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IESO SENIOR MANAGEMENT UPDATE

To: Stakeholder Advisory Committee

Date: October 30, 2008

Subject: **Briefing note on Energy Forward Market Design**

Information Item

The purpose of this document is to provide the Stakeholder Advisory Committee with an update of the progress made by the IESO to further a decision on any Energy Forward Market (EFM) design for Ontario and to outline the next steps in this process.

Introduction

The IESO released its Day-Ahead Market Evolution Preliminary Assessment on May 5th, 2008. The report assessment was based on a cost-benefit analysis of 3 options for improving unit commitment efficiency, providing day-ahead financial commitment opportunities and continuing reliable operations. The report recommended Option 2 which would enhance the existing day-ahead commitment process (DACP) and implement an Energy Forward Market.

At the September 5th meeting of the IESO Board, it was determined that “Management will continue to review EFM alternatives and report back to the Board later in 2008”. Review of EFM alternatives continues on a separate path from the approved enhancements of the DACP.

Background

The need for forward financial commitments had been contemplated at market opening, resulting in a section in Chapter 8 of the Market Rules outlining the operation of an EFM. The IESO also created a tool to facilitate a forward auction. This system and the associated market rules were never enabled.

In the process of assessing the 3 options mentioned above, we identified benefits related to day-ahead financial commitments (risk mitigation, improvements in decision-making and demand response), but we were unable to quantify them. However, we did assess that the potential benefits of the Chapter 8 EFM were expected to exceed the cost of implementation because the system and rules were already in place and because the IESO could likely add value by synergizing day-ahead and real-time prudential posting requirements.

Stakeholders suggested that the IESO broaden our assessment of EFM options to include a design which utilized an existing exchange platform and offered prudential synergies. Currently, an external exchange (NGX) has posted forward products for Ontario electricity but there has been limited trading activity. The lack of interest is thought to be a result of:

1. the structure of the Ontario market, where many participants have built-in price protection,
2. the complexity of the marketplace, and
3. the significant cost of posting prudentials with an exchange.

Stakeholders and the IESO have reviewed these factors which impact the success of an EFM. We have determined that it is possible for the IESO to assist in simplifying day-ahead forward market trading for Ontario market participants. The IESO is also in a position to lessen the impact of prudential posting concerns.

Furthermore, although current market structure does not support a liquid EFM, evolution of the market is anticipated. This will result in more price volatility for certain market participants. Examples of the evolution of market structure are: the MUSH sector moving from RPP to hourly pricing, increase of merchant generation without regulated pricing, and possible load serving entities.

As price volatility increases for load and generation, stakeholders have told us that they will want to manage risk and will need effective tools to provide day-ahead financial commitments. Stakeholders have identified synergies in the posting of prudentials as an area where the IESO can add value. Participation in the EFM may improve over time due to the benefits of forward financial commitments, and this will increase the liquidity of the EFM. The EFM may also provide a more reliable day-ahead predictor of real-time price than the current forecast of HOEP, although this is not the primary goal of the EFM. A better price signal may allow all market participants to improve operational and investment decisions, resulting in market efficiencies.

The following section provides a further update of progress made by the IESO and the EFM TSG since August 20th, to determine the appropriateness of an EFM for the Ontario market, discuss design considerations, and to outline any next steps. The IESO has moved forward on EFM design considering stakeholder feedback and balancing priorities.

EFM Technical Support Group Update

With the elimination of Option 3, some stakeholders felt that an EFM may offer some benefits to the Ontario market which do not exist today and which are not provided by the enhanced DACP.

For these reasons, the September 30th meeting of the TSG revealed more interest on the part of participants in reviewing key EFM considerations. At that meeting, the TSG members generally agreed on the following:

- The goal of an EFM is to provide opportunities for forward financial commitments, and this may ultimately result in improved price signals in advance of real-time.
- Any EFM must have adequate liquidity in order to reach its goals, and the efficiency gains of an EFM should be greater than its cost.
- Prudential posting requirements might become a material factor in participation in an EFM. The lower the posting, the less of a barrier it would represent and the more liquid the market. Prudentials also impact the overall costs incurred or efficiencies achieved.
- The ability to better manage risk and future price volatility would be a benefit for all participants; however the current market structure will limit liquidity, and the market structure of the future is uncertain.
- Although worthy of further review, the IESO should not allocate significant resources to developing an EFM if this would delay other important initiatives.

High Level Design Alternatives

At the September 30th meeting of the TSG, the IESO outlined possible EFM options: externally operated EFM or IESO administered EFM; financial swap mechanism or “physical” contract.

The IESO presented its general findings to the TSG members for discussion purposes. Our findings, in conjunction with the TSG discussion, led to the following conclusions:

1. Due to prudential advantages, an IESO administered EFM is likely preferable. It was determined that it is not possible to “share” prudential postings between the IESO real-time market and an external day-ahead platform. However, the IESO can add value relative to an external EFM by reducing overall prudential postings required. Load could participate in the IESO EFM with very little if any increase in prudential postings, and generators could use their credits in real-time to reduce EFM prudentials. An external EFM does not provide any prudential synergies between day-ahead and real-time.
2. The IESO needs to clarify differences, if any, between prudential posting requirements for a financial swap arrangement versus a “physical” contract between parties.
3. Implementation of any EFM would involve costs related to market rule changes and systems; however some options are more efficient than others. Further work is required to determine actual costs and benefits for viable options.

Next Steps

The IESO is preparing an update for the IESO Board of Directors meeting in November. This update will review TSG feedback and outline several viable EFM design options. Products currently offered in the market will be outlined for comparison purposes. The IESO team will confer with the TSG members prior to the Board meeting to receive input.