Stakeholder Comments and AESO Replies Matrix

Proposed New Definition "Obligation Period"

Date of Request for Comment: January 3, 2019

Period of Comment: January 3, 2019 through January 18, 2019

Stakeholder Comments and/or Proposed Alternative Definition Wording	AESO Replies
"obligation period" means a 12-month period running continuously from November 1 to October 31 of the following year.	
Capital Power Corporation ("Capital Power") Capital Power has reviewed Morrison Park Advisors' ("MPA") report, "Capital Markets Impacts of Electricity Capacity Market Length of Contract," and remains supportive of the AESO's CMD decision to offer the same capacity contract term (one-year) for all capacity resources, new and existing. The MPA report offers no new information that would warrant review or reconsideration of the proposed definition and the AESO's decision to establish a one-year obligation period for all assets. Equal term length is a critical design element and honors the commitments made by the Government of Alberta with respect to treating existing investments fairly and is critical to ensuring a level playing field for new and existing assets. Capital Power previously proposed changes to the definition of "obligation period" that would ensure the definition explicitly references the fact that the obligation period is the same for all resources. Capital Power recognizes the AESO's reply with respect to these proposed changes that "[t]he CMD and proposed ISO rules for the implementation of the capacity market do not consider different terms for different assets." Capital Power agrees with the AESO, however, continues to believe that this critical design element – equal term length – should be explicitly referenced in the definition of "obligation period" or appropriate ISO rule. Capital Power also recognizes the AESO's comment in its reply to Capital Power that it "will revise the definition to incorporate Capital Power's proposed wording to clarify the obligation period includes October 31" and looks forward to this clarification being made.	The AESO has revised the definition to clarify that the obligation period includes October 31. The AESO agrees with Capital Power that the obligation period should be the same for all resources, and is of the view that this is clearly conveyed in the proposed Capacity Market Rules and Definitions as drafted.
Pembina Institute for Appropriate Development ("Pembina") "**obligation period**" means a 12-6 month period running continuously either from November 1 to	The AESO agrees with Pembina that the term should be a 12 month period. As noted in the AESO's November 29, 2018 reply to Pembina however, the AESO disagrees with the seasonal definition of the obligation period. The AESO intends to propose the selection of a one-year term of the obligation period. The AESO provided rationale for the selection of the one-year term of the obligation period on page 2 of

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October April 31 of the following year or from May 1 to October 31. In its prior comment on this definition, Pembina suggested re-wording the definition (as shown in the left column) to enable seasonal capacity markets. Neither of the two studies referenced in the AESO's notice address the appropriateness of enabling seasonal markets, so Pembina will not repeat its rationale for seasonal markets here. Putting seasonal markets aside, Pembina supports the 12-month term in the AESO's draft "obligation period" definition, for the reasons identified by the AESO in part 5.4 of its Comprehensive Market Design Rationale document. In Pembina's view, chief among these reasons is that limiting the contract term to one year helps minimize the risk of over-procurement. A one-year term also helps ensure that the capacity market is consistent with the fundamental principles stated by the AESO—that the tool to ensure reliability should "not fundamentally alter the [energy] market" and should enable investment risks to continue to "primarily fall on generators". (AESO, *Alberta's Wholesale Electricity Market Transition Recommendation* (Oct., 2016), p. 22.) The longer the contract term, the more the capacity market poses the same disadvantages the AESO noted, in its 2016 *Transitions* report, of the long-term energy contract approach which the AESO assessed and rejected in that report. The Sargent & Lundy study does not appear to relate to the length of the capacity contract term. The Morrison Park Advisors (MPA) study addresses the availability of construction financing for new generating assets, based on the length of the capacity contract term. This study claims there are benefits to a longer term. For example, the study concludes that the "overall cost of capital of new electricity generation projects is directly affected by the length of term of underlying contractual agreements. The longer the contract, the lower the total cost of capital" (p. 23). However, the study does not purport to address the bottom line—whether a one-year contract term will be insufficient to attract the investment needed to meet Alberta's reliability needs. Pembina understands that a one-year term is commonly used in other capacity markets and has proven sufficient to attract investment. PJM and ISO New England use a one-year term and New York ISO uses six-month terms. All three markets have attracted investment. In addition, there are costs to a longer term as the AESO has articulated in its evaluation of the long-term contracts approach, namely, shifting risks from investors to consumers. The Commission must	the on November 22, 2017 SAM work group recommendation. https://www.aeso.ca/assets/Uploads/Recommendation-Obligation-Period-2017-11-14.pdf

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balance the upsides and downsides. The MPA study recognizes this risk of extending the contract term, by warning that a "longer contract term will also increase risk exposure to consumers who ultimately must fulfil the contracts through the price they pay for energy" (p. 23). Once again, the AESO should limit the contract period to one year so that the capacity market does not materially shift investors' risks to consumers.	
TransAlta Corporation ***The AESO should clarify how the Energy and Ancillary Services Offset using the forward methodology will be aligned to the obligation period.*** TransAlta accepts the AESO's definition of an obligation period. We would like to understand how the AESO intends to apply the forward methodology for Energy and Ancillary Services Offset calculation when the obligation period defines a different timeframe than the annual forward product.	The AESO intends to propose the selection of a one-year term of the obligation period. While the EAS offset is outside the scope of this consultation, the AESO provides the following brief response. The EAS offset will be determined for the full duration of the obligation period. The AESO will apply a weighting to: (a) the forward product for one year to establish a November, December period forward market price and (b) the forward market price in the subsequent year to establish the January – October forward market price for that portion of the obligation period.
General Comments	
Capital Power Corporation ("Capital Power") Capital Power has no further comments at this time.	
Enmax Corporation ENMAX reiterates in comments in previous matrix responses supporting a 12-month obligation period definition for all resource types, including new entrants and incumbent resources. It is imperative that the obligation period be consistent between resource classes, maintaining a level playing field for all resources and maintaining investor confidence in the market. The capacity market should be technology and vintage neutral, and should not arbitrarily favour one resource over the other. Performance will be determined through the incentive/penalty structure, not vintage. Moreover, the Alberta market is small, and treating new and existing in different manners would have the effect of bifurcating the market and creating deferential price signals, essentially favouring one resource type (new), over other resources (existing), regardless of performance or contribution to reliability.	The AESO acknowledges Enmax's comment.

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Pembina Institute for Appropriate Development ("Pembina") The Sargent & Lundy study attempts to estimate the development timeframes (including interim milestones) for new and refurbished generators. This study relates to the appropriateness of the AESO's proposed use of a forward capacity auction based on a three-year forward period. (CMD, section 1, p. 5 and section 5.1.1., p. 1; Rule 2(1), Section 206.6.) As explained in its prior comments on Section 206.6, Pembina recommends that the AESO reduce this forward period from three years to 12 months. Pembina stands by this recommendation, notwithstanding the Sargent & Lundy study. According to the Sargent & Lundy study's tables, the overall development periods for the five reference technologies range from nine months for wind and energy storage (using batteries), to 20, 25 and 36 months for simple-cycle combustion turbines, coal-to-gas conversions, and combined cycle combustion turbines, respectively. If those schedules are accurate, then presumably they show that developers of all technologies can start and complete their developments within a three-year forward period. By contrast, three of the five technologies could not be developed from scratch within the one-year forward period recommended by Pembina. However, in Pembina's view, it is inappropriate to provide a long enough forward period to accommodate *complete* development schedules, because doing so shifts investors' risks in new (or refurbished) generation to consumers and reduces flexibility (and risk mitigation) in resource decision-making. As to flexibility, one commentator recently noted that: > resources with shorter construction lead times can help reduce the risk that a utility makes large capital investments that turn out not to be needed because of inaccurate demand forecasts. Smaller, more modular generators that can be deployed at smaller sizes and size increments, such as solar, also become more valuable, as they allow a utility to more precisely build to meet smaller increases in demand through just-in-time investments, which can help reduce the risk of over or under-building. David Manning, *A flexible framework for capacity investment planning and decision making*, UtilityDive (Sept. 24, 2018) (www.utilitydive.com/news/a-flexible-framework-for-capacity-investment-planning-and-decision-making/532868/). Similarly, another commentator noted that capacity markets should be designed "as much as possible to recognize the higher relative value of more flexible resources" (Michael Hogan, *Hitting the Mark on*	Please refer to the AESO's November 29, 2018 reply to Pembina: *The AESO does not agree with the change proposed by the Pembina Institute. The three-year forward period is intended to ensure the orderly entry and exit of capacity assets, and to ensure that new entrants can effectively compete in the capacity market. The three-year forward period received unanimous support from the Capacity Market Technical Design Working Industry Group and is consistent with the forward periods in other capacity market jurisdictions, including PJM and ISO-NE. Uncertainty about future demand and supply conditions are mitigated through the rebalancing auctions. Please see subsection 5.1.1 of the CMD Final Rationale for further information.*

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Missing Money: How to Ensure Reliability at Least Cost to Consumers, Regulatory Assistance Project (Sept. 2016), p. ES-1 (www.raponline.org/knowledge-center/?_sft_topic=market-design&sf_paged=6).)	
TransAlta Corporation No comments at this time.	