



March 24, 2016

To: Clients and Colleagues

From: Alison Cumming and Jason Chee-Aloy, Power Advisory LLC

RE: IESO Market Renewal Stakeholder Engagement

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This note summarizes the Independent Electricity System Operator's (IESO's) forthcoming Market Renewal consultation and draft Stakeholder Engagement Plan.

## Background

The Electricity Market Forum (EMF) was established by the IESO in March 2011 to identify the principal issues being encountered or anticipated in the operation of and participation in the IESO-Administered Markets and to make recommendations that address those issues in light of the respective roles of the market, contracts, and regulation. As part of the EMF's final report<sup>1</sup>, a Market Road Map<sup>2</sup> was developed to specifically identify issues that should be addressed in order to achieve improvements to the Ontario electricity market. A prioritization of the issues along with deliverables and timelines for implementation of market improvements was included in the Market Road Map. In the role of EMF facilitator/consultant, Power Advisory developed the Market Road Map and contributed to the final report.

Between 2011 and 2015, the IESO sought to address the recommendations stemming from the Market Road Map through a series of stakeholder consultations<sup>3</sup>. In their 2014-2016 Business Plan, the IESO proposed to move forward with several elements of market development in 2015 and beyond. At the March 5, 2015 Stakeholder Advisory Committee (SAC) meeting, the IESO signaled their intention to launch a stakeholder engagement towards the end of 2015 to begin to the potential move away from the present wholesale energy market two-scheduling/uniform pricing system towards a locational energy pricing system<sup>4</sup>. In late 2015, the IESO held a series of pre-consultation meetings with select market participants and other stakeholders to initiate discussions and gather preliminary feedback on a variety of potential market design changes. At the February 10, 2016 SAC meeting, a high-level presentation<sup>5</sup> was given to formally introduce the IESO's forthcoming Market

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<sup>1</sup> [http://www.ieso.ca/Documents/consult/Market\\_Forum\\_Report.pdf](http://www.ieso.ca/Documents/consult/Market_Forum_Report.pdf)

<sup>2</sup> Refer to Appendix D of Final Report: [http://www.ieso.ca/Documents/consult/Market\\_Forum\\_Report.pdf](http://www.ieso.ca/Documents/consult/Market_Forum_Report.pdf)

<sup>3</sup> A few key consultations are summarized in Appendix A of this memo

<sup>4</sup> [http://www.ieso.ca/Documents/consult/sac/SAC-20150305-memo\\_market\\_forum\\_FINAL.pdf](http://www.ieso.ca/Documents/consult/sac/SAC-20150305-memo_market_forum_FINAL.pdf)

<sup>5</sup> <http://www.ieso.ca/Documents/consult/sac/SAC-20160210-Item-5-Presentation.pdf>

Development Initiative (which has since been renamed the Market Renewal Initiative). More specifically, the IESO communicated its plan to work with stakeholders in 2016 to develop a multi-year work plan for market development. Areas where potential market design changes have been identified include: two-schedule pricing; day-ahead market; real-time unit commitment; intertie scheduling; capacity; demand response (DR) capacity auction and portfolio; and, intertie capacity with transactions.

### **Market Renewal Engagement and Draft Stakeholder Engagement Plan**

On March 23, 2016, the IESO released preliminary details on a forthcoming stakeholder engagement entitled the Market Renewal Initiative<sup>6</sup>. The purpose of this consultation will be to gather feedback regarding the development of a workplan for renewing Ontario's wholesale energy market design. The workplan is intended to set out specific market design changes to be implemented over the coming years and will define target timelines for completing the work.

In preparation for the Market Renewal stakeholder engagement, the IESO has published a draft Market Renewal Stakeholder Engagement Plan<sup>7</sup>. In its current form the plan is high level and introductory, with a focus on background information and engagement objectives. Key elements of the draft Plan are summarized below.

- It is not clear that the current market design is optimal to meet future challenges, for the following reasons:
  - Uncertainty over future needs;
  - Significant advances in technology have opened the door to potential new resource providers; and
  - There are underutilized assets within Ontario, both on the demand and supply sides.
- An optimal market design will ensure all resources have the opportunity to compete to meet Ontario's power system needs as they emerge while minimizing operational risks and maximising opportunities.
- The proposed workplan for Market Renewal will target the larger structural inefficiencies related to the energy market's two-schedule system, day-ahead commitment and real-time

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<sup>6</sup> <http://www.ieso.ca/Pages/Participate/Stakeholder-Engagement/Market-Renewal.aspx>

<sup>7</sup> <http://www.ieso.ca/Documents/consult/ME/ME-20160321-Draft-Stakeholder-Engagement-Plan.pdf>

commitment processes and the introduction of a capacity auction (i.e., capacity market) at the appropriate time.

- Through this stakeholder engagement, the IESO will seek feedback from stakeholders to help:
  - Define objectives and principles that will inform the development and implementation of the workplan;
  - Identify the set of market design changes to be included in the workplan; and
  - Determine sequencing and timelines for the elements of the workplan.
- The completed workplan will be underpinned by a to be developed business case and cost-benefit analysis which will proceed in parallel with this stakeholder engagement.

## Timelines

Few details have been made available regarding the number and scope of meetings that will take place under this stakeholder engagement. The following draft schedule has been proposed by the IESO.

Date	Activity
March 21, 2016	Draft Stakeholder Engagement Plan posted by IESO
April 19, 2016	Meeting # 1: Overview of draft Stakeholder Engagement Plan
TBD	Feedback on draft Stakeholder Engagement Plan and Meeting #1
TBD	Meeting #2: Scope TBD
TBD	Additional meetings as required

## Power Advisory Commentary

Power Advisory offers the following preliminary feedback regarding this initiative.

- The IESO has correctly identified that due to the complexity of the real-time energy market and the interplay between each of the components within the market, none of the potential enhancements under consideration can be implemented on their own.
  - Similar feedback has been provided in several recent IESO stakeholder engagements, as stakeholders have cautioned that the IESO consider market design changes not as discrete elements but within a holistic and integrated manner.

- The draft Stakeholder Engagement Plan makes reference the work of the EMF but not specifically to the Market Road Map (which is presented in Appendix B of this note). As noted earlier, Power Advisory acted as the facilitator/consultant for the EMF. It is our recommendation that the Market Road Map be used by the IESO as a starting point for development of the workplan, with relevant updates overlaid onto it (e.g., Ontario’s forthcoming cap-and-trade program, etc.).
- The timing associated with the Market Renewal stakeholder engagement and subsequent market evolution activities is still unclear. However, some clues related to the IESO’s probable order of priorities do exist.
  - For example, at the February 10, 2016 SAC meeting, the IESO indicated that replacing the two-schedule system is the key that will enable other market development work. This indicates that the IESO will likely make two-schedule pricing changes a high priority relative to other market design improvement initiatives.
  - Within the draft Stakeholder Engagement Plan, the IESO makes reference to “...the introduction of a capacity auction at the appropriate time”, which may indicate that this component of market development will be initiated following other activities that will be given higher priority.
    - Recall that the stakeholder engagement which was initiated in 2014 to design and implement a capacity auction was put on hold in 2015.
- The Market Renewal stakeholder engagement is not intended to result in market rule changes, however subsequent stakeholder engagements are expected to be launched in order to implement the initiatives developed within the Market Renewal stakeholder consultation.
- Changes resulting from subsequent stakeholder engagements are likely to be significant, potentially altering how resources such as imports/exports, generation, and DR are scheduled and dispatched, and therefore significantly impacting and/or altering the calculations of the 5-minute Market Clearing Price (MCP) and the Hourly Ontario Energy Price (HOEP). Such significant changes will likely also trigger generator contract amendments.
- The draft Market Renewal Stakeholder Engagement Plan does not makes reference to Ontario’s forthcoming cap-and-trade program, which is expected to impact the electricity market in several ways<sup>8</sup>.

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<sup>8</sup> Power Advisory’s recent commentary on cap-and-trade is available here: <http://www.poweradvisoryllc.com/wp-content/uploads/2016/03/Ontario-Cap-and-Trade-Power-Advisory-Commentary-March-11-2016.pdf>

- The cap-and-trade program's specific impacts on market participants, MCP/HOEP, electricity demand, etc. should be taken into consideration as discussions within the Market Renewal stakeholder engagement evolve.
- As conveyed to the IESO by SAC members, there are several other key factors that should be incorporated into the Market Renewal workplan:
  - The focus of market development initiatives should be on improved efficiency and not diminution of revenues;
  - Potential market development initiatives should consider assets (e.g., generation, etc.) currently in operation in addition to expected future operating assets; and
  - Governance is integral to market confidence and must be addressed.

## **Conclusion**

Though still high-level, details are beginning to emerge regarding the IESO's forthcoming Market Renewal stakeholder engagement. Power Advisory will closely monitor this engagement.

## Appendix A: Key IESO Stakeholder Engagements

The scope of future developments in the electricity market is expected to connect and rationalize plans and recommendations stemming from the following key IESO stakeholder consultations which have been undertaken over the past few years.

- **HOEP Review** – The IESO completed the HOEP review in 2013. No market rule changes were proposed in relation to the review.
- **Global Adjustment Review** – The IESO completed the Global Adjustment (GA) review in 2013 and made recommendations in 2015. Because the IESO does not have the ability to change the methodology of calculating the GA, no related market rule changes were introduced.
- **Energy Market Pricing System Review** – On February 19, 2015, the IESO released the Energy Market Pricing System review report that assessed whether changes should be made to the two-schedule dispatch and pricing system (i.e., market schedule and constrained schedule, resulting in calculations of the HOEP, MCP, and Congestion Management Settlement Credits (CMSC)). The report recommends that the IESO should explore some form of locational pricing.

## Appendix B: Electricity Market Forum 2011 Report Market Road Map

OPTIONS AND GAME CHANGERS	SHORT-TERM (PRESENT TO END OF 2014)			MEDIUM-TERM (2015 TO 2018)		LONG-TERM (2019 AND BEYOND)	
	2012	2013	2014				
3.4	Pricing & Costs: Review and Study						
1.6	IESO-led review (with OPA and OEB participation) of publicly available information and consultation with stakeholders on Improvements to Access Information	IESO, OEB and OPA (and other entities) to make changes to the accessibility of information	Assess, review and evolve Access to Information based on, but not limited to: system changes; market changes; while considering development of a central data/information repository				
1.2a	IESO and OPA continue to develop solutions to address SBG challenges and implements solutions as appropriate in a transparent manner	IESO and OPA re-assess need for solutions to address SBG challenges and implements solutions as appropriate	IESO and OPA re-assess need for solutions to address SBG challenges and implements solutions as appropriate				
1.4	OPA Contracts: Review procurement processes to better ensure (1) procurement decisions are informed by market/system needs and system limitations; (2) contracts - new and existing - contain strong market incentives; (3) changes to IESO Market Rules are coordinated with existing OPA contract provisions, all while considering results from the Pricing and Costs Study.						
2.1 and 2.3	IESO consultation to investigate how to Increase Demand-Side Participation in the IAM to improve capabilities and utility of Demand-Side Management.	IESO implementation of Action Plan to Increase Demand-Side Participation in the IAM to improve capabilities and utility of Demand-Side Management.	Increasing Demand-Side Participation in the IAM while decreasing barriers to participate	Increasing Demand-Side Participation in the IAM while decreasing barriers to participate: including facilitating and capturing changes in technology; use in non-traditional ways (e.g., ancillary services, storage, etc.)			
2.2	OEB Review of Rate Design: review methodology to set RPP and utility rates	OEB setting new RPP and utility rates based on Review and considering results of Pricing & Costs Study	Timing and cycle for the OEB to set all applicable rates should consider: policy; system conditions; market conditions; etc.				
1.2b	IESO assesses need for new Ancillary Services to help enhance efficiency of system operability	If required, IESO designs new Ancillary Services and applicable market rules	If required, IESO to implement new Ancillary Services, IESO re-evaluates need for new Ancillary Services based on: system conditions; market conditions; etc.	IESO re-evaluates need for new Ancillary Services based on: system conditions; market conditions; etc.			
3.2	IESO to assess and review workability of Two-Schedule system and identify issues and improvements	IESO to identify options to Replace the Two-Schedule System	IESO to begin design work on preferred option to Replace the Two-Schedule System	IESO completes design/market rule changes to Replace Two-Schedule System and Changes to Intertie Transactions	IESO to implement Replacement for the Two-Schedule System and Changes to Intertie Transactions	New scheduling/dispatch, price system and changes for intertie transaction operational	
3.3		IESO assesses, reviews and potentially implements interim Changes to Intertie Transactions related to tradeable products (e.g., capacity) not requiring changes to systems and tools	Incorporated with design work to Replace the Two Schedule System. Changes to Intertie Transactions (e.g., products, scheduling frequency, etc.) to be included in the design work				
1.3	OEB Regulation: Review of OEB processes to ensure coordination between regulation, contracts, and market to encourage supply operations to meet system needs and limitations						
1.1 and 3.1	IESO use of Existing Tool/Capabilities: based on the need to maintain the reliability of the power system and to improve market efficiency, as required, the IESO will use existing tools/capabilities by way of the Market Rules						
Smart Grid	Data/Information/metering standards under development			Ancillary Services capabilities emerging from distribution system		Non-traditional energy storage available	
Electric Vehicles	Pilot Projects			Emergence of workplace/public charge stations		Mass market adoption (1 in 20) and vehicle-to-grid (V2G) charging	
Carbon Pricing	Regional GHG Initiative/Western Climate Initiative			Carbon pricing			

Source: Electricity Market Forum Report, Appendix D ([http://www.ieso.ca/documents/consult/Market\\_Forum\\_Report.pdf](http://www.ieso.ca/documents/consult/Market_Forum_Report.pdf))