

Proposed Amended ISO rule – Section 201.13, *Capacity Market Clearing*

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TCE)				403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed	language	Stakeholder comments
		Auction C	Clearing	
2	(1)	The ISO n manner th	nust use a clearing process that clears offers and bids , as applicable, in a at maximizes social surplus with consideration of the following:	TCE submits that flexible blocks, as referenced in subsection (e), should take precedence over inflexible blocks. This rewards and incents flexibility, which is desirable because it
		(a)	a lower priced capacity block in an offer will be cleared before a higher priced capacity block in an offer ;	allows social surplus to be maximized more efficiently. Since parts (c) and (d) are special cases of subsection (e) (that deals with multiple flexible and inflexible blocks), each of these subsections should be removed and be replaced by a new part (c) as drafted below:
		(b)	a higher priced capacity block in a bid will be cleared before a lower priced capacity block in a bid ;	 (c) when multiple capacity blocks are submitted at the clearing price, clear based on the following rules in order of priority:
		(c)	when multiple equivalent flexible blocks are submitted at the clearing price and result in the same social surplus, clear such equivalent flexible blocks as	(i) clear in a manner that maximizes social surplus;
			follows;	(ii) prioritize volume from flexible blocks over volume from inflexible
			(i) on a pro-rata basis, if all pro-rated quantities in MW remain whole numbers; or	(iii) reduce the cleared volume for all flexible blocks on a pro-rata basis
	 (ii) on a random basis, in all other cases; (d) when multiple equivalent inflexible blocks are submitted at the clearing price 		(ii) on a random basis, in all other cases;	where necessary;
			when multiple equivalent inflexible blocks are submitted at the clearing price	(iv) prioritize smaller inflexible blocks over larger inflexible blocks; and
		()	and result in the same social surplus, clear such equivalent inflexible blocks	(v) randomly choose among equivalent inflexible blocks.
	as follows:		as follows:	TCE suggests that the AESO develop a separate rule section that outlines the process and
			(i) clear a combination of the smallest volume inflexible blocks , if possible;	the proper oversight for item (v).
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Section	Subsection	Proposed language	Stakeholder comments
		or (ii) on a random basis, in all other cases; and (e) when multiple equivalent flexible blocks and inflexible blocks are submitted at the clearing price and result in the same social surplus, clear such equivalent flexible blocks and inflexible blocks on a random basis.	
		Consideration of Transmission Market Constraint and Transfer Path Limits in Clearing Process	
4	(1)	 The ISO may, in the event that the ISO determines that the energy associated with an offer may be unable to be delivered to the interconnected electric system during the obligation period due to either a transmission market constraint or a limit on an Alberta intertie determined in accordance with subsection 3: (a) not clear the offer; (b) clear a portion of the offer; or (c) if there are multiple flexible blocks impacted by the same transmission market constraint or limit on an Alberta intertie either: (i) not clear the flexible blocks; or (ii) when multiple equivalent flexible blocks are submitted at the same price and result in the same social surplus, clear such equivalent flexible blocks; or (d) if there are multiple inflexible blocks; or (i) not clear the inflexible blocks impacted by the same transmission market constraint or limit on an Alberta intertie either: (ii) when multiple equivalent flexible blocks are submitted at the same price and result in the same social surplus, clear such equivalent flexible blocks; or (ii) not clear the inflexible blocks; or (ii) not clear the inflexible blocks; or (ii) not clear the inflexible blocks; or (ii) when multiple equivalent inflexible blocks are submitted at the same price and result in the same social surplus, clear such equivalent inflexible blocks; or 	The current congestion management approach for the real-time energy market should not be used in the capacity market. Instead, the AESO should clear the offer and plan to address the congestion. In the event congestion persists, the offer should be paid and the market cleared at the uncongested price. Only in the event that a potential constraint causes an adequacy concern (i.e. failure to meet the minimum) should the AESO take an action to clear incremental volume.
		Setting Auction Clearing Price	

Section	Subsection	Proposed language	Stakeholder comments
5	(1)	The ISO must establish the clearing price of a base auction or rebalancing auction , without consideration of transmission market constraints in subsection 4, at the point on the demand curve that:	TCE agrees with this section subject to all capacity being cleared and paid. Congestion should not preclude participation in the market.
		(a) intersects with the supply curve; or	
		(b) corresponds to the volume of the cleared offers where the entire cleared offers are below the demand curve.	

Please provide you	Ir comments on the following (as set out in AUC Rule 017 s	s. 13(b-j)):
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Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 201.13, Capacity Market Clearing relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 201.13, Capacity Market Clearing should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of amended ISO rule – <i>Section 201.13, Capacity</i> <i>Market Clearing</i> and whether, in your view, <i>Section 201.13,</i> <i>Capacity Market Clearing</i> meets the objective or purpose	
4	how, in your view, amended ISO rule – <i>Section 201.13, Capacity Market Clearing</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 201.13, Capacity Market Clearing	
6	whether you agree with amended ISO rule – <i>Section</i> 201.13, <i>Capacity Market Clearing</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to amended ISO rule – Section 201.13, Capacity Market Clearing	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 201.13, Capacity Market Clearing.



Proposed New ISO rule – Section 201.15, Delisting

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TCE)			Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		 Section 201.15 applies to: (a) a capacity market participant; (b) a pool participant; (c) the legal owner of a generating unit or aggregated generating facility where such generating unit or aggregated generating facility is the subject of a permanent delist notification; and (d) the ISO. 	
		Requirements Request to Temporarily Delist for Economic Reasons	
2	(1)	A capacity market participant may, within the timelines specified in the <i>Capacity Market</i> <i>Auction Guidelines</i> for the last rebalancing auction and in the manner the ISO specifies, submit to the ISO a request to temporarily delist an asset for the obligation period for economic reasons.	
2	(2)	A capacity market participant must, in the request referred to in subsection 2(1), submit:	In general, TCE is concerned that the AESO is overly prescriptive in these rules. There is a real economic cost in reducing participant flexibility and there is no obvious benefit in

Section	Subsection	Proposed language	Stakeholder comments
		(a) an attestation from a corporate officer of the pool participant :	this case. Participants must submit cost data and illustrate that an asset is not economic
		(i) that the pool participant confirms that if the request is approved by the ISO , the delist outage in the energy market in the obligation period will total greater than 210 days such that participation in the energy market is for a continuous period of 155 days or less;	to operate in order to de-list. It is unclear why the AESO effectively mandates retirement or operating at a loss after 2 years.
		(ii) the MW volume of the asset that will be subject to a delist outage in the energy market;	
		(iii) the start date and the end date of the delist outage referred to in 2(2)(b)(i);	
		(b) the avoidable costs associated with the delist outage referred to in subsection 2(2)(a);	
		(c) any information necessary for the ISO to calculate the energy and ancillary services offset in accordance with subsection 3(2).	
		(d) an attestation from a corporate officer of the legal owner of the asset that the avoidable costs and information referred to in subsections 2(2)(b) and 2(2)(c), respectively, are accurate; and	
		(e) any other information the ISO specifies as it relates to the request to temporarily delist an asset for economic reasons.	
		ISO Review and Approval of Request to Temporarily Delist for Economic Reasons	
3	(1)	The ISO may exclude all or a portion of the avoidable costs submitted pursuant to subsection 2(2)(b) where such costs, in the ISO 's determination, are unreasonable.	
3	(2)	The ISO must calculate the energy and ancillary services offset, as applicable, for the asset during the obligation period using the methodology set out in Section 206.11 of ISO rules , <i>Energy and Ancillary Services Offset for Assets</i> .	
3	(3)	The ISO may, where the ISO determines that the energy associated with the outage referred to in subsection 2(2)(a) is not necessary to maintain reliability during the obligation period , approve a request to temporarily delist for economic reasons.	The reliability requirement in this subsection is unnecessary and should be removed as the market will take care of this automatically. If an asset that has applied to temporarily economic delist is needed for reliability, it will clear the capacity market and will be prevented from delisting. In this case the asset is kept whole, at least on a forecast basis.

Section	Subsection	Proposed language	Stakeholder comments
			If it does not clear, then it was not needed for reliability and the asset may delist to mitigate its losses.
			As currently drafted, there is a gap whereby the AESO may reject a delist request and the asset fails to clear the market. In this case, it turns out that the asset is not required for reliability and yet is prevented from delisting. If the AESO decides to keep the reliability requirement in this subsection, it must provide adequate compensation to keep the asset whole.
3	(4)	The ISO must, if it approves a request pursuant to subsection 3(3), provide the capacity market participant , within the timelines specified in the <i>Capacity Market Auction Guidelines</i> for the last rebalancing auction , with a price based on the remaining avoidable costs submitted in accordance with subsection 2(2)(b) that have not been excluded in accordance with subsection 3(3), net of the energy and ancillary services offset.	
		Submission of Offer Price for Temporary Economic Delist	
4		Notwithstanding Section 206.4 of the ISO rules , <i>Offers and Bids for the Capacity Market</i> , a capacity market participant that has been provided a price in accordance with subsection 3(4) must submit an offer comprised of one capacity block at the price specified in subsection 3(4) in the last rebalancing auction for the MW volume set out in subsection 2(2)(a)(ii).	
		Request to Temporarily Delist due to Physical or Operational Limitations	
5	(1)	A capacity market participant must, within the timelines specified in the <i>Capacity Market</i> <i>Auction Guidelines</i> and in the manner the ISO specifies, submit to the ISO a request to temporarily delist an asset from the capacity market for the obligation period if the asset will be subject to a derate or an outage for a period greater than or equal to 150 continuous days in the obligation period due to a physical operational limitation of the asset of the capacity market participant .	TCE submits that the timelines should not be noted in guidelines, but rather should be included directly in this rule. This provides investor certainty as the timelines cannot then be easily changed by the AESO.
			Further, TCE submits that in the case where an asset substitutes out of its obligation within the delivery year, it should be able to de-list to avoid the uniform capacity value reduction, <i>i.e.</i> where a unit experiences a large force majeure and substitutes out of its capacity obligation while it is being repaired.

Section	Subsection	Proposed language	Stakeholder comments
5	(2)	A capacity market participant must, subject to subsection 5(3), submit the following information to the ISO in the request referred to in subsection 5(1):	
		(a) a description of the physical or operational limitation;	
		(b) a description of any major repairs required to rectify the physical or operational limitation; and	
		(c) if applicable, an order, decision, final rule, opinion or final directive from a regulatory authority specifically mandating the derating of the asset.	
5	(3)	A capacity market participant must, in the case of an asset with new capacity , refurbished capacity or incremental capacity, submit to the ISO in the request referred to in subsection 5(1) an attestation from a corporate officer of the capacity market participant certifying that the new capacity , refurbished capacity or incremental capacity will not be in full commercial operation prior to the obligation period .	This rule appears to impose a requirement to delist if new, refurbished, or incremental capacity is not energized prior to the obligation period. This is inconsistent with other rules that allow for assets to energize during the obligation period and still receive capacity payments for that delivery year. This discrepancy requires clarification.
5	(4)	A capacity market participant must, in the request referred to in subsection 5(1), submit:	
		(a) an attestation from a corporate officer of the pool participant :	
		 that the pool participant confirms that if the request is approved by the ISO, the delist outage in the energy market will be for a continuous period in the obligation period which must be greater than 150 days; 	
		 the MW volume of the asset that will be subject to a delist outage in the energy market; 	
		(iii) a description of the physical or operational limitation of the asset; and	
		(iv) the start date and the end date of the delist outage referred to in $5(2)(c)(i)$; and	
		(b) any other information the ISO specifies as it relates to the request to temporarily delist the asset.	
		ISO Approval of Request to Temporarily Delist due to a Physical or Operational Limitation	

Section	Subsection	Proposed language	Stakeholder comments
6	(1)	The ISO must approve a request to temporarily delist an asset due to a physical or operational limitation if:	
		 (a) the ISO is satisfied that the request referred to in subsection 5(1) is complete; and 	
		(b) the delist outage referred in subsection 5(2)(a) is greater than 150 continuous days in the obligation period .	
6	(2)	Notwithstanding subsection 6(1), the ISO may not approve a request to temporarily delist an asset if, in the ISO 's determination, the volume of capacity is necessary to maintain reliability .	
		Delist Outage	
7	(1)	A pool participant must, if the offer referred to in subsection 4(1) does not clear in the last rebalancing auction , submit a delist outage that corresponds to the outage declared in accordance with subsection 2(2)(a).	
7	(2)	A pool participant must, if the ISO approves a request pursuant to subsection 6, submit a delist outage that corresponds to the outage declared in accordance with subsection 5(2)(a).	
		Request to Change Delist Outage	
8	(1)	A pool participant must submit a request to the ISO to change the delist outage submitted in accordance with subsection 7(2) in the manner the ISO specifies.	
8	(2)	The ISO may approve a request submitted under subsection 8(1) if the ISO determines that the change to the delist outage has no material impact to reliability , unless such request reduces the delist outage to less 150 days .	TCE recommends the following change in the section wording: "if the ISO determines that the change to the delist outage has no material impact to reliability or would result in improved reliability"
			The current language in the rules appears to only consider increases to the length of a de-list outage, and not consider market participants who may apply to return from a delist early.

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			This restriction appears to indicate that, for example, after 70 days of an expected 160- day outage, a plant could not reduce its delist outage to 130 days. Would the plant need to stay offline for 150 days to satisfy this rule and avoid reductions to its uniform capacity value? What is the intent of this approach?
		Restriction on Ability to Temporarily Delist	
9		A capacity market participant must not temporarily delist an asset for more than two consecutive obligation periods .	It is unclear what recourse is available to market participants who require more than two obligations periods to complete repairs to an asset in the event of a physical delist? These market participants should not be required to take performance risks when they fully expect to continue their outage. The 2-year restriction is inefficient and serves no useful purpose.
		Permanent Delist Notification	
11	(1)	A capacity market participant may, in accordance with the timelines established in the <i>Capacity Market Auction Guidelines</i> for the base auction or the first rebalancing auction for an obligation period , and in the manner the ISO specifies, submit to the ISO a notification to permanently delist an asset.	
11	(2)	A capacity market participant must, in the notification referred to in subsection 11(1), submit:	
		(a) the MW volume from the asset that the capacity market participant is permanently delisting; and	
		(b) in the case of a generating unit , aggregated generating facility or energy storage facility :	
		(i) an attestation from a corporate officer of the pool participant :	
		 (A) that the pool participant confirms that the MW volume referred to in subsection 11(2)(a) will be removed from the energy market on or before the first day of June in the obligation period; and 	
		(B) the date that the MW volume from the asset will be removed from the energy market.	

Section	Subsection	Proposed language	Stakeholder comments
		(ii) an attestation from a corporate officer of the legal owner :	
		(A) that the legal owner confirms that the MW volume referred to in subsection 11(2)(a) will be removed from the energy market on or before the first day of June in the obligation period ; and	
		(B) the date that the MW volume from the asset will be removed from the energy market.	
11	(3)	A capacity market participant may not revoke a notification to permanently delist after it has been submitted to the ISO in accordance with subsections 11(1) and 11(2).	
11	(4)	The ISO must implement the removal of the MW volume from an asset referred to in subsection 11(2) from the energy market.	

Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):

Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 201.15, <i>Delisting</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 201.15, <i>Delisting</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 201.15, <i>Delisting</i> and whether, in your view, the proposed new ISO Rule – Section 201.15, <i>Delisting</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 201.15, <i>Delisting</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 201.15, <i>Delisting</i>	
6	whether you agree with the proposed new ISO Rule – Section 201.15, <i>Delisting</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 201.15, <i>Delisting</i>	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 201.15, Delisting.



Proposed Amended ISO rule – Section 202.3, Issuing Dispatches for Equal Prices

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TC	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments		
		Requirements Equally-Priced Operating Blocks			
2	(3)	Notwithstanding subsection 2(1) and 2(2), the ISO must, when issuing dispatches in the	TCE agrees that source assets should be dispatched prior to load sink assets.		
		energy market merit order where there are 1 or more equally-priced operating blocks in an offer or bid consisting of both source assets and load sink assets , attempt to accommodate the source assets before issuing dispatches for the load sink assets .	The AESO should clarify in the rule language: (1) how the AESO would attempt to "accommodate the source assets before issuing dispatches for the load sink assets"; and (2) under what circumstances the AESO may be unable to "accommodate the source assets before issuing dispatches for the load sink assets". These circumstances must be specified in the Rule so that market participants understand when and why assets are dispatched.		
2	(4)	Notwithstanding subsection 2(1), the ISO must:			
		 (a) determine dispatch volumes for a pool asset that is an import asset or an export asset in accordance with the procedures set out in Section 303.3 of the ISO rules, Intertie Path Operations; and 			
		 (b) issue dispatches for equally priced \$0.00 offers in accordance with Section 202.5 of the ISO rules, Supply Surplus. 			

Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):

Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 202.3, <i>Issuing Dispatches for Equal Prices</i> relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 202.3, Issuing Dispatches for Equal Prices should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of amended ISO rule – Section 202.3, <i>Issuing</i> <i>Dispatches for Equal Prices</i> and whether, in your view, Section 202.3, <i>Issuing Dispatches for Equal Prices</i> meets the objective or purpose	
4	how, in your view, amended ISO rule – Section 202.3, Issuing Dispatches for Equal Prices affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 202.3, <i>Issuing Dispatches for Equal Prices</i>	
6	whether you agree with amended ISO rule – Section 202.3, <i>Issuing Dispatches for Equal Prices</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to amended ISO rule – Section 202.3, <i>Issuing Dispatches for Equal Prices</i>	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 202.3, Issuing Dispatches for Equal Prices.



Proposed Amended ISO rule – Section 203.1, Offers and Bids for Energy

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TC	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language Stakeho	older comments
		Applicability	
1		Section 203.1 applies to: (a) a pool participant when participating in the energy market; and (b) the ISO .	
		Requirements Submission Method and Timing	
2	(2)	 A pool participant submitting an offer or bid for a generating source asset or load sink asset, respectively, 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 hours, 7 days prior to the day that the offer or bid is effective. 	

Section	Subsection	Proposed language	Stakeholder comments
2	(3)	A pool participant submitting an offer or bid for an import asset or export asset, respectively, must submit such offer or bid :	
		(a) no later than 2 hours prior to the start of the settlement interval ; and	
		(b) no earlier than 00:00 hours, 7 days prior to the day that the offer or bid is effective.	
		Must-Offer and May-Offer	
3	(1)	A pool participant must submit offers in the energy market for each settlement interval , for each of its pool assets , that are:	
		(a) generating source assets with a maximum capability of 5 MW or greater;	
		(b) load sink assets subject to a capacity commitment with a maximum capability of 5 MW or greater; or	
		(c) import assets subject to a capacity commitment ;	
3	(2)	A pool participant may submit offers in the energy market for each settlement interval , for any of its pool assets that are import assets.	
3	(3)	A pool participant may submit offers in the energy market, for any of its pool assets that are:	
		 (a) generating source assets subject to a capacity commitment with a maximum capability greater than or equal to 1 MW and less than 5 MW; or 	
		(b) load sink assets subject to a capacity commitment with a maximum capability greater than or equal to 1 MW and less than 5 MW.	
3	(4)	A pool participant that chooses to submit offers in accordance with subsection 3(3) must notify the ISO , in the manner the ISO specifies.	
3	(5)	The ISO must, upon receiving a notification in accordance with subsection 3(4), provide the pool participant with the ability to submit offers .	

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3	(6)	A pool participant with a pool asset that is provided the ability to submit offers in accordance with subsection 3(5) must submit offers in the energy market for each settlement interval .	
3	(7)	Nothwithstanding subsections 3(1), 3(2), and 3(6), a pool participant must not submit offers for energy that is committed under a contract for resource adequacy standard threshold actions referred to in section 202.6 of the ISO rules , <i>Adequacy of Supply</i> .	
		Offer Content	
4	(1)	 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 a generating source asset or a load sink asset, is greater than or equal to zero dollars (\$0) per MWh and less than one thousand dollars (\$1000) per MWh; (ii) in the case of an import asset that has been only allocated 1 operating block in accordance with section 201.5 of the ISO rules, <i>Energy Market Block Allocation</i>, \$0.00 per MWh; or (iii) in the case of an import asset that has been allocated 7 operating blocks in accordance with section 201.5 of the ISO rules, <i>Energy Market Block Allocation</i> is greater than or equal to \$0.01 per MWh and less than or equal to \$999.99 per MWh; (b) a quantity in MW; and (c) an indication of whether the operating block is a flexible block or an inflexible block. 	
4	(2)	A pool participant that submits an offer must also submit the minimum stable generation for a generating source asset .	
4	(3)	A pool participant that submits an offer must ensure that: (a) the cumulative total MW, as entered for the highest priced operating block in	

Section	Subsection	Proposed language	Stakeholder comments
		the offer for the settlement interval, equals the maximum capability of the pool asset; and	
		(b) the minimum stable generation submitted for the generating 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 0 MW, including when submitted as part of a restatement under section 203.3 of the ISO rules, <i>Energy</i> <i>Restatements</i> .	
		Available Capability	
6		A pool participant that submits an offer must also submit the available capability , in MW, for each source asset or load sink asset , which such available capability must equal the maximum capability of the source asset or load sink asset , unless the pool participant has submitted an acceptable operational reason with the offer .	
		Operating Constraints for Offers	
7	(1)	A pool participant that submits an offer must also submit the following operating constraints:	The nature of the ramp table is authoritative and must be specified in the Rule.
		(a) for a generating source asset or a load sink asset , a ramp rate ;	
		(b) for a generating source asset or a load sink asset , a ramp table in the manner the ISO specifies; and	
		(c) for a generating source asset , the initial start-up time.	
7	(2)	A pool participant must submit to the ISO any changes to the operating constraints of a source asset or a load sink asset as soon as reasonably practicable.	
		Bid Content	
9	(1)	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 load sink asset , is greater than or equal to \$0.00 per	

Section	Subsection	Proposed language	Stakeholder comments
		MWh and less than or equal to \$999.99 per MWh; and	
		 (ii) in the case of export asset that has been only allocated 1 operating block in accordance with section 201.5 of the ISO rules, <i>Energy Market Block Allocation</i>, \$999.99 per MWh; and 	
		 (iii) in the case of an export asset that has been allocated 7 operating blocks in accordance with section 201.5 of the ISO rules, <i>Energy Market Block Allocation,</i> is greater than or equal to \$0.00 per MWh and less than or equal to \$999.98 per MWh; (b) a quantity in MW. 	
9	(2)	A pool participant that submits a bid must ensure that the total MW in the bid do not exceed the peak load of the load sink asset .	

Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):	
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Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 203.1, Offers and Bids for Energy relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 203.1, Offers and Bids for Energy should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of amended ISO rule – Section 203.1, Offers and Bids for Energy and whether, in your view, Section 203.1, Offers and Bids for Energy meets the objective or purpose	
4	how, in your view, amended ISO rule – Section 203.1, Offers and Bids for Energy affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 203.1, <i>Offers and Bids for Energy</i>	
6	whether you agree with amended ISO rule – Section 203.1, Offers and Bids for Energy taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to amended ISO rule – Section 203.1, Offers and Bids for Energy	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 203.1, Offers and Bids for Energy.



Proposed Amended ISO rule – Section 203.4, *Delivery Requirements for Energy*

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TCE)			Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 203.4 applies to: (a) a pool participant with a generating source asset that has an associated	
		current offer when participating in the energy market; and	
		 (b) a pool participant with a load sink asset that has an associated current offer when participating in the energy market; and 	
		(c) the ISO.	
		Requirements	
		Compliance Responsibilities	
2	(1)	A pool participant may only deliver energy to the interconnected electric system from a generating source asset pursuant to a dispatch or a directive the ISO issues.	
2	(2)	A pool participant must:	
		 (a) operate its generating source assets or load sink assets, or cause them to be operated; and 	
		(b) respond to dispatches from the ISO ,	

Section	Subsection	Proposed language	Stakeholder comments
		using good electric industry practice , including the design, implementation and use of reasonable dispatch protocols, together with personnel and software systems designed to detect and address errors or omissions in a timely fashion.	
		Steady State Compliance	
3	(1)	Subject to subsection 3(3), a pool participant must not, during steady state , vary the average MW it delivers from a generating source asset or consumes from a load sink asset , in any 10 minute clock period from the dispatch MW by more than the allowable dispatch variance .	
3	(2)	Subject to subsection 3(3), a pool participant that is supplying regulating reserve from a generating source asset or a load sink asset must ensure that the MW delivered in any 10 minute clock period is:	
		(a) not less than the dispatch MW minus the allowable dispatch variance ; and	
		(b) not greater than the dispatch MW plus the regulating reserve plus the allowable dispatch variance.	
3	(3)	A pool participant , after a load sink asset that is subject to a dispatch for 0 MW has met the requirements for the first 10 minute clock period as described in subsections 3(1) and 3(2), is no longer subject to the requirements of subsections 3(1) and 3(2).	This section is unclear. Please clarify the intent of this subsection or provide an example in an information document.
		Ramping Compliance	
4	(1)	A pool participant must move the output of a generating source asset or the consumption of a load sink asset which is:	
		(a) the subject of a dispatch ; and (b) ramping	
		towards the MW level indicated in that dispatch within 10 minutes of the time specified in the dispatch but not prior to the time specified in the dispatch .	
4	(2)	A pool participant must ensure that each generating source asset or load sink asset reaches the MW specified in an energy market dispatch , plus or minus the allowable dispatch variance for that generating source asset or load sink asset in:	

Section	Subsection	Proposed language	Stakeholder comments
		(a) no longer than the period of time calculated as follows:	
		 divide the change in dispatch MW by the ramp rate the pool participant submits; 	
		 (ii) add 40% of the time calculated in subsection 4(2)(a)(i) or 5 minutes, whichever is greater; and 	
		(iii) add the 10 minutes referred to in subsection 4(1); and	
		(b) no sooner than the period of time calculated as follows:	
		 divide the change in dispatch MW by the ramp rate the pool participant submits; and 	
		(ii) subtract 40% of the time calculated in subsection 4(2)(b)(i) or 5 minutes, whichever is greater.	
		Operational Deviation	
5	(1)	A pool participant must, if a generating source asset or load sink asset experiences an operational deviation in excess of 50 MW, verbally inform the ISO as soon as practical of the occurrence of the operational deviation and provide a description of the cause if known.	Consideration should be given to other criteria, such as timing, that lead to operational deviations as defined in the glossary. The criteria relate to deviations other than just MW deviations.
5	(2)	A pool participant must inform the ISO of the information required under subsection 5(1) on a telephone line the ISO designates, which must contain a voice recording system.	
5	(3)	A pool participant must, if an operational deviation extends for 20 minutes or longer, submit an available capability restatement or MW restatement for the generating source asset or load sink asset that represents the operational capability of the generating source asset or load sink asset , and must do so no later than 20 minutes after the commencement of the operational deviation .	
		Exceptions to Non-Compliance	
6		Notwithstanding the provisions set out in subsections 3, 4 and 5, the ISO must not determine that a pool participant is non-compliant with a dispatch for a generating source asset or load sink asset if the pool participant has met its responsibilities as set	

Section	Subsection	Proposed language		Stakeholder comments
		out in sub	section 2 and 1 or more of the following circumstances occur:	
		(a)	the generating source asset or load sink asset is ramping into position to provide operating reserve in response to a dispatch in the 15 minutes before the time indicated in that dispatch ;	
		(b)	the generating source asset is operating below the minimum stable generation level indicated in the Energy Trading System, but only if that generating source asset is:	
			 (i) synchronizing and its available capability the pool participant submitted is equal to its minimum stable generation and it has received a dispatch for that quantity, in MW; 	
			 going off line and its available capability the pool participant submitted is equal to 0 and it has received a dispatch for that quantity, in MW; 	
			(iii) unable to follow the ramp rate the pool participant submitted when its output is being increased to its minimum stable generation and the pool participant has submitted a verbal plan to the ISO indicating a proposal for ramping to minimum stable generation, which verbal plan must provide an estimate of the time required to achieve the ramp rate and be updated for deviations of greater than 30 minutes or 50 MW; or	
			 (iv) stopped at an output level not identified in the verbal plan referenced in subsection 6(1)(b)(iii) above, but which is below minimum stable generation for more than 30 minutes for an operational reason and the pool participant has submitted a restatement of the available capability accordingly; 	
		(c)	the generating source asset is responding to abnormal frequency through automatic governor or governor system action;	
		(d)	the load sink asset is responding to abnormal frequency;	
		(e)	an operational deviation has occurred and the pool participant has complied with subsection 5; and	

Section	Subsection	Proposed language	Stakeholder comments
		(f) energy is being delivered to the interconnected electric system from a generating source asset or load sink asset while it is being tested or commissioned or both, in accordance with applicable provisions of the ISO rules.	
		Concurrent Energy and Operating Reserve Requirements	
7	(1)	The ISO must, when assessing a pool participant 's compliance with section 205.2 of the ISO rules , <i>Issuing Dispatches and Directives for Operating Reserve</i> in a situation where there are concurrent energy and spinning reserve requirements or energy and supplemental reserve requirements, consider the time of the energy dispatch to be:	
		(a) 15 minutes after the directive for spinning reserve or supplemental reserve in the case of subsection 4(3); and	
		(b) the time the pool asset is providing the amount of real power described in of section 205.5 of the ISO rules , Spinning Reserve Technical Requirements and Performance Standards, or section 205.6 of the ISO rules , Supplemental Reserve Technical Requirements and Performance Standards, in the case of subsection 4(4);	
		 (c) the later of 15 minutes after the directive for spinning reserve or supplemental reserve or the time of the dispatch in the case of subsection 4(5); and 	
		(d) the time the pool asset is providing the amount of real power described in of section 205.5 of the ISO rules , Spinning Reserve Technical Requirements and Performance Standards, or section 205.6 of the ISO rules , Supplemental Reserve Technical Requirements and Performance Standards, in the case of subsection 4(6).	
7	(2)	The ISO must, when assessing a pool participant 's compliance with section 205.2 of the ISO rules , <i>Issuing Dispatches and Directives for Operating Reserve</i> in a situation where there are concurrent energy and spinning reserve requirements or energy and supplemental reserve requirements, consider the MW quantity to be the energy dispatch quantity plus the spinning reserve or supplemental reserve quantity while the directive remains in effect.	

Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):

Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 203.4, <i>Delivery Requirements for Energy</i> relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 203.4, <i>Delivery Requirements for Energy</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of amended ISO rule – Section 203.4, <i>Delivery</i> <i>Requirements for Energy</i> and whether, in your view, Section 203.4, <i>Delivery Requirements for Energy</i> meets the objective or purpose	
4	how, in your view, amended ISO rule – Section 203.4, <i>Delivery Requirements for Energy</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 203.4, <i>Delivery Requirements for Energy</i>	
6	whether you agree with amended ISO rule – Section 203.4, <i>Delivery Requirements for Energy</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to amended ISO rule – Section 203.4, <i>Delivery Requirements for Energy</i>	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 203.4, Delivery Requirements for Energy.


Proposed New ISO rule – Section 203.5, Energy Market Mitigation

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (T	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 203.5 applies to: (a) a pool participant that submit offers in the energy market for a source asset ; (b) the legal owner of a generating unit or aggregated generating facility ; and (c) the ISO .	
		Requirements Expected Supply Cushion for Mitigation	
2	(1)	 The ISO must: (a) publish the method for calculating the expected supply cushion on the AESO website; and (b) provide 120 days' notice notice to pool participant before changing to the method for calculating the expected supply cushion published in accordance with subsection 2(1)(a). 	The calculation of the supply cushion is a critical component of the energy market mitigation framework. The method for calculating the supply cushion is authoritative and should be under the purview of the Commission.
2	(2)	The ISO must, for each settlement interval :	In subsection 2(2)(d), the supply cushion for the hour should be calculated as close to the settlement interval as reasonably practicable to ensure that the calculation reflects actual

Section	Subsection	Proposed language	Stakeholder comments
		 (a) calculate the expected supply cushion using the method published in accordance with subsection 2(1)(a); 	conditions to the greatest extent possible.
		 (b) publish the expected supply cushion on the AESO website prior to the settlement interval; 	
		 update the expected supply cushion as soon as reasonably practicable upon a change to 1 or more of the inputs to the calculation of the expected supply cushion;. 	
		 (d) select a value of the expected supply cushion observed during the two hours immediately prior to the settlement interval; 	
		(e) publish the value of the expected supply cushion which is selected for each settlement interval under subsection 2(2)(d) as soon as reasonably practicable after such selection is made.	
		Asset-Specific Cost Information –Generating Unit or Aggregated Generating Facility	
3	(1)	A pool participant must submit to the ISO , in the manner the ISO specifes, the following cost information related to the short-run marginal costs for a thermal generating unit or	TCE submits that new subsections (e) and (f) should be added with the following language:
		(a) hast rate:	(e) the estimated variable operations and maintenance cost; and
		(a) neatrate;	(f) any further cost information the market participant considers relevant.
		(b) If the source asset 's fuel is not natural gas, fuel cost;	In TCE's view, flexibility is required for participants to define their costs and therefore
		(c) financial exposure to greenhouse gas emissions costs; and	included costs cannot be entirely at the discretion of the AESO.
		(d) any further cost information the ISO specifies.	
3	(2)	A pool participant must, in relation to the cost information submitted pursuant to subsection 3(1):	
		(a) submit the cost information to the ISO:	
		 (i) for a generating unit or aggregated generating facility that has energized and commissioned, on or before a date the ISO specifies; or 	
		(ii) for a generating unit or aggregated generating facility that has not	

Section	Subsection	Proposed language	Stakeholder comments
		completed energization and commissioning , before the energization and commissioning of such generating unit or aggregated generating facility .	
		 (b) determine the values of such cost information assuming that the generating unit or aggregated generating facility is operating under normal operating conditions at maximum capability; and 	
		 submit updated cost information to the ISO as soon as reasonably practicable upon becoming aware of any material change in the cost information submitted in accordance with subsection 3(1). 	
		(d) an attestation by a corporate officer of the pool participant that the cost information provided pursuant to subsection 3(1) is complete and accurate.	
3	(3)	The ISO may, with respect to cost information submitted pursuant to subsection 3(1), exclude costs determined by the ISO to be unreasonable.	
3	(4)	The ISO must select alternate values for the cost information submitted pursuant to subsection 3(1) if such costs have been excluded pursuant to subsection 3(3).	
3	(5)	 The ISO must: (a) identify the current carbon price from the appropriate public authority; (b) identify the natural gas price for each day on a day-ahead basis, or as close to a day-ahead basis as reasonably practicable; and (c) estimate the variable operations and maintenance costs for a generating unit or aggregated generating facility on a c lass-specific basis. 	What if spot gas materially deviates from day ahead due to a pipeline force majeure for example? A process must exist to allow generators to apply for uplift payments to cover any such losses that may occur due to this deviation.
		Asset-Specific Reference Price – Generating Unit or Aggregated Generating Facility	
4	(1)	The ISO must, using the cost information derived pursuant to subsection 3, calculate an estimated short-run marginal cost for producing power, measured in dollars per MWh, for each generating unit or aggregated generating facility for each settlement interval as a sum of the following:	

Section	Subsection	Proposed language	Stakeholder comments
		 (a) the heat rate multiplied by the fuel price, if applicable; (b) the exposure to greenhouse gas emissions costs multiplied by the carbon price from the appropriate public authority, if applicable; and (c) the estimated variable operations and maintenance cost. 	
4	(2)	 The ISO must, using the estimated short-run marginal costs derived pursuant to subsection 4(1), set the asset-specific reference price for each generating unit or aggregated generating facility for each settlement interval as an amount equal to: (a) the estimated short run marginal cost multiplied by 3, if the expected supply cushion selected for the settlement interval under subsection 2(2)(d) is 1,000 MW or greater; (b) the estimated short run marginal cost multiplied by 6, if the expected supply cushion selected for the settlement interval under subsection 2(2)(d) is 250 MW or greater and less than 1,000 MW; and (c) the maximum permissible price for an offer made under section 203.1 of the ISO rules, Offers and Bids for Energy, if the expected supply cushion selected for the run and subsection 2(2)(d) is less than 250 MW. 	TCE notes that these proposed mitigation levels are similar to other markets and have been developed through extensive consultation with industry. It is important to recognize that under the proposed framework Alberta generators must self-commit, there is no ORDC, and there is little to no congestion. Further, value in the energy market for the actual delivery of power in real-time is a far more effective price signal than value in the capacity market. Accordingly, an ex-ante mitigation framework that mitigates to 1x variable cost would not be efficient given the overall capacity market design. On balance, less mitigation is preferred to more in the energy market. This has the effect of rewarding real-time performance and sending strong signals for the value of energy under tight market conditions. Proposals that minimize the real-time price signals are not expected to result in lower overall prices – they simply move value towards the capacity market and away from the energy market. As such, TCE supports a no-look threshold of 500 MW as has previously been proposed to reflect that the system is within a single forced outage of an emergency event (<i>i.e.</i> , there is scarcity in the market). Eliminating the ability to signal scarcity prior to actual emergencies erodes the value of that price and simply moves value to the capacity market.
		Asset-Specific Reference Price – Prescribed Non-Thermal Generating Source Assets Capable of Storing Energy	
5	(1)	The ISO may prescribe a set of non-thermal generating source assets to which this subsection 5 is applicable, provided that each generating source asset is capable of storing its fuel.	
5	(2)	The ISO must, if the ISO prescribes a set of generating source assets in accordance with subsection 5(1) publish the list of such prescribed generating source assets on the AESO website.	

Section	Subsection	Proposed language	Stakeholder comments
5	(3)	The ISO must, subject to subsection 5(4), set the asset-specific reference price for generating source assets prescribed pursuant to subsection 5(1) for each settlement interval as an amount equal to:	
		 (a) the 30-day rolling average pool price most recently published by the ISO multiplied by 3, if the expected supply cushion selected for the settlement interval under subsection 2(2)(d) is 1,000 MW or greater; 	
		(b) the 30-day rolling average pool price most recently published by the ISO multiplied by 6, if the expected supply cushion selected for the settlement interval under subsection 2(2)(d) is 250 MW or greater and less than 1,000 MW; and	
		(c) the maximum permissible price for an offer made under section 203.1 of the ISO rules, Offers and Bids for Energy, if the expected supply cushion selected for the settlement interval under subsection 2(2)(d) is less than 250 MW.	
5	(4)	Notwithstanding subsection 5(3), if a pool participant , for any generating source asset prescribed pursuant to subsection 5(1) for a settlement interval , has satisfied the asset-specific requirements for participation in the ancillary services market referred to in subsection 5(5), then the ISO must, set the asset-specific reference price for such generating source asset for the settlement interval as an amount equal to the maximum permissible price for an offer made under Section 203.1 of the ISO rules, <i>Offers and Bids for Energy</i> .	
5	(5)	The ISO must: (a) publish the asset-specific requirements for participation in the ancillary services market on the AESO website; and	
		 (b) provide 120 days' notice to pool participants before changing to the asset- specific requirements published in accordance with subsection 5(5)(a). 	
		Asset-Specific Reference Price – Import Source Assets	
6	(1)	The ISO must set the asset-specific reference price for each import source asset for each	

Section	Subsection	Proposed language	Stakeholder comments
		settlement interval as an amount equal to:	
		 (a) MidC(on peak) + min{100, 3 * MidC(on peak)}, if the expected supply cushion selected for the settlement interval under subsection 2(2)(d) is 1,000 MW or greater; 	
		(b) MidC(on peak) + min{100, 6 * MidC(on peak)}, if the expected supply cushion selected for the settlement interval under subsection 2(2)(d) is 250 MW or greater and less than 1,000 MW;	
		where <i>MidC(on peak)</i> is the day-ahead, on-peak price in the Mid-Columbia market for delivery on the same day as the energy market in Alberta;	
		or	
		(c) the maximum permissible price for an offer made under section 203.1 of the ISO rules, Offers and Bids for Energy, if the expected supply cushion selected for the settlement interval under subsection 2(1)(d) is less than 250 MW.	
		Asset-Specific Reference Price – Limitations and Exemptions	
7	(1)	Notwithstanding subsections 4, 5 and 6, the ISO must not set the asset-specific reference price for any source asset for any settlement interval as an amount:	
		(a) less than \$25/MWh; or	
		(b) greater than the maximum permissible price for an offer made under section 203.1 of the ISO rules , <i>Offers and Bids for Energy</i> .	
7	(2)	A pool participant may request that the ISO provide a variance from any asset-specific reference price determined pursuant to subsections 4, 5, or 6.	
7	(3)	The ISO may, upon receiving a request pursuant to subsection 7(2), assign a different asset-specific reference price determined pursuant to subsections 4, 5, or 6 if the ISO is satisfied that the pool participant would not be able to reasonably recover the short run marginal costs and cycling costs of the source asset within the scope of the asset-specific reference price determined pursuant to subsections 4, 5, or 6.	

Section	Subsection	Proposed language	Stakeholder comments
		Market Power Screen	
8	(1)	The ISO must identify those persons , using the methodology for the calculation of market share offer control described in section 5 of the <i>Fair, Efficient, and Open Competition Regulation</i> , that have offer control over one or more source assets for the purposes of identifying a person as having market power.	
8	(2)	The person identified under subsection 8(1) may submit to the ISO , in the manner the ISO specifies, supply obligations in MW for each settlement interval , at least 2 hours prior to the start of the settlement interval , for the purposes of the expected residual supply index.	
8	(3)	A person who submits supply obligations in accordance with subsection 8(2) must submit a value that is equal to or less than the person 's actual supply obligations .	
8	(4)	The ISO must, for each person identified under subsection 8(1) and in the offer control information for an operating block in respect of a settlement interval , calculate a value called the expected residual supply index for each settlement interval for the person identified under subsection 8(1) as follows:	TCE recommends that this should be replaced by the formula expressed in CMD Final.
		 (a) the expected supply from all source assets for the settlement interval; (b) minus the expected supply from all source assets under the offer control of a person identified under subsection 8(1), net of the supply obligations of the person identified under subsection 8(1), for the settlement interval; and (c) divided by expected demand from all sink assets for the settlement interval. 	
8	(5)	The ISO must select the expected residual supply index referenced in subsection 8(1) during the 2 hours immediately prior to the settlement interval .	
8	(6)	The ISO must identify a person with a expected residual supply index of less than 1 for a given settlement interval as having market power in that settlement interval .	
8	(7)	The ISO must not reconsider the conclusion drawn under subsection 8(4) if market conditions change at any time after the expected residual supply index is selected for the	

Section	Subsection	Proposed language	Stakeholder comments
		settlement interval under subsection 8(3).	
		Mitigation of Market Power	
9	(1)	The ISO must, for each settlement interval , identify each operating block associated with a source asset under the offer control of a person identified under subsection 8(4) that has an offer price that is greater than the asset-specific reference price of the related source asset which was determined pursuant to subsections 4, 5, or 6.	
9	(2)	Subject to subsection 9(3), the ISO must change the offer price of an operating block identified under subsection 9(1) to the asset-specific reference price of the associated source asset as determined under subsection 4, 5 or 6 if the operating block is:	
		 (a) controlled by a single person that has been identified as having market power under subsection 8(4), 	
		 (b) controlled by multiple persons which have all been identified as having market power under subsection 8(4), or 	
		 (c) declared to be inflexible in accordance with Section 203.1 of the ISO rules, Offers and Bids for Energy, and is at least partially controlled by a person that has been identified as having market power under subsection 8(4). 	
9	(3)	The ISO must, if an operating block identified under subsection 9(1) is declared to be flexible under Section 203.1 of the ISO rules , <i>Offers and Bids for Energy</i> , and is partially, but not fully, controlled by one or more person identified as having market power under subsection 8(4), split the existing operating block into two operating blocks as follows:	
		 (a) create a new operating block that contains the quantity of the existing operating block that is controlled by the person identified as having market power under subsection 8(4) and select an offer price equal to the asset- specific reference price of the associated source asset; and 	
		(b) reduce the quantity of the existing operating block by the quantity of the newly created operating block , with no associated change made to the offer price of the operating block .	

Section	Subsection	Proposed language	Stakeholder comments
		Timely Information from Legal Owner	
10		A legal owner of a generating unit or aggregated generating facility must, if it is not the pool participant for that generating unit or aggregated generating facility:	
		 (a) provide such timely and complete information to the pool participant for such source asset to enable the pool participant to comply with its obligations under subsection 3; and 	
		(b) provide an attestation to the pool participant from a corporate officer of the legal owner of such generating unit or aggregated generating facility to enable the pool participant to comply with its obligations under subsection 3(2)d.	

Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):

Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 203.5, <i>Energy Market Mitigation</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 203.5, <i>Energy Market Mitigation</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 203.5, <i>Energy Market Mitigation</i> and whether, in your view, the proposed new ISO Rule – Section 203.5, <i>Energy Market</i> <i>Mitigation</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 203.5, <i>Energy Market Mitigation</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 203.5, <i>Energy Market Mitigation</i>	
6	whether you agree with the proposed new ISO Rule – Section 203.5, <i>Energy Market Mitigation</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 203.5, <i>Energy Market Mitigation</i>	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 203.5, Energy Market Mitigation.



Proposed Amended ISO rule – Section 203.6, Market Requirements for Interchange Transactions

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TCE)				403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
		 Section 203.6 applies to: (a) a pool participant seeking to exchange or transact an import or export interchange transaction in the energy market or ancillary services market; and (b) the ISO. 	
		Requirements	
2	(1)	A pool participant must submit an offer or bid for a settlement interval in the energy market or ancillary services market in order to initiate an interchange transaction .	
2	(2)	A pool participant that submits offers that are priced greater than or equal to \$0.01, or bids that are priced less than or equal to \$999.98 in the energy market in accordance with Section 203.1 of the ISO rules , <i>Offers and Bids for Energy</i> , or an offer in the ancillary services market, must initiate an interchange transaction only pursuant to a dispatch that the ISO issues.	The Rule states that a pool participant must not "initiate an interchange transaction" unless it has received a dispatch. The AESO should define what "initiate an interchange transaction" includes. It would be problematic if this were to include the procuring or reserving or transmission since these activities must be done prior to the top of the hour in neighbouring jurisdictions.

Section	Subsection	Proposed language	Stakeholder comments
2	(3)	A pool participant that submits a \$0.00 import offer or \$999.99 export bid for a settlement interval in the energy market must initiate an interchange transaction for the start of the settlement interval in accordance with this section 203.6.	
		Procurement of Transmission Service by a Pool Participant	
3	(1)	A pool participant that initiates an interchange transaction must use all reasonable efforts to procure transmission service from applicable transmission service providers in an amount in MW at least equal to the dispatch volume in accordance with subsection 2(2) or in accordance with its submission volume in subsection 2(3), which reasonable efforts must include:	Pool participants should be required to procure transmission at least equal to its submission volume in relation to both sections 2(2) and 2(3). In neighbouring jurisdictions transmission must be procured in advance of the hour. A pool participant may be unable to procure or reserve transmission for the hour if it waits to receive a dispatch.
		 (a) determining whether there is transmission service posted by the applicable transmission service providers and available for that interchange transaction; and 	
		(b) submitting a request to the applicable transmission service providers to procure the transmission service, if it has been posted and is available.	
		Submission of E-tags by Pool Participants	
4	(1)	A pool participant with any import or export interchange transactions who has acquired transmission service must submit or adjust 1 or more e-tags to the ISO for the interchange transactions .	
4	(2)	A pool participant subject to an energy market dispatch in accordance with subsection 2(2) must submit or adjust an e-tag as soon as reasonably practicable with a start time that is:	The AESO should clarify when a price import transaction would receive a dispatch effective at the top of the hour.
		 (a) equal to or later than the time the e-tag is submitted or adjusted, but no earlier than the effective time of the dispatch; and 	
		(b) as soon as reasonably practicable, but no later than 40 minutes after the instruction time of the dispatch .	
4	(3)	A pool participant that submits an offer or bid in accordance with subsection 2(3) must submit or adjust e-tags no later than the start of the settlement interval and with a start	

Section	Subsection	Proposed language	Stakeholder comments
		time that is equal to the start of the settlement interval .	
4	(4)	A pool participant must, when submitting or adjusting an e-tag , identify within the e-tag the corresponding pool ID and any other information the ISO specifies.	
4	(5)	A pool participant must submit or adjust 1 or more e-tags for an interchange transaction such that the MW indicated in the e-tags aligns with:	
		 (a) the dispatch volume indicated in subsection 2(2) for the pool asset, or as otherwise set out in the ISO rules; or 	
		(b) the submission volume indicated in subsection 2(3) as stated at 2 hours prior to the start of the settlement interval for the pool asset, unless a restatement has been made in accordance with the provisions of this section 203.6, or as otherwise set out in the ISO rules.	
		[Note to draft: The content in subsection 4(5) is currently under further consideration by the AESO]	
		Restatements	
5	(1)	If, after complying with subsection 3 the pool participant is unable to procure all or a portion of the requested transmission service, or the transmission service is curtailed by any transmission service provider other than the ISO , then the pool participant must submit, as applicable:	
		 (a) an energy restatement in accordance with Section 203.3 of the ISO rules, Energy Restatements; or 	
		(b) an ancillary services restatement in accordance with Section 205.3 of the ISO rules , <i>Restatements for Operating Reserve.</i>	
		Validation of E-Tags by the ISO	
6	(1)	The ISO must validate an e-tag in order to maintain reliability and market operations under the existing ISO rules .	

Section	Subsection	Proposed language	Stakeholder comments
6	(2)	The ISO may deny an e-tag if:	
		(a) the e-tag is incomplete or incorrect;	
		(b) the interchange transaction is not being transacted by a pool participant ;	
		(c) the e-tag does not comply with subsection 4; or	
		(d) required for the reliable operation of the interconnected electric system .	

Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 203.6, <i>Market Requirements for Interchange Transactions</i> relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 203.6, <i>Market Requirements for Interchange Transactions</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of amended ISO rule – Section 203.6, <i>Market</i> <i>Requirements for Interchange Transactions</i> and whether, in your view, Section 203.6, <i>Market Requirements for</i> <i>Interchange Transactions</i> meets the objective or purpose	
4	how, in your view, amended ISO rule – Section 203.6, <i>Market Requirements for Interchange Transactions</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 203.6, <i>Market Requirements for Interchange Transactions</i>	
6	whether you agree with amended ISO rule – Section 203.6, Market Requirements for Interchange Transactions taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	

Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):

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Item #		Stakeholder comments
7	whether you would suggest any alternatives to amended ISO rule – Section 203.6, <i>Market Requirements for Interchange Transactions</i>	
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 203.6, Market Requirements for Interchange Transactions.



Proposed Amended ISO rule – Section 206.1, Qualification of Capacity

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TCE)				403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Declaration for New Capacity	
3		 A person must, within the timelines prescribed by the <i>Capacity Market Auction Guidelines</i> and in the manner the ISO specifies, submit to the ISO an attestation from a corporate officer as to whether an asset with the new capacity will: (a) permanently delist in accordance with Section 201.15, <i>Delisting</i>; or (b) continue to participate in the energy and capacity markets, in the event that the capacity market participant fails to receive a capacity commitment for such asset in the base auction or rebalancing auction. 	The timelines should not be noted in guidelines, but rather should be included directly in this rule. This provides investor certainty as the timelines cannot then be easily changed by the AESO.
		Declarations for Incremental Capacity and Refurbished Capacity	
4	(1)	A capacity market participant must, if it has applied to provide proposed incremental capacity, submit to the ISO , within the timelines prescribed by the <i>Capacity Market Auction Guidelines</i> and in the manner the ISO specifies, an attestation from a corporate officer as to whether the anticipated maximum capability of the asset with incremental capacity will be either:	
		 (a) the maximum capability of the asset had the capacity market participant not applied for proposed incremental capacity; or 	

Section	Subsection	Proposed language	Stakeholder comments
		(b) remain as the anticipated maximum capability accounting for the proposed incremental capacity,	
		in the event that the capacity market participant fails to receive a capacity commitment for such asset in the base auction or rebalancing auction for some or all of the proposed incremental capacity.	
4	(2)	A capacity market participant must, within the timelines prescribed by the <i>Capacity</i> <i>Market Auction Guidelines</i> and in the manner the ISO specifies, submit to the ISO an attestation from a corporate officer as to whether an asset with refurbished capacity will:	
		 (a) permanently delist in accordance with Section 201.15 of the ISO rules, Delisting; or 	
		(b) continue to participate in the energy market and capacity market,	
		in the event that the capacity market participant fails to receive a capacity commitment for such asset in the base auction or rebalancing auction .	
		Declaration for Load Asset	
5	(1)	A person must, within the timelines prescribed by the <i>Capacity Market Auction Guidelines</i> and in the manner the ISO specifies, declare to the ISO a firm consumption level if the person is seeking to have the ISO qualify a load asset providing a firm consumption level for the capacity market.	
5	(2)	A person must, within the timelines prescribed by the <i>Capacity Market Auction Guidelines</i> and in the manner the ISO specifies, declare to the ISO a guaranteed load reduction if the person is seeking to have the ISO qualify a load asset providing a guaranteed load reduction for the capacity market.	
		Declaration for Import Asset	
6		A person must, within the timelines prescribed by the <i>Capacity Market Auction Guidelines</i> and in the manner the ISO specifies, declare to the ISO a volume in MW from an import asset, which is less than or equal to the amount of firm transmission, that the person is seeking to have the ISO qualify for the capacity market.	

Section	Subsection	Proposed	language	Stakeholder comments
		Qualificat	ion of New Capacity, Incremental Capacity and Refurbished Capacity	
7	(1)	The ISO n provided p	nust, based on the information in the application and any supporting documents pursuant to subsection 2, be satisfied that the asset:	
		(a)	will be capable of providing energy to or reducing consumption from the interconnected electric system;	
		(b)	has a uniform capacity value greater than or equal to 1 MW;	
		(c)	will be:	
			 developed in accordance with a project plan and timeline that aligns with the critical milestones established by the ISO; and 	
			(ii) energized and commissioned prior to the obligation period .	
		(d)	is not a source asset that is the subject of a renewable electricity support agreement in connection with rounds 1, 2 or 3 of the Renewable Electricity Program;	
		(e)	is not energy efficiency;	
		(f)	in the case of a load asset:	
			 (i) can or will be able to reduce demand during the obligation period in a way that is measureable by the ISO; and 	
			(ii) is or will be a retail or self-retail asset;	
		(g)	in the case of an energy storage facility , is or will be capable of maintaining energy production at it uniform capacity value for a minimum of 4 hours;	
		(h)	in the case of an import asset:	
			 (i) has firm transmission from the import asset to the Alberta border for the duration of the obligation period; 	
			 (ii) is not participating as non-recallable capacity in a resource adequacy program of another jurisdiction; and 	

Section	Subsection	Proposed language	Stakeholder comments
		(iii) will be curtailed on a pro-rata basis by the balancing authority of the jurisdiction in which the import asset is located in when load, which is firm, is curtailed.	
		(i) in the case of an aggregation of assets:	
		 (i) has a uniform capacity value less than or equal to the maximum capability of the largest generating unit in Alberta multiplied by 0.85; 	
		 (ii) has or will have the appropriate metering the ISO specifies for each asset in the aggregation; 	
		(iii) is comprised of assets that are either exclusively:	
		 (A) generating units or aggregated generating facilities located within Alberta; 	
		 (B) load assets providing a firm consumption level located within Alberta; or 	
		 (C) load assets providing a guaranteed load reduction located within Alberta; 	
		and,	
		 (iv) is not comprised of any asset that will contribute capacity individually, or as part of another aggregation, to the capacity market; 	
		(j) in the case of incremental capacity, will be retrofitted in a manner that will, in the opinion of the ISO, increase the maximum capability of the asset by an amount in MW that is:	
		(i) greater than or equal to 1 MW; and	
		(ii) less than or equal to the greater of:	
		(A) 15% of the asset's maximum capability; or	

Section	Subsection	Proposed language	Stakeholder comments
		(B) 40 MW above the asset's maximum capability .	
		 (k) in the case of refurbished capacity, will be retrofitted in a manner that will, in the opinion of the ISO, result in either: 	
		 (i) an increase in the asset's maximum capability by an amount exceeding the greater of: 	
		(A) 15% of the asset's maximum capability ; or	
		(B) 40 MW above the asset's maximum capability ; or	
		 (ii) a capital investment of greater than or equal to \$200 per kW of the asset's current maximum capability multiplied by a capital cost escalation rate that is specified by the ISO. 	

Please provide	your comments on t	he following (as	set out in AUC Rul	le 017 s. 13(b-j)):
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Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 206.1, Qualification of Capacity relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 206.1, Qualification of Capacity should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of amended ISO rule – <i>Section 206.1, Qualification</i> <i>of Capacity</i> and whether, in your view, <i>Section 206.1,</i> <i>Qualification of Capacity</i> meets the objective or purpose	
4	how, in your view, amended ISO rule – Section 206.1, Qualification of Capacity affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 206.1, <i>Qualification of Capacity</i>	
6	whether you agree with amended ISO rule – Section 206.1, Qualification of Capacity taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to amended ISO rule – Section 206.1, Qualification of Capacity	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 206.1, Qualification of Capacity.



Proposed Amended ISO rule – Section 206.2, Self-Supply

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (T	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language Stake	keholder comments
		Applicability	
1		 Section 206.2 applies to: (a) the legal owner of a load asset that is served by one or more onsite generating units or aggregated generating facilities, excluding sites where the load is exclusively station service for the generating unit or aggregated generating facility; (b) the legal owner of a generating unit or an aggregated generating facility that self-supplies capacity for one or more onsite load assets; (c) the City of Medicine Method 	
		(d) the ISO .	
		Requirements Requirements to Self-supply Capacity	
2	(1)	The legal owner of a load asset must self-supply capacity if such site is: (a) metered in a manner that the metering measures both onsite generation and load as a single value for each metering interval; or	

(b) is not capable of flowing all energy produced on the site on to the interconnected electric system. 2 (2) The City of Medicine Hat must self-supply capacity.	
2 (2) The City of Medicine Hat must self-supply capacity.	
Application to Self-supply Capacity	
3 The legal owner of a load asset and the City of Medicine Hat must provide the ISO , within the timelines prescribed by the <i>Capacity Market Auction Guidelines</i> , a completed application to self-supply capacity including all information or documents that the ISO by the AESO.	d in guidelines, but rather should be included directly in ertainty as the timelines cannot then be easily changed
Approval to Self-supply Capacity	
4 The ISO must, within the timelines prescribed by the <i>Capacity Market Auction Guidelines</i> , approve an application to self-supply capacity if the site meets the criteria set out in subsection 2.	
Changes in Self-supply Configuration	
5 The legal owner of a load asset that is self-supplying capacity pursuant to subsection 2(1) must self-supply capacity for a minimum of 4 obligation periods unless it can demonstrate to the ISO's satisfaction that physical changes to the site warrant a change in self-supply configuration. TCE does not support the propose to the site warrant a change in status commitment that significant that significant the self-supply configuration.	ed language that a self-supply status designation must rs. This 4-year designation commitment, combined with -year obligation period, effectively creates an 8-year ty restricts the flexibility of Alberta businesses.
TCE acknowledges that sites sho auction and that they must meet the period. TCE submits that this provide be rare for self-suppliers to exercise the period. TCE submits that this provide be rare for self-suppliers to exercise the period. TCE submits that the flexibility to switch if the changes in law, or changes in marking the flexibility to should not be unneed businesses. On this basis, TCE submits basis, TCE submits basis. TCE submits basis	build declare their intention to self-supply in advance of an their capacity market obligations during the delivery vides adequate market certainty. Although it is expected ercise the option to switch status, self-suppliers should needed in response to changes in their business, arket rules. These events will not neatly align on a four- rily tied to a physical change to the operation of the site. essarily imposed that restrict the flexibility of Alberta submits that subsection 5 should be removed. we the proposed self-supply status designation

Section	Subsection	Proposed language	Stakeholder comments
			expanded beyond physical changes to the operation of the site. It is important to recognize that not all self-supply sites are structured the same way. In some cases, the legal owners of the load asset and the generating units are separate entities in which case the self-supply site is structured via contractual arrangements that pre-date the capacity market and may change over time. The rules must be sufficiently flexible to account for such structural differences. As such, there is a legitimate need for the ability to change a self-supply designation due to business or contractual changes.

Please provide your	comments on the following	(as set out in AUC	CRule 017 s. 13(b-j)):
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Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 206.2, Self-Supply relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 206.2, Self-Supply should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of amended ISO rule – <i>Section 206.2, Self-Supply</i> and whether, in your view, <i>Section 206.2, Self-Supply</i> meets the objective or purpose	
4	how, in your view, amended ISO rule – Section 206.2, Self- Supply affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 206.2, Self-Supply	
6	whether you agree with amended ISO rule – Section 206.2, Self-Supply taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to amended ISO rule – Section 206.2, Self-Supply	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 206.2, Self-Supply.

Issued for Stakeholder Comment: September 7, 2018 *Section 206.2, Self-Supply*



Proposed New ISO rule – Section 206.3, Uniform Capacity Value Determination

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	n: TransCanada Energy Ltd. (TCE)		Phone:	403-920-5005	
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 206.3 applies to: (a) a capacity market participant ; and (b) the ISO .	
		Requirements 1250 Tightest Supply Cushion Hours	
2		The ISO must select 250 hours from each 12 month consecutive period in the historical 60 month evaluation period as follows:	
		(a) calculate the supply cushion for every hour;	
		(b) rank all hours based on supply cushion in ascending order;	
		 (c) within the order referred to in subsection 2(b), rank hours with equivalent supply cushion in ascending order from the most recent to the most distant of time; and 	
		 (d) select the first 250 hours after ranking in accordance with subsection 2(b) and 2(c). 	

Section	Subsection	Proposed language	Stakeholder comments
		Asset Specific Hours for Uniform Capacity Value Calculation	
3	(1)	The ISO must remove the following hours from the 1250 hours identified in subsection 2 on an asset-specific basis, in order to create an historical data set for each asset listed for a capacity market participant on the list:	TCE submits that part (b)(ii) must be amended to also include physical delist outages. If an asset is delisted, be it for physical or economic reasons, then the hours during the delisted period should not count towards the asset's uniform capacity value in the future.
		(a) hours in which there was a state of markets suspension;	
		(b) hours that the ISO determines that the asset was affected by:	
		(i)an event of limited markets operations, war, invasion, armed conflict, blockade, act of public enemy, riot, revolution, insurrection, act of terrorism, sabotage, act of vandalism, fire that does not originate at the asset, lightning, explosion, earthquake or flooding; and	
		(ii) a mothball outage or temporary economic delist outage ;	
		(c) hours in which the asset had no production or consumption history;	
		(d) hours in which the asset was commissioning ; and	
		(e) in the case of an import asset, hours in which the relevant transfer path was unavailable as a result of an issue on the Alberta transmission system.	
3	(2)	The ISO may, in the case of a long lead time asset that was synchronized but had varying start-up times for distinct portions of its MW and which required more than 1 hour to deliver such additional portions of its MW, remove the hours where the ISO determines that:	
		(a) the pool participant reason in the Energy Trading System indicates that the asset was offline for a long lead time configuration; or	
		(b) the cost assessment for the asset exceeds the pool price ;	
		in order to create an historical data set for each long lead time asset listed for a capacity market participant on the list.	

Section	Subsection	Proposed language	Stakeholder comments
3	(3)	The ISO must, if it determines that the asset was impacted by a transmission market constraint during an hour in the asset's historical data set, add the volume that was curtailed to the metered volume in that hour for the purposes of calculating the uniform capacity value for the asset in accordance with subsection 5(2).	
		Selection of Methodologies for Uniform Capacity Value Calculation	
4		 The ISO must, when calculating a uniform capacity value for an asset, apply the methodologies as follows: (a) if the number of hours in the historical data set determined in accordance with subsection 3 is greater than or equal to 300 hours and less than or equal to 1250 hours then the methodologies in subsection 5 will be applied to the hours in the historical data set; (b) if the number of hours in the historical data set determined in accordance with subsection 3 is greater than or equal 1 hour and less than 300 hours then: (i) the methodologies in subsection 5 will be applied to the hours in the historical data set, as applicable; and (ii) the methodology in subsection 6 will be applied to the number of hours that is 300 hours minus the hours in the historical data set, determined in accordance with subsection 3; or (c) if the number of hours in the historical data set determined in accordance with subsection 3 is 0 hours then the methodology in subsection 6 will be applied to the applied to 300 hours that is 300 hours minus the hours in the historical data set, determined in accordance with subsection 3; 	
		hours.	
		Methodologies for Hours in the Historical Data Set	
5	(1)	 The ISO must, subject to subsections 5(2) through 5(8) calculate a uniform capacity value for an asset as follows: (a) calculate the hourly availability factor using the time weighted available capability as observed in the Energy Trading System, divided by maximum capability 	
Section	Subsection	Proposed language	Stakeholder comments
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		 observed in each hour in the historical data set; (b) calculate the availability factor by averaging the hourly availability factors as calculated in subsection 5(1)(a) over the number of hours in the historical data set; and (c) multiply the availability factor calculated in subsection 5(1)(b) by the asset's maximum capability. 	
5	 (2) The ISO must calculate a uniform capacity value for a wind or solar aggregated generating facility or a run of river hydroelectric generating unit or aggregated generating facility, or an aggregated asset containing a wind or solar aggregated generating facility or a run of river hydroelectric generating unit or aggregated generating facility, or assets that do not receive a dispatch as follows: (a) calculate the hourly capacity factor by adding metered energy and applicable ancillary services volumes observed in each hour in the historical data set, and dividing by maximum capability; (b) calculate the capacity factor by averaging each hourly capacity factor in subsection 5(2)(a) over the number of hours in the historical data set; and (c) multiply the capacity factor calculated in subsection 5(2)(b) by the asset's maximum capability. 		
5	(3)	 The ISO must calculate a uniform capacity value for an import asset as follows: (a) calculate the lesser of an asset's available capability or an asset's firm transmission over a transfer path observed in each hour in the historical data set, and dividing by an asset's firm transmission capacity over a transfer path; (b) calculate the availability factor by averaging each hourly availability factor in subsection 5(3)(a) over the number of hours in the historical data set; and (c) multiply the availability factor calculated in subsection 5(3)(b) by an asset's firm transmission capacity over a transfer path. 	

Section	Subsection	Proposed language	Stakeholder comments
5	(4)	 The ISO must calculate a uniform capacity value for a site with one or more onsite generating units or aggregated generating facilities that self-supplies capacity and is dispatched gross-to-grid as follows: (a) calculate a gross uniform capacity value using the availability factor of the asset on the self-supply site as observed in each of the hours in the historical data set; and (b) translate the gross uniform capacity value calculated in subsection 5(4)(a) to a net uniform capacity value using a linear regression of net-to-grid energy relative to the energy market dispatches issued to the asset on the self-supply site. 	The regression analysis to approximate an availability factor for self-supply assets is an improvement to the previous approach, but creates the potential of a disconnect between actual performance and deemed performance in a given hour. In effect, in many hours the regression will give a materially different result than the actual performance. This creates a 'sampling' risk that the availability assessment will be based on deemed performance that is not reflective of actual performance. It is unclear what benefit the regression provides relative to a real-time measure that assesses availability as metered volumes plus ancillary services volumes plus non-dispatched MW, as is used for other thermal assets in the availability factor approach.
			Notwithstanding a strong preference for the approach noted above, the methodology as described also does not reflect ancillary services volumes appropriately. AS volumes should be included as an independent variable akin to metered volumes and measured against gross availability. The current approach strongly biases net to grid sites against selling ancillary services relative to energy. This is an inefficient incentive and should be corrected by including AS volumes within the independent variable.
5	(5)	The ISO must, subject to subsection 7, calculate a uniform capacity value for a load asset providing firm consumption level as follows:	
		(a) identify the metered energy for the settlement intervals with the same hour ending as the hour the historical data set in the following days:	
		 the 15 most recent business days prior to the day with the hour in the historical data set if the hour falls on a business day; 	
		 the 10 most recent weekend days or holidays prior to the day with the hour in the historical data set if the hour falls on a weekend day or a holiday; or 	
		 (iii) the days the ISO specifies if, in the 45 day period prior to the day with the hour in the historical data set, there are fewer than 15 business days and 10 weekend days when days containing settlement intervals identified in subsection 5(5)(b) are excluded; 	
		(b) determine if any settlement intervals referred to in subsection 5(a) contain any of hours in the historical data set in accordance with subsection 2;	

Section	Subsection	Proposed language	Stakeholder comments
		(c) calculate the qualified baseline as the average of the metered energy for the settlement intervals referred to in subsection 5(5)(a) excluding the metered energy for the settlement intervals identified in subsection 5(5)(b); and	
		(d) minus an asset's declared firm consumption level from the qualified baseline calculated in subsection 5(5)(b).	
5	(6)	The ISO must calculate a uniform capacity value for a load asset providing guaranteed load reduction as the guaranteed load reduction declared in accordance with Section 206.1, <i>Qualification of Capacity</i> .	
5	(7)	The ISO must calculate a uniform capacity value for an asset with incremental capacity by multiplying the performance factor calculated in accordance with subsections 5(1) through 5(6), as applicable, by the sum of the assets maximum capability and the amount of incremental capacity.	
5	(8)	The ISO must calculate a uniform capacity value for an asset that undergoes a derate in its maximum capability in accordance with subsection 5, as applicable, substituting the maximum capability of the asset for its derated maximum capability .	
5	(9)	Where the uniform capacity value for at least 1 asset in an aggregated asset would otherwise be calculated in accordance with subsection 5(2), the ISO must calculate the uniform capacity value of all assets in the aggregated asset in accordance with subsection 5(2).	
		Methodologies for Hours not in the Historical Data Set	
6	(1)	The ISO must calculate a uniform capacity value for an asset in accordance with subsection 4, as follows:	
		(a) using a class average performance factor multiplied by maximum capability , where the class average performance factor is:	
		(i) for a load asset, 91% unless the ISO specifies a class average	

Section	Subsection	Proposed language	Stakeholder comments
		performance factor based on Alberta load data; or	
		(ii) for all other assets, as specified by the ISO ;	
		(b) if a class average performance factor is not available, using a performance factor based on engineering studies or equivalent engineering documents, or production or load estimates of the asset multiplied by maximum capability ; or	
		(c) if a class average performance factor and production or load estimates are not available, using a performance factor based on a review of similar assets in other jurisdictions multiplied by maximum capability .	
6	(2)	The ISO must calculate a uniform capacity value for an import asset where the hours in the historical data set are less than 250 as follows:	
		(a) using the value declared, in accordance with Section 206.1, <i>Qualification of Capacity</i> , for the import asset; and	
		 (b) derating the value declared , in accordance with Section 206.1, Qualification of Capacity, to reflect the hours in the 1250 hours determined in accordance with subsection 2 where the British Columbia transfer path, Montana transfer path or Saskatchewan transfer path, as applicable, was out of service with an available transfer capability of 0 MW. 	
		Test Requirement for Load Asset Providing a Firm Load Consumption	
7	(1)	A capacity market participant must, if there were no delivery hours in the obligation period prior to obligation period that the ISO is calculating a uniform capacity value for in accordance with subsection 6(5), demonstrate to the ISO the ability of a load asset providing a firm consumption level to reduce down to the firm consumption level declared by the capacity market participant and maintain the reduction for 1 hour.	
7	(2)	The ISO must, in the event that the load asset providing a firm consumption level fails the demonstration in subsection 7(1), adjust the uniform capacity value calculated in accordance with subsection 6(5) to reflect the observed load reduction.	
		Calculation of Ranges for a Uniform Capacity Value	

Section	Subsection	Proposed language	Stakeholder comments
8	(1)	The ISO must, subject to subsection 8(2), calculate 3 ranges for a uniform capacity value on an asset-specific basis as follows:	
		(a) the 5% range, as follows:	
		(i) calculate the upper limit, as follows:	
		 (A) remove 5% of the hours identified in the historical data set, in which the asset's availability factor or capacity factor, as applicable, was the lowest; 	
		 (B) average the asset's remaining availability factor or capacity factor, as applicable; and 	
		(C) multiply the average remaining availability factor or capacity factor, as applicable, by the asset's maximum capability; and	
		(ii) calculate the lower limit, as follows:	
		 (A) remove 5% of the hours identified in the historical data set, in which the asset's availability factor or capacity factor, as applicable, was the highest; 	
		 (B) average the asset's remaining availability factor or capacity factor, as applicable; and 	
		 (C) multiply the average remaining availability factor or capacity factor, as applicable, by the asset's maximum capability; 	
		(b) the +/- 2% range, as follows:	
		(i) calculate the upper limit, as follows:	
		(A) 2% multiplied by the maximum capability ;	
		(B) added to the uniform capacity value ; and	
		(ii) calculate the lower limit, as follows:	
		(A) 2% multiplied by the maximum capability ;	
		(B) subtracted from the uniform capacity value ; and	

Section	Subsection	Proposed language	Stakeholder comments
		(c) the +/- 1 MW range, as follows:	
		 (i) calculate the upper limit by adding 1 MW to the uniform capacity value; and 	
		 (ii) calculate the lower limit by subtracting 1 MW to the uniform capacity value. 	
8	(2)	The ISO must not calculate the uniform capacity value ranges in subsection 7(1) for:	
		(a) assets with new capacity or refurbished capacity;	
		(b) incremental capacity;	
		(c) a load asset; and	
		(d) an import asset.	
		Notification of Tightest Supply Cushion Hours and Preliminary Uniform Capacity Values	
9	(1)	The ISO must publish on the AESO website:	
		(a) the 1250 tightest supply cushion hours identified in accordance with subsection 2; and	
		(b) the class averages referred to in subsection 6(a).	
9	(2)	The ISO must provide the following information to a capacity market participant on an asset-specific basis:	
		(a) the hours in the historical data set, referred to in subsection 3;	
		(b) the uniform capacity value calculated in accordance with subsections 4, 5 and 6, as applicable;	
		(c) the methodology used to calculate the uniform capacity value ;	
		(d) the greatest of the upper limits calculated in accordance with subsections 8(1)(a)(i), 8(1)(b)(i) and 8(1)(c)(i) to a maximum of the asset's maximum	

Section	Subsection	Proposed language	Stakeholder comments
		capability; and	
		the lowest of the lower limits calculated in accordance with subsection 8(1)(a)(ii), 8(1)(b)(ii) and 8(1)(c)(ii) to a minimum of 1 MW.	
		Uniform Capacity Value Variances	
10	(1)	A capacity market participant may, within the timelines prescribed by the <i>Capacity Market Auction</i> Guidelines and in the manner specified by the ISO , submit to the ISO :	
		 (a) a request to vary the uniform capacity value of an asset for a reason set out in subsection 10(2); and 	
		(b) detailed information in support of the request, including, as applicable:	
		(i) metering or Energy Trading System data;	
		 (ii) information regarding a planned or completed physical change to the asset demonstrating that the maximum capability will increase or decrease by at least 1 MW; 	
		 (iii) the characteristics, selection criteria and rationale for comparable assets, for class average and jurisdictional assessment requests, including: 	
		(A) maximum capability; and	
		(B) available production and load data, and	
		 (iv) engineering studies or equivalent engineering documents, or production or load estimates which are specific to the asset at its location, completed by a qualified professional engineer. 	
10	(2)	The ISO may accept a request made in accordance with subsection 10(1) on the following:	
		 (a) the metering or Energy Trading System data during the historical data set evaluated by the ISO did not accurately reflect the available capability of the asset; 	
		(b) the asset has or will undergo a physical change before the start of the obligation period that will increase or decrease the maximum capability of	

Section	Subsection	Proposed language	Stakeholder comments
		the asset by at least 1 MW; or	
		 (c) where the class average data, production or load estimates, or jurisdictional assessment used in calculating the uniform capacity value, in accordance with subsections 6(1)(a)(ii), 6(1)(b) or 6(1)(c), does not create a comparable representation of the asset's future performance. 	
10	(3)	The ISO must notify the capacity market participant of its decision.	
		Declaration and Assignment of Final Uniform Capacity Value	
11	(1)	A capacity market participant must, in accordance with the timelines specified in the <i>Capacity Market Auction Guidelines</i> declare to the ISO , as applicable, the uniform capacity value within the range identified in subsection 8(1) that it will use for the auction.	
11	(2)	The ISO must, in accordance with the timelines specified in the <i>Capacity Market Auction Guidelines</i> , notify the capacity market participant of its assigned uniform capacity value .	

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Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 206.3, <i>Uniform Capacity Value Determination</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 206.3, <i>Uniform Capacity Value Determination</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 206.3, <i>Uniform Capacity Value Determination</i> and whether, in your view, the proposed new ISO Rule – Section 206.3, <i>Uniform Capacity Value Determination</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 206.3, <i>Uniform Capacity Value Determination</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 206.3, <i>Uniform Capacity Value Determination</i>	
6	whether you agree with the proposed new ISO Rule – Section 206.3, <i>Uniform Capacity Value Determination</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	

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Item #		Stakeholder comments
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 206.3, <i>Uniform Capacity Value</i> <i>Determination</i>	
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 206.3, Uniform Capacity Value Determination.



Proposed Amended ISO rule – Section 206.4, Offers and Bids for Capacity

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TCE)			Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Bid Content	
7	(1)	A capacity market participant with a capacity commitment may submit a bid in a rebalancing auction:	
		 (a) for a quantity in MW that is equal to or greater than 1 MW and less than or equal to the capacity commitment; 	
		(b) that is priced at a price in \$/kW-year to the nearest cent per kW-year which is greater than or equal to \$0/kW-year; and	
		(c) less than or equal to the maximum price established by the final demand curve.	
7	(2)	 A capacity market participant with a capacity commitment must submit a bid, priced at \$0.01/kW-year above the maximum price established by the demand curve, in accordance with the following: (a) if the asset's assigned uniform capacity value for the final rebalancing auction is lower than its capacity commitment, the capacity market participant must submit a bid for the difference between the capacity 	Regarding part (a), TCE submits that there should be a dead band, within which the market participant has the discretion to choose to submit a bid or not. If the uniform capacity value changes by a small amount, the market participant shouldn't be forced to sell out of the difference. This dead band could be the same size as the uniform capacity value range, <i>i.e.</i> 1MW or 2%.
		commitment and the assigned uniform capacity value;	

Section	Subsection	Proposed language	Stakeholder comments
		(b) if the ISO determines that the capacity market participant has missed a critical milestone subject to Section 206.5 of the ISO rules, Forward Period Milestone Requirements, the capacity market participant must submit a bi equal to its entire capacity commitment in the applicable rebalancing auction; or	
		(c) if the ISO determines for a load asset that the capacity market participant has not met the milestone set out in Section 206.5 of the ISO rules, Forward Period Milestone Requirements, then that capacity market participant mus submit a bid for the difference between the capacity commitment and the assigned uniform capacity value in the final rebalancing auction.	

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Please provide your comments on this rule's appendices:

Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 206.4, Offers and Bids for Capacity relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 206.4, Offers and Bids for Capacity should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of amended ISO rule – <i>Section 206.4, Offers and</i> <i>Bids for Capacity</i> and whether, in your view, <i>Section 206.4,</i> <i>Offers and Bids for Capacity</i> meets the objective or purpose	
4	how, in your view, amended ISO rule – <i>Section 206.4,</i> <i>Offers and Bids for Capacity</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 206.4, Offers and Bids for Capacity	
6	whether you agree with amended ISO rule – Section 206.4, Offers and Bids for Capacity taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to amended ISO rule – Section 206.4, Offers and Bids for Capacity	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 206.4, Offers and Bids for Capacity.



Proposed New ISO rule – Section 206.5, Forward Period Milestone Assessment

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (To	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 206.5 applies to: (a) a capacity market participant; and (b) the ISO.	
		Requirements Milestone Assessment	
2	(1)	The ISO must develop and publish on the AESO website, the critical milestones and associated target completion dates applicable to respective asset classes identified by the ISO .	
2	(2)	The ISO must prior to each rebalancing auction and in accordance with the timelines prescribed in the <i>Capacity Market Auction Guidelines</i> , determine if an asset with new capacity , incremental capacity, or refurbished capacity that is subject to a capacity commitment has achieved the critical milestones prior to the target completion date in advance of the rebalancing auction , as applicable.	The timelines should not be noted in guidelines, but rather should be included directly in this rule. This provides investor certainty as the timelines cannot then be easily changed by the AESO.
2	(3)	The ISO must, where it has determined under subsection 2(2) that an asset with new	

Section	Subsection	Proposed language	Stakeholder comments
		capacity has not achieved one or more critical milestones that have target completion dates prior to the date of the applicable rebalancing auction , reasonably determine whether or not such asset will be able to achieve such critical milestone(s):	
		 (a) in the case of the first rebalancing auction, within 8 months after the applicable target completion date(s); and 	
		(b) in the case of the second rebalancing auction , and in the case of the singular rebalancing auction within the transitional period, within 5 months after the applicable target completion date(s).	
		Unique Asset Classes	
3	(1)	The ISO may, if it received a project plan for an asset with new capacity pursuant to Section 206.1 of the ISO rules , <i>Qualification of Capacity</i> that is not included in the asset classes set out in subsection 2(1), develop a set of proposed critical milestones and associated target completion dates for such asset.	
3	(2)	The ISO must notify capacity market participants of its proposed critical milestones and associated target completion dates under subsection 3(1).	
3	(3)	The ISO may add an asset class with the critical milestones and target completion dates as determined in subsection 3(1) to the list published in accordance with subsection 2(1).	
3	(4)	The ISO must determine if an asset with new capacity has not achieved one or more critical milestones that have target completion dates prior to the date of the applicable rebalancing auction.	
		Outcome of Milestone Assessment	
4		A capacity market participant must, where the ISO has determined under subsection 2 that an asset will not achieve one or more critical milestones, submit a bid in respect of the new capacity , incremental capacity, or refurbished capacity of such asset in accordance with Section 206.4 of the ISO rules , <i>Offers and Bids for the Capacity Market</i> .	

Section	Subsection	Proposed language	Stakeholder comments
		Milestone Assessment for Load Assets	
5	(1)	The ISO must, prior to the last rebalancing auction for each load asset with new capacity that is subject to a capacity commitment , make a determination of whether the asset will be able to provide a minimum 75% of the capacity commitment based on the supporting evidence submitted pursuant to subsection 5(2).	
5	(2)	A capacity market participant must submit evidence of sufficient contracted loads to meet the milestone in subsection 5(1) and any other information that the ISO requires.	
5	(3)	The ISO must notify the capacity market participant of its determination under subsection 5(1).	
5	(4)	A capacity market participant must, where the ISO has determined under subsection 5(1) that the asset will not be able to achieve the milestone by the last rebalancing auction , submit a bid in respect of the new capacity of such asset in accordance with Section 206.4 of the ISO rules , <i>Offers and Bids for the Capacity Market</i> .	

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Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 206.5, <i>Forward Period Milestone Assessment</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 206.5, <i>Forward Period Milestone Assessment</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 206.5, <i>Forward Period Milestone Assessment</i> and whether, in your view, the proposed new ISO Rule – Section 206.5, <i>Forward</i> <i>Period Milestone Assessment</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 206.5, <i>Forward Period Milestone Assessment</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 206.5, <i>Forward Period Milestone Assessment</i>	
6	whether you agree with the proposed new ISO Rule – Section 206.5, <i>Forward Period Milestone Assessment</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 206.5, <i>Forward Period Milestone</i> <i>Assessment</i>	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 206.5, Forward Period Milestone Assessment.



Proposed New ISO rule – Section 206.7, Capacity Market Mitigation

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (T	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		 Section 206.7 applies to: (a) a person who has offer control over capacity from an asset that has been assigned a uniform capacity value for a base auction; and (b) the ISO. 	
		Market Power Screen	
2	(1)	The ISO must, before a base auction and within the timelines prescribed by the <i>Capacity Market Auction Guidelines</i> , identify those persons who have market power by conducting the following steps:	
		(a) determine the price corresponding to the inflection point on the final demand curve for the base auction ;	
		(b) determine the slope above the inflection point of the final demand curve for the base auction using the following formula:	
		$m = \frac{y_{cap} - y_{ip}}{x_{min} - x_{ip}}$	

Section	Subsection	Proposed language	Stakeholder comments
		Where	
		<i>m</i> means the slope above the inflection point of the final demand curve for the base auction ;	
		<i>y_{cap}</i> means the price cap;	
		<i>x_{min}</i> means the minimum procurement volume;	
		y_{ip} means the price corresponding to the inflection point on the final demand curve for the base auction , determined in subsection 2(1)(a); and	
		x_{ip} means the capacity volume of the inflection point.	
		(c) determine the slope below the inflection point of the final demand curve for the base auction using the following formula:	
		$n = \frac{y_{ip} - y_{foot}}{x_{ip} - x_{foot}}$	
		Where	
		<i>n</i> means the slope below the inflection point of the final demand curve for the base auction ;	
		y_{ip} means the price corresponding to the inflection point on the final demand curve for the base auction , determined in subsection 2(1)(a);	
		x_{ip} means the capacity volume of the inflection point;	
		y _{foot} means the price at the foot of the final demand curve for the base auction ; and	
		x_{foot} means the volume of capacity at the foot of the final demand curve.	
		(d) calculate the amount of capacity that, if withheld, will raise the clearing price from y_{ip} to 1.1 times y_{ip} using the following formula:	
		$w_1 = 0.1/m X y_{ip}$	
		Where:	
		w_1 means the amount of capacity in MW, if withheld, will raise the clearing price from y_{ip} to 1.1 y_{ip} ;	

Section	Subsection	Proposed language	Stakeholder comments
		y_{ip} means the price corresponding to the inflection point on the final demand curve for the base auction , determined in subsection 2(1)(a); and	
		m means the slope above the inflection point of the final demand curve established for the base auction , calculated in accordance with subsection $2(1)(a)(ii)$.	
		(e) calculate, the amount of capacity that, if withheld, will raise the clearing price from $y_{ip}/1.1$ to y_{ip} using the formula:	
		$w_2 = 0.1/1.1 n X y_{ip}$	
		Where:	
		w_2 means the amount of capacity in MW, if withheld, will raise the clearing price from $y_{ip}/1.1$ to y_{ip} ;	
		y_{ip} means the price corresponding to the inflection point on the final demand curve for the base auction , determined in subsection 2(1)(a); and	
		<i>n</i> means the slope below the inflection point of the final demand curve established for the base auction .	
		(f) calculate the average of the capacity referred to in subsections 2(1)(c) and 2(1)(d) using the formula:	
		$w = (w_1 + w_2)/2 = (0.1/2m + 0.1/2.2n) \times y_{ip}$	
		Where:	
		<i>w</i> means the average of the capacity in MW referred to in subsections 2(1)(d) and 2(1)(e) and is the minimum amount of capacity in MW to be withheld above and below the inflection point to effect a 10% change in the clearing price;	
		w_1 means the value in MW calculated in subsection 2(1)(a);	
		w_2 means the value in MW calculated in subsection 2(1)(b);	
		m means the slope above the inflection point of the final demand curve established for the base auction , calculated in accordance with subsection $2(1)(a)(ii)$;	
		n means the slope of the final demand curve below the inflection point; and	
		y_{ip} means the price corresponding to the inflection point on the final demand curve for the	

Section	Subsection	Proposed language	Stakeholder comments
		base auction, determined in subsection 2(1)(a);	
		(g) calculate the minimum amount of capacity that a person must have under its offer control to withhold the amount of capacity calculated in subsection 2(1)(f) from the capacity market without sustaining any financial loss, using the following steps:	
		(i) determine the amount of capacity under the offer control of a person that, if the amount calculated in 2(1)(f) is economically withheld from the capacity market, that person would earn revenue from the capacity market that is no less than the amount the person would earn absent of the withholding, using the formula:	
		$1.1 \times p \times (q - w) \ge p \times q$	
		Where:	
		<i>q</i> means the amount of capacity , in MW referred to in subsection 2(1)(g), held by a person and its associates, as associate is described in the <i>Fair, Efficient, and Open Competition Regulation</i> ;	
		p means the market clearing price absent of the withholding; and	
		w means the amount of capacity in MW referred to in subsection 2(1)(f);	
		(ii) determine the minimum amount of capacity referred to in subsection 2(1)(g), using the formula:	
		$q = 11 \times \{(0.1/2m + 0.1/2.2n) \times y_{ip}\}$	
		Where:	
		<i>q</i> means the minimum amount of capacity , in MW referred to in subsection 2(1)(g), held by a person and its associates, as associate is described in the <i>Fair, Efficient, and Open Competition Regulation</i> ;	
		m means the slope above the inflection point of the final demand curve established for the base auction in subsection 2(1)(b);	
		n means the slope of the final demand curve below the inflection point; and	
		y_{ip} means the price corresponding to the inflection point on the final demand curve established for the base auction .	

Section	Subsection	Proposed language	Stakeholder comments
2	(2)	The ISO must identify those persons that have offer control over an amount of capacity that is greater than or equal to the amount of capacity calculated in subsection 2(1)(g), where capacity is measured by uniform capacity values , excluding such capacity that is new capacity or incremental capacity.	
2	(3)	 The ISO must, in accordance with the timelines established in the <i>Capacity Market Auction Guidelines</i>: (a) publish the minimum amount of capacity identified in subsection 2(1)(g); and (b) notify a person that has been identified in subsection 2(2) as having market power. 	The timelines should not be noted in guidelines, but rather should be included directly in this rule. This provides investor certainty as the timelines cannot then be easily changed by the AESO.
		Offer price cap	
3		Subject to subsection 4, a person that has received a notification in accordance with subsection 2(3)(b) that they have market power must, with respect to an asset under the offer control of such person , except for new capacity , refurbished capacity, or incremental capacity, submit an offer in a base auction at or below an offer price cap as follows: (a) where the price cap for the base auction is set at a multiple of net-CONE in accordance with Section 207.3 of the ISO rules , <i>Shape of Demand Curve</i> , the offer price cap is an amount that is 80% of the net-CONE; or	
		(b) where the price cap for the base auction is set at a multiple of gross-CONE in accordance with Section 207.3 of the ISO rules , <i>Shape of Demand Curve</i> the offer price cap is an amount that is 80% of the ratio between the multiple of gross-CONE and the multiple of net-CONE specified in Section 207.3 of the ISO rules , <i>Shape of Demand Curve</i> multiplied by gross-CONE.	
		Asset-specific offer price cap	
4	(1)	A person that has received a notification in accordance with subsection 2(3)(b) as having market power may submit to the ISO , in the form and manner the ISO specifies, a request for an asset-specific offer price cap to offer capacity from an asset under the offer control	

Section	Subsection	Proposed language	Stakeholder comments
		of such person , except for new capacity , refurbished capacity or incremental capacity, above the offer price cap established in subsection 4.	
4	(2)	A person requesting an asset-specific price cap, in accordance with subsection 4(1), must submit to the ISO the following:	
		(a) the asset to which the asset-specific price cap request applies;	
		(b) avoidable costs of the asset for the obligation period ;	
		 (c) any costs necessary for the ISO to calculate the energy and ancillary services offset in accordance with subsection 4(4)(a); and 	
		 (d) an attestation from a corporate officer of the legal owner that has offer control over the asset that the information provided pursuant to subsections 4(2)(b) and 4(2)(c) are complete and accurate. 	
4	(3)	The ISO may, with respect to the avoidable costs submitted pursuant to subsection 4(2)(b), exclude costs items that are unreasonable.	
4	(4)	The ISO must, when a request is made for an asset-specific price cap under subsection $4(1)(a)$:	
		 (a) calculate the energy and ancillary services offset, as applicable, using the methodology set out in Section 206.11 of the ISO rules, <i>Energy and Ancillary</i> <i>Services Offset for Assets</i> for the asset to which the request for the asset- specific offer price cap applies; and 	
		 (b) subtract the energy and ancillary services offset referred to in subsection 4(4)(a) from the avoidable costs submitted pursuant to subsection 4(2)(b) that have not been excluded by the ISO pursuant to subsection 4(3). 	
4	(5)	The ISO must, if it determines the amount calculated in subsection $4(4)(b)$ is greater than the offer price cap referred to in subsection 3, provide an asset-specific price cap equal to the amount determined in subsection $4(4)(b)$ to the person that submitted the asset-specific price cap request under subsection $4(1)(a)$.	

Section	Subsection	Proposed language	Stakeholder comments
4	(6)	A person must, if the person has been provided an asset-specific offer price cap in accordance with subsection 4(5), submit an offer in the base auction at a price equal to or below the asset-specific offer price cap for the capacity from an asset referred to in subsection 4(2)(a).	
4	(7)	A person must, if the person does not receive an asset-specific price cap pursuant to subsection $4(5)$, submit an offer in the base auction at or below the offer price cap established in subsection 3 for the capacity from an asset referred to in subsection $4(2)(a)$.	

Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 206.7, <i>Capacity Market Mitigation</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 206.7, <i>Capacity Market Mitigation</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 206.7, <i>Capacity Market Mitigation</i> and whether, in your view, the proposed new ISO Rule – Section 206.7, <i>Capacity Market</i> <i>Mitigation</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 206.7, <i>Capacity Market Mitigation</i> affects the performance of the capacity market and the electricity market	

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Item #		Stakeholder comments
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 206.7, <i>Capacity Market Mitigation</i>	
6	whether you agree with the proposed new ISO Rule – Section 206.7, <i>Capacity Market Mitigation</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 206.7, <i>Capacity Market Mitigation</i>	
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 206.7, Capacity Market Mitigation.



Proposed New ISO rule – 206.8, Obligation Period Performance Assessments

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (T	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section S	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 206.8 applies to: (a) the ISO .	
		Requirements Availability Hours during an Obligation Period	
2	(1)	The ISO must select 250 hours from each obligation period to assess availability as follows:	
		(a) calculate the supply cushion for every hour in an obligation period ;	
		(b) rank all hours based on supply cushion in ascending order;	
		(c) within the order referred to in subsection 2(1)(b), rank hours with equivalent supply cushion in ascending order from the most recent to the most distant of time; and	
		 (d) select the first 250 hours after ranking in accordance with subsection 2(1)(b) and 2(1)(c). 	
2	(2)	The ISO must, in order to establish the availability hours for an asset, remove the following	TCE submits that the AESO should remove the market suspension hours (all hours that would be removed for all assets) prior to selecting the 250 uniform capacity value hours in

Section	Subsection	Proposed language	Stakeholder comments
		hours from the 250 hours identified in subsection 2(1) on an asset-specific basis:	order to maintain as large a data set as possible for the market.
		(a) hours in which there was a state of markets suspension; and	
		(b) hours that the ISO determines that the asset is affected by an event of limited markets operations, war, invasion, armed conflict, blockade, act of public enemy, riot, revolution, insurrection, act of terrorism, sabotage, act of vandalism, fire that does not originate at the asset, lightning, explosion, earthquake or flooding.	
		Delivery Hours for a Settlement Period	
3	(1)	The ISO must select hours to assess delivery for a settlement period by identifying any hours or portions thereof in which a supply shortfall has occurred and the ISO has declared an energy emergency event in accordance with Section 305.1 of the ISO rules , <i>Energy Emergency Alerts</i> .	
3	(2)	The ISO must, in order to establish the delivery hours for an asset, remove the following hours from the hours selected in subsection 3(1) on an asset-specific basis:	
		(a) hours in which there was a state of markets suspension; and	
		(b) hours that the ISO determines that the asset was affected by an event of limited markets operations, war, invasion, armed conflict, blockade, act of public enemy, riot, revolution, insurrection, act of terrorism, sabotage, act of vandalism, fire that does not originate at the asset, lightning, explosion, earthquake or flooding.	
		Look-back Baseline for a Load Asset Providing a Firm Consumption Level	
4		The ISO must, for each of the availability hours established in subsection 2(2), calculate the look-back baseline as a volume in MW for a load asset as follows:	
		 (a) identify the metered energy for the settlement intervals with the same hour ending as the availability hour in the days which must be either: 	
		(i) the 15 most recent business days prior to the day with the availability	

Section	Subsection	Proposed language	Stakeholder comments
		hour if the availability hour falls on a business day ;	
		 (ii) the 10 most recent weekend days or holidays prior to the day with the availability hour if the availability hour falls on a weekend day or a holiday; or 	
		 (iii) the days the ISO specifies if, in the 45 day period prior to the day with the availability hour, there are fewer than 15 business days and 10 weekend days when days containing settlement intervals identified in subsection 4(b) are excluded; 	
		(b) determine if any settlement intervals referred to in subsection 4(a) contain:	
		(i) any of the availability hours established in subsection 2(2); or	
		(ii) any of the delivery hours established in subsection 3(2); and	
		(c) calculate the average of the metered energy for the settlement intervals referred to in subsection 4(a) excluding the metered energy for the settlement intervals identified in subsection 4(b).	
		Delivery Baseline for a Load Asset Providing Guaranteed Load Reduction	
5	(1)	The ISO must, for each of the delivery hours established in subsection 3(2), calculate the standard baseline in MW as follows:	
		(a) identify the days for the calculation which must be either:	
		 (i) the 10 most recent business days prior to the day with the delivery hour if the delivery hour falls on a business day; 	
		 (ii) the 5 most recent weekend days or holidays prior to the day with the delivery hour if the delivery hour falls on a weekend day or a holiday; or 	
		 (iii) the days the ISO specifies if, in the 35 day period prior to the day with the delivery hour, there are fewer than 10 business days and 5 weekend days when days identified in subsection 5(1)(b) are excluded or replaced; 	
		 (b) exclude or replace any of the days identified in subsection 5(1)(a) if the following occurred: 	

Section	Subsection	Proposed language	Stakeholder comments
		(i) the asset received dispatch for an amount greater than 0 MW;	
		(ii) delivery was assessed in accordance with subsection 9(1);	
		 (iii) the load asset was subject to a delayed forced outage or automatic forced outage; 	
		(iv) the load asset was subject to a planned outage ; or	
		(v) the load asset was tripped for the provision of load shed service ;	
		(c) for each of the days identified in accordance with subsections 5(1)(a) excluding or replacing the days as indicated in subsection 5(1)(b), identify the metered energy for the settlement interval with the same hour ending as the delivery hour; and	
		(d) calculate the average of the metered energy for the settlement intervals referred to in subsection 5(1)(c).	
5	(2)	The ISO must, for each delivery hour established in subsection 3(2), calculate an adjustment factor as follows:	
		adjustment factor = delivery consumption \div historical consumption _{3W}	
		where:	
		delivery consumption means the average consumption in MWh during the 3 hour window occurring 1 hour before the delivery hour;	
		historical consumption means the average consumption in MWh during all of the 3W hours on the days identified in accordance with subsections 5(1)(a) and excluding or replacing the days as indicated in subsection 5(1)(b); and	
		3W means the 3 hour window occurring 1 hour before the same hour ending as the delivery hour.	
5	(3)	The ISO must establish the adjustment factor as:	
		 (a) 1.2 if the adjustment factor calculated in accordance with subsection 5(2) is greater than 1.2; 	
Section	Subsection	Proposed language	Stakeholder comments
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		(b) 0.8 if the adjustment factor calculated in accordance with subsection 5(2) is less than 0.8; or	
		(c) the value calculated in accordance with subsection 5(2) in all other cases.	
5	(4)	The ISO must calculate the delivery baseline in MW as follows:	
		delivery baseline = standard day baseline x adjustment factor	
		where:	
		the standard day baseline in MW is calculated in accordance with subsection 5(1); and	
		the adjustment factor is the value established in accordance with subsection 5(3).	
		Asset-specific Penalty Rate for Availability Assessment	
6	(1)	The ISO must calculate the asset-specific penalty rate in \$/MWh to be applied during the availability assessment, as follows:	
		asset-specific penalty rate = $\frac{\text{capacity payment x 12}}{\text{capacity commitment x hours}}$	
		where:	
		capacity payment in \$/month is calculated for the asset in accordance with Section 103.10 of the ISO rules , <i>Capacity Payment Calculation</i> ;	
		capacity commitment is in MW; and	
		hours is the number of availability hours established in accordance with subsection 2(2).	
6	(2)	The ISO must establish the asset-specific penalty rate in \$/MWh as:	
		 \$133/MWh, if the rate calculated in accordance with subsection 6(1) is less than \$133/MWh and the clearing price of the base auction was greater than \$33/kW-year; 	

Section	Subsection	Proposed language	Stakeholder comments
		 (b) \$0/MWh, if the rate calculated in accordance with subsection 6(1) is less than \$0/MWh and the clearing price of the base auction was less than or equal to \$33/kW-year; or 	
		(c) the rate calculated in accordance with subsection 6(1) in all other cases.	
		Availability Assessment	
7	(1)	 The ISO must, as soon as practicable after an obligation period, identify the asset's availability volume in MWh during each of the availability hours identified in subsection 2 as follows: (a) for an asset with a uniform capacity value based on a capacity factor, availability volume is based on the sum of the following for each settlement interval, as applicable: (i) metered energy; (ii) in the case of an asset that was subject to a dispatch for spinning reserve or supplemental reserve, the volume that was provided according to Section 205.5 of the ISO rules, Spinning Reserve Technical Requirements and Performance Standards or Section 205.6 of the ISO rules, Supplemental Reserve Technical Requirements and Performance Standards; (iii) in the case of an asset that provides regulating reserve, the volume based on the regulating reserve provided pursuant to Section 205.4 of the ISO rules, Regulating Reserve Technical Requirements and Performance Standards that is not captured as metered energy; and (iv) in the case of an asset that was impacted by a transmission market constraint, the volume that was curtailed; (b) for an asset with a uniform capacity value based on availability factor, availability volume is equal to: (i) the available capability submitted into the Energy Trading System where the offer the regulating provide and the regulating for dispatch for the test provide of the settlement constraint for provides and set of the formation of the settlement constraint is encored as a set that was available for dispatch for that settlement constraint is encored as a set of an asset that was available to dispatch for that settlement constraint is encored as a set of an asset that was a standards that is not capture as metered energy; and for an asset with a uniform capacity value based on availability factor, availability volume is equal to: 	The regression analysis to approximate an availability factor for self-supply assets is an improvement to the previous approach, but creates the potential of a disconnect between actual performance and deemed performance in a given hour. In effect, in many hours the regression will give a materially different result than the actual performance. This creates a 'sampling' risk that the availability assessment will be based on deemed performance that is not reflective of actual performance. It is unclear what benefit the regression provides relative to a real-time measure that assess availability as metered volumes plus ancillary services volumes plus non-dispatched MW, as is used for other thermal assets in the availability factor approach. Notwithstanding a strong preference for the approach noted above, the methodology as described also does not reflect ancillary services volumes appropriately. AS volumes should be included as an independent variable akin to metered volumes and measured against gross availability. The current approach strongly biases net to grid sites against selling ancillary services relative to energy. This is an inefficient incentive and should be corrected by including AS volumes within the independent variable.

Section	Subsection	Proposed language	Stakeholder comments
		interval; and	
		 (ii) if applicable, any operating reserves provided in that settlement interval pursuant to a dispatch; or 	
		 (ii) 0 MW when there was no electric energy from the asset available for dispatch for that settlement interval; 	
		 (c) for a load asset that provides a guaranteed load reduction, availability volume is the available capability for that settlement interval; 	
		 (d) for a load asset that provides a firm consumption level, availability volume is based on the difference between the look-back baseline calculated in accordance with subsection 3 and the firm consumption level for that settlement interval; 	
		 (e) for self-supply assets that are dispatched gross to grid, availability volume is based on the linear regression approach set out in Section 206.3 of the ISO rules, Determination of Uniform Capacity Value; and 	
		(f) for an import asset, availability volume is the available capability for that settlement interval capped at the volume of firm transmission established in accordance with Section 206.1 of the ISO Rules, Qualification of Capacity.	
7	(2)	The ISO must calculate the assessment volume in MWh for an asset as follows:	
		assessment volume = \sum availability volume - capacity commitment x hours	
		where:	
		availability volume in MWh is the value identified for each of the availability hours in accordance with subsection 7(1); and	
		hours is the number of availability hours established in accordance with subsection 2(2).	
		Under-availability Adjustment	
8	(1)	The ISO must, when the assessment volume calculated in accordance with subsection 7(2) is negative, calculate the under-availability adjustment in dollars for an asset as	

Section	Subsection	Proposed language	Stakeholder comments
		follows: <i>under-availability adjustment = adjustment rate x assessment volume</i> where: adjustment rate in \$/MWh is calculated in accordance with subsection 8(2); and assessment volume in MWh is calculated in accordance with subsection 7(2).	
8	(2)	The ISO must calculate the adjustment rate in \$/MWh, for each asset, as follows: <i>adjustment rate</i> = 40% x 1.3 x asset-specific penalty rate where: asset-specific penalty rate in \$/MWh is determined in accordance with subsection 6(2).	TCE submits that the overall penalty and incentive framework sends poor market signals. In the context of the current framework, which is not ideal, more value should be placed on the availability component of the equation. Availability on average is far more within the control of a generator than availability in a very small number of random hours (EEA events). The current framework has the poor incentive of penalizing bad luck very strongly (EEA events) and penalizing systematically poor availability very weakly (availability hours).
8	(3)	 The ISO must, for each asset, limit the under-availability adjustment amount for an obligation period to: (a) an amount in dollars equal to the annual cap determined in accordance with subsection 14(2) minus the sum of all under-delivery adjustments determined in accordance with subsection 12(3) for the obligation period, if the sum of the under-availability adjustment determined in accordance with subsection 8(1) and under-delivery adjustments for the obligation period is greater than the annual cap; or (b) the amount in dollars calculated in accordance with subsection 8(1), in all other cases. 	
		Over-availability Adjustment	
9	(1)	The ISO must, when the assessment volume calculated in accordance with subsection 7(2) is positive, calculate the over-availability adjustment in dollars for an asset as follows: <i>over-availability adjustment = adjustment rate x assessment volume</i>	

Section	Subsection	Proposed language	Stakeholder comments
		where:	
		adjustment rate is the value calculated in accordance with subsection 9(2); and	
		assessment volume in MWh is calculated in accordance with subsection 7(2).	
9	(2)	The ISO must calculate the adjustment rate in \$/MWh, which is the same value for all assets, as follows:	TCE submits that all assets should be eligible for incentive payments, not just those with a capacity commitment.
		$adjustment \ rate = \frac{\sum under - availability \ adjustments}{\sum positive \ assessment \ volumes}$	
		where:	
		under-availability adjustments in dollars is determined in accordance with 8(3) for all assets subject to a capacity commitment in an obligation period ; and	
		positive assessment volumes in MWh is the positive values calculated in accordance with subsection 7(2) for all assets subject to a capacity commitment in an obligation period .	
9	(3)	The ISO must, for each asset, limit the over-availability adjustment amount for an obligation period to an amount in dollars equal to the annual cap determined in accordance with subsection 15 minus the sum of all over-delivery adjustments determined in accordance with subsection 13(3) for the obligation period .	TCE submits that there should not be a cap on incentive payments and, accordingly, that this section is not required.
		Asset-specific Penalty Rate for Delivery Assessments	
10	(1)	The ISO must calculate the asset-specific penalty rate in \$/MWh for an asset, to be applied during the delivery assessments, as follows:	
		asset-specific penalty rate = $\frac{\text{capacity payment x 12}}{\text{capacity commitment x hours}}$	
		where:	
		capacity payment in \$/month is calculated for the asset in accordance with Section 103.10 of the ISO rules , <i>Capacity Payment Calculation</i> ; and	
		hours is the greater of 20 or the forecasted number of energy supply shortfall hours for the obligation period as described in the <i>Capacity Market Auction</i>	
lss	ued for Stakehold	er Comment: September 7, 2018 Page 113 of 168	Public

Section	Subsection	Proposed language	Stakeholder comments
		Guidelines published for the last rebalancing auction of the obligation period.	
10	(2)	The ISO must establish the asset-specific penalty rate in \$/MWh as:	
		 \$1,667/MWh, if the rate calculated in accordance with subsection 10(1) is less than \$1,667/MWh and the clearing price of the base auction was greater than \$33/kW-year; 	
		 \$0/MWh, if the rate calculated in accordance with subsection 10(1) is less than \$0/MWh and the clearing price of the base auction was less than or equal to \$33/kW-year or 	
		(b) the rate calculated in accordance with subsection 10(1) in all other cases.	
		Delivery Assessments	
11	(1)	The ISO must, as soon as practicable in the settlement period following each delivery hour established in subsection 3(2), identify an asset's delivery volume in MWh during each of the delivery hours as follows:	
		(a) for an asset with a uniform capacity value based on a capacity factor or availability factor, the delivery volume is based on the sum of the following for each settlement interval, as applicable:	
		(i) metered energy;	
		 (ii) in the case of an asset that was subject to a dispatch for spinning reserve or supplemental reserve, the volume that was provided according to Section 205.5 of the ISO rules, Spinning Reserve Technical Requirements and Performance Standards or Section 205.6 of the ISO rules, Supplemental Reserve Technical Requirements and Performance Standards; and 	
		(iii) in the case of an asset that provided regulating reserve, the volume based on the regulating reserve provided pursuant to Section 205.4 of the ISO rules, Regulating Reserve Technical Requirements and Performance Standards that is not captured as metered energy;	
		(b) for a load asset that provides a guaranteed load reduction , the delivery	

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Section	Subsection	Proposed language	Stakeholder comments
		volume is equal to the delivery baseline calculated in accordance with subsection 5(4) minus the following for each settlement interval , as applicable:	
		(i) metered energy; and	
		 (ii) in the case of an asset that provided spinning reserve or supplemental reserve, the volume that was dispatched. 	
		(c) for a load asset that provides a firm consumption level, the delivery volume is equal to the qualified baseline as calculated in accordance with Section 206.3 of the ISO rules, <i>Determination of Uniform Capacity Value</i> minus the following for each settlement interval, as applicable:	
		(i) metered energy; and	
		 (ii) in the case of an asset that provided spinning reserve or supplemental reserve, the volume that was dispatched. 	
		 (d) for self-supply configurations with excess generation, the delivery volume is based on metered energy; and 	
		(e) for an import asset, the delivery volume is:	
		(i) the volume in a validated e-tag ; or	
		 (ii) in the case of an import asset where the offer price is greater than or equal to \$0.01 per MWh during the first two delivery hours that are subject to the limits referenced in Section 303.2 of the ISO rules, Available Transfer Capability, the volume in the offer. 	
11	(2)	The ISO must adjust the delivery volumes identified in subsection 11(1) for each delivery hour to include any delivery volume adjustments due to any substitutions which was approved in accordance with Section 206.9 of the ISO rules , <i>Asset Substitution</i> , and as follows:	
		 (a) in the case of an asset that was impacted by a transmission market constraint, the volume that was curtailed will be added to the delivery volume identified in subsection 11(1); 	
		(b) in the case of a load asset that was armed for the provision of load shed	

Section	Subsection	Proposed language	Stakeholder comments
		service , the volume that was armed will be added to the delivery volume identified in subsection 11(1); or	
		 (c) in all other cases, no adjustments to the delivery volume identified in subsection 11(1). 	
11	(3)	The ISO must calculate the assessment volume in MWh for an asset during each delivery hour established in subsection 3(2) as follows:	
		assessment volume = delivery volume – (capacity commitment volume x balancing ratio)	
		where:	
		delivery volume in MWh is the value in identified in subsection 11(2);	
		capacity commitment volume in MWh means the quantity of electric energy expected to be delivered from an asset based on its capacity commitment during the supply shortfall hour or portion thereof; and	
		balancing ratio is the value calculated in subsection 11(5).	
11	(4)	The ISO must establish the assessment volume in MWh for an asset for each delivery hour established in subsection 3(2) as follows:	
		 (a) for an asset with a uniform capacity value based on a capacity factor or availability factor, the assessment volume is calculated in accordance with subsection 11(3) and subject to any reallocation volumes which were approved in accordance with Section 206.10 of the ISO rules, Volume Reallocation; 	
		 (b) for self-supply configurations with excess generation the assessment volume is calculated in accordance with subsection 11(3) and subject to any reallocation volumes which were approved in accordance with Section 206.10 of the ISO rules, <i>Volume Reallocation</i>; 	
		 (c) for an import asset, the assessment volume is calculated in accordance with subsection 11(3) and subject to any reallocation volumes which were approved in accordance with Section 206.10 of the ISO rules, <i>Volume</i> 	

Section	Subsection	Proposed language	Stakeholder comments
		Reallocation; or	
		 (d) for a load asset that provides a guaranteed load reduction or a firm consumption level: 	
		 (i) if the delivery hour occurred on a day which the load asset was subject to a delayed forced outage or automatic forced outage, that is not the first day of that delayed forced outage or automatic forced outage, the assessment volume is 0 MWh; 	
		 (ii) if the supply shortfall hour occurred on a day which the load asset was subject to a planned outage, the assessment volume is 0 MWh; or 	
		(iii) in all other cases, the assessment volume is calculated in accordance with subsection 11(3) and subject to any reallocation volumes which were approved in accordance with Section 206.10 of the ISO rules, Volume Reallocation.	
11	(5)	The ISO must calculate for each delivery hour established in subsection 3(2), the balancing ratio as follows:	
		balancing ratio = min{ $\frac{\sum delivery \ volumes}{\sum capacity \ commitment \ volumes}}$, 1}	
		where:	
		delivery volumes in MWh is the values identified in subsection 11(2) for all assets subject to a capacity commitment in an obligation period ; and	
		capacity commitment volumes in MWh means, for each asset subject to a capacity commitment in an obligation period , the quantity of electric energy expected to be delivered from an asset based on its capacity commitment during the supply shortfall hour or portion thereof.	
		Under-delivery Adjustment	
12	(1)	The ISO must, when the assessment value determined in accordance with subsection 11(4) is negative, calculate the under-delivery adjustment in dollars for an asset as follows:	

Section	Subsection	Proposed language	Stakeholder comments
		under-delivery adjustment = adjustment rate x assessment volume	
		where:	
		adjustment rate in \$/MWh is calculated in accordance with subsection 12(2); and	
		assessment volume in MWh is the value determined in accordance with subsection 11(4).	
12	(2)	The ISO must calculate the adjustment rate in \$/MWh as follows:	
		adjustment rate = $60\% \times 1.3 \times asset$ -specific penalty rate	
		where asset-specific penalty rate in \$/MWh is determined in accordance with subsection 10(2).	
12	(3)	The ISO must, for each asset, cap the under-delivery adjustment amount for each settlement period to the lesser of:	
		(a) the monthly cap determined in accordance with subsection 14(1); or	
		 (b) an amount equal to the annual cap determined in accordance with subsection 14(2) minus the sum of all under-delivery adjustments calculated in accordance with this subsection 12(3) for the prior settlement periods of the obligation period. 	
		Over-delivery Adjustment	
13	(1)	The ISO must, when the assessment value determined in accordance with subsection 11(4) is positive, calculate the over-delivery adjustment in dollars for an asset as follows:	
		over-delivery adjustment = adjustment rate x assessment volume	
		where:	
		adjustment rate in \$/MWh is calculated in accordance with subsection 13(2); and	
		assessment volume in MWh is the value determined in accordance with subsection 11(4).	

Section	Subsection	Proposed language	Stakeholder comments
13	(2)	The ISO must calculate the adjustment rate in \$/MWh as follows:	
		$adjustment \ rate = \frac{\sum under - delivery \ adjustments}{\sum positive \ assessment \ volumes}$	
		where:	
		under-delivery adjustments in dollars is determined in accordance with 12(3) for all assets subject to a capacity commitment in an obligation period ; and	
		positive assessment volumes in MWh are the positive values calculated in accordance with subsection 11(4) for all assets subject to a capacity commitment in an obligation period .	
13	(3)	The ISO must, for each asset, limit the over-delivery adjustment amount in dollars for a settlement period to an amount equal to the annual cap determined in accordance with subsection 15 minus the sum of all over-delivery adjustments determined in accordance with this subsection 13(3) for the prior settlement periods of the obligation period .	
		Maximum Payment Adjustments for Under-availability and Under-delivery	
14	(1)	The ISO must cap for each asset, any under-delivery adjustment for a settlement period at an amount in dollars equal to:	
		(a) monthly $cap = capacity payment \times 3$	
		where capacity payment in \$/month is the asset's monthly capacity payment calculated in accordance with Section 103.10 of the ISO rules , <i>Capacity Payment Calculation</i> ; or	
		 (b) monthly cap = default rate x capacity commitment x max{supply shortfall hours, 20} 	
		where the default rate is \$417/MW.	
14	(2)	The ISO must cap for each asset, the sum of any under-availability adjustment and under- delivery adjustments for each obligation period at an amount in dollars equal to the greater of:	

Section	Subsection	Proposed language	Stakeholder comments
		(a) annual cap = capacity payment x 12×1.3	
		where capacity payment in \$/month is the asset's monthly capacity payment calculated in accordance with Section 103.10 of the ISO rules , <i>Capacity Payment Calculation</i> ; or	
		(b) annual cap = default rate x capacity commitment	
		where the default rate is \$33,333/MW.	
		Maximum Payment Adjustments for Over-availability and Over-delivery	
15		The ISO must cap for each asset, the sum of any over-availability adjustment and over- delivery adjustments for an obligation period at an amount in dollars equal to the greater of:	TCE submits that there should not be a cap on incentive payments and, accordingly, that this section is not required.
		(a) $annual cap = capacity payment x 12$	
		where capacity payment means the assets monthly capacity payment in dollars determined in accordance with Section 103.10 of the ISO rules , <i>Capacity Payment Calculation</i> ; or	
		(b) annual cap = default rate x capacity commitment	
		where the default rate is \$33,333/MW.	

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Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 206.8, <i>Obligation Period Performance Assessments</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 206.8, <i>Obligation Period Performance Assessments</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 206.8, <i>Obligation Period Performance Assessments</i> and whether, in your view, the proposed new ISO Rule – Section 206.8, <i>Obligation Period Performance Assessments</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 206.8, <i>Obligation Period Performance Assessments</i> affects the performance of the capacity market and the electricity market	TCE submits that the overall penalty and incentive framework sends poor market signals and negatively affects the performance of the market. The framework both fails to incent strong overall performance and is excessively punitive for infrequent random events. In order to fix the framework, more value should be placed on the availability component of the penalty framework. Availability on average is far more within the control of a generator than availability in a very small number of random hours (EEA events). The current framework has the poor incentive of penalizing bad luck very strongly (EEA events) and penalizing systematically poor availability very weakly (availability hours).
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 206.8, <i>Obligation Period Performance Assessments</i>	
6	whether you agree with the proposed new ISO Rule – Section 206.8, <i>Obligation Period Performance Assessments</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	

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Item #		Stakeholder comments
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 206.8, <i>Obligation Period</i> <i>Performance Assessments</i>	
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 206.8, Obligation Period Performance Assessments.



Proposed New ISO rule – Section 206.9, Asset Substitution

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (T	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28		Email:	markj_thompson@transcanada.com	

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 206.9 applies to: (a) a capacity market participant ; and (b) the ISO .	
		Requirements Eligible Substitute Capacity	
2	(1)	A capacity market participant with a capacity commitment may substitute all or a portion of its capacity commitment with capacity from 1 or more assets that are:	
		(a) subject to a capacity commitment :	
		(i) of 0 MW for the obligation period ; or	
		(ii) less than its uniform capacity value for the obligation period ;	
		(b) not subject to a transmission market constraint during the substitution; and	
		 (c) in the case of new capacity, refurbished capacity or incremental capacity, qualified by the ISO pursuant to Section 206.1 of the ISO rules, <i>Qualification of Capacity</i> and will be energized and commissioned by the start date and 	

Section	Subsection	Proposed language	Stakeholder comments
		time of the substitution.	
2	(2)	 A capacity market participant may substitute capacity from one or more assets identified in subsection 2(1): (a) for a minimum of one settlement interval; (b) up to a maximum of an entire obligation period; and (c) for a duration that is a whole number of settlement intervals. 	
		Asset Substitution Request	
3	(1)	A capacity market participant must, in order to substitute all or a portion of its capacity commitment with eligible substitute capacity in accordance with subsection 2, submit a complete request for substitution to the ISO prior to the start date and time of the substitution.	
3	(2)	A capacity market participant must, in the request referred to in subsection 3(1) submit the following information to the ISO :	
		(a) the unique identifier of the asset providing substitute capacity ;	
		 (b) evidence of agreement to substitute between all capacity market participants for the assets to the substitution; 	
		(c) the start date and time of the substitution;	
		(d) the end date and time of the substitution;	
		 the proposed substitute capacity in MW, which must be a whole value greater than or equal to 1; 	
		(f) if the capacity market participant is proposing multiple substitution requests for the same asset for the same duration, the total of all other proposed substitute capacity from other assets; and	
		(g) any other information specified by the ISO .	

Section	Subsection	Proposed language	Stakeholder comments
		Asset Substitution Approval	
4	(1)	The ISO must, based on the information in the substitution request and any supporting documents provided pursuant to subsection 3, be satisfied that:	It is unclear why bilateral trades are restricted to after the last auction. TCE submits that bilateral trades should be allowed at any time.
		(a) the substituted capacity is at least 1 MW;	
		 (b) the substitution has been approved by all applicable capacity market participants for the assets to the substitution; 	
		 (c) the start date and time of the asset substitution is after the last rebalancing auction for an obligation period; 	
		(d) the duration of the asset substitution satisfies subsection 2(2);	
		 the substitute capacity is equal to or less than the capacity commitment of the asset the capacity market participant submitted the request for; 	
		(f) if the capacity market participant is proposing multiple substitution requests for the same asset for the same duration, the total of all proposed substitute capacity must be less than or equal to the capacity commitment of the asset the capacity market participant submitted the request for; and	
		(g) the substitute capacity is not otherwise approved for substitution pursuant to subsection 4(2) or requested for substitution with a different asset for the duration requested or portion thereof.	
4	(2)	The ISO must approve the substitution requested pursuant to subsection 3 for the asset if:	
		(a) the request provided in subsection 3 is complete; and	
		(b) the ISO is satisfied pursuant to subsection 4(1).	
		Delivery Assessment for Substitute Capacity	

Section	Subsection	Proposed language	Stakeholder comments
6		The ISO must, when calculating the under-delivery adjustment or over-delivery adjustment for approved substitute capacity in respect of the asset which requested the substitution, use the methodology in Section 206.8 of the ISO rules , <i>Obligation Period Performance Assessments</i> based on:	
		(a) the technology of the substitute capacity ,	
		(b) any asset-specific penalty rates determined for the asset which requested the substitution;	
		(c) any maximum payment adjustment amounts for under-delivery and over-delivery for the asset which requested the substitution.	
		Excess Delivery Volumes from an Asset Providing Substitute Capacity	
7	(1)	 The ISO must calculate for each delivery hour and without regard to any approved substitutions, the delivery assessment volumes in accordance with Section 206.8 of the ISO rules, Obligation Period Performance Assessments for: (a) the asset providing substitute capacity; and (b) any asset approved for substitution with the asset in subsection 7(1)(a) for that delivery hour. 	TCE submits that this calculation should be done for both delivery hours and availability hours. Asset substitution loses its value if uniform capacity value for the next five auctions continues to be calculated based on the volumes prior to substitution. Asset substitution should be akin to removing the obligation entirely from the participant and substituting it to another participant that takes on the rights and obligations of the capacity provider.
7	(2)	The ISO must, if the delivery assessment volume from subsection 7(1)(a) is positive, determine the excess delivery volume from that asset providing substitute capacity if the assessment volume is reduced to zero.	
7	(3)	 The ISO must apportion the excess delivery volume from subsection 7(2) to any asset approved for substitution in that delivery hour and recalculate the delivery assessment volumes subject to the limitation that the recalculated delivery assessment volume of each applicable asset will be zero, if possible, or else less than zero and as follows: (a) apportion the excess delivery volume to any assets approved for substitution in the order that the request for substitution was received; and (b) apportion any remaining excess delivery volume back to the asset providing 	

Section	Subsection	Proposed language	Stakeholder comments
		substitute capacity without limitation on that assets delivery assessment volume.	

Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 206.9, <i>Asset Substitution</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 206.9, <i>Asset Substitution</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 206.9, <i>Asset Substitution</i> and whether, in your view, the proposed new ISO Rule – Section 206.9, <i>Asset Substitution</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 206.9, <i>Asset Substitution</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 206.9, Asset Substitution	
6	whether you agree with the proposed new ISO Rule – Section 206.9, <i>Asset Substitution</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 206.9, Asset Substitution	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 206.9, Asset Substitution.

ALBERTA ELECTRIC SYSTEM OFERATOR

Proposed New ISO rule – Section 206.10, Volume Reallocation

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (T	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 206.10 applies to: (a) a capacity market participant ; and (b) the ISO .	
		Requirements Eligible Reallocation Volumes for a Supply Shortfall Event	
2		The ISO must, if an asset was assessed an over-delivery adjustment or under-delivery adjustment on a preliminary capacity market statement issued in accordance with Section 103.9 of the ISO rules , <i>Capacity Market Financial Statement</i> , inform a capacity market participant no later than 1 business day following the issuance of the preliminary capacity market statement of the following for each delivery hour:	
		(a) the asset's delivery volume in MWh;	
		(b) the balancing ratio; and	
		(c) the asset's positive or negative delivery assessment volume, as applicable, determined in accordance with Section 206.8 of the ISO rules, Obligation Performance Period Assessments which was included on the preliminary	

Section	Subsection	Proposed language	Stakeholder comments
		capacity market statement.	
		Reallocation Request	
3	(1)	A capacity market participant must, in order to reallocate positive or negative delivery assessment volumes between different assets, submit a complete request to reallocate volumes to the ISO no later than 5 business days following receipt of the volume reallocation information issued in accordance with subsection 2.	
3	(2)	A capacity market participant must in the request referred to in subsection 3(1) include the following information to the ISO :	The AESO should confirm that an asset with no obligation and/or no uniform capacity value can engage in this reallocation. UCV and/or an obligation should not be required to participate in reallocation.
		(a) the unique identifier of the asset with positive delivery assessment volume;	
		(b) the unique identifier of the asset with negative delivery assessment volume;	
		 (c) evidence of agreement to reallocate between all capacity market participants for the assets to the reallocation; 	
		(d) the supply shortfall hour which the volume reallocation applies;	
		(e) the proposed reallocation volume in MWh, which must be an integer value;	
		(f) if the capacity market participant is proposing multiple volume reallocation requests for the same asset during the supply shortfall hour or portion thereof, the total of all other proposed reallocation volumes to other assets.	
3	(3)	The ISO may request additional clarification or information regarding a volume reallocation request or supporting documents from the capacity market participant .	
		Volume Reallocation Approval	
4	(1)	The ISO must, based on the information in the volume reallocation request and any supporting documents provided pursuant to subsection 3, be satisfied that: (a) one asset has a positive delivery assessment volume and the other asset has a negative delivery assessment volume;	

Section	Subsection	Proposed language	Stakeholder comments
		(b) the volume reallocation is in respect of the same supply shortfall hour;	
		(c) for the asset with a positive delivery assessment volume:	
		 (i) the proposed reallocation volume is less than or equal to the positive delivery assessment volume of the asset as set out in accordance with subsection 2; and 	
		 (ii) if the asset is participating in volume reallocation with multiple other assets, the sum any proposed or approved reallocation volumes from the asset to all other assets must be less than or equal to the positive delivery assessment volume of the asset as set out in accordance with subsection 2; 	
		(d) for the asset with a negative delivery assessment volume:	
		 the magnitude of the proposed reallocation volume is less than or equal to the magnitude of the negative delivery assessment volume of the asset as set out in accordance with subsection 2; and 	
		 (ii) if the asset is participating in volume reallocation with multiple other assets, the magnitude of the sum any proposed or approved reallocation volumes from the asset to all other assets must be less than or equal to the magnitude of the negative delivery assessment volume of the asset as set out in accordance with subsection 2; 	
4	(2)	The ISO must approve the reallocation volume requested pursuant to subsection 3 for an asset if:	
		(a) the request made pursuant to subsection 3 is complete; and	
		(b) the ISO is satisfied pursuant to subsection 4(1).	
		Adjustments of Approved Reallocated Volumes	
5		The ISO must adjust approved reallocation volumes if the approved reallocation volumes were not based on energy determined on a final basis from the settlement period 5 months following the month with the applicable delivery hour.	

Section	Subsection	Proposed language	Stakeholder comments
		Revisions to Delivery Assessment Volumes	
6	(1)	The ISO must, recalculate the under-delivery adjustment or over-delivery adjustment for an asset pursuant to Section 206.8 of the ISO rules , <i>Obligation Period Performance</i> Assess <i>ments</i> to account for any reallocation volumes approved and adjusted pursuant to subsection 5 for the relevant settlement period .	
6	(2)	The ISO must replace the applicable under-delivery adjustment or over-delivery adjustment for the asset which were included in the preliminary capacity market statement for that settlement period with the updated under-delivery adjustment or over-delivery adjustment recalculated in accordance with subsection 5 for the final capacity market statement for that settlement period .	

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Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 206.10, <i>Volume Reallocation</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 206.10, <i>Volume Reallocation</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 206.10, <i>Volume Reallocation</i> and whether, in your view, the proposed new ISO Rule – Section 206.10, <i>Volume</i> <i>Reallocation</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 206.10, <i>Volume Reallocation</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 206.10, <i>Volume Reallocation</i>	
6	whether you agree with the proposed new ISO Rule – Section 206.10, <i>Volume Reallocation</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 206.10, <i>Volume Reallocation</i>	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 206.10, Volume Reallocation.



Proposed New ISO rule – Section 206.11, *Energy and Ancillary Services Offset for Assets*

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (T	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 206.11 applies to: (a) the ISO ; and (b) a capacity market participant requiring an energy and ancillary services offset for and asset.	
		Requirements Calculation of Energy and Ancillary Services Offset for Assets	
2	(1)	The ISO must, when required under Section 201.15 of the ISO rules , <i>Delisting</i> and Section 206.8 of the ISO rules , <i>Capacity Market Mitigation</i> , for every obligation period or portion of an obligation period , calculate the energy and ancillary services offset value in accordance with the following formula: $\frac{\text{EAS Offset}_{t}}{(\text{Forward Power Price}_{t} - \text{Energy Market Expense}_{t}) \times \text{Forward Product Energy}_{t} + = \frac{Other \ non - electricity \ market \ revenues}{\text{Nameplate Capacity} \times 1000}where;(i) t equals the obligation period or portion of an obligation period, for$	 TCE reiterates its concern is that the AESO is exclusively relying on the forward price. TCE submits that minimum liquidity requirements must be met before an index can be used. TCE submits that a minimum number of counterparties must have traded an index for it to be utilized. Data availability from ICE should be examined to assess relevant screens, etc. It should also be noted that the use of the forward market systematically makes the market less efficient at signaling investment needs. For example, if the market is expected to be over supplied, forward prices will fall. This lowers offsets from energy and ancillary services. Net CONE increases as a result, which sends a stronger signal to

Section	Subsection	Proposed language	Stakeholder comments
Section	Subsection	 Proposed language which the energy and ancillary services offset is being determined; (ii) EAS Offset in \$/kW, is the revenue less variable cost offset of the asset and includes energy and ancillary services revenues as well as all other non-electricity market revenues the asset may be expected to obtain such as revenues from the sale of renewable attributes an for obligation period <i>t</i>, (iii) Forward Power Price <i>t</i> is in \$/MWh and is the weighted average of the settlements matching the obligation period <i>t</i>, where the settlements are the average over a period determined by the ISO, of the published NGX forward power product in Appendix 1 that yields the highest EAS Offset to obligation period <i>t</i>. (iv) Energy Market Expense is the energy market expenses for the asset in \$/MWh for obligation period <i>t</i> calculated in accordance with subsection 2(5) below; (v) Forward Product Energy is the forward product energy value in MWh for 	build.
		 obligation period <i>t</i> calculated in accordance with subsection 2(4) below; and (vi) Nameplate Capacity is the maximum capability of the asset. 	
2	(2)	The ISO must, when determining the Forward Power Price $_t$ for hydro assets, wind assets, storage assets, solar assets and thermal assets with an availability factor less than 50%, multiply the forward power price with a forward power price adjustment factor, as calculated in subsection 2(3).	
2	(3)	The ISO must calculate the forward power price adjustment factor as the realized energy renenues from the immediately preceeding obligation period divided by the average pool price from the immediately preceeding obligation period where the realized energy revenues equal hourly production of the asset in MWh multiplied by the pool price in each of those hours.	
2	(4)	The capacity market participant must provide the ISO with the expectation of forward	

Section	Subsection	Proposed language	Stakeholder comments
		product energy production in MWh for the asset during the obligation period t or a portion of an obligation period, for which the generation is being determined.	
2	(5)	The ISO must, in calculating the EAS Offset tunder subsection 2(1) above, calculate the Energy Market Expense tusing the following formula:	
		$\begin{array}{l} \mbox{Energy Market Expense}_t \\ &= [\mbox{Forward Fuel Price}_t + (1 + \mbox{Commodity Fuel Charge}_t)] \times \mbox{Heat Rate}_t \\ &+ \mbox{Variable Operations and Maintenance}_t \\ &+ \mbox{(Emission Intensity - Established Benchmark}_t) \times \mbox{Carbon Price}_t \\ &+ \mbox{Transmission Losses}_t + \mbox{Trading Charge}_t \end{array}$	
		 where; (i) <i>t</i> equals the obligation period, or the portion of an obligation period, for which the energy and ancillary services offset is being determined; (ii) Forward Fuel Price is 	
		 (A) For natural gas fueled assets: the weighted average of the settlements matching obligation period <i>t</i>, where the settlements are the average over the period determined by the ISO in subsection 2(1)(i), of NGX Phys, FP (CA/GJ), AB-NIT; 	
		(B) For thermal assets that are not fueled by natural gas: the capacity market participant must provide the ISO the expected variable cost of fuel in \$/GJ, including variable transporation charges, for the asset during the obligation period t.	
		(C) For non thermal assets: this variable does not apply	
		(iii) Commodity Fuel Charge t_t relates to natural gas fueled assets only and is	
		the most recent 12 month average of published NOVA Gas Transmission Ltd NGTL Fuel Usage and Measurement Variance;	
		 (iv) Heat Rate relates to thermal assets only; the capacity market participant must provide the ISO the fuel consumption efficiency of the asset in GJ/MWh for the obligation period t; 	

Section	Subsection	Proposed language	Stakeholder comments
		 (v) Variable Operations and Maintenance the capacity market participant must provide the ISO the variable operations and maintenance costs of the asset for obligation period t in \$/MWh, excluding any fuel related costs and any amortized or capitalized costs; 	
		 (vi) Emission Intensity is the amount of CO2 emited by the asset when producing a MWh of electicity; the capacity market participant must provide the ISO the Emissions Intensitty for the asset in tonnes of CO2/MWh; 	
		(vii)Established Benchmark, is the weighted average of the calendar year	
		values matching obligation period <i>t</i> for an established benchmark for electricity published by a public authority;	
		(viii) Carbon Price $_{t}$ is the weighted average of the calendar year values	
		matching obligation period <i>t</i> for the carbon price published by a public authority for carbon emissions in Alberta;	
		(ix) Transmission Losses $_{t}$ is the transmission loss value for obligation period	
		<i>t</i> in MWh calculated as the loss factor of the asset multiplied the Forward Power Price where:	
		 the loss factor is the most recent published loss factor for the asset published on the AESO website; and 	
		(ii) Forward Power Price , for obligation period , is the value in subsection	
		2(1)(a)(iii).	
		(x) Energy Market Trading Charge t_{t} is the most recent energy market trading	
		charge in \$/MWh published on the AESO website.	

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Please provide your comments on this rule's appendices:

Issued for Stakeholder Comment: September 7, 2018Page 143 of 168Proposed new ISO Rule – Section 206.11, Energy and Ancillary Services Offset for Assets

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Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 206.11, <i>Energy and Ancillary Services Offset for</i> <i>Assets</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 206.11, <i>Energy and Ancillary Services Offset for</i> <i>Assets</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 206.11, <i>Energy and Ancillary Services Offset for Assets</i> and whether, in your view, the proposed new ISO Rule – Section 206.11, <i>Energy and Ancillary Services Offset for Assets</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 206.11, <i>Energy and Ancillary Services Offset for Assets</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 206.11, Energy and Ancillary Services Offset for Assets	
6	whether you agree with the proposed new ISO Rule – Section 206.11, <i>Energy and Ancillary Services Offset for</i> <i>Assets</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
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Item #		Stakeholder comments
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 206.11, <i>Energy and Ancillary</i> <i>Services Offset for Assets</i>	
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 206.11, Energy and Ancillary Services Offset for Assets.



Proposed New ISO rule – Section 303.2, *Available Transfer Capability*

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TCE)			Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 303.2 applies to:	
		Capability Limits Determinations	
2	(1)	The ISO must determine and post on the AESO website the following capability limits in MW prior to each settlement interval , and also on an as required basis when interconnected electric system operating conditions change:	
		(a) the Alberta interchange capability;	
		 (b) the import and export capability of the combined British Columbia and Montana transfer paths; and 	
		(c) the import available transfer capability and export available transfer capability for each of the British Columbia, Montana and Saskatchewan transfer paths.	
2	(2)	Once the ISO has determined the limits under subsection 2(1), it must ensure that:	
		 (a) the amount in MW of all transmission service for all import and export interchange transactions for all transfer paths does not exceed the Alberta 	

Section	Subsection	Proposed language	Stakeholder comments
		 interchange capability limit referenced in subsection 2(1)(a); (b) the amount in MW of all transmission service for all import and export interchange transactions for the combined British Columbia and Montana transfer paths does not exceed the combined limit referenced in subsection 2(1)(b); and (c) the amount in MW of all transmission service for all import and export interchange transactions for an individual transfer path does not exceed the limit for that transfer path referenced in subsection 2(1)(c). 	
		Total Transfer Capability Determinations and Available Transfer Capability Calculations	
3	(1)	The ISO must determine the import total transfer capability and the export total transfer capability for an individual transfer path, in order to calculate the import available transfer capability and the export available transfer capability for that transfer path.	
3	(2)	The ISO must make the determinations and calculations under subsection 3(1) with reference to the applicable provisions of any related reliability standards .	
		Available Transfer Capability for a Transfer Path	
4	(1)	The ISO must use the calculated import available transfer capability and the export available transfer capability limits as referenced under subsection 2(1)(c) for an individual transfer path, for scheduling interchange transactions on that transfer path.	
		Available Transfer Capability Allocations for Transfer Paths	
5	(1)	At approximately 85 minutes prior to a settlement interval the ISO must determine whether the capability limits under subsection 2(2) may be exceeded, and if so then the ISO must determine the individual transfer path available transfer capability allocations in accordance with the following procedures: (a) the ISO must calculate the net interchange transaction amount in MW, at each potential system marginal price , taking into account:	

Section	Subsection	Proposed language	Stakeholder comments
		 the energy interchange transaction amounts in MW, and the prices fo bids and offers; 	
		(ii) the interchange transaction amount in MW for ancillary services; and	
		(iii) applicable counterflows; and	
		(b) the ISO may exclude any wheel through transaction amounts in MW if those amounts will not result in any limits or allocations under this section 303.2 being exceeded.	
5	(2)	The ISO must comply with the following additional procedures in the following sequence to determine the allocation of each of the individual transfer path available transfer capability allocations:	In subsection 5(2)(c)(iii), "10(2)(b)" should be "5(2)(b)".
		 (a) the net amount in MW of all interchange transactions for the individual transfer path must be compared to the limit determined for that individual transfer path as referenced in subsection 2(1)(c), and: 	
		 (i) if that net amount is equal to or greater than the limit, then the allocation must be set at that limit; and 	
		(ii) if that net amount is less than the limit, then the allocation must be set a that net amount;	
		 (b) for the British Columbia and Montana transfer paths, the sum in MW of their individual transfer path allocations calculated under subsection 5(2)(a) must be compared to the combined British Columbia and Montana transfer path limit referenced in subsection 2(1)(b); 	
		 (c) if the combined transfer path limit of subsection 2(1)(b) is not exceeded, then the allocations must remain as determined in accordance with subsection 5(2)(a), but if it is exceeded, then a further allocation must be done in accordance with the following sequence in order to ensure the combined transfer path limit as determined under subsection 2(1)(b) is not exceeded: 	
		 (i) first, the British Columbia, or the Montana, or both the British Columbia and the Montana transfer path allocations must be reduced as necessary by the applicable ancillary services type interchange 	

Section	Subsection	Proposed	language	Stakeholder comments
			transaction amounts in MW;	
			(ii) second, the British Columbia, or the Montana, or both the British Columbia and the Montana transfer path allocations must be reduced as necessary by the applicable energy interchange transaction amounts in MW, with the reduction being in reverse merit order based on bid and offer prices; and	
			(iii) third, if there are equally priced British Columbia and Montana energy interchange transactions, then the British Columbia and Montana allocations must be reduced on a pro rata basis using the following formula:	
			the MW allocation for each of the Montana and British Columbia transfer paths as determined in accordance with subsection $5(2)(a)$, as may be reduced under subsections $5(2)(c)(i)$ and $5(2)(c)(ii)$;	
			divided by	
			the sum in MW calculated under in subsection 10(2)(b) as may be reduced under subsections 5(2)(c)(i) and 5(2)(c)(ii);	
			multiplied by	
			the amount by which that sum exceeds the combined British Columbia and Montana transfer path limit referenced in subsection 2(1)(b);	
		(d)	the allocation resulting from subsection $5(2)(c)$ plus the Saskatchewan transfer path allocation calculated under subsection $5(2)(a)$ must then be compared to the Alberta interchange capability limit referenced in subsection $2(1)(a)$; and	
		(e)	if the Alberta interchange capability limit is not exceeded, then the allocations must remain as determined in accordance with subsections 5(2)(a) and 5(2)(c), but if that limit is exceeded, then a further allocation of available transfer capability must be done in accordance with the following sequence in order to ensure that the Alberta interchange capability limit as determined	

Section	Subsection Proposed language		Stakeholder comments
		under subsection 2(1)(a) is not exceeded:	
		 (i) first, any individual 1, or any combination of the British Columbia, Montana, and Saskatchewan transfer path allocations must be reduced as necessary by the applicable ancillary service type interchange transaction amount in MW; 	
		 second, any individual 1, or any combination of the British Columbia, Montana, and Saskatchewan transfer path allocations must be reduced as necessary by the applicable energy interchange transaction amounts in MW, with the reduction being in reverse merit order based on bid and offer prices; and 	
		 third, if there are equally priced British Columbia, Montana and Saskatchewan energy interchange transactions, then the British Columbia, Montana and Saskatchewan allocations must be reduced on a pro rata basis using the following formula: 	
		the MW allocation for each of the Montana and British Columbia transfer paths as determined in accordance with subsection $5(2)(c)$ and the Saskatchewan transfer path allocation under subsection $5(2)(a)$, as may be reduced under subsections $5(2)(e)(i)$, and $5(2)(e)(ii)$;	
	divided by		
		the sum in MW referred to in subsection 5(2)(d), as may be reduced under subsections 5(2)(e)(i) and 5(2)(e)(ii);	
		multiplied by	
		the amount by which that sum exceeds the Alberta interchange capability limit referenced in subsection 2(1)(a);	
5	(3)	At approximately 85 minutes prior to a settlement interval , the ISO must post on the AESO website:	
		 (a) the total in MW of all energy import offers and export bids received for each transfer path and the combinations of transfer paths referenced under subsection 2, at 2 hours prior to the start of the settlement interval in 	

Section	Subsection	Proposed language	Stakeholder comments
		accordance with section 203.1 of the ISO rules , Offers and Bids for Energy;	
		(b) the limits referenced under subsection 2; and	
		(c) all allocations made under this subsection 5.	
5	(4)	If, after 85 minutes prior to a settlement interval , any of the limits referenced in subsection 2 have changed, then the ISO must follow the procedures and sequence set out in Section 303.3, <i>Intertie Path Operations</i> .	

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Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):

Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 303.2, <i>Available Transfer Capability</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 303.2, <i>Available Transfer Capability</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 303.2, <i>Available Transfer Capability</i> and whether, in your view, the proposed new ISO Rule – Section 303.2, <i>Available Transfer</i> <i>Capability</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 303.2, <i>Available Transfer Capability</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 303.2, <i>Available Transfer Capability</i>	
6	whether you agree with the proposed new ISO Rule – Section 303.2, <i>Available Transfer Capability</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 303.2, <i>Available Transfer Capability</i>	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 303.2, Available Transfer Capability.

Proposed New ISO rule – Section 303.3, Intertie Path Operations



Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (TCE)			Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments
		Applicability	
1		Section 303.3 applies to: (a) the ISO .	
		Requirements Subsection Title (no numbers)	
2	(1)	If, after carrying out the available transfer capability allocation procedures set out in Section 303.2 of the ISO rules , <i>Available Transfer Capability</i> , and based on the e-tags submitted under Section 203.6 of the ISO rules , <i>Market Requirements for Interchange Transactions</i> , the available transfer capability limits referenced in Section 303.2 of the ISO rules , <i>Available Transfer Capability</i> are still exceeded in a settlement interval , then the ISO must reduce interchange transactions in accordance with the sequential procedures set out in this subsection 2.	
2	(2)	The ISO must determine the effective interchange transactions for mitigating a limit being exceeded at the Alberta interchange capability level, the combined Montana and BC transfer path capability level, or at each individual transfer path level.	
2	(3)	The ISO may determine that any wheel through transaction is not effective in mitigating	

Section	Subsection	Proposed language		Stakeholder comments
		an exceedance, based on its analysis under subsection 2(2).		
2	(4)	The ISO must comply with the following procedures in the following sequence to mitigate the remaining exceedance:		
		(a) asses limits <i>Trans</i> effect	ss all interchange transactions for transmission services against the and allocations referred to in Section 303.2 of the ISO rules , <i>Available</i> <i>sfer Capability</i> , and determine the interchange transactions that will be trive in mitigating the constraint;	
		(b) dispa accor Energ	atch any effective operating blocks in reverse merit order in rdance with section 203.2 of the ISO rules, <i>Issuing Dispatches for gy</i> ;	
		(c) where trans out in follow	re necessary to manage system reliability in real-time, curtail the smission service of interchange transactions under the sequencing set in subsection 2(4)(d), mitigating the constraint in the following order at the wing levels, where effective:	
		(i)	an individual transfer path limit level;	
		(ii)	the combined Montana and British Columbia transfer path level; or	
		(iii)	the Alberta interchange capability level; and	
		(d) curta	il at the effective level:	
		(i)	inadvertent energy payback interchange transactions , prior to the curtailment of any interchange transactions on the Saskatchewan transfer path;	
		(ii)	transmission services of any effective interchange transactions for ancillary services ;	
		(iii)	where reasonably practicable, transmission services of any effective energy interchange transactions based on bid and offer prices in reverse merit order ; and	
		(iii)	transmission services of any effective energy interchange transactions on a pro rata basis in accordance with the following formula:	

Section	Subsection	Proposed language	Stakeholder comments
		 (A) scheduled amount of each effective interchange transaction; (B) multiplied by the total amount necessary to mitigate the proceedings and 	
		(C) divided by total scheduled amount of all effective interchange transactions.	
2	(5)	The ISO must, if after following the procedures in subsection 2(4), and the available transfer capability has subsequently increased in the same settlement interval , apply the procedures in subsection 2(4)(c) and 2(4)(d) in the reverse order, where reasonably practicable.	Please clarify how subsection 2(5), which was not contained within subsection 11(5) of the current ISO Rule 203.6, relates to the capacity market.
		Interchange Schedule and Dispatches by the ISO	
3	(1)	 Subject to the provisions of this section 303.3, the ISO must include in the interchange schedule the energy components of interchange transactions if the e-tags for the interchange transactions have been: (a) received and validated by the ISO as set out in Section 203.6 of the ISO rules, <i>Market Requirements for Interchange Transactions;</i> and 	
		(b) approved by all other applicable approval entities.	
3	(2)	The ISO must determine the interchange schedule for each transfer path taking into account the allocation set out in Section 303.2 of the ISO rules, <i>Available Transfer Capability Allocation</i> and the path limit management procedures set out in subsection 2.	
3	(3)	 The ISO may initiate changes to an interchange schedule for a transfer path when required to address: (a) a dispatch or directive for energy or ancillary services, including for an internal transmission market constraint; (b) supply shortfall or supply surplus matter; (c) a matter of reliability on the interconnected electric system, or a similar matter which may ensure that belonging authority area; 	
		matter which may occur in any other balancing authority area;	

Section	Subsection	Proposed language	Stakeholder comments
		 (d) reserve sharing; or (e) any changes resulting from the procedures and sequencing set out in subsection 2. 	
		Saskatchewan Inadvertent Energy Management	
4		If the ISO is required to manage an amount of inadvertent energy on the Saskatchewan transfer path, then:	
		(a) the inadvertent energy is not eligible to set the pool price ; and	
		(b) inadvertent energy payback on the Saskatchewan transfer path must not exceed 25 MW.	

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Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):

Item #		Stakeholder comments
1	whether you agree that the proposed new ISO Rule – Section 303.3, <i>Intertie Path Operations</i> relates to the capacity market and why or why not	
2	whether you agree that the proposed new ISO Rule – Section 303.3, <i>Intertie Path Operations</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and agree with the objective or purpose of the proposed new ISO Rule – Section 303.3, <i>Intertie Path Operations</i> and whether, in your view, the proposed new ISO Rule – Section 303.3, <i>Intertie Path</i> <i>Operations</i> meets the objective or purpose	
4	how, in your view, the proposed new ISO Rule – Section 303.3, <i>Intertie Path Operations</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting the proposed new ISO Rule – Section 303.3, <i>Intertie Path Operations</i>	
6	whether you agree with the proposed new ISO Rule – Section 303.3, <i>Intertie Path Operations</i> taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to the proposed new ISO Rule – Section 303.3, Intertie Path Operations	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with the proposed new ISO Rule – Section 303.3, Intertie Path Operations.



Proposed Amended ISO rule – Section 306.5, Generation Outage Reporting

Period of Comment:	September 7, 2018	through	September 28, 2018	Contact:	Mark Thompson
Comments From:	TransCanada Energy Ltd. (T	CE)		Phone:	403-920-5005
Date [yyyy/mm/dd]:	2018-09-28			Email:	markj_thompson@transcanada.com

Please provide comments relating to the subsection of the proposed amendments to the rule in the corresponding box. Please include any views on whether the language clearly articulates the requirement for either the AESO or a market participant, and provide any proposed alternative wording by blacklining the proposed language below.

Section	Subsection	Proposed language	Stakeholder comments	
		Applicability		
1		 Section 306.5 applies to: (a) a pool participant with a generating source asset with a maximum capability greater than or equal to 5 MW; (b) a pool participant that submits offers in the energy market for a generating source asset with a maximum capability that is greater than or equal to 1 MW and less than 5 MW; (c) a legal owner of a source asset described in subsections 1(a) and 1(b); and (d) the ISO. 		
		Requirements General		
2	(1)	 A pool participant must, for any outage that results or will result in a change in available capability of: (a) 1 MW or greater, for a generating source asset with a maximum capability that is greater than or equal to 1 MW and less than 5 MW; or 		

Section	Subsection	Proposed language	Stakeholder comments
		(b) 5 MW or greater, for a generating source asset with a maximum capability greater than or equal to 5 MW,	
		comply with the notification requirements set forth in subsections 3, 4 or 5, as applicable.	
		Planned Outage Notification Requirements	Section 3(2) is missing. TCE has no specific issues with respect to the 48-month requirement in this section. However, the AESO should provide a report within its IT system that permits a market participant to view all of its scheduled outages on an asset by asset basis.
4	(1)	A pool participant must, as soon as reasonably practicable, in respect of a delayed forced outage , submit to the ISO :	
		(a) the dates, times, durations and impact to MW capability for the delayed forced outage ;	
		(b) the specific nature of the delayed forced outage work to be done; and	
		(c) a designation of the delayed forced outage as "Derate-Forced" or "Outage-Forced".	
4	(2)	A pool participant must also, as soon as reasonably practicable, in respect of a delayed forced outage for which the pool participant has less than 24 hours between the time of discovering the circumstances requiring the delayed forced outage and the time of commencing the delayed forced outage , contact the ISO by telephone, on a telephone number that the ISO designates, which must contain a voice recording system.	
		Automatic Forced Outage Notification Requirements	
5		A pool participant must, as soon as reasonably practicable, submit automatic forced outage information as follows:	
		(a) through contacting the ISO by telephone, on a telephone number that the ISO designates, which must contain a voice recording system; and	
		 (b) submit a designation of the automatic forced outage as "Derate-Forced" or "Outage-Forced". 	

aeso

Please provide your comments on the following (as set out in AUC Rule 017 s. 13(b-j)):

Item #		Stakeholder comments
1	whether you agree that amended ISO rule – Section 306.5, <i>Generation Outage Reporting</i> relates to the capacity market and why or why not	
2	whether you agree that amended ISO rule – Section 306.5, <i>Generation Outage Reporting</i> should [or should not] be in effect for a fixed term and why or why not	
3	whether you understand and ag Section 306.5, <i>Generation Outage Reporting</i> and whether, in your view, Section 306.5, <i>Generation Outage Reporting</i> meets the objective or purpose	
4	how, in your view, amended ISO rule – Section 306.5, <i>Generation Outage Reporting</i> affects the performance of the capacity market and the electricity market	
5	your views on any analysis conducted or commissioned by the AESO supporting amended ISO rule – Section 306.5, <i>Generation Outage Reporting</i>	
6	whether you agree with amended ISO rule – Section 306.5, Generation Outage Reporting taken together with all ISO rules and in light of the principle of a fair, efficient and openly competitive market	
7	whether you would suggest any alternatives to amended ISO rule – Section 306.5, <i>Generation Outage Reporting</i>	

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Item #		Stakeholder comments
8	whether you agree that the proposed provisional rule supports ensuring a reliable supply of electricity at a reasonable cost to customers and why or why not	
9	whether you agree that the proposed provisional rule supports the public interest and why or why not	

Please provide your views on the type of content that should be included in an information document associated with amended ISO rule – Section 306.5, Generation Outage Reporting.