Enhanced Real-time Unit Commitment – Stakeholder Engagement Session 4

January 31, 2018

Minutes of Meeting

Date held: January 31, 2018	**Time held**: 12:00pm - 4:00pm	**Location**: Holiday Inn, Toronto International Airport
Company	**Name**	**Attendance Status** (A) Attended; (WebEx) Attended via WebEx; (TC) Attended via teleconference
Amp	Luukkonen, Paul	WebEx
Bruce Power	Dalzell, Pat	A
Bruce Power	Xu, Jennifer	A
Capital Power	Robb, Colin	WebEx
Centre Lane Trading Ltd	Nikkel, Jonathan	A
CRA	Cary, Robert	A
Customized Energy Solutions	Withrow, David	WebEx
Emera Energy	Maddison, Michel	A
Emera Energy	Ferguson, David	A
Enbridge	Kemp, Heather	WebEx
EnerNOC	Griffiths, Sarah	A
Goreway Power Station	Sutherland, Chris	A
MAG Energy Solutions	Ahouassou, Jean-Paul	WebEx
Market Surveillance Panel	Shalaby, Amir	WebEx
Ministry of Energy	Zerek, Peter	A
MIT Power	Koizumi, Shigeru	WebEx
Northland Power	Samant, Sushil	A
Northland Power	Khan, Shahid	WebEx
OPG	Harrison, Ken	A
OPG	Wizniak, Lynn	A
Powerful Solutions	Inman, Peter	A
Resolute	Degelman	WebEx
TransAlta	Nguyen, Thanh	Webex
TransCanada Energy Ltd	Kuntz, Margaret	A
TransCanada Energy Ltd.	Luthra, Amit	WebEx
TSI Services Management Inc.	Malka, Maurice	WebEx
Workbench Corp	Sears, Heather	A

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Company	**Name**	**Attendance Status** (A) Attended; (WebEx) Attended via WebEx; (TC) Attended via teleconference
FTI	Scott Harvey	A
FTI	Susan Pope	A
FTI	Joseph Cavicchi	A
IESO	Doyle, Robert	A
IESO	Barbara Ellard	A
IESO	Brennan Louw	A
IESO	Darren Matsugu	A
IESO	Ekene Umeike	A
IESO	Emanuel Movchovitch	A
IESO	Karen Backman	A
IESO	Mark Gojmerac	A
IESO	Pat Kamstra	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 Agenda and Meeting Objectives – Pat Kamstra

The IESO welcomed participants to the afternoon session and outlined the meeting's objectives and agenda.

ERUC Project Recap – Pat Kamstra

The IESO presented a quick review of the purpose of ERUC and how it will work.

A participant asked whether market participants selected through ERUC would receive their start-up costs if they are not recouped through market revenues.

The IESO responded that cost recovery guarantees will continue to be available for eligible resources (resources with specific operating characteristics) and noted that all offered costs will be subject to the market power mitigation framework.

Discussion of Pre-Dispatch Timeframe – Pat Kamstra

The IESO led a discussion on the anticipated impact of ERUC on the pre-dispatch timeframe.

A participant asked about what implications advisory prices will have on real-time prices.

The IESO explained that advisory prices will not be settlement-ready prices and that while they will provide an indication of what real-time prices may be, actual outcomes might differ.

A participant asked whether the period between a non-quick start generator's synchronization and Minimum Load Point (MLP) will be part of its binding start-up instructions through ERUC or something that generators will be scheduling on their own using offers.

The IESO explained that this was to be determined. Editor's note: The resource will receive a binding start-up instruction and operational constraint for its minimum generation block run-time. The participant will offer their expected ramp rates for the period from synchronization to MLP. The IESO's real-time dispatch will calculate the 5-minute dispatch schedules based on offers received.

The IESO also added that currently the Real-Time Generation Cost Guarantee (RT-GCG) happens through a process outside of the hourly pre-dispatch scheduling, and the intent is to let the long run of pre-dispatch evaluate resource offers over multiple hours and also to apply operational constraints.

Design Elements – Pat Kamstra

The IESO presented a number of preliminary decisions and updates on the design elements that will make up the ERUC design.

A participant asked for clarity on when the output of the ERUC engine will be indicative as opposed to being binding.

The IESO responded that there would be more discussion on that later in the presentation, but explained that it will depend on a unit's lead time. As an example, the IESO suggested that if ERUC runs and finds it needs a resource in 8 hours but the resource has a lead time of 4 hours, the resource will not be scheduled right away. Instead, the ERUC engine will run again in subsequent hours to verify that the need persists and then, on a just in time basis, it will commit the resource.

A participant pointed out that if a pseudo unit model rather than a physical unit model is considered, then lead times would be different. The participant suggested that the implication of that choice is worth considering.

The IESO agreed.

A participant asked what the difference between elapsed time to dispatch and lead time is.

The IESO responded that elapsed time to dispatch is the minimum amount of time it takes for a resource that is offline to reach its MLP. The IESO added also that the elapsed time to dispatch is a constant value, while the lead time can vary depending on whether the unit in question is hot, warm or cold.

A participant asked whether start-up costs refer simply to the cost of reaching MLP.

The IESO explained that it includes costs incurred during the start-up and ramp period.

A participant pointed out that start-up costs are the same whether a resource goes to full output or remains at MLP. The participant then asked about how those costs will be accounted for in market power mitigation.

The IESO explained that reference levels for start-up costs will be established.

A participant asked whether preliminary decisions have been made regarding reference levels.

The IESO responded that these decisions have not been made and will be the topic of future discussions.

In response to the IESO's statement that reference levels for start-up costs will be based on short run marginal cost principles (which is the cost for the next MW of production), a participant asked how that principle will apply to start-up cost offer of $20,000 for instance.

FTI responded and the IESO agreed that $20,000 would be considered the marginal start-up cost.

A participant pointed out that much of the information needed to establish reference costs has already been submitted as part of previous IESO programs. The participant then asked whether the IESO's intention was to require that market participants re-submit operating parameters for ERUC.

The IESO stated that where information has previously been provided and accepted, there may not be a need to repeat the process but reiterated that no decisions have been made on how reference levels will be set. For operating parameters, registration of information is required and it is possible that operating data may also be provided as non-price offer parameter data on a daily basis, so that changes in this data can be factored into the evaluation.

A participant remarked that different generators have different costs and should not be subject to the same reference levels. The participant then asked whether proposed reference levels will be resource specific while the thresholds will be universal.

The IESO agreed with this.

A participant asked whether the ERUC commitment will only be up to MLP or could be above MLP.

The IESO explained that resources with an ERUC commitment will receive an operational constraint at MLP when committed, and will receive an advisory schedule for quantities above MLP.

The participant then asked whether a generator in the middle of its ERUC commitment will be allowed to raise prices associated with any additional megawatts beyond the level committed under ERUC if there happens to be demand for them.

The IESO agreed to consider this question and present a response at the March meeting.

A participant asked whether the proposed advisory schedules will be the same format as today.

The IESO said they will be in the same format as today and added that they will be published with hourly granularity with a frequency that will be dependent on how often ERUC is run, to be determined.

A participant pointed out that binding start-up instructions cover the initial MGBRT period and subsequent ERUC runs may add hours, and then asked whether the offer restrictions outlined in the presentation applies to the entire advisory schedule or just the MGBRT period. The participant explained that the question was intended to help clarify how a gas generator would know if it needs to arrange for additional gas supply.

The IESO thanked the participant for the question and noted that it will work with stakeholders to address this issue in future meetings.

The participant then explained that more likely than an outage, a resource will probably be able to source more fuel but at higher costs. Under those circumstances, the participant expressed concern that those genuinely higher costs could be flagged under market power mitigation.

The IESO agreed that such an outcome would not be ideal and restated that it will work with stakeholders on this question.

A participant asked whether the IESO could arrange a meeting during which stakeholders can more thoroughly discuss must-offer and market power mitigation across the various market renewal projects.

The IESO agreed that the proposed approach is a good one and that efforts will be made to have cohesive discussions across the energy work stream in the future.

Another participant suggested that it would be useful to include the Incremental Capacity Auction (ICA) in the proposed broader conversations.

The IESO said it will consider the linkages between the energy work stream and the ICA and plan for integrated discussions where appropriate.

A participant asked whether Option 2 under the calculation of make-whole payments would also include ramp down.

The IESO said that decisions regarding the ramp-down period are still being considered.

A participant reiterated an earlier point about the distinction between physical units and pseudo units, and the need to pay adequate attention to how design decisions might affect pseudo units, particularly in the context of eligibility for make-whole payments.

The IESO agreed.

A participant suggested that it might be difficult to define 'adequate notice' and 'acceptable reasons' on a standard basis. The participant explained that it could be necessary to develop a hybrid approach in which certain incidents trigger a failure while others require a conversation with the IESO before further action is taken.

The IESO said that this was good feedback and invited the stakeholders to send in further feedback on that issue.

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

The next ERUC meeting is scheduled for March 28, 2018.