



Barbara Ellard
Director, Markets
Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1

June 16, 2017

Dear Barbara,

Power Advisory LLC has coordinated this submission on behalf of a consortium of renewable generators and the Canadian Wind Energy Association (CanWEA). The members of this consortium include: Boralex; Brookfield Renewable Power; EDF EN; EDPR; Enbridge; ENGIE; Kruger Energy; NextEra Energy; Pattern Energy; and Suncor. Collectively, this consortium of renewable generators represents over 44,000 MW of installed renewable generation capacity in North America, with over 4,000 MW of installed or under development renewable generation in Ontario.

We wish to formally offer suggestions and comments to the Independent Electricity System Operator (IESO) regarding our collective thoughts on the IESO's Market Renewal Program (MRP).

The purpose of this submission is to request changes to the objective and principles of the IESO's MRP that will clearly link important statutory objectives to which the IESO's MRP is presently not explicitly addressing, and to help directionally set a sound course towards re-designing Ontario's wholesale electricity market in-line with its present and changing resource mix. Given Ontario's progressive climate change and electricity policies and objectives, along with Ontario's clean resource mix, the IESO has a significant opportunity to show leadership regarding wholesale electricity market design that will best facilitate public policy goals and objectives along with maintenance and development of clean energy resources while meeting Ontario's power system reliability needs.

We support the notion that Ontario's wholesale electricity market (i.e., IESO-Administered Markets (IAM)) should evolve from its present design. Ontario's energy and related policies (e.g., environmental, etc.) along with resource mix (i.e., substantial uptake in renewables, conservation and demand management (CDM), distributed energy resources (DERs), etc.) have dramatically changed since the IAM opened in May 2002, thus challenging the effectiveness of the original wholesale market design. Therefore, in concept we are supportive of the IESO's MRP as a means to address these challenges. However, we offer these suggestions and comments on the MRP for the IESO's consideration and we wish to request a meeting wherein we can discuss the issues outlined within this submission.

Proposed Changes to the Market Renewal Program Objective and Principles

At both the May 4, 2017 Single Schedule Market (SSM) stakeholder meeting and the May 18, 2017 Incremental Capacity Auction (ICA) stakeholder meeting, the IESO presented the following revised objective and principles for the MRP.

Objective: *"To deliver a more efficient, stable marketplace with competitive and transparent mechanisms that meets system and participant needs at lowest cost"*

Principles: *efficiency, competition, implementability, certainty, transparency*

During discussions at the May 4 SSM meeting, in part based on potential changes to some of the U.S. wholesale electricity markets to better account for state policies (e.g., renewable generation development to meet Renewable Portfolio Standards (RPS), etc.), the IESO stated that the MRP objective and principles could evolve as stakeholder consultations move forward.

We are requesting the following changes (highlighted in bold font) to the MRP objective and principles that explicitly link to key electricity related Ontario Government policy objectives and objects of the IESO, which also better reflect directional changes to the mix of electricity resources (e.g., renewables, DERs, CDM, and advancing technologies (e.g., energy storage, etc.)) that will continue to occur within all electricity markets including within Ontario.

Revised Objective: *"To deliver a more efficient, stable marketplace with competitive and transparent mechanisms that **aligns with provincial climate change policies and** meets system and participant needs at lowest cost"*

Revised Principles: *efficiency, competition, implementability, certainty, transparency, **flexibility, reliability, clean energy***¹

The rationale for our proposed changes to the objective and principles of the MRP is based on: need to ensure strong alignment with Ontario Government policies and objectives relating to climate change and cleaner energy sources; and, acknowledgement that Ontario's resource mix will continue to evolve towards cleaner and non-emitting resources with greater penetration of renewable generation, CDM, and DERs which should drive how to effectively improve the scheduling and dispatch of resources and pricing within the IAM while maintaining the reliability of Ontario's power system.

¹ The Ontario Government established these five principles within the 2013 Long-Term Energy Plan to guide decision-making for Ontario's energy sector: affordability; reliability; clean energy; community and Indigenous engagement; and CDM (see <http://www.energy.gov.on.ca/en/ltep/>).

Need to Explicitly Link Objective of the Market Renewal Program with Ontario Government Policies and Objectives and Objects of the IESO

With the introduction and passing of Bill 135² in 2016, amendments were made to several key statutes and regulations, including the *Electricity Act*. Amendments to the *Electricity Act*³ introduced new objectives and purposes, some of which are identified below with points underlined for emphasis that convey needed links to the IESO's MRP and therefore providing supporting rationale for our proposed changes to the objective and principles of the MRP.

Objectives

6 (1) The objects of the IESO are,

- (g) to operate the IESO-administered markets to promote the purposes of this Act;
- (m) to engage in activities to facilitate the diversification of sources of electricity supply by promoting the use of cleaner energy sources and technologies, including alternative energy sources and renewable energy sources;
- (n) to engage in activities in support of system-wide goals for the amount of electricity to be produced from different energy sources;

1 The purposes of this Act include the following:

- (d) to promote the use of cleaner energy sources and technologies, including alternative energy sources and renewable energy sources, in a manner consistent with the policies of the Government of Ontario;

Bill 135 also introduced changes which formalized the new long-term electricity planning process in Ontario. Examples contained within the amended *Electricity Act* pertaining to planning and procurement of electricity resources are provided below.

PART II.2

PLANNING, PROCUREMENT AND PRICING

Long-term energy plans

25.29 (1) At least once during each period prescribed by the regulations, the Minister shall, subject to the approval of the Lieutenant Governor in Council, issue a long-term energy plan setting out and balancing the Government of Ontario's goals and objectives respecting energy for the period specified by the plan. 2016, c. 10, Sched. 2, s. 7.

2) For the purposes of subsection (1), a long-term energy plan may include goals and objectives respecting,

- (d) the use of cleaner energy sources and innovative and emerging technologies;

² On June 2, 2016, the Ontario Government passed Bill 135, the *Energy Statute Law Amendment Act*, which includes amendments to three key statutes and regulations to reflect changes to Ontario's long-term energy planning process and Government policy objectives. Bill 135 is available at http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=3539.

³ <https://www.ontario.ca/laws/statute/98e15>

(e) air emissions from the energy sector, taking into account any projections respecting the emission of greenhouse gases developed with the assistance of the IESO

Therefore, it is clear from the applicable Ontario Government policies and objectives, purposes of the *Electricity Act*, related objects of the IESO, and the scope of the Ontario Government's Long-Term Energy Plans, that the objective and principles of the IESO's MRP should explicitly account for and meet the Ontario Government's climate change policies and objectives relating to electricity.

Need to Re-Design Ontario's Wholesale Electricity Market to Accommodate Changing Resource Mix

Consistent with points made above, and from the outset of the stakeholder engagement process to fundamentally re-design the IAM, the IESO's MRP should acknowledge that Ontario's resource mix has evolved and will continue to evolve towards increasing uptake of non-emitting and clean resources, with greater penetration of renewable generation, CDM, and DERs. This should drive how to effectively improve the scheduling and dispatch of resources and pricing within the IAM. If done effectively, this will better ensure that Ontario's re-design of the IAM will deliver the 'market of the future' and not a market that was designed to schedule, dispatch, and price conventional resources (e.g., primarily coal- and gas-fired generation) with passive demand-side resources.

This point is supported by market design and evolution activities that have recently emerged within other jurisdictions. For example, in response to growing tension between wholesale electricity market design and public policy objectives and programs (e.g., contracting for renewable generation to meet state RPS) other electricity system operators including Independent System Operator New England (ISO-NE), New York ISO (NYISO), and the Pennsylvania-New Jersey-Maryland Interconnection (PJM) are currently working with stakeholders to make design changes to their wholesale electricity markets (i.e., energy and capacity markets) to better accommodate and achieve public policy objectives (e.g., climate change objectives relating to cleaner resource mix and energy production). Further, the U.S. Federal Energy Regulatory Commission (FERC) held a technical conference on this very subject on May 1-2, 2017, and now FERC has outlined some directional options to address these challenges and has provided stakeholders with follow on actions to move these challenges toward eventual solutions⁴. Therefore, the IESO and stakeholders should proceed in an effective and progressive manner towards re-designing the IAM that best facilitates Ontario Government policies and objectives combined with a changing resource mix and technological advances, while maintaining the reliability of Ontario's power system.

⁴ See <https://www.ferc.gov/CalendarFiles/20170523170542-AD17-11-000PostTC.pdf>

In closing, we request a meeting to discuss the contents of this submission and the general direction of the MRP towards defining high-level designs within the defined workstreams (i.e., Energy, Capacity, Operability). Additionally, we would like to discuss the status of the Market Development Roadmap, as introduced at the May 10, 2017 IESO Stakeholder Advisory Committee meeting. We look forward to continued participation within the IESO's MRP stakeholder engagement and collaboration with the IESO and other stakeholders.

Sincerely,



Jason Chee-Aloy
Managing Director
Power Advisory LLC

cc:

JoAnne Butler (IESO)
Darren Matsugu (IESO)
Steve Nusbaum (IESO)
Tom Chapman (IESO)
Ryan King (IESO)
Rob Coulbeck – Market Renewable Working Group Co-Chair (Goreway Power Station)
Paul Dottori – Market Renewable Working Group Co-Chair (Tembec)
Robert Hornung (CanWEA)
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Adam Rosso (Boralex)
Jack Burkom (Brookfield Renewable Power)
David Thornton (EDF EN)
Tom LoTurco (EDPR)
Ian MacRobbie (Enbridge)
Bonnie Hiltz (ENGIE)
JJ Davis (Kruger Energy)
Jennifer Tuck (NextEra Energy)
Kellie Metcalf (Pattern Energy)
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