 Section 206.2 applies to:

(a) a **pool participant** with an **eligible long lead time asset**; and

(b) the **ISO**

in accordance with the *Supply Cushion Regulation*, AR 42/2024.

Requirements

Information to be Provided for an Eligible Long Lead Time Asset

2(1) A **pool participant** must submit to the **ISO**, for an **eligible long lead time asset**:

(a) estimated cost parameters including:

(i) all variable charges under the **ISO tariff** applicable to the **eligible long lead time asset**, including any applicable **loss factor** charge or credit;

(ii) variable operational and maintenance charges;

(iii) heat rates to inform the fuel cost to start and run the **eligible long lead time asset;**

(iv) **emissions costs**; and

(v) any other information requested by the **ISO**; and

(b) accurate physical constraints including:

(i) **initial start-up time**;

(ii) **minimum off time**;

(iii) **ramp rate**;

(iv) **minimum stable generation**;

(v) **maximum run up time**; and

(vi) **minimum on time**.

(2) A **pool participant** must submit the information under subsection 2(1):

(a) by June 21, 2024 for an existing **eligible long lead time asset** that is in **commercial operation** as of June 21, 2024;

(b) 48 hours after an **eligible long lead time asset** achieves **commercial operation**;

(c) 48 hours after the **pool participant** submits a change to an **initial start-up time** such that it changes from 1 hour or less to a time greater than 1 hour for an **eligible long lead time asset** that has already achieved **commercial operation**; or

(d) upon request from the **ISO**.

(3) A **pool participant** must:

(a) ensure the information provided to the **ISO** under subsection 2(1) remains accurate and up to date; and

(b) submit to the **ISO** any material changes to the information provided to the **ISO** under subsection 2(1) as soon as practicable.

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Section 206.2 Interim Supply Cushion Directives

(4) A **pool participant** must submit the information required under subsections 2(1) and 2(3)(b) in the form published on the AESO website.

(5) The **ISO** must review the information submitted by the **pool participant** under subsection 2(1) and 2(3)(b) to ensure completeness in a timely manner, and may request additional clarification or information from the **pool participant**.

(6) The **ISO** must, upon a **pool participant** satisfying subsection 2(4), provide written notification to the **pool participant** that the information received under subsection 2 will be used by the **ISO** to issue **unit commitment directives** under subsection 5.

Calculation of Estimated Start-Up and Hourly Operation Costs

3(1) The **ISO** must, using the information submitted under subsection 2(1), calculate the estimated start-up costs of an **eligible long lead time asset** that is not already online starting-up and reaching **minimum stable generation** as the sum of:

(a) start-up variable operation and maintenance charges;

(b) start-up **emissions costs**; and

(c) start-up fuel costs.

(2) The **ISO** must, using the information submitted under subsection 2(1), calculate the estimated hourly operation costs of an **eligible long lead time asset** operating at **minimum stable generation** as the sum of:

(a) variable operation and maintenance charges;

(b) **emissions costs**; and

(c) fuel costs.

Anticipated Supply Cushion

4(1) The **ISO** must:

(a) determine the **anticipated supply cushion** for a **settlement interval** based on:

(i) the **available capability** of applicable **source assets**;

(ii) estimated output from wind and solar **generating units**;

(iii) estimated total net imports and exports on all **interties**;

(iv) estimated **Alberta internal load**; and

(v) any other relevant variable as determined by the **ISO**; and

(b) publish the methodology underlying the determination referenced in subsection 4(1) on the AESO website.

(2) The **ISO** must provide reasonable notice of any changes to the methodology referenced in subsection 4(1).

(3) The **ISO** must report on the **anticipated supply cushion** on the AESO website.

Issuance of Directives and Determination of Relative Economic Merit

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Section 206.2 Interim Supply Cushion Directives

5(1) The **ISO** must, if the **anticipated supply cushion** determined under subsection 4(1) will be less than the **supply cushion threshold** for any **settlement interval**:

(a) minimize the deficit to the extent reasonable for the safe, reliable, and economic operation of the **interconnected electric system** by issuing a **unit commitment directive** or combination of **unit commitment directive**s to **pool participants** for **eligible long lead time assets**; and

(b) determine the order of issuance of **unit commitment directives** according to relative economic merit, including on the basis of the physical constraint parameters of **eligible long lead time assets** submitted under subsection 2(1) and the costs calculated under subsections 3(1) and 3(2).

(2) The **ISO** must, in assessing the relative economic merit of **unit commitment directives** under subsection 5(1)(b), determine the least cost **unit commitment directive** or combination of **unit commitment directives** based on:

(a) all identified **settlement intervals** with a supply cushion deficit to be minimized;

(b) the period of time an **eligible long lead time asset** would be required to operate; and

(c) the calculated estimated cost of a **unit commitment directive** for an **eligible long lead time asset** as the sum of:

(i) the estimated start up costs calculated under subsection 3(1) if the **eligible long lead time asset** is not already online; and

(ii) the estimated hourly operation costs calculated under subsection 3(2) for each hour of operation for the **unit commitment directive**.

(3) The **ISO** must ensure that a **unit commitment directive** requires an **eligible long lead time asset** to operate, specifying:

(a) for an **eligible long lead time asset** that is not already online, the start time of when the **eligible long lead time asset** will be required to synchronize to the **interconnected electric system**; and

(b) the period of time the **eligible long lead time asset** is required to operate.

(4) The **ISO** must ensure that the period of time under subsection 5(3)(b), for an **eligible long lead time asset** that is not already online, is greater than or equal to the **minimum on time** of the **eligible long lead time asset**.

(5) The **pool participant** must, on receipt of a **unit commitment directive**, in accordance with a **unit commitment directive**:

(a) if the **eligible long lead time asset** is not already synchronized to the **interconnected electric system**:

(i) synchronize by the time specified by the **ISO** and ramp up the **eligible long lead time asset** to its **minimum stable generation**; and

(ii) continue to operate the **eligible long lead time asset** at or above its **minimum stable generation** until at least the end time specified by the **ISO**.

(c) if the **eligible long lead time asset** is already synchronized to the **interconnected electric system**, continue to operate the **eligible long lead time asset** at or above its **minimum stable generation** until at least the end time specified by the **ISO**.

ISO Rules
Part 200 Markets
Division 206 Interim Market Power Mitigation
Section 206.2 Interim Supply Cushion Directives

(6) The **ISO** must, when issuing a **unit commitment directive** to an **eligible long lead time asset** not already online, issue the **unit commitment directive** at least, but not more than one hour, prior to the **initial start-up time** of the **eligible long lead time asset** before the start time specified in the **unit commitment directive.**

(7) The **ISO** must not, notwithstanding subsection 5(1), issue a **unit commitment directive** that would require the **pool participant** to cancel an outage for an **eligible long lead time asset**.

(8) The **ISO** is not required to take any steps to maintain the **supply cushion threshold** other than those described in this subsection 5.

Price Reconstitution

6 The **ISO** must not reconstitute the **pool price** to the level it would have reached without any action taken in accordance with a **unit commitment directive**.

Cost Guarantee

7(1) The **ISO** must pay a **pool participant** for an **eligible long lead time asset** the prudent incremental costs incurred from operating an **eligible long lead time asset** up to but not greater than the **minimum stable generation** in compliance with a **unit commitment directive**, net of **pool price** revenue received by the **pool participant** during the **settlement intervals** in which the **eligible long lead time asset** responded to the **unit commitment directive**, subject to this subsection 7.

(2) The obligation of the **ISO** to pay the **pool participant** under subsection 7(1) is conditional upon the **pool participant** submitting to the **ISO**:

(a) a written request for payment under subsection 7(1) in the form specified by the **ISO** which must include:

(i) the asset ID of the **eligible long lead time asset**;

(ii) the time the **unit commitment directive** was in effect; and

(iii) costs under subsection 7(1) being claimed by the **pool participant**;

(b) the attestation referred to in subsection 7(3); and

(c) any other information that the **ISO** reasonably requires to ensure that the **ISO** has a full and satisfactory understanding of the costs being claimed by the **pool participant**.

(3) A **pool participant** must, to be eligible for payment under this subsection 7, provide a completed attestation to the **ISO** from a corporate officer of the **pool participant** or, if the **pool participant** is not the **legal owner** of the **eligible long lead time asset,** from a corporate officer of the **legal owner** of the **eligible long lead time asset** that:

(a) attests to the accuracy, prudency and completeness of the actual incremental costs incurred in response to the **unit commitment directive** and being claimed by the **pool participant**, consisting of:

(i) the actual costs of all variable charges under the **ISO tariff** applicable to the **eligible long lead time asset,** including any applicable **loss factor** charge or credit;

(ii) variable operational and maintenance charges;

(iii) fuel costs to start and run the **eligible long lead time asset**; and

(iv) **emissions costs**; and

(b) is in the form of attestation set out in Appendix 1.

ISO Rules
Part 200 Markets
Division 206 Interim Market Power Mitigation
Section 206.2 Interim Supply Cushion Directives

(4) The **ISO** must pay the costs under subsection 7(1) being claimed by a **pool participant** within 75 business days of all of the conditions under subsection 7(2) being satisfied.

(5) A **pool participant** must request payment and submit the attestation required under subsection 7(2) no later than two years following the day on which the **unit commitment directive** was issued.

Incremental Cost Recovery

8 The **ISO** must recover all costs paid to a **pool participant** under subsection 7(1) for an **eligible long lead time asset** through a pro rata **ISO fee** charged to every **pool participant** with energy consumption and production during any **settlement interval** in which the **unit commitment directive** was issued, in accordance with section 21 of the **Act.**

Applicability of Other ISO Rules

9(1) Subsections 5 and 13 of Section 103.4 of the **ISO rules**, *Power Pool Financial Settlement,* do not apply to an **eligible long lead time asset** that is responding to a **unit commitment directive** under this Section 206.2.

(2) Subsections 5, 6, 7 and 8 of Section 202.4 of the **ISO rules**, *Managing Long Lead Time Assets*, do not apply to an **eligible long lead time asset** that is responding to a **unit commitment directive** under this Section 206.2.

(3) Subsections 3, 5(1), 6, and 8(2) of Section 204.2 of the **ISO rules**, *Issuing Dispatches for Dispatch Down Service*, do not apply to an **eligible long lead time asset** that is responding to a **unit commitment directive** under this Section 206.2.

Effective Date and Expiry

10(1) This Section 206.2 is effective July 1, 2024, except for subsection 2 of this Section 206.2 which is effective June 21, 2024.

(2) This Section 206.2 expires on November 30, 2027.

Appendices

Appendix 1 – Form of Costs Attestation

Revision History

Date	Description
2024-07-01	Initial release of subsections 1 and, 3-8.
2024-06-21	Initial release. In accordance with Order 29091-D01-2024 issued June 19, 2024, subsection 2 came into effect on June 21, 2024 and all other subsections come into effect on July 1, 2024.

ISO Rules
Part 200 Markets
Division 206 Interim Market Power Mitigation
Section 206.2 Interim Supply Cushion Directives

Appendix 1 – Form of Costs Attestation

STATUTORY DECLARATION IN THE MATTER OF the prudent, incremental costs incurred while responding to a **unit commitment directive** pursuant to the *Supply Cushion Regulation*, Alberta Regulation 42/2024 and Section 206.2 of the ISO rules, between the Independent System Operator ("ISO") and [insert name of Pool Participant or Legal Owner], dated [insert date].

Bolded terms not defined herein have the meaning ascribed thereto in the ISO's Consolidated Authoritative Document Glossary.

I, [insert name of declarant] DO SOLEMNLY DECLARE, on behalf of [insert name of Pool Participant or Legal Owner], without personal liability, the following information:

1. I am the / an [insert office held, e.g. president, director, etc.] of [insert name of Pool Participant or Legal Owner] and have knowledge of the matters herein described.

2. The [insert name of Pool Participant or Legal Owner] responded to a **unit commitment directive** from the ISO beginning at [insert time and date of start of unit commitment directive] and ending at [insert time and date of end of unit commitment directive].

3. To the best of my knowledge and information, after having made due enquiry, Table 1 contains the complete, accurate, and prudent incremental costs incurred by [insert name of Pool Participant or Legal Owner] from operating [insert name of eligible long lead time asset] [insert asset ID], an **eligible long lead time asset,** up to but not greater than the **minimum stable generation** in response to the **unit commitment directive** referenced in section 2, above.

Table 1

Incremental Costs Incurred in Response to a Unit Commitment Directive

Description of Cost	**Dollar Amount of Cost**
Actual costs of all variable charges under the **ISO tariff** applicable to the **eligible long lead time asset**, including any applicable loss factor charge or credit	[insert amount of cost]
Variable operational and maintenance charges	[insert amount of cost]
Fuel costs to start and run the **eligible long lead time asset**	[insert amount of cost]
Emissions costs	[insert amount of cost]
Incremental costs (sum of above four rows)	[insert amount of cost]

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Section 206.2 Interim Supply Cushion Directives

AND I MAKE THIS SOLEMN DECLARATION conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the *Canada Evidence Act.*

Name of declarant [insert name of declarant]	Declared before me at [insert name of City, Town, Region, etc.] in the Province of [insert name of Province] this day of , 20
Signature of declarant	Name of [insert "Commissioner of Oaths", "Notary Public", etc., as applicable] [insert name of Commissioner, Notary, etc.]
Note: *Statutory declarations must be solemnly declared and signed before commissioners of oaths or similar officials (e.g., notary public).*	Signature of [insert "Commissioner of Oaths", "Notary Public", etc., as applicable]

ISO Rules
Part 200 Markets
Division 202 Dispatching the Markets
Section 202.4 Managing Long Lead Time Assets

Applicability

1 Section 202.4 applies to:

(a) a **pool participant**; and

(b) the **ISO**,

when providing or procuring energy from a **long lead time asset**.

Requirements

Start-Up Time

2 A **pool participant** must enter an **initial start-up time** of no greater than thirty-six (36) hours in the Energy Trading System.

Voluntarily Providing Energy from a Long Lead Time Asset that is not Synchronized

3(1) A **pool participant** must, if it wishes to have a **long lead time asset** that is not synchronized participate in the energy market, enter a start time for the **long lead time asset** prior to two (2) hours before the start of the **settlement interval**.

(2) A **pool participant** must enter a start time in the Automated Dispatch and Messaging System.

(3) A **pool participant** must enter a start time which indicates when the **pool participant** anticipates the **long lead time asset** will synchronize to the **interconnected electric system**.

(4) A **pool participant** may:

(a) prior to two (2) hours before the start of the **settlement interval**, submit a restated start time for the **long lead time asset**; and

(b) within two (2) hours before the start of the **settlement interval**, submit a restated start time for the **long lead time asset** if it has an **acceptable operational reason**.

(5) A **pool participant** must ensure that a restated start time submitted in accordance with subsection 3(4) represents the current physical condition of the **long lead time asset**.

Voluntarily Providing Additional Energy from a Long Lead Time Asset that is Synchronized

4(1) A **pool participant** must, if the **ISO** makes a request, declare the additional energy it would be able to provide from a **long lead time asset** that is synchronized.

(2) Notwithstanding subsection 6 of section 203.1 of the **ISO rules**, *Offers and Bids for Energy*, a **pool participant** that has a **long lead time asset** that is synchronized must have the **available capability** submitted for the **long lead time asset** equal the **maximum capability** of the **long lead time asset** less that portion of its energy that it is not currently delivering.

(3) A **pool participant** must, if it wants a **long lead time asset** that is synchronized to be eligible to receive a **dispatch** for the energy it is not currently delivering:

(a) reflect the availability of such energy by appropriately adjusting the **available capability** of the **long lead time asset**; and

(b) do so prior to two (2) hours before the start of the **settlement interval**.

(4) A **pool participant** must ensure that the adjustment to **available capability** referenced in subsection 4(3)(a) represents the current physical condition of the **long lead time asset**.

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Part 200 Markets
Division 202 Dispatching the Markets
Section 202.4 Managing Long Lead Time Assets

Cancelling a Directive for Energy from a Long Lead Time Asset

5(1) Notwithstanding subsection 3 of section 301.2 of the **ISO rules**, *Directives*, a **pool participant** may refuse a **directive** to provide energy from a **long lead time asset** if it chooses instead to receive a **dispatch** in the energy market.

(2) If a **pool participant** chooses to receive a **dispatch** as allowed in subsection 5(1), the **pool participant** must:

(a) in the case of a **long lead time asset** that is not synchronized, enter a start time in accordance with subsection 3(1); and

(b) in the case of a **long lead time asset** that is synchronized, adjust **available capability** in accordance with subsection 4(3); and

meet the time and MW requirements of the original **directive**.

(3) The **ISO** must, if a **pool participant** chooses to receive a **dispatch** in accordance with subsection 5(2), cancel the **directive** to provide energy from a **long lead time asset**, as applicable, and issue a **dispatch** according to the energy market **merit order**.

Payment for Incremental Generation Costs

6(1) Subject to subsection 6(2) below, subsections 5(1) and (2) of section 103.4 of the **ISO rules**, *Power Pool Financial Settlement* and the definition of **incremental generation costs**, a **pool participant** that has complied with a **directive** to provide energy from a **long lead time asset**, and with the cancellation of such **directive** may be eligible to receive payment for **incremental generation costs** from the **ISO**.

(2) A **pool participant** that elects to participate in the energy market:

(a) before receiving a **directive** for energy from a **long lead time asset** that is not synchronized and by entering a start time in accordance with subsection 3;

(b) before receiving a **directive** to provide energy from a **long lead time** asset that is synchronized and by adjusting **available capability**; or

(c) after receiving a **directive** to provide energy from a **long lead time asset** but before complying with it and choosing instead to receive a **dispatch** in accordance with subsections 5(1) and 5(2),

is not eligible to receive payment for **incremental generation costs**.

Financial Settlement

7(1) A **pool participant** that has complied with a **directive** to provide energy from a **long lead time asset** must, within forty (40) **business day**s after the end of the **settlement period** in which such **directive** was issued, issue to the **ISO** a statement showing the amount owing or owed as calculated in accordance with the definition of **incremental generation costs** and this subsection 7 along with supporting documentation.

(2) The **pool participant** must provide to the **ISO** the supporting information used to determine the amount specified in any statement provided pursuant to this subsection 7, including all information necessary to confirm the costs, charges and other items specified in the definition of **incremental generation costs** and such other information as the **ISO** considers appropriate and may request.

(3) The **ISO** must, if it approves the statement the **pool participant** issues, pay such statement on or before forty (40) **business days** following receipt by **ISO** of the statement and supporting information specified in this subsection 7.

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Part 200 Markets
Division 202 Dispatching the Markets
Section 202.4 Managing Long Lead Time Assets

Reporting

8 If the **ISO** issues a **directive** to provide energy from a **long lead time asset**, the **ISO** must prepare a report and post it on the AESO website which report must include:

(a) an explanation of the circumstances that caused and are related to the issuance of the **directive**;

(b) chronological events and material market impacts; and

(c) any other matters the **ISO** deems appropriate.

Revision History

Date	Description
2024-xx-xx	Updated defined term in subsection 2.
2023-03-31	Updated to align with current AESO drafting principles.
2016-06-07	Amended to include subsection 2 “Start-Up Time”.
2013-01-08	Initial release

ISO Rules
Part 200 Markets
Division 203 Energy Market
Section 203.1 Offers and Bids for Energy

Applicability

1 Section 203.1 applies to:

(a) a **pool participant**; and

(b) the **ISO**,

when participating in the energy market.

Requirements

Submission Method and Timing

2(1) A **pool participant** may only submit an **offer** or a **bid** to the **power pool** in respect to an active **pool asset** listed opposite their name in the **ISO** list of **pool assets**.

(2) A **pool participant** submitting an **offer** or **bid** must submit such **offer** or **bid**:

(a) before 12:00 hours on the **day** before the **day** that the **offer** or **bid** is effective, subject to any extension of time granted pursuant to subsection 3 of section 201.4 of the **ISO rules**, *Submission Methods and Coordination of Submissions*; and

(b) no earlier than 00:00, 7 **days** prior to the **day** that the **offer** or **bid** is effective.

Obligation to Offer and Offer Content

3(1) A **pool participant** must, for each **settlement interval**, submit an **offer** for each of its **source assets** with a **maximum capability** of greater than or equal to 5 MW.

(2) A **pool participant** must not, notwithstanding subsection 3(1), submit an **offer** for capacity that is committed under a contract for long term adequacy.

(3) A **pool participant** must include in each **operating block** in an **offer**;

(a) a price in $/MWh to the nearest cent per MWh which:

(i) in the case of **source asset** that is not an import asset, is greater than or equal to $0 per MWh and less than $1000 per MWh; and

(ii) in the case of an import, is $0;

(b) a quantity in MW; and

(c) an indication of whether the **operating block** is a **flexible block** or an **inflexible block**; and

must also include in the **offer** the **minimum stable generation** for **the source asset**.

(4) A **pool participant** that submits an **offer** must ensure that:

(a) the cumulative total MW, as entered for the highest priced **operating block** in the **offer** for the **settlement interval**, equals the **maximum capability** of the **source asset**; and

(b) the **minimum stable generation** submitted for the **source asset** does not exceed the MW of the **operating block** with the lowest **offer** price for the **source asset** and a quantity greater than zero, including when submitted as part of a restatement under subsection 5(2) of section 203.3, *Energy Restatements*.

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Section 203.1 Offers and Bids for Energy

Offers During Commissioning and Testing

4 A **pool participant** that submits an **offer** for a **source asset**, excluding an import asset, which is undergoing **commissioning** and testing under section 505.3 of the **ISO rules**, *Coordinating Synchronization, Commissioning, WECC Testing and Ancillary Services Testing* must, notwithstanding subsection 3(3)(a)(i) and until the **ISO** otherwise authorizes in writing, submit a price for the **offer** of $0.

Available Capability

5 A **pool participant** that submits an **offer** must also submit the **available capability**, in MW, for each **source asset** which such **available capability** must equal the **maximum capability** of the **source asset** unless the **pool participant** has submitted an **acceptable operational reason** with the **offer**.

Operating Constraints for Offers and Bids

6(1) A **pool participant** must also submit the following operating constraints for a **pool asset**:

(a) for **offers** and **bids**, **ramp rate**; and

(b) for **offers**, the **initial start-up time** of the asset.

(2) A **pool participant** must submit to the **ISO** any changes to the operating constraints of a **pool asset** as soon as practicable.

Option to Bid and Bid Content

7(1) A **pool participant** may, for a **settlement interval**, submit a **bid** for any of its **sink assets**.

(2) A **pool participant** must include in each **operating block** in a **bid**:

(a) a price in $/MWh to the nearest cent per MWh which:

(i) in the case of a **sink asset** that is not an export asset, is greater than or equal to $0 per MWh and less than $1000 per MWh; and

(ii) in the case of an export asset, is $999.99; and

(b) a quantity in MW.

(3) A **pool participant** that submits a **bid** must ensure that the total MW in the **bid** do not exceed the **maximum capability** of the **sink asset**.

Standing Submission

8(1) A **pool participant** may create a standing submission, being an **offer** or **bid** that remains in place until the **pool participant** changes it.

(2) The **ISO** must use the data contained in the standing submission for the **pool asset** for the **day** following the **forecast scheduling period**.

Validation

9 The **ISO** must, as soon as reasonably practicable following the receipt of an **offer** or **bid**, send to the **pool participant** who submitted the **offer** or **bid**:

(a) acknowledgment of receipt of the **offer** or **bid**;

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Section 203.1 Offers and Bids for Energy

(b) notification that the **offer** or **bid** is either valid or invalid with respect to this section 203.1 of the **ISO rules**; and

(c) if an **offer** or **bid** is invalid, an explanation as to why the **offer** or **bid** is not accepted.

Revision History

Date	Description
2024-xx-xx	Updated constraint requirements in subsection 6(1). Administrative amendment.
2024-04-01	Amended, as approved in **Commission** Decision 28176-D01-2023 issued on June 13, 2023.
2013-12-20	Updated subsections 3(1) and 3(2) to clarify offers in the context of capacity that is committed under a contract for long term adequacy.
2013-01-08	Initial Release

Proposed Interim Market Mitigation ISO Rules - CADG Definitions

CADG definitions related to Section 206.1 *Secondary Offer Cap*	
Term	**Clean of proposed new**
reference generating unit	means a hypothetical **generating unit** possessing the operating variables and values listed in the Schedule of the *Market Power Mitigation Regulation*, Alberta Regulation 43/2024 with a monthly cumulative settlement interval net revenue and annualized unavoidable costs, as defined in the *Market Power Mitigation Regulation.*

CADG definitions related to Section 206.2 *Interim Supply Cushion Directives*	
Term	**Clean of proposed new**
anticipated supply cushion	means the supply cushion as determined by the **ISO** in accordance with subsection 3 of Section 206.2 of the **ISO rules**, *Interim Supply Cushion Directives* and section 4 of the *Supply Cushion Regulation,* Alberta Regulation 42/2024
eligible long lead time asset	as defined in the *Supply Cushion Regulation*, Alberta Regulation 42/2024, means a **source asset** that requires more than one hour to synchronize to the **interconnected electric system**
emissions costs	as defined in the *Supply Cushion Regulation*, Alberta Regulation 42/2024, means the amount that a **pool participant** for an **eligible long lead time asset** pays in respect of the costs of complying with (i) section 12(3) of the *Technology Innovation and Emissions Reduction Regulation* Alberta Regulation 133/2019 and (ii) any similar obligation under an enactment governing greenhouse gas emissions in Alberta
initial start-up time	means the time required for a **source asset** to synchronize to the **interconnected electric system** from an offline state
maximum run up time	means the time required for a **source asset** to reach **minimum stable generation** from the point that it is synchronized to the **interconnected electric system**.
minimum off time	means the minimum amount of time after disconnecting from the **interconnected electric system** required by a **source asset** to be offline before the **source asset** can be re-synchronized to the **interconnected electric system**

Proposed Interim Market Mitigation ISO Rules - CADG Definitions

minimum on time	means the minimum amount of time after synchronization to the **interconnected electric system** required by a **source asset** to be online before the **source asset** can be dispatched off
supply cushion threshold	as defined in the *Supply Cushion Regulation*, Alberta Regulation 42/2024, means the target supply cushion of 932 MW
unit commitment directive	as defined in the *Supply Cushion Regulation*, Alberta Regulation 42/2024, means a **directive** issued by the **ISO** in accordance with the *Supply Cushion Regulation* for an **eligible long lead time asset**