

The AESO invites stakeholders to provide comments on the final Comprehensive Market Design (CMD Final). All feedback (whether it be general or specific in nature) will assist in the development of the suite of ISO rules for the implementation of the capacity market. With respect to comments provided in relation to the “Specific Feedback Questions”, please note that your responses will also help to inform future consultation activities, including the topics to be discussed during upcoming stakeholder sessions expected to be planned for the end of July/early August.

Please review the instructions below and submit your feedback to [capacitymarket@aeso.ca](mailto:capacitymarket@aeso.ca) no later than 3:00 p.m. on Friday, July 20, 2018.

The AESO will post all feedback “as received” on [www.aeso.ca](http://www.aeso.ca) by Wednesday, July 25, 2018. Please note that the names of the parties submitting each completed comment matrix will be included in this posting. Please also note that the AESO will not be responding to individual submissions.

## Instructions

- Stakeholders are requested to provide all feedback on CMD Final within this matrix.
  - if it is believed necessary to submit additional supporting documentation, please clearly indicate which section of CMD Final or topic your document refers to. No handwritten comments will be accepted.
- Please input your name and the organization you are representing in the comment boxes provided below each CMD Final section. Your contact information is requested in each section for ease of sorting and compiling feedback from all stakeholders.
  - Press Shift + Return to enter paragraph breaks within a comment box.
  - Comment boxes will automatically expand if additional room for feedback is required.

If you have any questions about this comment matrix, please email [capacitymarket@aeso.ca](mailto:capacitymarket@aeso.ca)

CMD Final Glossary

- 1) Which, if any, of the defined terms in the glossary do you find vague, confusing, or unnecessary? Please identify each defined term and explain how it may be improved.  
  
(insert response here)
- 2) What gaps or disconnects may exist as between the glossary and the sections of CMD Final? Please identify any relevant terms, definitions, and/or specific content in CMD Final.  
  
(insert response here)
- 3) Which, if any, of the definitions in the glossary contradict the AESO’s current Consolidated Authoritative Document Glossary? Please identify each term and corresponding definition, and describe the concern.  
  
(insert response here)
- 4) Which terms, if any, do you believe are missing from the glossary? Please provide each term that is missing and suggest an appropriate definition.  
  
(insert response here)
- 5) Do you have any other feedback specific to the glossary that you would like to provide?  
  
(insert response here)

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 2: Supply Participation

GENERAL FEEDBACK QUESTIONS

1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta's capacity market design?

(insert response here)

2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?

(insert response here)

3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?

(insert response here)

4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?

Renewable generation, solar in particular, can be located behind a load 'fence' and the rules must ensure that this generation is treated equivalently to other types of behind the fence generation.

NextEra supports the ability of storage assets to participate in the market.

SPECIFIC FEEDBACK QUESTIONS

The AESO is also specifically requesting feedback on the following question(s):

1) Is the description of the required thresholds to be classified as a refurbished asset clear? What additional considerations or further detail may be required, regarding the determination of these thresholds?

2) Is the description of the mechanics of making refurbishment offers and the associated market clearing mechanism clear? If not, please explain.

3) What additional considerations or further detail may be required regarding the conditions under which temporarily delisted assets can return to service during an obligation period?

4) Please see the comments above. An asset should be able to return to the energy market from a temporary delist within the obligation period when market conditions change such that the market participant is incented to return the asset to service.

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.

(insert response here)

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 3: Calculation of UCAP

GENERAL FEEDBACK QUESTIONS

1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta's capacity market design?

*(insert response here)*

2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?

*(insert response here)*

3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?

*(insert response here)*

4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?

NextEra is concerned with the UCAP approach because it provides low and unstable capacity values to renewable assets. This is a result of the decision to concentrate the capacity value in a very small number of hours. In order to provide a more consistent signal of capacity value more hours should be included in the UCAP calculation. While 250 hours is preferred to the prior 100 hours, a further increase allows UCAP to be more consistent year to year.

SPECIFIC FEEDBACK QUESTIONS

1) Is the regression-based approach to determining UCAP for gross dispatched self-suppliers clear? What additional considerations or further detail may be required, to sufficiently describe this approach?

2) What additional considerations or further detail may be required regarding the process for determining external resource UCAPs?

3) What additional considerations or further detail may be required regarding the UCAP refinement process?

4) Should the list of events under which a refinement request can be submitted as provided in section 3.2.2.a.i be further defined? If so, please provide your suggestions.

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.

NextEra Energy Canada, LP (NextEra) supports a UCAP range for participants. This will allow market participants to better manage their risk by selecting the appropriate UCAP within a range of options considered acceptable by the AESO.

NextEra supports the use of a larger number of hours (250 vs 100) in the UCAP calculation to allow more stable and reasonable estimates of UCAP to be made, however, more than 250 hours would be preferable.

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 4: Calculation of demand curve parameters

GENERAL FEEDBACK QUESTIONS

1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta’s capacity market design?

(insert response here)

2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?

(insert response here)

3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?

(insert response here)

4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?

The current demand curve parameters are expected to result in an over-supply situation on average. This raises a number of concerns, starting with higher costs for end consumers. There is no expected reliability benefit from this amount of over-supply, but the incremental capital must be paid for through larger capacity charges. The second concern, and of particular concern for renewable generation, is that over-supply depresses energy market prices. Given the AESO’s UCAP methodology that results in low capacity values for renewables, the energy market will be the primary revenue source for wind and solar. An over-supplied market depresses this value.

NextEra also believes other capacity markets have demonstrated that the energy market provides superior price signals to capacity. Market design choices, such as the current demand curve parameters, that do not allow appropriate energy signals to emerge are less efficient and less sustainable. The capacity market should be designed to supply the ‘missing money’ from the energy only market rather than a full substitute. NextEra is concerned that the AESO has increased the expected missing money problem by over-supply the market through the demand curve and as a result increased the relative importance of capacity prices.

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.

(insert response here)

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 5: Base auction

GENERAL FEEDBACK QUESTIONS

- 1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta's capacity market design?  
*(insert response here)*
- 2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?  
*(insert response here)*
- 3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?  
*(insert response here)*
- 4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?  
*(insert response here)*

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.  
*(insert response here)*

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 6: Rebalancing auction

GENERAL FEEDBACK QUESTIONS

- 1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta's capacity market design?  
*(insert response here)*
- 2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?  
*(insert response here)*
- 3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?  
*(insert response here)*
- 4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?  
*(insert response here)*

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.

NextEra requests clarity on the requirement to submit a UCAP reduction bid. If an asset sells UCAP at the top of its range in the Base auction, is it the case that any reduction in UCAP by the final rebalancing auction will trigger a UCAP reduction bid? In effect, is the intent of the UCAP reduction bid to ensure that an asset sits within its updated UCAP range going into the delivery year? In addition, if an asset goes into the final rebalancing auction below its maximum range, is it eligible to sell to the top of the range in that final auction?

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 7: Capacity market monitoring and mitigation

GENERAL FEEDBACK QUESTIONS

- 1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta's capacity market design?  
*(insert response here)*
- 2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?  
*(insert response here)*
- 3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?  
*(insert response here)*
- 4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?  
*(insert response here)*

SPECIFIC FEEDBACK QUESTIONS

- 1) What additional considerations or further detail may be required regarding how the AESO will conduct the ex ante market power screen to identify firms that will be subject to capacity market mitigation?
- 2) What additional considerations or further detail may be required regarding the determination of asset specific offer caps?

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.

NextEra supports the current approach of not applying a MOPR to any assets. A MOPR is a barrier to entry, and NextEra is concerned that 'subsidies' are difficult to determine and a MOPR will simply keep competitive projects out of the market.

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 8: Supply obligations and performance assessments

GENERAL FEEDBACK QUESTIONS

1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta's capacity market design?

*(insert response here)*

2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?

*(insert response here)*

3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?

*(insert response here)*

4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?

NextEra is concerned with the penalty framework. The approach to defining UCAP is in and of itself very punitive for poor performance, and as such NextEra does not believe the AESO needs to incorporate large penalties as seen in other capacity markets. NextEra proposes several changes to the penalty structure: 1) Increase the number of hours in the UCAP assessment and corresponding performance framework. 2) Increase the relative importance of the availability portion of the performance framework. This element of the framework is far more predictable and incents availability throughout the year. 3) Reduce or eliminate the punitive penalty during performance hours. These hours are random in nature and do not occur in all years. This results in a very unpredictable revenues for capacity market participants. 4) Reduce the monthly cap of 300% of monthly revenues.

NextEra believes the performance framework should incent performance but not randomly punish uncontrollable events. NextEra notes that the framework can reduce capacity payments by over 25% in a single day. This does not incent performance; it is simply punitive against random events that cannot be managed.

SPECIFIC FEEDBACK QUESTIONS

1) What additional considerations or further detail may be required regarding how the AESO will assess whether demand response assets have obtained a sufficient load volume prior to the second rebalancing auction?

2) What additional considerations or further detail may be required regarding how the performance of external capacity assets will be measured during availability and delivery assessment periods?

3) Should the list of events under which availability and delivery assessments will not be conducted as provided in section 8.2.39 be further defined? If so, please provide your suggestions.

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 9: Settlement and credit requirements

GENERAL FEEDBACK QUESTIONS

- 1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta's capacity market design?  
*(insert response here)*
- 2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?  
*(insert response here)*
- 3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?  
*(insert response here)*
- 4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?  
*(insert response here)*

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP

CMD Final Section 10: Roadmap for changes in the Energy and Ancillary Services Markets

GENERAL FEEDBACK QUESTIONS

1) Please provide your feedback as to whether the design in this section meets the [desired end state and criteria](#) set out for Alberta's capacity market design?

(insert response here)

2) Which, if any, of the concepts or details discussed in this section are unclear or confusing? What should be added or clarified in the ISO rules to address this?

(insert response here)

3) What gaps or disconnects may exist in this section? What should be added or clarified in the ISO rules to address this?

(insert response here)

4) In addition to 2) and 3) above, what other factors or information should the AESO consider as it drafts the ISO rules for this section?

NextEra supports the ability of the energy market to signal scarcity. As noted, the energy market is the preferred revenue source for the majority of value in the market. The AESO's approach to mitigation appears to be marginally improved from the prior iteration, but there does not appear to be a rationale for reducing the no look threshold to 250 MW from 500 MW. The rationale that the no-look threshold was tied to the largest contingency on the system at 500 MW was very reasonable and should continue.

NextEra also believes that resources without a capacity market obligation should be exempt from the energy market mitigation. These resources are not recovering value from capacity and should have full flexibility in the energy market.

SPECIFIC FEEDBACK QUESTION

1) What additional considerations or further detail may be required regarding the determination of the asset-specific reference price for non-thermal, energy-limited assets?

ADDITIONAL COMMENTS

Please add any additional comments you may have on this section here.

(insert response here)

Name: Jennifer Tuck Organization: NextEra Energy Canada, LP