

Minutes of Meeting

Date held: July 9, 2014	Time held: 9:00am – 12:00pm	Location held: Crowne Plaza Toronto Airport
Invited/Attended	Company Name	Attendance Status (A)ttended; (R)egrets; (S)ubstitute
Adapt2 Solutions	Nichols, Ross	TC
Aegent Energy Advisors	Sharp, Bruce	A
Arcelormittal Dofasco	Pump, Sonya	TC
Atlantic Packaging Products Ltd.	Stephenson, Kim	A
Atlantic Packaging Products Ltd.	Kostal, Todd	A
Bennett Jones LLP	Belyea, Ernest	TC
Beyond Green Consulting Inc.	Gallant, Brad	A
BOMA Toronto	Gnanam, Bala	A
Brantford Power Inc.	Van Panhuis, Joanne	TC
Bruce Power	Villegas, Gabriel	TC
Burlington Hydro	Guatto, Dan	A
Burman Energy Consultants Group	Sturgeon, Tim	A
City of Toronto	Goldberg, Sam	A
City of Toronto	Morris, Richard	A
City of Toronto	Koff, Chaim	TC
Customized Energy Solutions	Tinkler, Mark	A
Customized Energy Solutions	Chintapalli, Raj	TC
Delta Energy LLC	Wang, Cynthia	TC
Direct Energy	Forster, Ric	TC
Econoler	Gauthier, Geneviève	TC
Eco-Shift Power	Omercajic, Nadan	TC
Eco-Shift Power	Leishman, Mike	TC
Eco-Shift Power	Lambert, John	TC
Elster Metering	Mills, Kevin	A
Elster Metering	Donovan, Dan	A
Energy Curtailment Specialists	Hausle, Kyle	TC
Energy Curtailment Specialists	Buerger, Laura	TC
Energy Profiles	Bober, George	TC
EnerNOC, Inc.	L'heureux, Matthew	A
EnerNOC, Inc.	Griffiths, Sarah	A
Environmental Commissioner of Ontario	Whicher, Martin	TC
Environmental Commissioner of Ontario	Parkes, Mike	TC
General Motors of Canada	Ali, Adel	TC
Goreway Power Station	Maddix, Melanie	A
Goreway Power Station	Coulbeck, Rob	TC
Goreway Power Station	Paul, Rob	TC

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Greater Sudbury Hydro	McMillan, Brian	TC
Holcim (US) Inc.	Payne, Wendy	TC
Honeywell Smart Grid Solutions	Black, Peter	A
Honeywell Smart Grid Solutions	Sparling, Jay	TC
HQ Energy Marketing	Plante, Matthieu	TC
Hydro Ottawa	Roberts, Dan	TC
Irving Tissue	McLuckie, Craig	TC
Loblaw Companies Limited	Northey, Mark	A
London Hydro	Isber, Mike	A
Magna International	Donches, Senka	A
Ministry of Energy	Qureshi, Musab	A
Ministry of Energy	Kersman, Paul	A
Nexant	Bode, Josh	TC
NRG Matters Corp.	DiRuscio, Carmine	A
Ontario Power Authority	Chen, Simon	A
Ontario Power Authority	Ciaravino, Chris	A
Ontario Power Generation	Peterson, David	A
Portlands Energy Centre	Jayapalan, Jennifer	TC
Power Advisory LLC	Cumming, Alison	TC
Power Advisory LLC	Lusney, Travis	TC
Praxair	Whitney, Ellen	A
RBC Capital Markets	Doolittle, Robin	TC
Region of Peel	Mishra, Sanjay	A
Resolute Forest Products	Degelman, Cara	A
Resolute Forest Products	Cole, Gordon	A
Rodan Energy	Dudka, Marko	A
Rodan Energy	Goddard, Rick	A
Rodan Energy	Grove, William	A
Rodan Energy Solutions Inc.	Goddard, Rick	A
Rogers Communications	Shaw, Ryan	A
Rogers Communications	Zhao, Kate	A
Shell Energy	Kerr, Paul	TC
Springgay & Associates	Springgay, Guy	TC
Sussex Strategy Group	Simmons, Sarah	A
Sygration	Hilbig, Tom	A
Tembec	Laflamme, Serge	A
TransCanada	Kuntz, Margaret	A
Vale Ontario Operations	Oatway, Lewis	A
Vale Ontario Operations	Gereghty, Al	A
Arlitt, Edward	IESO	A

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Bruno, Juliana	IESO	A
Chung, Jo	IESO	A
Drake, Gordon	IESO	A
Duru, Josh	IESO	A
Grbavac, Jason	IESO	A
King, Ryan	IESO	A
Kwok, Jason	IESO	A
Murray, Patricia	IESO	A
Romlewski, Daniel	IESO	A
Wright-Hilbig, Rhonda	IESO	A
Scribe: Juliana Bruno, Market Development Please report any corrections, additions or deletions by email to: stakeholder.engagement@ieso.ca .		

All meeting material is available on the IESO web site at: www.ieso.ca/drwg.

Meeting Objective: The objective of the second Demand Response Public Session is to provide an update on demand response integration, the framework for DR pilots and a proposed stakeholder engagement for the design of a DR Auction mechanism.

Item 1 Update on DRWG

Gordon Drake of the IESO provided an update on the progress that the Demand Response Working Group (DRWG) has made on the workplan since the last public session on April 3. The update addressed three work streams: transitional rules for capacity based demand response and how those map to the Technical Panel (TP) process, demand response pilot program consultation, and plans to launch a separate stakeholder engagement for the DR auction. The agenda was introduced and stakeholders were reminded of existing opportunities to offer feedback.

Item 2 Preview of Stakeholder Engagement for DR Auction

Ryan King of the IESO provided a high level preview of design concepts expected to be involved in the stakeholder engagement (SE) for the DR Auction. The concept of a DR Auction was briefly explained and put into the context of a workplan. It was noted that there are a number of outstanding issues that will be addressed through the DR Auction SE. Areas of opportunity for stakeholder feedback within the proposed SE framework were then highlighted. As a part of the next steps, stakeholders were advised that they will be receiving an email with specific questions for which feedback is sought.

Attendee Questions, Comments and Discussion, with the IESO's response in italics:

An Attendee asked if the SE for the DR Auction will incorporate sources of supply other than DR. *The IESO responded that for the purposes of this SE, the auction is going to be limited to DR. The IESO is investigating the broader capacity market – but the DR Auction SE will be focused on the framework for DR integration.*

An Attendee asked if the IESO will give consideration to the interaction and potential overlap of various programs (such as coincident peak and Global Adjustment class A) when designing eligibility requirements for the DR Auction. *The IESO will be analyzing the interaction between GA class A participation and other DR programs. Though this process has not yet been defined – the IESO plans to propose design elements that prevent double counting and over compensation. It is anticipated that this concern may be addressed through the design of the qualification and capacity rating process.*

Item 3 Update on Pilot Programs and Enabling Market Rules

Patricia Murray of the IESO provided an overview of the proposed pilot programs, the expected learnings from these pilots, procurement highlights, and an overview of discussion points from the last pilot sub-committee meeting on July 2.

Note: Stakeholders were advised that minor edits were made to the presentation and that it will be reposted following the meeting at: www.ieso.ca/drwg.

Josh Duru of the IESO presented the concepts of the proposed enabling market rules for the pilot programs to be brought before the Technical Panel on July 22.

Attendee Questions, Comments and Discussion, with the IESO's response in italics:

An Attendee asked how the 100 MW procurement size for the pilots was determined. *The IESO responded that in a letter from the Minister of Energy received at the end of March, the IESO was encouraged to use a portion of expiring DR2 capacity to conduct DR pilot programs.*

An Attendee asked if a redline version of the enabling rules will be available for comment. *The redline rules are still being developed, but they will be available a week in advance of the July 22 Technical Panel (TP) meeting. There is no vote at the July 22 TP meeting related to the draft of the redlined market rules they are only being provided for review and discussion. Instead at the July 22 meeting the TP will be asked to vote that the amendment submission warrants consideration which is determined based upon the rationale and background of the amendment submission. In August the TP will be asked to vote to post the redline rules for stakeholder comment. Pending the TP's vote, stakeholders will have an opportunity to comment publicly on the proposed market rules after the August meeting.*

An Attendee asked if exporters will face increased uplift charges related to pilot cost recovery. *The past practice was to recover DR costs through Global Adjustment charges paid by Ontario consumers. As uplifts are developed to replace that practice it can be expected that they will continue to be subject only to Ontario consumers and not to exports.*

An Attendee asked the IESO to comment on the anticipated nature of pilot program participants and how this would differ from Global Adjustment/critical peak high 5 participation. The Attendee also asked if pilot participants will be permitted to use on-site or behind the meter generation to meet demand reductions. *Through these pilot programs the IESO is looking to explore new cost competitive opportunities for DR. Though the incentives and behavior of loads under critical peak high 5 is representative of one form of DR (peak avoidance) – the pilot programs seek to attract resources that may have different behavior and incentives. Eligibility requirements will be explored in the RFP design process and it will address the topic of behind the meter generation. Stakeholders are invited to provide feedback via the DRWG on the draft redline rules which will be made available through the Technical Panel webpage on July 15.*

An Attendee commented that capacity should only be curtailed when doing so is cost effective against other alternatives. The Attendee asked how the IESO anticipates DR pilot programs to be cost competitive. *A competitive RFP process will be held to procure DR pilot services - the IESO expects the competitive nature of that process to have a natural downward pressure on the cost of providing pilot services (i.e. Unit Commitment and Load Following). Through the course of the pilot programs the IESO will be able to learn about both the cost competitive capabilities of DR in these services and potential barriers to cost competitive participation. Existing market services will be analyzed against the opportunities for DR to participate cost competitively.*

An Attendee asked if energy storage would be considered for participation. *The IESO is seeking DR resources that can provide the proposed services – we are not attempting to define the technology that is allowed to participate. The IESO will be exploring potential interactions in compensation with the energy storage RFP but the current focus is to understand what services DR resources are able to provide.*

An Attendee asked the IESO to comment on the flexibility of the 100MW procurement size. *The IESO responded that the final procurement size will be based on the response to the RFP. While the IESO expects the scale to be in the order of 100MW – the cost and response to the RFP will drive the final scale.*

Item 4 Compliance Changes

Jason Kwok of the IESO presented the proposed changes to the DR compliance framework under the transitional Market Rules. It was noted that the changes are only applicable to existing DR3 contracts operating under the market rules, including those that will expire prior to the delivery date of the first DR Auction. Compliance changes that are proposed include: simplifying the definition of a Performance

Breach, evaluating Performance Breach for each Activation event and assessing participant's performance at the zonal level rather than at the Settlement Account level, and changing the financial penalty for a Performance Breach to match the month of the breach.

Attendee Questions, Comments and Discussion, with the IESO's response in italics:

An Attendee asked if the IESO can specify or has documented the distinction between 'dispatch' and 'activation'. The Attendee also asked how that language relates to slide 7 and for clarification on what is meant by 'compliance at the zonal level'. *The IESO responded that the way dispatch will be triggered under the transitional market rules will be consistent with the way resources are activated now. There are two areas of change – compliance and baseline, but all of the other operational expectations remain the same. The trigger mechanism is described in the document that was posted on the DRWG page in response to the April 3 meeting on DR (IESO Response: DR3 Triggers). The difference in language is a function of ensuring the transitional market rules contain the same obligations and expectations as they would have under OPA DR3 contracts. Evaluating compliance on the zonal resource level would be consistent with how DR resources are currently dispatched. The predispatch shadow price report details the resources at a zonal level – the proposed compliance framework would evaluate activation performance using the same zonal granularity. The IESO reminded the group that this is a transitional piece and is limited to those participants who have DR3 contracts in force at the time of the Minister's March 2014 letter to the IESO regarding the transition of DR.*

An Attendee asked if the performance breach penalty will be assessed per performance breach or per month. *The IESO responded that under current DR3 contracts Performance Breaches are assessed for events on a monthly basis and the financial penalty for Performance Breaches are capped at one availability payment per month. This will be kept consistent under the transitional market rules. During the DR Auction design, enduring rules will be discussed.*

Item 5 Baseline Changes

Juliana Bruno of the IESO presented the changes that are proposed to the baseline methodology under the transitional Market Rules. Again, it was noted that these changes apply to existing DR3 resources that will operate under the transitional market rules. The proposed solution was to continue with the High 15 of 20 baseline methodology and introduce an in-day adjustment. With the addition of an in-day adjustment, the current optional weather sensitive adjustment will be removed.

Attendee Questions, Comments and Discussion, with the IESO's response in italics:

An Attendee asked if the 10 of 10 baseline methodology as previously proposed by the OPA is still applicable. *The IESO responded that given the DRWG and IESO discussion and research it was determined that the earlier proposal of a move to 10 of 10 methodology will not be applicable.*

Item 6 Transitional Market Rules

Josh Duru of the IESO presented the enabling changes and the concepts of the proposed transitional market rules for demand response. Josh provided a review of information to be included in the Market Rules along with proposed amendments to be made, referencing relevant chapters and sections. The presentation addressed the need for the creation of a new class of Market Participant and offered a review of the eligibility requirements to participate in the Demand Response program. It was noted that bullet 3 from slide 13 will be removed in the final version of the slides. A review of the next steps for the DRWG and TP regarding the Market Rules was provided.

Attendee Questions, Comments and Discussion, with the IESO's response in italics:

An Attendee asked if IESO reports will contain details in regards to demand reduction as mentioned on slide 14. *Currently, the predispach shadow price report indicates instances when regions are above \$200 for 4 consecutive hours. Under the current DR3 program today, IESO System Status Reports (SSR's) contain notification and activation event details. This SSR process is expected to continue but there will be a new report available for stakeholder review later this year that will contain greater details – such as MW quantities.*

An Attendee asked if transitional market rule amendments affect the pilot programs. *The IESO responded that there are two separate market rule amendments: MR Amendment 408 is for transitional market rules and MR Amendment 410 is for the pilot programs.*

An Attendee asked if the framework for the flow of payments (from the IESO, to the aggregator and onto the customer) will continue under the transitional market rules. *Yes, this framework will continue as the IESO is not proposing to interject between the contractual arrangements made between aggregators and their contributors. The aggregator will be the Market Participant with which the IESO will deal and settle with.*

An Attendee asked if the new section 2.1.1A on slide 16 would allow for an aggregator to use proprietary metering methods and if there are any changes to metering thresholds. *The IESO responded that the metering method would have to be outlined in a participant's Metering & Verification Plan and then authorized by the IESO. Details relating to this would be found in the applicable IESO Market Manual. With regard to meter accuracy – the IESO is not proposing any changes to what is acceptable under the current DR3 contract.*

An Attendee asked for an update on the change from a supply cushion calculation to a price trigger activation method. *The IESO responded that the change to a price based trigger took effect June 1. An update on this was provided in the materials posted for the June 3 DRWG meeting.*

An Attendee asked if the price based trigger addresses the interaction between participation in DR and the Global Adjustment high 5 and potential double compensation problems. *The IESO responded that the price trigger will better align DR utilization and system need. It is recognized that there are interactions between GA peak avoidance and participation in this DR program. This is one of the reasons why the High 15 of 20 baseline*

will remain as the baseline methodology used. The interaction between DR and GA peak avoidance will be analyzed and stakeholdered through the DR Auction design.

An Attendee asked if there is anything in the rules to amend the practice of aggregators over-subscribing DR resources. *The IESO wants to ensure the right signals are sent for performance and the expected delivery for aggregators. By relaying the correct information, the IESO maintains the expectation that aggregators are able to manage their portfolios effectively. Nothing in the proposed market rules speak to over-subscription issues.*

Item 7 Wrap up and next steps

Ryan King of the IESO concluded the session by thanking and reminding attendee's to submit feedback in writing by email to stakeholder.engagement@ieso.ca. He noted that all market rules progress and updates will be communicated through the IESO weekly bulletin and advised attendees that the next DRWG meeting is on August 6 with plans for another public session in September.