

Non-emitting Resources Subcommittee Meeting Summary – August 16, 2018

Date held: August 16, 2018	Time held: 10 am – 12 pm	Location held: Vantage Venues, Toronto
Attendees	Company Name	Attendance Status – (A)ttended; (T)eleconference; (WebEX) attended via Webex
Fonger, Jim	Ameresco	A
Luukkonen, Paul	AMP Solar Group	A
Butters, David	APPrO	A
Gatto, Elio	Axium Infrastructure Inc.	A
Wu, Julien	Brookfield	TC
Johnston, Wes	CanSIA	A
Giannetta, Brandy	CanWEA	A
Liut, Emma	Constant Power Inc.	WebEX
Withrow, David	Customized Energy Solutions	WebEX
Phillips, Patricia	Energy Storage Canada	A
Im, Brian	EnergyHub	WebEX
Langelaan, Deborah	ENGIE Canada Inc.	A
Spence, Garry	EverGreen Energy Corp	A
Bajc, Frank	GC Energy Services	A
Somerville, Stephen	H2O Power	A
Belanger, Frederic	HQEM	WebEX
Bowman, Stuart	Hydrogeneration Inc.	A
Ng, Jennifer	Invenergy LLC	A
Hunter, Art	J. A. Hunter Inc.	WebEX
Freeman, David	Ministry of Energy, Northern Development and Mines	A
Amaral, Utilia	Nest Labs/Stem	A
Tuck, Jennifer	NextEra Energy Canada	WebEX
Popova, Julia	NRG	WebEX
Reid, Robert	N-Sci Technologies Inc.	WebEX
Fortin, Michel	Ontario Citizens' Coalition for Clean Affordable Energy	A
Wizniak, Lynn	Ontario Power Generation	A
Norris, Paul	OWA	WebEX
O'Neill, John	Pattern Energy	A

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Pohlod, Michael	Peak Power	WebEX
Chee-Aloy, Jason	Power Advisory LLC	A
Simmons, Sarah	Power Advisory LLC	A
Inman, Peter	Powerful Solutions	A
Mulligan, Shane	Radicle Works	WebEX
Laflamme, Serge	Rayonier Advanced Materials	WebEX
Ingram, Rachel	Rodan Energy Solutions Inc.	WebEX
Johns, Grant	Saturn Power	WebEX
Zsofcsin, Nick	Saturn Power	A
Wark, Brian	Stem	WebEX
Ford, Nathan	TransCanada Energy	A
Mikkelsen, John	TransCanada Energy	A
Malka, Maurice	TSI Service Management Inc.	WebEX
Dent, David	Union Gas	A
Long, Jesse	Wpd Canada	WebEX
Chang, Judy	The Brattle Group	A
Oates, David Luke	The Brattle Group	WebEX
Chapman, Tom	IESO	A
Fitzgerald, Dale	IESO	A
Grbavac, Jason	IESO	A
Hartland, Mark	IESO	A
Louw, Brennan	IESO	A
Singh, Diljeet	IESO	A
Zubyck, Laura	IESO	A
Prepared by Laura Zubyck. Please report any corrections, additions or deletions by e-mail to engagement@ieso.ca .		

All meeting material is available on the IESO website at: <http://www.ieso.ca/Sector-Participants/Market-Renewal/Non-Emitting-Resources-Subcommittee>

Review of Agenda and Meeting Objectives – Tom Chapman, IESO

The IESO reviewed the meeting agenda and outlined the day’s objectives.

Modelling Ontario's Future Electricity Markets – Judy Chang, The Brattle Group

The Brattle Group presented the five modelling scenarios that stakeholders had helped develop at the July 24th NERSC meeting. Further clarification was provided on the approach to the modelling exercise and stakeholders were invited to provide their thoughts on how the input assumptions across each of the scenarios could be refined.

A participant asked if the current trend referenced in Scenario 1, Low Net Demand, represents the expected case.

The IESO explained that the approach of this modelling exercise is not to develop a base case, which other scenarios are measured against, but to look at a wide range of plausible scenarios and work with stakeholders to refine the input assumptions for each of the scenarios. Stakeholders are invited to draw their own conclusions about which scenarios are most likely to occur.

A participant commented that it would make sense to start with the Long-term Energy Plan (LTEP) as a base case and make adjustments to that to account for things that have changed since its release. Their reasoning was that the LTEP was developed more recently and shows significant changes since the Ontario Planning Outlook (OPO).

The IESO responded that the OPO is being drawn on for certain inputs, including a range of demand projections, as it provides a robust data set for Ontario supply and demand. The IESO added that changes that have occurred since the publication of the OPO are also being incorporated into the study. A detailed list of assumptions will be published and shared with stakeholders along with study results.

A participant asked if each of the scenarios is independent of each other.

Brattle confirmed that the scenarios are independent of each other.

The IESO added that the scenarios aren't mutually exclusive and the future may be comprised of components from each of the scenarios, or work its way through a range of scenarios over the next 20-30 years.

A participant suggested that Scenario 1, Low Net Demand, be modified in the following ways: 1) incorporate a higher baseload component, or traditional generation, including gas, and; 2) increase the proportion of contracted resources in the event contracts are extended or new contracts are offered.

Brattle responded that Ontario's existing fleet of resources will be included in the assumptions of the modelling; however, the supply mix will be an output of the model rather than an input. A change case where existing supply resources remain under contract could also be explored.

A participant commented that if the purpose of the exercise is to determine how high the energy price needs to clear in order for there to be sufficient revenue to meet system needs, then the outcome of these scenarios will start to drive the conversation around other mechanisms.

The IESO agreed with the stakeholders insights. Brattle added that the aim is to model the revenue streams available to resources and to see how high prices need to be to support the supply mix to meet market need and supply adequacy.

A participant commented that the scenarios show gas prices rising but they could also go lower.

Brattle thanked the participant for their input and comments and agreed that a low gas price could be looked at as an additional sensitivity.

A participant suggested that the carbon price used in the assumptions should reflect New York's carbon price.

Brattle thanked the participant for their input and comments.

A participant suggested that the potential of grid defection should be looked at in Scenario 5, Decentralized Future.

Brattle thanked the participant for their input and comments and confirmed that they will simulate a grid-defection change case where DERs are not visible or controllable by the IESO in Scenario 5, Decentralized Future.

A participant suggested that energy conservation causing load reduction should be considered.

Brattle responded that energy efficiency will be reflected as net load.

A participant commented that Scenario 5, Decentralized Future, needs to capture DERs that are currently on the distribution system that will need to become market participants as that will play a role in how the market needs to perform.

Brattle thanked the participant for their input and comments.

A participant suggested that DERs coupled with energy storage will be available to help the system operate and should be incorporated into the market.

Brattle responded that the approach to simulating behind-the-meter resources participating in the wholesale market is under development.

A participant commented that with an increase in DERs, less transmission is required to serve a similar level of load and that this should be considered in any long term planning efforts to demonstrate potential savings on assets.

Brattle thanked the participant for the comment and responded that transmission costs are not being analyzed in this process.

A participant commented that DERs needs to be modelled as more than just a reduction to net load and consideration must be given to how they can participate in the new market.

Brattle responded that DERs participating in the wholesale market will be modelled, however transactive energy, such as the buying and selling of electricity between a DER and another customer, will not be simulated.

A participant commented that the model should be flexible in terms of looking at a range of gas, energy or capacity prices in each scenario.

Brattle confirmed that the model will be flexible and that they are looking for suggestions in terms of what sensitivities market participants would like to see analyzed.

The participant followed up by asking if the results of the modeling exercise will outline the effects of, for example, capacity prices as a result of gas prices.

Brattle responded that the format for the presentation of results is still under consideration, but that the recommendation is to include change cases where certain sensitivities can be altered to assess the impact on the scenario's results.

A participant commented that it's important to consider transactive energy and its impact on the wholesale market prices in the sense that the volume of energy and volume of trading that occurs in the market would reduce drastically if it was occurring from private generation to private load.

Brattle responded that distribution level transactions that do not interact with the wholesale market except for the shape of their net load to the market are out of scope for this exercise.

A participant commented that carbon tax policies (federal and provincial) should be a variable in the analysis as carbon incentive mechanisms contribute to reducing the cost of DERs.

Brattle thanked the participant for their input and commented that a carbon price has been assigned to four of the scenarios that were developed together with stakeholders.

Conclusion and Wrap-up – Tom Chapman, IESO

The IESO thanked all participants and welcomed feedback from all stakeholders. Feedback should be sent to engagement@ieso.ca.

Meeting sessions adjourned at 12:05 pm.

The next NERSC meeting is scheduled for September 21, 2018.