

Meeting Summary

Date held: April 3, 2014	Time held: 9:00am – 11:30am	Location held: Crowne Plaza Toronto Airport Hotel
Invited/Attended	Company Name	Attendance Status (A)ttended; (R)egrets; (TC) Teleconference
Rutigliano, Tom	Achieving Equilibrium LLC	TC
Sharp, Bruce	Aegent Energy Advisors Inc.	A
Chalcroft, James	Air Liquide Canada	TC
White, Adam	AMPCO	A
Butters, David	APPrO	A
Shaw, Ian	Arcelormittal Dofasco	A
Pump, Sonya	Arcelormittal Dofasco	A
Cortese, Michael	Arcelormittal Dofasco	A
Belyea, Ernest	Bennett Jones LLP	A
Gnanam, Bala	BOMA Toronto	A
Morris, Richard	City of Toronto	A
Chihata, Bill	City of Toronto	A
Goldberg, Sam	City of Toronto	A
Marier, Paul	Comsatec	A
Tinkler, Mark	Customized Energy Solutions	A
Chintapalli, Raj	Customized Energy Solutions	TC
Wang, Cynthia	Delta Energy LLC	A
Dizy, Ron	Eco-Shift Power	A
Mills, Kevin	Elster Metering	A
Donovan, Dan	Elster Metering	A
Pieniasek, Marie	Energy Curtailment Specialists	A
Hausle, Kyle	Energy Curtailment Specialists	A
Griffiths, Sarah	EnerNOC, Inc.	A
L'heureux, Matthew	EnerNOC, Inc.	TC
Healy, Herb	EnerNOC, Inc.	A
Whicher, Martin	Environmental Commissioner of Ontario	A
Parkes, Mike	Environmental Commissioner of Ontario	A
Forsyth, David	Gerdau Long Steel North America	A
Maddix, Melanie	Goreway Power Station	TC
Katsuras, George	Hydro One Networks	A
Roberts, Dan	Hydro Ottawa	A
Northey, Mark	Loblaws Companies Limited	A
Yakupova, Kelima	London Economics International LLC	A

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Kersman, Paul	Ministry of Energy	A
Qureshi, Musab	Ministry of Energy	A
DiRuscio, Carmine	NRG Matters Corp.	A
Gibbons, Jack	Ontario Clean Air Alliance	A
Lundhild, Evelyn	Ontario Power Authority	A
Byers, Darren	Ontario Power Authority	A
Peterson, David	Ontario Power Generation	A
Caperton, Richard	Opower	TC
Graham, Ross	Par-Pak Ltd.	A
Kuriychuk, Mike	Pathchoice Energy Consulting Inc.	A
Chee-Aloy, Jason	Power Advisory LLC	A
Doolittle, Robin	RBC Capital Markets	TC
Bourdages, Alain	Resolute Forest Products	A
Sturgeon, Tim	Rodan Energy	A
Grod, Paul	Rodan Energy	A
Goddard, Rick	Rodan Energy Solutions Inc.	A
Dudka, Marko	Rodan Energy Solutions Inc.	A
Kerr, Paul	Shell Energy	A
Beaver, Chris	Sheridan College	A
Simmons, Sarah	Sussex Strategy Group	A
Hilbig, Tom	Sygration	A
Laflamme, Serge	Tembec	A
Marchant, Michael	Toronto Hydro Electric System Limited	A
Kuntz, Margaret	TransCanada	A
Bruno, Juliana	IESO	A
Doyle, Robert	IESO	A
Drake, Gordon	IESO	A
Holmsen, Martine	IESO	A
Iqbal, Haris	IESO	A
Kwok, Jason	IESO	A
Louw, Brennan	IESO	A
Leonard, Ted	IESO	A
Rivard, Brian	IESO	A
Wright-Hilbig, Rhonda	IESO	A
Scribe: Juliana Bruno, Market Development Please report any corrections, additions or deletions e-mail to stakeholder.engagement@ieso.ca		

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

Meeting Objective:

The objective of the public session is to discuss the IESO's plans for demand response integration and development, the role of stakeholders and the Demand Response Working Group members, and a proposed workplan.

Welcome

Ted Leonard of the IESO opened up the public session by welcoming participants and providing a brief history of demand response in Ontario. He also emphasized the IESO's eagerness and readiness to begin working with stakeholders to better engage demand side resources into the market and further the initiatives of the IESO market development plan.

Introduction and Overview

Robert Doyle of the IESO introduced the framework for the day and indicated the objectives for both the public and working group sessions.

IESO Market Review

Rhonda Wright-Hilbig of the IESO presented an IESO Market Review. The focus was to use dispatchable loads as a precursor of how demand response resources would be scheduled into the market. The IESO will look to both embedded and grid connected customers in the future of DR offerings.

Key takeaway: balancing supply and demand on the grid in a way that is economic, achievable for the system and enhances reliability is fundamental to IESO operations and the dispatch process.

An attendee asked how the cost of Congestion Management Settlement Credits (CMSC) is recovered. *The IESO responded that CMSC that is paid to dispatchable resources is charged to consumers in an hourly uplift.*

Demand Response Programs in Ontario

Evelyn Lundhild from the Ontario Power Authority presented the history of DR programs in Ontario and learning's from these programs. The focus of the presentation was intent, evolution, key findings, and evaluation of the programs. She noted that programs are intended to provide a range of options for customers to participate. Under current OPA DR Programs there is approximately 500MW of capacity provided. A brief overview of each of the programs was then provided in accordance with the presentation slides, in addition there was also a description of Peaksaver and Peaksaver Plus. The program evaluation highlights were then presented and are available on the final slide of the presentation.

Demand Response in surrounding regions

Jason Kwok of the IESO provided a general overview of the role demand response currently plays in the NYISO, PJM RTO, ISO New England, and MISO markets. All regions surrounding Ontario have incorporated market pricing in their DR compensation.

Demand Response 3 Integration

Gordon Drake of the IESO addressed the roadmap and the proposed mechanisms for bringing existing DR programs into the market. He followed that by emphasizing that the IESO is also asking stakeholders to think about what future opportunities there may be in meeting system needs with DR in a cost competitive way. He also provided an update to the group on the work that the IESO, the OPA, and DR3 participants have been doing to integrate DR by having it scheduled in market. His presentation focused on the principles that drove the DR design changes and the enhancements planned for the DR program to aid in market integration. He also spoke about the progress of those integration efforts, how DR3 resources will be represented within the IESO market and next steps. The goal is to integrate DR3 into the market by the summer. The public reports on DR3 scheduling will be available later this year, and the IESO will use the System Status Reports (SSR) to notify the market when DR has been notified and/or activated. The IESO was asked to present to the broad stakeholder community the market facing public reports to show how resources are being called upon.

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

How does the IESO plan to represent resources within the network model within a specific electrical location? *Resulting from analysis, the IESO will create a virtual generator at a specific location within the network model that will be priced in predispatch at \$200 for the hours of availability.*

Will the notification and activation come from the constrained sequence? *Yes.*

Does the IESO expect the price trigger to be a better indicator than supply cushion? *Looking back over 2012/2013 and analyzing predispatches where there would have been notifications the IESO found that under this scenario activations would have been done at the appropriate times. Even in the day-ahead time frame predispatch this can still be a good signal for the calling upon of these resources and should lead to a better indicator than supply cushion.*

Will the size of the resources match to the contracted MW amounts or will it be reduced to reflect availability? *The MW quantities associated with the resources assume 100% availability. However, when DR3 participants notify us that they are not fully available to reduce their consumption on a given day, we will reduce the MW associated with the affected resource in the scheduling process for the day in question.*

If you are modeling these resources as generators, will their capability, output, derates, outages be reported on – similar to what is in the Generator Output & Capability reports? *That type of reporting is*

done at the fuel supply level –DR resources will be grouped into a reporting mechanism as ‘other’ fuel type. Changes in available capacity will be reported through predispatch and adequacy reports. The IESO will also create separate, public reports for these resources to show how they are being scheduled in predispatch.

In your analysis did you consider January and February 2014 market conditions? Yes – there would have been 10 activations over those 2 months out of 25 in a year. Jan/Feb of this year was significantly out of step and stood out as a 1 in 35 year for gas sector heating degree days. \$200 is still the correct price threshold but a regular review process is important as well and will be described in a public document.

Is there any intent to bring Peaksaver into this integration? It is not in scope at this time. DR3 will be used in a way that is well aligned to market signals – the emergency alert of Peaksaver is not something that is, at this time, understood to be easily signaled through a price based trigger.

Demand Response Working Group Workplan

Gordon Drake then presented the DRWG workplan and addressed the following broad questions: What comes next? Where do we see IESO efforts moving in the near term horizon? What is the DRWG’s role in this? The goal is to derive greater value and more economic use of DR by integrating DR3 into the market, expanding opportunities, identifying areas of system need, and managing the balance of supply and demand more cost effectively. He reiterated that we are transitioning DR from a program to a market approach and using competitive pressures to bring costs down. He also presented the four work streams that will initiate this. In regards to the development of pilot projects – Gordon highlighted a call to action for stakeholders in the DRWG to communicate and provide input on opportunities for DR to meet both proposed and unexplored system needs. The timelines presented also demonstrated opportunities for both the public group and working group to provide feedback at multiple points throughout the course of the working group. Opportunities to provide feedback will occur through the demand response working group, formal stakeholder engagement plan(s), pending changes, baseline, and technical panel.

Attendee Questions, Comments and Discussions, with the IESO’s response in italics:

Can you provide the rationale of how the IESO has the authority to bring DR3 into the market under current market rules? *The IESO is creating a resource that represents what is already operating in the market via the DR3 program. The trigger process is a component of the OPA contracts. The IESO and the OPA are working on a document to make those steps clear and will enhance transparency of DR3 activations.*

We would like to see all stakeholder processes open to all market participants not just the working group. *The IESO plans to make use of the entire stakeholder community – but there is a specific role for the DRWG. Where focused discussion is required on DR capabilities (pilots for example) the IESO will first work with them. As the IESO stakeholders through the DRWG, stakeholder engagement plan(s), pending changes, baseline*

and technical panel there will be opportunities for all market participants to play a role. Any relevant issues will also be brought before the public group in addition to the DRWG. The IESO expects to hold public group meetings approximately every two months.

It seems that the 400MW block could really affect the entire marketplace – how will this affect the scheduling of other resources? If we have reached HE 7 of the day-at-hand predispach and have not issued a standby notification, we will prevent the dispatch tools from scheduling DR3 resources so that they do not impact subsequent predispaches. If activated, our scheduling tools will fix them to their activated quantity in predispach and prevent them from being scheduled in other hours. This will be managed through our scheduling tools so that it reflects demand response expected and actually achieved. This is an interim process to respect DR3 contract terms. As the IESO rolls out further evolution of DR in the market, it is expected that DR participants will manage their own resources. This is one of the DR capabilities that will need to be discussed with the DRWG.

Is there an opportunity for others to join the Working Group? Membership is fixed but we encourage you to bring your points to a representative on the Working Group and to the open sessions.