Comments and Questions from Vlad Urukov received January 8, 2026

Item	Statement (From TP presentation found here, the proposal found here, and the supplemental presentation found here)	Question	IESO Response
Item 1	From presentation (slide 7) The **DSO** considers these constraints and will not schedule **energy** in a Forbidden Region except to ramp through it. **EOP** **Energy** | **10S** 5 MW | 35 MW	Could the IESO confirm that OR is by design not subject to the forbidden region constraint in the DSO. Could the IESO confirm that the 5MW for Energy and 35MW for 10S OR in this example can be a valid (feasible) DSO output if the DSO is ramping a unit through the 20MW FR. As such, a participant can receive such schedules from the DSO in a given interval, except it will not receive it for multiple intervals due to ramping.	That is correct: by design, the DSO does not consider forbidden regions for OR. The DSO can schedule energy within a forbidden region if it is ramping through it. Depending on the ramp rates submitted for the resource, the schedules can be for multiple intervals as the DSO ramps the resource through the forbidden region.
Item 1	From presentation (slide 7) The **EOP calculation engine** does not consider Forbidden Regions. As a result, energy EOPs can be in a Forbidden Region, an infeasible physical result.	If the EOP calculation was modified to consider forbidden regions it would generate the same EOPs as the DSO's dispatch schedule for both Energy and OR.	There could be situations where EOPs and schedules differ just as there are for resources without Forbidden Regions; however, the physical limitation of the Forbidden Region would be considered in calculating the EOPs.
Item 1	From presentation (slide 8)	If the 10S offer was changed to 40MW @$1 (a reasonable change from 35MW to offer full capacity for OR) then the EOP for Energy would equal 0MWs and the EOP for OR 40MW due to the higher value of OR – is this correct? Considering ii. '$FR_LL_k^{m,f}$' is the *forbidden region* lower limit from *forbidden region* set 'f' where $RT\_QSI_{k,h}^{m,t}$ >= $FR\_LL_k^{m,f}$, as submitted by *market participant* 'k' for *delivery point* 'm' as daily *dispatch data*. what would the MWP calculation be in such example, before and after the proposed change?	That is correct, for a scenario in which the 10S offer was changed to 40MW at $1, then the EOP results would be Energy = 0 MW and OR = 40 MW. : Before the proposed market rule amendment, we would expect:

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	Forbidden Region 1: 0 MW – 20 MW; Max Capacity: 40 MW **Dispatch** Energy: 20 MW; 10S: 20 MW **EOP** Energy: 5 MW; 10S: 35 MW Energy LMP: $5/MWh; Energy Offer PQ1: 20MW @ $1; Energy Offer P: 40MW @ $19 10S LMP: $10/MWh; 10S Offer: 35MW @ $1	In this example, given the higher value of 10S OR, a generator would receive its optimal OP if condensing and being scheduled for its full 10S OR capacity (40MW * ($10/MWh-$1/MWh))/12 ~ $30 The 20MW for Energy and 20MW for 10S OR schedule generates an OP of ((20MW*($5/MWh-$1/MWh))/12 + ((20MW*($10/MWh-$1/MWh))/12 ~ $22 Could the IESO explain this outcome and the circumstances that would generate the 20MW Energy and 20MW OR schedule as a more economic outcome as well as the reason a MWP is not required.	• An energy LC between 0 and 20 MW and a corresponding FROP clawback such that ELC = 0. • OR LOC for the difference from 20 MW to 40 MW with no clawback. After the proposed market rule amendment, we would expect: • Same outcome for ELC • OR FROP now calculated for 20 MW to 40 MW, resulting in an OR LOC = 0. The issue with the proposed example is that with the offer changes, the DSO will likely also change (i.e., the dispatch schedules would change as do the EOPs). The simple explanation is that differences between the pricing and scheduling passes could lead to this outcome being more economic, for example the price in energy was higher while scheduling, leading to the energy being more economic for its first 20 MW.

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Item 1	*delivery point* 'm' as daily *dispatch data.* c. Otherwise $RT\_FROP\_LOC_{k,h}^{m,t}$ shall equal zero. 3.5.6.3 The *IESO* shall calculate $RT\_OR\_FROP\_LOC_{r,k,h}^{m,t}$ as follows: $RT\_OR\_FROP\_LOC_{r,k,h}^{m,t} = Max[0, OP(RT\_PROR_{r,h}^{m,t}, (RT\_OR\_LOC\_EOP_{r,k,h}^{m,t} - QTY\_ADJ_{r,k,h}^{m,t}), BOR_{r,k,h}^{m,t})] - Max\left(0, OP(RT\_PROR_{r,h}^{m,t}, RT\_QSOR_{r,k,h}^{m,t}, BOR_{r,k,h}^{m,t})\right)$ Where: a. $QTY\_ADJ_{r,k,h}^{m,t} = \mathrm{Max}\left(0, QTY\_DIFF_{r,k,h}^{m,t} - FR\_QTY\_AVAIL_{r,k,h}^{m,t}\right)$ b. $QTY\_DIFF_{r,k,h}^{m,t} = RT\_OR\_LOC\_EOP_{r,k,h}^{m,t} - RT\_QSOR_{r,k,h}^{m,t}$	Section 3.5.6.3 relates to section 3.5.6 However there is no set of conditions that make it clear what forbidden region assumptions are to be used for RT_OR_FROP_LOC, the way there are clear "where…." conditions for RT_FROP_LC and RT_FROP_LOC Absent a modification, it is not clear if section 3.5.6.3 is to use the set of assumptions for 3.5.6.1 or 3.5.6.2 which are different in regards to UL and LL's "equal to "portion Propose a section "where…" is added to 3.5.6.3 to clearly articulate terms in the RT_OR_FROP_LOC equation"	As presented in the January 13th Supplemental Presentation, edits have been made to MR Ch.9 s.3.5.6.3, including the addition of a "where clause" which clarifies the lower limit and maximum number of forbidden region assumptions to be used in the calculation of RT_OR_FROP_LOC. The change was made in the version that was posted for stakeholder review.
Item 1	$RT\_FROP\_LC_{k,h}^{m,t} = Max\ [0, OP(RT\_LMP_{h}^{m,t}, Max(DAM\_QSI_{k,h}^{m}, Min(RT\_QSI_{k,h}^{m,t}, AQEI_{k,h}^{m,t})), BE_{k,h}^{m,t})] - OP(RT\_LMP_{h}^{m,t}, Max(FR\_LL_{k,h}^{m,t,f}, DAM\_QSI_{k,h}^{m}, RT\_LC\_EOP_{k,h}^{m,t}), BE_{k,h}^{m,t})$ $RT\_FROP\_LOC_{k,h}^{m,t} = Max\ [0, OP(RT\_LMP_{h}^{m,t}, Min(FR\_UL_{k,h}^{m,f}, RT\_LOC\_EOP_{k,h}^{m,t}), BE_{k,h}^{m,t})] - Max[0, OP(RT\_LMP_{h}^{m,t}, Max(RT\_QSI_{k,h}^{m,t,f}, AQEI_{k,h}^{m,t}), BE_{k,h}^{m,t})]$	Please confirm, the addition of Max for RT_FROP_LC and RT_FROP_LOC is related to Item 3 (and not related to Item 1)?	The introduction of a max function in energy and OR Lost Opportunity Cost calculations to ensure the operating profit based on EOP is always a positive value, is related to item 3. The Max of zero on the RT_FROP_LC will be removed. The max of zero should only apply to the lost opportunity.

<table>
<tr><th>Item</th><th>Statement

(From TP presentation found here, the proposal found here, and the supplemental presentation found here)</th><th>Question</th><th>IESO Response</th></tr>
<tr><td>Item 1</td><td>
<table><tr><th>Forbidden Region</th></tr><tr><td>0 to 100 MW</td></tr></table>
<table><tr><th></th><th>Energy</th></tr><tr><td>Schedule</td><td>100</td></tr><tr><td>LC EOP (MW)</td><td>5</td></tr></table>
) -
<table><tr><th></th><th>10S</th><th>10N</th><th>30R</th></tr>
<tr><td>Schedule (MW)</td><td>10</td><td>0</td><td>15</td></tr>
<tr><td>LOC EOP (MW)</td><td>95</td><td>0</td><td>25</td></tr>
<tr><td>Price ($/MWh)</td><td>15.00</td><td>10.00</td><td>9.00</td></tr>
<tr><td>Offer Price ($/MWh)</td><td>4.00</td><td>3.50</td><td>2.00</td></tr>
<tr><td>Offer Qty (MW)</td><td>95</td><td>25</td><td>25</td></tr></table>
</td><td>In the example in the LOC supplementary materials, what is the assumed Energy Offer(s) and Energy LMP?</td><td>The salient point is that the energy schedule needed to respect the FR and was scheduled to the upper boundary. The underlying assumption is that it would not be at the boundary based on economics.

The energy schedule could arise from a few possibilities: e.g., reliability constraint or scheduling/pricing pass differences.</td></tr>
<tr><td>Item 1</td><td>e. For thirty-minute operating reserve:
$$FR\_QTY\_AVAIL_{r3,k,h}^{m,t} = FR\_QTY\_AVAIL_{r2,k,h}^{m,t} - (RT\_OR\_LOC\_EOP_{r2,k,h}^{m,t} - QTY\_ADJ_{r2,k,h}^{m,t} - RT\_QSOR_{r2,k,h}^{m,t})$$</td><td>Suggest italicizing “thirty-minute”</td><td>Thank you for your suggestion. The change has been made in the version that was posted for stakeholder review.</td></tr>
<tr><td>Item 1</td><td>Where:
a. $QTY\_ADJ_{r,k,h}^{m,t} = \mathrm{Max}(0, QTY\_DIFF_{r,k,h}^{m,t} - FR\_QTY\_AVAIL_{r,k,h}^{m,t})$
b. $QTY\_DIFF_{r,k,h}^{m,t} = RT\_OR\_LOC\_EOP_{r,k,h}^{m,t} - RT\_QSOR_{r,k,h}^{m,t}$
c. For synchronized ten-minute operating reserve:
$$FR\_QTY\_AVAIL_{r1,k,h}^{m,t} = Max\left[0, Max\left(DAM\_QSI_{k,h}^{m}, Min(RT\_QSI_{k,h}^{m,t}, AQEI_{k,h}^{m,t})\right) - Max(FR\_LL_{k,h}^{m,t}, DAM\_QSI_{k,h}^{m}, RT\_LC\_EOP_{k,h}^{m,t})\right]$$
d. For non-synchronized ten-minute operating reserve:
$$FR\_QTY\_AVAIL_{r2,k,h}^{m,t} = FR\_QTY\_AVAIL_{r1,k,h}^{m,t} - (RT\_OR\_LOC\_EOP_{r1,k,h}^{m,t} - QTY\_ADJ_{r1,k,h}^{m,t} - RT\_QSOR_{r1,k,h}^{m,t})$$
e. For thirty-minute operating reserve:
$$FR\_QTY\_AVAIL_{r3,k,h}^{m,t} = FR\_QTY\_AVAIL_{r2,k,h}^{m,t} - (RT\_OR\_LOC\_EOP_{r2,k,h}^{m,t} - QTY\_ADJ_{r2,k,h}^{m,t} - RT\_QSOR_{r2,k,h}^{m,t})$$</td><td>The RT_OR_FROP_LOC is set up as a cascading function that works down from 10S to 10N to 30R. Is this approach appropriate in all instances, including if 30R (for example) has a higher value than the 10S and 10N?

For clarity, I recognize that 10S is generally of higher value than 10N and then 30R (subject to unidirectional substitution), which would align with the cascade approach; however, I know infrequently that may not be the case and would like to know that this methodology would still work.</td><td>The LMP for 10S will always be greater than or equal to the LMP for 10N which in turn is always greater than or equal to the LMP for 30R.

The offers from a Market Participant could on occasion potentially create a situation where, for example, there would be greater gains from trade for 30R than 10N.

The proposed solution balances complexity and accuracy.</td></tr>
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Item 2:	• Assumptions ◦ The Operating Ramp Rate (ORR) is 10 MW/min ◦ The energy EOP in the previous interval was 0 MW ◦ The energy EOP in the current interval is 25 MW	What are the assumptions about the respective Energy and OR schedules for this resource for these two intervals? Also what is the OR EOP for the initial (i.e., previous) interval. In this example, the comparison of feasibility is EOP to EOP from one interval to the next. What if the actual schedule for the initial (i.e., previous) interval is 25 MW already. Isn't the schedule from a previous interval also relevant and possibly more relevant than the previous interval EOP in the calculation of a MWP?	Previous interval for the OR EOP was 0MW. The prior interval's energy and OR RT schedules are relevant for the ramping of RT schedules which are currently modelled in the DSO. The EOPs are independent of the prior interval's energy and OR RT schedules. The point to which an EOP can ramp in each interval starts from where the EOP was in the prior interval not where the RT schedule was in the prior interval.
Item 2:	**Correction required**: Include the ramping constraints that are in the real-time calculation engine (Chapter 7 App 7.6 s.8.6.3) into the constraints section of the Economic Operating Point calculations (Chapter 7 App 7.8 s.4.4). 8.3.1.15 $S10SDG_{h,b,k}$, which designates the amount of synchronized *ten-minute operating reserve* that a *dispatchable generation resource* is scheduled to provide at bus $b \in B^{DG}$ in hour $h \in \{1,..,24\}$ in association with lamination $k \in K^{10S}_{h,b}$; 8.3.1.16 $S10NDG_{h,b,k}$, which designates the amount of non-synchronized *ten-minute operating reserve* that a *dispatchable generation resource* is scheduled to provide at bus $b \in B^{DG}$ in hour $h \in \{1,..,24\}$ in association with lamination $k \in K^{10N}_{h,b}$; 8.3.1.17 $S30RDG_{h,b,k}$, which designates the amount of *thirty-minute operating reserve* that a *dispatchable generation resource* is scheduled to provide at bus $b \in B^{DG}$ in hour $h \in \{1,..,24\}$ in association with lamination $k \in K^{30R}_{h,b}$;	Section 8.6.3 uses terms (S10SDG....etc...) as defined in 8.3.1.15... etc...whereas the proposed change is using definitions from 4.3.1.1.. (ES10SDG...etc...) I am noting that these definitions are almost identical with some small differences ("for hour" vs "in hour" and "lamination" vs "offer lamination", "schedule to provide" vs "scheduled at"...). I assume there are no substantive differences aside from S** being used in the DSO and ES*** in the EOP calculation. Question 1: As per previous question, why is that EOP to EOP comparison appropriate. In my review, I don't see other instances where ES*** formulas consider a previous interval (as in there are no other EOP to EOP from previous interval comparisons).	We can confirm that there are no substantive differences between the inconsistencies you've noted. For energy ramp the current EOP rules do outline that the starting point is from the prior EOP schedule **Constraints for Energy Ramping** 4.4.25 With the exception of the first *interval* of each *dispatch day*, the RT LOC EOP shall use its RT LOC EOP for the prior interval as its initial starting point as follows:

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	4.3.1.1 $ESDG_{i,b,k}$, which designates the amount of *energy* that a *dispatchable generation resource* is scheduled at bus $b \in B^{DG}$ in interval $i \in I$ in association with *offer* lamination $k \in K^{E}_{i,b}$; 4.3.1.2 $ES10SDG_{i,b,k}$, which designates the amount of synchronized *ten-minute operating reserve* that a *dispatchable generation resource* is scheduled to provide at bus $b \in B^{DG}$ in interval $i \in I$ in association with *offer* lamination $k \in K^{10S}_{i,b}$; 4.3.1.3 $ES10NDG_{i,b,k}$, which designates the amount of non-synchronized *ten-minute operating reserve* that a *dispatchable generation resource* is scheduled to provide at bus $b \in B^{DG}$ in interval $i \in I$ in association with *offer* lamination $k \in K^{10N}_{i,b}$;		The DSO has the following OR ramping Constraints: 8.5.4.4 The total *operating reserve* scheduled from a *dispatchable generation resource* shall not exceed the *resource's* ramp capability over 30 minutes, its remaining capacity, and its unscheduled capacity. These 2.0 - December 3, 2025 Public Chapter 7-404 newed Market Rules – Chapter 7: System Operations and Physical arkets - Appendices 7 restrictions shall be enforced by the following constraints for all intervals $i \in I$ and all buses $b \in B^{DG}$: $\sum_{k \in K^{10S}_{i,b}} S10SDG_{i,b,k} + \sum_{k \in K^{10N}_{i,b}} S10NDG_{i,b,k} + \sum_{k \in K^{30R}_{i,b}} S30RDG_{i,b,k} \leq 30 \cdot ORRDG_b;$ 8.5.4.5 The amount of both synchronized and non-synchronized *ten-minute operating reserve* that a *dispatchable generation resource* is scheduled to provide shall not exceed the amount by which the *resource* can increase its output over 10 minutes, as limited by its *operating reserve* ramp rate. This restriction shall be enforced by the following constraint for all intervals $i \in I$ and all buses $b \in B^{DG}$: $\sum_{k \in K^{10S}_{i,b}} S10SDG_{i,b,k} + \sum_{k \in K^{10N}_{i,b}} S10NDG_{i,b,k} \leq 10 \cdot ORRDG_b.$ The EOP rules have these exact same OR ramping constraints in place currently, as shown below.

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			Constraints for Operating Reserve Ramping 4.4.22 For a *dispatchable resource*, the upper bound of the RT LOC EOP for all classes of *operating reserve* shall be less than or equal to it *operating reserve* ramp rates as follows: 4.4.22.1 For a *dispatchable generation resource*, for interval $i \in I$ and bus $b \in B^{DG}$: $\sum_{k \in K_{i,b}^{10S}} ES10SDG_{i,b,k} + \sum_{k \in K_{i,b}^{10N}} ES10NDG_{i,b,k} + \sum_{k \in K_{i,b}^{30R}} ES30RDG_{i,b,k} \leq 30 \cdot ORRDG_b$ $\sum_{k \in K_{i,b}^{10S}} ES10SDG_{i,b,k} + \sum_{k \in K_{i,b}^{10N}} ES10NDG_{i,b,k} \leq 10 \cdot ORRDG_b$ The DSO rules also contain this OR ramp constraint: 8.6.3.2 Constraints shall be applied to recognize that interval to interval changes in a *dispatchable generation resource's* schedule for *energy* may modify the amount of *operating reserve* that the *resource* can provide. For all intervals $i \in I$ and all buses $b \in B^{DG}$: $\sum_{k \in K_{i,b}^{10S}} S10SDG_{i,b,k} + \sum_{k \in K_{i,b}^{10N}} S10NDG_{i,b,k} + \sum_{k \in K_{i,b}^{30R}} S30RDG_{i,b,k} \leq \sum_{k \in K_{i-1,b}^{E}} SDG_{i-1,b,k} - \sum_{k \in K_{i,b}^{E}} SDG_{i,b,k} + 30 \cdot ORRDG_b$ and $\sum_{k \in K_{i,b}^{10S}} S10SDG_{i,b,k} + \sum_{k \in K_{i,b}^{10N}} S10NDG_{i,b,k} \leq \sum_{k \in K_{i-1,b}^{E}} SDG_{i-1,b,k} - \sum_{k \in K_{i,b}^{E}} SDG_{i,b,k} + 10 \cdot ORRDG_b.$ This constraint is missing from the EOP rules and will be added in as shown in the MR amendment proposal. All these constraints shown here are on an interval level.

Item	Statement **(From TP presentation found here, the proposal found here, and the supplemental presentation found here)**	Question	IESO Response
Item 3	The presentation (slides 17 to 24 and 26 to 27) only speak to Lost Opportunity Cost (LOC); slide 25 as well as the proposed changes to 3.5.4.5 and 3.5.4.7 also include changes to Lost Cost (LC) for both RT_ELC and RT_OLC	Could you explain the proposed changes as they relate to ELC and OLC in 3.5.4.5 and 3.5.4.7. Could you provide examples to support these changes and how they interact with the changes to ELOC and OLOC?	The RT LC changes should not have an impact on the RT MWP. The only time that the lost cost business rule changes will have an impact, is if we have a non-intuitive RT EOP which is at a MW value that is not economic. In this case the business rule changes will prevent RT MWP from being calculated when it would be inappropriate. No such events have been observed.
Item 3	The IESO made a general statement that the EOP algorithm that calculates LOC considers joint optimization whereas the one that calculates LC does not The result of co-optimization for LOC EOPs is that when the energy LOC EOP is lower, the result is a higher OR EOP. This relationship does not exist for LC EOPs, which are not co-optimized. (also stated in April 21, 2022 presentation titled “Market Renewal – Energy Project: Overview of Economic Operating Point Design”)	Could you confirm/clarify this statement. Question 1: If these proposed changes are to address “The RT-MWP calculation must be congruent to how energy and OR schedules are co-optimized” (slide 17), could you comment on applicability of changes to LC as per: “In the eligibility sections of 3.5.4.5 to 3.5.4.8, a change is made so that a resource is only ineligible for positive make-whole payment components (ELC, ELOC, OLC, OLOC) to ensure that off-setting occurs when they are negative values.” (slide 25) Again, noting that LC EOPs are not co-optimized.	See previous response.

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Item 3	Regarding Item 3, Presentation Example	The presentation includes one LOC example in support of the change. What steps has the IESO taken to ensure that the changes are appropriate for other permutations of instances when LOC based MWPs may be warranted? Secondly, does the proposal support all instances of ELC and OLC when RT schedule is less than the RT_LC_EOP? As requested above, please provide an example.	IESO changes undergo a rigorous internal testing process before deployment, which includes all combinations and permutations of instances.
Item 3	3.5.4.5 *resources* shall be ineligible for positive ELC when its ~~it is injecting or withdrawing~~ *real-time schedule* for *energy* is less than~~below~~ it's RT_LC_EOP; 3.5.4.6 *resources* shall be ineligible for positive ELOC when its *real-time schedule* for~~it is injecting or withdrawing~~ *energy* is greater than ~~above~~its RT_LOC_EOP;	In its original form (i.e., before the proposed edits), I understood this section to assign ineligibility based on real-time meter readings, by virtue of the reference to "injecting" or "withdrawing". Question 1: How was the IESO implementing this original condition? Was this at the interval level? Where and how was this condition presented in the formulas? Question 2: By replacing "injecting" or "withdrawing" with "real-time schedule", is the overall meaning of these sections now different? Is the reference to RT_LC_EOP as compared to injections/withdrawals now removed and replaced with a different condition	Your understanding is correct, section 3.5.4.5. & 3.5.4.6 references the actual metered quantities. Re Question 1: These eligibility rules were implemented as defined in the market rules at the interval level. When calculating RT MWP, the eligibility rules are evaluated prior to executing the equations hence the calculation of the equations does not handle these conditions. In instances where the resource is injecting or withdrawing below or above the relevant EOP, the ELC and ELOC are not computed. Re Question 2: The IESO has identified an unintended outcome with the deletion of the language "injecting or withdrawing energy below its RT_LC_EOP".

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		that compares the schedule to EOP/EOC to allow for the subtraction of positive ELC? In other words, is the IESO also correcting for another issue that was referencing "injecting…withdrawing" incorrectly in the first place? Also, if changing the overall intent, will the change create other deficiencies? For example, after the change what will happen if the real-time schedule is 100 MW, EOP is105 MW and injection is 106 MW?	The language in sections 3.5.4.5 & 3.5.4.6 has been updated and an example provided in the presentation titled: 2026-01-13 TP presentation-Adjustments-RTMWP. This language will also be reinstated in the rules. The change to the rule does not create any unintended deficiencies in this scenario. The outcome of this scenario would be same with the amended market rule, that is, the resource would be paid based on the Min(RT quantity, AQEI) which is 100 MWs.
Item 3	3.5.4.5 *resources* shall be ineligible for positive ELC when its ~~it is injecting or withdrawing~~ *real-time schedule* for *energy* is less than~~below~~ it~~'~~s RT_LC_EOP; 3.5.4.6 *resources* shall be ineligible for positive ELOC when its *real-time schedule* for~~it is injecting or withdrawing~~ *energy* is greater than ~~above~~its RT_LOC_EOP; 3.5.4.7 *resources* shall be ineligible for positive OLC when its *real-time schedule* for *operating reserve* is less than its RT_OR_LC_EOP; 3.5.4.8 *resources* shall be ineligible for positive OLOC when its *real-time schedule* fo *operating reserve* is greater than its RT_OR_LOC_EOP;	Assuming 3.5.4.5 and 3.5.4.6 are corrected to real-time schedule (i.e, .5 to .8 now all refer to schedules), the proposed change can be interpreted as: If respective condition is met and (either ELC, ELOC, OLC, OLOC) is positive than set to zero, if (either ELC, ELOC, OLC, OLOC) is negative leave as is…. whereas currently both positive and negative will be set to zero. Question 1: Please confirm if this understanding is correct. Question 2: As per above, please confirm applicability to LC with an example.	The language in sections 3.5.4.5 & 3.5.4.6 has been updated and example provided in the January 13th Supplemental Presentation.
Item 3	$RT\_ELOC_{k,h}^{m,t} = \{Max[0, OP(RT\_LMP_h^{m,t}, RT\_LOC\_EOP_{k,h}^{m,t}, BE_{k,h}^{m,t})] - Max[0, OP(RT\_LMP_h^{m,t}, Max(RT\_QSI_{k,h}^{m,t}, AQEI_{k,h}^{m,t}), BE_{k,h}^{m,t})] - RT\_FROP\_LOC_{k,h}^{m,t}\}/12$ d. $RT\_OLOC_{k,h}^{m,t} = \sum_R[\{Max[0, OP(RT\_PROR_{r,h}^{m,t}, RT\_OR\_LOC\_EOP_{r,k,h}^{m,t}, BOR_{r,k,h}^{m,t})] - Max[0, OP(RT\_PROR_{r,h}^{m,t}, RT\_QSOR_{r,k,h}^{m,t}, BOR_{r,k,h}^{m,t})] - RT\_OR\_FROP\_LOC_{r,k,h}^{m,t}\}/12]$	Question 1: Please explain how RT_ELOC and RT_OLOC can be negative as 3.5.4.6 and 3.5.4.8 allow for based on the amended language, while subjected to a Max (0, …) function	Re question 1: the Max (0, …) is to ensure the calculation won't create a larger negative than necessary. i.e. If the OP of the EOP is negative and lower than the OP of the RT schedule,

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		Question 2: Confirm and explain why the additional Max function is not required for LC, if the changes to 3.5.4.5 and 3.5.4.7 mirror those for LOC, which required the Max function addition Question 3: Please confirm that these changes work with all three types of OR? (as RT_OLOC is a summation over R – the set of the three types of Operating Reserve). If possible, please provide an example.	without the Max 0, this calculation would end up deducting a valid LC payment from the total LOC MWP. This would be an unintended outcome, hence the inclusion of the Max (0,…). Re Question 2: The Max (0, …) in LOC is to avoid an underpayment of a true LC being subtracted out of the total LOC amount. The LC function does not have this same issue. Re Question 3: That is correct, the changes work for all 3 classes of OR.
Item 3	General	It would be helpful to have separate example for LOC and one for LC, including multiple OR EOPs, carried through the use of the Max function to show the overall function of the proposal.	An example with Max of zero applying when there was a ELC, OLC and ELOC calculation was previously reviewed in detail during one-on-one sessions. Those examples were intended to demonstrate the overall operation of the proposal end-to-end.