

### Minutes of Meeting

Date held: July 29, 2008	Time held: 11:00 – 1:00	Location held: Viewing Gallery
Invited/Attended	Company Name	Attendance Status (A)ttended; (R)egrets; (S)ubstitute
Loughren, Chris	Bruce Power	A
Wight, Gary	Constellation Energy Group	A
Hugh, Prodan	NGX	Phone
Bellissimo, Vittoria	OPA	A
Fulton, Sheldon	OPA	A
Shah, Sushil	OPG	A
Van, Sam	OPG	A
Leung, Linda	OPG	A
Cary, Rob	Sithe Global	A
Harwood, Shane	Sithe Global	A
Kelly, Brian	TransCanada	A
Pat, Kamstra	IESO	A
Huber, Devon	IESO	A
Martinello, Anthony	IESO	A
Chung, Jo	IESO	A
Briggs, Jeannette	IESO	A
Maria, Gamal	IESO	A

All meeting material is available on the IESO web site at:  
[http://www.ieso.ca/imoweb/consult/consult\\_se21-efm.asp](http://www.ieso.ca/imoweb/consult/consult_se21-efm.asp)

#### Item 1 Review of July 15 Meeting Minutes, TSG Objectives and Deadlines

Pat Kamstra (IESO) reviewed the meeting minutes from the July 15 Technical Support Group meeting. There was no further feedback from stakeholders regarding the minutes. The group moved directly to clarify TSG objectives.

#### Members Questions, Comments and Discussion

1. A stakeholder requested a better understanding of the recommendation to be posted by August 6<sup>th</sup>, in advance of the August 20<sup>th</sup> SAC meeting. It was clarified that the submission to the SAC would be a summary of the design review to date, including viewpoints of all stakeholders and the IESO day ahead team. The submission may include high level design ideas depending on the progress of

the TSG. Participation in the TSG does not suggest the stakeholders are promoting Option 2, but rather investigating all possible options for market evolution.

2. A stakeholder asked what the timelines are for EFM document review.

**IESO response:** Today's meeting minutes will be provided for review within 2 days. The IESO has committed to incorporating all viewpoints of the TSG members in its submission to the SAC, to be posted August 6 (two weeks prior to the SAC meeting on August 20). The general stakeholder meeting scheduled for August 13 has been cancelled. Stakeholders may provide comments on EFM design to their SAC representative prior to the August 20 meeting. The next TSG meeting is scheduled for Aug 14.

3. A stakeholder inquired about the role of virtual participation in the current physical bilateral system and the proposed EFM design.

**IESO response:** Virtual participation is not permitted under the current market rules; the transaction must occur at a meter. The role of virtual participation in the proposed EFM design is still being discussed but would require market rule amendments.

4. Pat K asked the TSG to consider the following question from IESO senior management: Do the TSG members want to move forward with the Option 2 EFM design (current market rules), or are we eliminating this option?

**TSG response:** TSG members did not have the information they require to answer this question, and it was deferred until later in the meeting.

## **Item 2 EFM Design**

Pat K presented NGX's proposal for a physical EFM that would utilize their clearinghouse for transacting, followed by electronic transfer of data from NGX to the IESO (physical bilateral mechanism) for settlement of forward quantities against real time quantities. Pat explained how the physical bilateral mechanism currently operates according to the market rules, and how the NGX proposal could translate into an "IESO exchange EFM" with changes to existing market rules and IESO systems. This description was followed by examples.

### Members Questions, Comments and Discussion

1. A stakeholder asked for clarification of the difference between a financial contract versus a physical forward contract.

**NGX and OPA response:** Existing Ontario electricity products on NGX are financial swaps (contract for differences) that settle against HOEP. The physical forward contract would involve the transaction of physical MWs that could be offset/settled against real time quantities, and would also allow the price to be discovered independently of HOEP (not a swap).

2. The OPA noted their opinion for the need of a physical offset and not just a financial swap. It was stated that, currently, global adjustment and uplift absorb risk and price volatility without direct impact on HOEP; a forward energy price would include those costs, resulting in convergence with the all-in energy price (HOEP plus uplift and global adjustment).
3. A stakeholder noted that if a generator were to participate in the exchange EFM, they would be required to post prudentials with NGX and, if the generator was unable to generate, they would become a net buyer in RT and may be required to post prudentials with the IESO. This contrasts with the current prudential requirements for generators, where the generator is typically a net seller and has no obligation to post any prudentials with the IESO. Another stakeholder asked if there would be a difference in prudential requirements if the IESO administered the RT market and the EFM.

**IESO response:** The IESO noted that the exploration of prudential synergies within potential IESO markets, as well as prudential synergies between NGX and the IESO, is ongoing. Prudentials for generators would be lower for a day ahead market where the timeframe between the transaction date and settlement is very short.

4. CES generators are very concerned about the impact of an EFM on their pricing and, therefore, may prefer no EFM.
5. A stakeholder noted that it is advantageous for NGX to operate the EFM if a participant is active in other NGX markets. A second stakeholder countered that the ideal end state, in their mind, is for the IESO to operate both DA and RT markets and that there is no need for an outside exchange to operate the DA market. A third stakeholder suggested that other jurisdictions with DA markets administered by an ISO also have external exchanges that trade separate from the ISO, and that the presence of an outside exchange does not necessarily limit the evolution of an ISO DA market.

### **Item 3 Discussion Questions**

Pat K led the group through a series of open ended discussion questions.

#### Members Questions, Comments and Discussion

1. In answer to the IESO's original question about proceeding with Option 2 EFM, stakeholders could not definitively answer Yes or No. One stakeholder said that UDAM is still their first choice. If UDAM is still on the table, then EFM is not desired; if UDAM is not a possibility, then at least part of the TSG believe that some kind of EFM is needed to further the evolution of the market. As well, any EFM needs to fit with future market structure, and stakeholders can't commit to a design until there is some understanding of the direction of market structure changes. Some of the group felt that more information is required on other EFM options aside from the one presented today and that there are more questions than answers, particularly with respect to EFM design and the OPA

market structure initiatives. The OPA feels that the EFM option presented today is preferred for evolving the market. They noted that it may be advantageous to start an EFM, promote LSE/CEA and create incentives for loads to participate, then to wait for a political directive.

2. A stakeholder asked how NGX became involved in this process. A second stakeholder responded, noting that SAC had suggested the exploration of alternative EFM designs based on an external exchange platform, to improve liquidity of the EFM. Several stakeholders noted that they wanted the involvement of an exchange. The IESO added that, in addition to direction from the SAC to consider EFM designs based on an exchange, NGX was called because they are the only exchange currently posting Ontario electricity forward contracts (financial swap). A stakeholder indicated that caution is required regarding contractual requirements (including termination) for any possible future relationship between the IESO and an external exchange.
3. A majority of the members agreed that any EFM design must provide incremental value for buyers and sellers, and that a cost benefit analysis must be considered.
4. A stakeholder asked how the demand side would be incorporated into the EFM. The OPA noted that, in their view, a physical bilateral is a preferred EFM structure to get the demand side involved through incentives related to real time settlement quantities.

**IESO response:** The specifics of encouraging load to participate have yet to be determined, but it is understood that incentives are likely required.

5. A stakeholder identified the perceived lack of broad acceptance at a government level for required changes in market structure which are needed to encourage liquidity. We may be “putting the cart before the horse” in attempting to design an EFM for Ontario.
6. Stakeholders asked the IESO to provide a summary of the various options. A stakeholder requested that counterparty risk be included in the analysis of each scenario. These scenarios include:
  - Do nothing: that is, use current NGX financial products or current IESO physical bilateral settlement for OTC transactions, and let the market develop a day ahead price on its own;
  - Option 2 EFM financial swap, auction process;
  - NY ISO model where the IESO would implement an auction for physical day ahead quantities and provide clearing, settlement, invoicing;
  - Joint venture with NGX as proposed today, using new NGX physical products, NGX providing clearing, settlement and electronic transfer to IESO physical bilateral for settlement of real time quantity differences;
  - Joint venture with ICE, using current ICE trading system for new physical forward products, followed by IESO clearing, settlement, invoicing.

7. The group asked NGX for information on swaps versus physical bilateral trades on ICE in other jurisdictions. NGX and OPA agreed to provide information with respect to day ahead products traded by ICE for other ISO such as PJM, and to clarify if these were physical or financial products.

8. A stakeholder asked: who assumes the credit risk if the IESO operates the EFM?

**IESO response:** The IESO does not take credit risk and would not in future if it operated an EFM because it is not a clearing house. We manage risk through our prudential process, but any default is spread amongst the market participants. NGX, however, does assume the credit risk in an EFM, taking on any defaults and managing that risk through prudentials.

9. A stakeholder noted that the timing of unit commitment (DACP) would need to be considered with the timing of other market closings, such as the gas and power markets, real time, and so on.

10. The IESO has requested that participants provide written feedback (by Tuesday, August 5) on:

- a) the meeting’s minutes, which they will receive Thursday, July 31, and
- b) the EFM design review for submission to SAC August 6.

Action Item Summary				
#	Date	Action	Status	Comments
1	July 31	<ul style="list-style-type: none"> <li>• IESO (Pat) to provide these minutes to TSG members, followed by comparison of various EFM options ASAP.</li> <li>• NGX and OPA to respond to question regarding products traded on ICE for other hubs such as PJM.*</li> </ul>	Minutes done	*NGX: Power trading on the ICE platform offers both financial and physical products for several hubs including PJM. The Ontario market on ICE is currently only enabled to trade financially cleared through NGX or bilaterally.
2	August 5	TSG members to provide feedback on minutes and comments on EFM design review to date for input to SAC submission.		
3	August 6	IESO to post submission to SAC regarding this EFM design review.		
4	TBA-late August or early Sept	Next TSG meeting.		TSG meeting for August 14 cancelled due to scheduling conflicts and time required for further design analysis.