

Enhanced Real-time Unit Commitment – Stakeholder Engagement Session 5 March 29, 2018

Minutes of Meeting

Date held: March 29, 2018	Time held: 9:00am - 12:00pm	Location: Four Points Hotel, Toronto International Airport
Company	Name	Attendance Status (A) Attended; (WebEx) Attended via WebEx; (TC) Attended via teleconference
ADG Group Inc.	Cai, David	A
AMP Solar Group	Luukkonen, Paul	A
AMPCO	Anderson, Colin	A
APPrO	Butters, David	A
Bruce Power	Dalzell, Pat	A
Bruce Power	Xu, Jennifer	A
Capital Power	Robb, Colin	WebEx
Centre Lane Trading Ltd.	Nikkel, Jonathan	A
Customized Energy Solutions	Withrow, David	WebEx
Emera Energy	Maddison, Michel	A
Enbridge	Kemp, Heather	WebEx
ENGIE Canada Inc.	Sanderson, Hope	A
Goreway Power Station	Sutherland, Christopher	A
HQEM	Belanger, Frederic	WebEx
IVACO	Abdelnour, Francois	A
MAG Energy	Villeneuve, Alexandre	WebEx
MAG Energy	Bordeleau, Patricia	WebEx
Market Surveillance Panel	Shalaby, Amir	WebEx
Market Surveillance Panel	Deweese, Don	A
Ministry of Energy	Qureshi, Musab	A
Nalcor Energy Marketing	Martin, David	WebEx
Northland Power Inc.	Samant, Sushil	A
Ontario Citizens' Coalition for Clean Affordable Energy	Fortin, Michel	A
Ontario Power Generation	Harrison, Ken	A
Ontario Power Generation	Mo, Herman	A
Ontario Power Generation	Wizniak, Lynn	A
Power Consumer	Jagt, Mandy	A

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Powerful Solutions	Inman, Peter	A
Resolute	Degelman, Cara	WebEx
TransCanada Energy Ltd.	Kuntz, Margaret	A
TransCanada Energy Ltd.	Van Norman, Tom	A
TransCanada Energy Ltd.	Luthra, Amit	WebEx
TransCanada Energy Ltd.	Vasquez, Noralyn	WebEx
Wasser Resources Inc.	Wasser, Leon	A
Workbench Corp.	Sears, Heather	A
WPD Canada	Long, Jesse	A
FTI Consulting	Cavicchi, Joe	WebEx
FTI	Harvey, Scott	A
FTI	Pope, Susan	A
IESO	Matsugu, Darren	A
IESO	Umeike, Ekene	A
IESO	Backman, Karen	A
IESO	Kula, Leonard	A
IESO	Kamstra, Pat	A
IESO	Doyle, Robert	A
IESO	Scratch, Jonathan	A
Prepared by Ekene Umeike, please report any corrections, additions or deletions e-mail to engagement@ieso.ca		

All meeting materials are available on the IESO web site at: <http://www.ieso.ca/en/sector-participants/market-renewal/market-renewal-enhanced-real-time-unit-commitment>

Introduction, Review of Meeting Objectives – Robert Doyle, IESO

The IESO welcomed participants and described the day's objectives.

Review of Meeting Agenda - Pat Kamstra, IESO

The IESO outlined the day's agenda.

Design Element Discussion – Pat Kamstra, IESO

The IESO led stakeholders through a discussion of the Look-Ahead Period, Timing and Frequency of Runs, Intertie Transactions, Market Participant Data, Offer Changes, Calculation of Make-Whole Payment and Failure Charge.

A participant asked whether the window for putting in offers to the day-ahead market will remain the same as it currently is in the day-ahead commitment process.

The IESO responded that the timeframe will be similar, and is under consideration.

A participant asked the IESO to confirm that the illustration on slide 21 of the presentation was based on the presumption of hourly and not fifteen minute scheduling of interties.

The IESO confirmed and added that while it is not currently looking to implement fifteen minute intertie scheduling, it could be an option in the future.

A participant asked whether the 19:00 ERUC engine run will recognise the Day-Ahead Market (DAM) constraints when it determines unit commitments. The participant described a scenario in which a resource with an early morning day-ahead commitment could be dispatched off by the 19:00 run of the ERUC engine and asked how that would be handled.

The IESO responded that, as currently planned, the 19:00 run will not include the Day-Ahead Market constraints for the following day and invited written feedback so that this scenario can be considered further.

Editor's Note: The scenario described can be managed by the generator through its offers. If the failure of pre-dispatch to extend the commitment would interfere with the minimum down-time prior to a DAM financially binding commitment, the generator may need to lower its offer to ensure that the commitment is extended, bridging pre-dispatch to DAM. We expect this would happen infrequently.

FTI pointed out that runs starting at hour ending 20:00 will pick up new constraints for the following day's day-ahead schedules, and factor them into determining unit commitments. Where appropriate, previous advisory schedules will be revised to reflect the constraints of the day-ahead schedule. As a result, the risk of wrongly dispatching off a resource will be reduced.

A participant asked the IESO to clarify what elements of the ERUC engine output are a binding schedule.

The IESO explained that ERUC engine will provide binding start-up instructions to generators on a "just-in-time basis" that will rely on the lead time information provided by the generator. For example, if a generator has indicated to the IESO that it has a three-hour lead time, pre-dispatch will factor that into

its evaluation and ensure that the generator receives a binding instruction in time to ensure that it has at least the three hours it requires to start up and reach MLP.

A participant asked whether there is a potential to get different schedules for the T+1 and T+2 periods from the results published by 15 minutes past the hour versus 30 minutes past the hour.

The IESO said the results will be the same, and explained that schedules published by the 30 minute mark will be for periods in addition to those already published by the 15 minute mark, not replacement results.

Given the preliminary decision that the pre-dispatch run in hour T would evaluate all inertie bids/offers, both DAM and non-DAM scheduled quantities, in hours T+1 and T+2, a participant asked whether non-DAM exports could lead to additional unit commitments. The participant further inquired about the cost allocation principle, asking how the costs of commitments triggered by exports will be allocated, and whether the cost should be paid by the export that caused it.

The IESO responded that non-DAM export bids in hour T+1 could not trigger a new unit commitment of a Non Quick Start (NQS) generator due to the minimum registered elapsed time to dispatch of 1 hour for eligible generators. Non-DAM exports in hour T+2 could hypothetically trigger a unit commitment if the NQS generator was offline with a very short lead time (hot operating state), possibly with lower start-up costs. The commitment will only occur if the NQS generator is the least cost resource over the look-ahead period, considering other options such as quick-start resources. Inclusion of exports in T+2 is expected to often provide benefits to Ontario in a scenario where no commitment is triggered but surplus MWs are utilized.

With respect to cost allocation, the IESO indicated that the cost of commitment will be allocated in the same way as other uplifts based on real-time consumption by load. The IESO further noted that it is not possible to allocate based on cost causation because other changes happening simultaneously may also be contributing to the cost.

A participant asked the IESO to confirm that ramp-up megawatts will not be included in the future equivalent of the pre-dispatch schedule but will remain a part of real-time dispatch instructions.

The IESO responded in the affirmative.

Citing the example on slide 40 of the presentation deck, a participant asked the IESO to confirm that the resource in the example receiving binding start-up instructions at hour ending 1, may have received advisory schedules in earlier hours that were indicative of this binding instruction.

The IESO responded in the affirmative.

A participant asked whether the IESO has considered allowing multiple Operating Reserve ramp rates.

The IESO said that option has not been considered, adding that written comments are welcome to inform future design work.

A participant asked the IESO to confirm that the registration data referred to in the presentation will allow pseudo-unit data, not only physical unit registration data.

The IESO responded in the affirmative.

In response to IESO remarks about how a marginal resource might be able to influence prices if offer increases for quantities that were not committed are allowed, a participant asked whether the Market Power Mitigation (MPM) measures proposed by the IESO would ease the concerns.

The IESO responded that MPM is triggered by a lack of competition in a constrained area of the province. The concern that committed generators may have information that would allow them to influence price is not addressed by MPM; there may be sufficient competition, but once a generator is committed it has an advantage over other suppliers.

Following up, another participant asked whether the IESO had considered the role that quick start resources might play in the scenario.

The IESO acknowledged that there could be additional competitive pressures from quick start resources and the inerties. However, the IESO added that even with those resources, concerns persist as to whether there will be adequate competitive pressure to discourage anti-competitive behaviour by marginal resources.

A participant asked whether price increases for non-committed supply would be limited based on the offer price for the committed supply or based on offers for the non-committed supply at the time the unit is committed.

FTI explained that the intent is not to limit resources to offers that apply to committed quantities. Rather, what is being considered is whether to limit resources to the offer curve they provided.

A participant suggested that, rather than impose limits on offer changes, the IESO could rely on the General Conduct Rule and investigations to determine if there has been abuse, and then allocate penalties as appropriate.

The IESO said that this will be considered but that it could be administratively burdensome for all.

A participant asked whether other markets apply similar restrictions to offer changes.

FTI explained that US jurisdictions have approaches that vary based on the lengths of the look-ahead period. FTI added that a solution tailored to the realities in Ontario is necessary because the province differs from other jurisdictions in terms of the nature of the generation mix and the resultant need to look farther forward.

A participant suggested that the risks arising from scheduling gas supply in advance based on advisory schedules are a concern for gas generators. The participant added that offer restrictions could induce offer behaviour that adversely affects the market, in response to uncertainty about how much gas to schedule and when.

The IESO acknowledged that this is a risk that needs further stakeholder input in order to make a decision.

Following up, the participant added that it is important to also consider how the tools available to generators today to manage uncertainty and provide flexibility around gas supply might be affected as the province moves from sourcing generating capacity through contracts to sourcing through capacity auctions.

A participant asked whether the lead time curve that resources have to submit in the day-ahead as part of the daily generator data can be updated in real-time to reflect changing conditions as long as the resource does not have a commitment.

The IESO responded that the initial concept of the design is that the data submitted day-ahead will be adequate in the majority of cases. However, to address changes that might occur closer to real-time, an additional process will be considered.

A participant asked whether extensions beyond the Minimum Generation Block Run-Time are commitments and so part of the commitment period.

The IESO explained that extended periods that are the result of pre-dispatch runs, as opposed to real-time dispatch, are part of the commitment period.

A participant asked whether a scenario in which a resource that has a commitment but suffers a forced outage just before its lead-time starts such that it is hours away from Minimum Loading Point would still attract a failure charge.

The IESO explained that as soon as a resource is issued a notice that it has a binding start-up commitment, choices will be made and actions taken on the assumption that the resource will fulfil its commitment. As such, even in this scenario where the resource is yet to synchronize with the system, a failure charge will apply.

A participant asked the IESO to confirm that if insufficient fuel at a resource occurs due to equipment failure at a third-party for example, that it would qualify as another party's failure and so not result in penalties for the affected resource.

The IESO responded in the affirmative. The IESO added that it will be impossible to account for every possible scenario that can arise. However, the general principle is to impose failure charges for incidents that are within the control of the generator, such as generator equipment issues.

A participant asked how a force majeure or other constraint beyond the control of a resource that arises just before or after a getting a commitment will be handled.

The IESO explained that it wants to avoid excluding specific categories of rarely occurring events from the failure charge. The IESO added that it is willing to acknowledge that legitimate justifications for failures could arise and in such cases, they will be handled on an ad hoc basis.

A participant asked whether all of the three conditions on slide 64 of the presentation need to be met for a failure charge to apply or if any one of them will suffice to trigger a charge.

The IESO said that any combination of the conditions or each condition on its own will be able to trigger a failure charge.

The IESO thanked participants and reiterated feedback is appreciated and should be sent to: engagement@ieso.ca.

The next ERUC meeting is scheduled for May 23, 2018.