

Proposed New Definition “Obligation Period”

Period of Comment:	January 3, 2019 through January 18, 2019	Contact:	Michael M. Wenig, Big Spruce Law Office
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Please include any suggestions for alternative definition wording and accompanying rationale in the table below. Track in your changes to the existing definition wording in column one below.

Blackline of Suggested Rule Wording	Rationale
<p>“obligation period” means a 42-6 month period running continuously either from November 1 to October April 31 of the following year or from May 1 to October 31.</p>	<p>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.</p> <p>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.</p> <p>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, <i>Alberta’s Wholesale Electricity Market Transition Recommendation</i> (Oct., 2016), p. 22.)</p> <p>The longer the contract term, the more the capacity market poses the same disadvantages the AESO noted, in its 2016 <i>Transitions</i> report, of the long-term energy contract approach which the</p>

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	<p>AESO assessed and rejected in that report.</p> <p>The Sargent & Lundy study does not appear to relate to the length of the capacity contract term.</p> <p>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).</p> <p>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.</p> <p>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 balance the upsides and downsides.</p> <p>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.</p>

Please provide any comments you have on other Capacity Market Definitions arising from the two documents referenced in the Letter of Notice. Include a description how the two documents relate to these other Capacity Market Definition.

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 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)).