



May 6, 2016

IESO Market Renewal Project
Attention: Tom Chapman, Barbara Ellard, Gordon Drake
Email: engagement@ieso.ca

Subject: Request for Feedback on IESO Market Renewal Project Scope and Plans

The Ontario Society of Professional Engineers (OSPE), is pleased to submit our comments on your Market Renewal Project. OSPE is the advocacy body and member services organization for engineers in the province of Ontario. OSPE wishes to thank the IESO for the opportunity for Ontario's power system engineers to submit comments on a project that will impact the economic and environmental interests of the public.

OSPE agrees with the IESO that a renewal of the electricity market here in Ontario is overdue. The rule changes that the IESO has implemented to promote market efficiency and reliability of the IESO controlled grid since the 2002 market opening have been commendable. Ontario has now completed a transition to a low emission, low variable cost, high fixed cost power system. Such a system will require some additional enhancements in the wholesale market if we expect that market to meet the public's expectations for energy dependability, affordability and environmental stewardship.

Attached is a summary of our concerns and suggestions for IESO's consideration. OSPE is ready to assist IESO in its market renewal efforts.

If you would like to discuss the comments in more detail with our OSPE Energy Task Force members, please contact our Manager of Policy and Government Relations, Lee Weissling, Ph.D. at lweissling@ospe.on.ca or 416-223-9961, ext. 230.

We look forward to exchanging views on a regular basis with IESO staff.

Yours truly,

A handwritten signature in black ink that reads "Sandro Perruzza".

Sandro Perruzza
Chief Executive Officer
Ontario Society of Professional Engineers

A handwritten signature in black ink that reads "M. Monette".

Michael Monette
President and Chair
Ontario Society of Professional Engineers

Information copies to:

Honorable Bob Chiarelli

Minister of Energy

Rosemarie T. Leclair

Chair and Chief Executive Officer
Ontario Energy Board

Bruce Campbell

Chief Executive Officer
Independent Electricity System Operator

Serge Imbrogno

Deputy Minister of Energy

Michael Reid

Assistant Deputy Minister
Regulatory Affairs and Strategic Policy Division
Ministry of Energy

OSPE Comments Related to the Ontario Electricity Market Renewal Project

OSPE appreciates the current limitations on the IESO administered markets brought about by:

- The two schedule system of constrained dispatch with unconstrained price setting with side payments (congestion management settlement credits or CMSC along with the various guarantee programs).
- The lack of an incremental “capacity” mechanism or financially binding “day ahead” market.

OSPE also understands the IESO’s desire to limit the near term changes to high priority wholesale and capacity market changes. OSPE supports IESO’s phased approach to renewing the wholesale market.

OSPE supports the IESO’s efforts to gradually reduce the impact of or eliminate entirely the global adjustment mechanism (GAM) as it is currently implemented. The GAM, as it is currently implemented, dulls the wholesale market price signals and encourages counter productive consumer behaviours that result in additional curtailment (waste) of clean electricity and higher overall operating costs for the power system.

For the same reason, OSPE supports the IESO's efforts to ensure market resources are paid for production and not for "not producing" through side payments like CMSC. Ensuring that the appropriate components of CMSC such as congestion costs are signaled through the market clearing price will also encourage efficient generator behavior, and potentially consumer behavior depending on decisions made regarding a uniform price for loads.

OSPE would encourage the IESO to ensure that the market dispatching orders support the government’s emission reduction goals. This is especially important because, according to the Auditor General of Ontario’s 2015 report, the government has invested approximately \$250 for each tonne of CO₂ emission reduction in the electrical sector. OSPE does not want to see those benefits lost after the new cap-and-trade program is launched in 2017 with an expected carbon price of only \$15 to \$30 per tonne CO₂.

OSPE encourages the IESO to ensure new market mechanisms are not barriers to the introduction of innovative technologies that are alternatives to conventional supply resources. OSPE is concerned that promising new technologies like smart grid technologies and small modular Generation IV reactors will not be able to offer sufficient capacity for the electricity market. Smart grid and nuclear technologies are absolutely required to meet our 2050 emission reduction goals at an affordable cost. In the case of smart grid technology, risk capital is necessary to commercialize promising innovations at the early stage of development. Nuclear technology specifically requires financial guarantees to successfully obtain financing, so that nuclear energy can help us successfully sustain an affordable, low emission, reliable electricity system.

While outside the scope of this IESO market renewal project, OSPE believes there are significant opportunities to improve the efficiency and effectiveness of the wholesale market if the interaction of the wholesale (both energy and capacity) and retail markets were subject to a more comprehensive technical and economic analysis under a longer term separate project.

OSPE supports efforts that will create better retail pricing signals for consumers that incent peak load reduction, load leveling and displacement of fossil fuels in other sectors by clean electricity. This is becoming more important each year as the capacity of variable renewable sources increase. The curtailment (waste) of surplus clean energy will become more serious if we don't find a way for electricity markets to incent consumers to use all available clean energy in productive ways, including increasing clean electricity use to displace fossil fuel use in other sectors.

A low emission, low variable cost power system like Ontario, combined with the government's commitment to reduce emissions across the entire economy, will require new approaches to manage the electricity system and leverage its capabilities. We would encourage the IESO, Ministry of Energy and the Ontario Energy Board to undertake such an analysis. Ontario's professional engineers are a valuable resource for that analysis and review.