

IESO Stakeholder Advisory Committee (SAC)

Minutes of Meeting

January 24, 2007

10:00 am

Metro Toronto Convention Centre - South Building - Room 713

Advisory Committee Members in Attendance:

Mr. Brian Bentz, Chair (representing Distributors)
Mr. Bruce Campbell (representing IESO)
Mr. Steve Dorey (representing Transmitters)
Ms. Julie Girvan (representing Residential Consumers)
Mr. Richard Horrobin (representing Generators)
Mr. Mike Humphries (representing Embedded Industrial Consumers)
Mr. Bruce Lourie (representing Environmental)
Mr. Paul McMillan (representing Marketers/Brokers)
Mr. Colin Osborne (representing Wholesale Consumer Market Participants)
Mr. Matthew Picardi (representing Marketers/Brokers)
Mr. Doug Reeves (representing Distributors)
Mr. Chuck Stradling (representing Commercial Consumers)
Mr. Daniel Whyte (representing Generators)

Advisory Committee Members Absent: none

Presenters:

Mr. Pat Doran (IESO)
Mr. Ken Kozlik (IESO)
Mr. Richard Penn (IESO)

IESO Board Members in attendance:

Ms. Glenna Carr (Chair)
Ms. Roberta Brown
Mr. James Hind
Mr. Bill Museler
Mr. Mike Naeve
Mr. Howard Shearer
Mr. John Wiersma

Introduction – Brian Bentz

MR. Bentz welcomed everyone and acknowledged the attendance of members of the IESO Board of Directors. Mr. Bentz said that the Committee was having a joint session with the IESO's Board of Directors in the afternoon to talk about the stakeholder engagement process including the roles and responsibilities of the Committee and opportunities for improvement; as well as the IESO's plans and priorities for 2007.

Agenda Item No. 2: Feedback from November 17, 2006 IESO Board Meeting:

Mr. Bentz and Mr. McMillan attended the Board meeting.

Prior to the Board meeting all Board members had an opportunity to review a briefing note from the Committee in addition to the minutes from the meeting. The briefing note is available at:

<http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20061101-BrianBentz-BriefingNote-to-IESOBoD.pdf>

Mr. Bentz summarized the items discussed. They included a discussion of demand forecast deviations and performance measures. This led to discussion around administrative matters - what constitutes a motion of the Committee, how motions are recorded, and the appropriate level for the Committee to function at. It was agreed that the Committee should function at the policy level, and this was reinforced with the Board.

On the twelve times ramp rate issue, at the request of Mr. Humphries, Vice-Chair, the Board was advised that while his constituents' (Embedded Industrial Consumers) agreed with the calculation of the ramp rate, this did not mean that they were supportive of the commodity price increase that may result from a change in the ramp rate.

With respect to the ERO (Electric Reliability Organization), the Board was advised of the transmitter concern that we need good transparency going forward.

On the DACP (Day Ahead Commitment Process), a Board member enquired whether the Committee was proposing a hard termination date for the DACP program. Mr. Bentz advised that the majority opinion was for a yearly review, but some members were asking for a hard date for review as well as a sunset date. One of the Board members commented that there may be merit to a sunset date because it could avoid issues going forward similar to those encountered with the twelve times ramp rate where there was no definitive end date.

It was mentioned that the customer survey should be broader than just the market participants.

They advised the Board that the IESO should proceed cautiously with LMP (Locational Marginal Pricing) and question whether there is sufficient political will to proceed.

Agenda Item No. 3: Senior Management update – Bruce Campbell

(a) Review of Action Items from November 1 Meeting

This list has been posted and circulated and can be found at:

<http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20070124-Action-Items.pdf>

Mr. Campbell spoke to a number of items on the list including the development of a transparent process to track MSP recommendations, what work is going on and the IESO's response. On locational pricing, the IESO is continuing to do some analysis, so that as this item moves forward, the IESO will be in a better position to discuss its implications in comparison to the current approach. Regarding DACP, the IESO will prepare an annual review of the program's operation which will take into account the IESO's views as well as the input of market participants. It is anticipated that this will be a yearly agenda item for the Committee. Itemized reports on increases in staff are in the business plan.

(b) Day-Ahead Commitment Process

Mr. Campbell advised that the IESO will be looking at how DACP may evolve. The context in which this will take place will be in the course of the discussion about day-ahead arrangements. An explicit theme of the recently published day-ahead market stakeholder plan is to talk to the various constituencies about day-ahead arrangements and what features they want or need.

(c) Ramp Rate Multiplier

Mr. Campbell advised that the Board made a decision to change the market rule that governs the ramp rate. The market amendment proposal was posted just after Christmas with a comment period. The Board decision document on the matter was recently posted as well. The effective date is 22 days after the Board decision and there is the opportunity for OEB review to be initiated.

Mr. Campbell explained that when the Board makes a rule, there are various filings that have to take place with the OEB including an impact statement and comments received within 21 days of the rule being passed and published. The OEB can ask on its own motion that the rule be reconsidered or it can be asked to do so by an interested party. The OEB is required to decide on the matter within 60 days of a request being received. A request for review is not automatic; unless the party who is asking for the review convinces the OEB to grant a stay pending its decision on the review.

In response to a question Mr. Campbell advised that the Board had a choice of which vehicle to use to implement this change in the ramp rate multiplier. The Board's rationale is set out in its decision document which has been posted. In summary the Board understood that some stakeholders did not concur with the need to move to the more efficient pricing signals that this change would make at this time, and they acknowledged that they could have done this without doing it by way of a market rule. Given the significance that some attached to the Board's decision regarding this issue the Board decided to make it clear in the market rules how the ramp rate would be determined. Their feeling was that the market rule amendment would enhance the transparency with respect to the energy pricing mechanism and provide an

opportunity for those stakeholders who did not accept the Board's decision to apply for regulatory review by the OEB.

Mr. Whyte noted that there was never a discussion at the Committee as to how the issue would be delivered or the decision on the issue would be delivered. Mr. Campbell said that any issue like this would likely get raised at the Committee. This was a very unusual circumstance. It was expected that a significant change to the market pricing mechanism would be done through the rules. Mr. Bentz suggested that if there are deviations from the normal practice in terms of how the IESO implements policy this should be considered by the Committee.

Mr. Campbell was asked to describe the transmission right clearing account is, and whether it would have been cleared anyway? Mr. Humphries suggested that this would cloud the issue by layering what are two different topics one on top of the other. Mr. Campbell explained that the transmission rights clearing account is an account that is built up over time as a result of transactions in the separate transmission rights market. This is not money collected from the general consumers. There are essentially two forms of revenues that flow into this account: 1) the auction revenues - rights are auctioned, competitively auctioned, and 2) the congestion rents that come into the account, net of payouts. The account has built up a surplus over time and the market rules provide that the Board looks at this surplus from time to time and decides what to do with it. The Board has limited options, one of which is to pay back to consumers which the Board has decided to do subject to maintaining a cushion in that account. The premise for using it this way is that these amounts are not simply taken from consumers but are the price of admission to those who want to participate in the transmission rights market. From a public policy sense, this is a good source of funds. As you move forward with market evolution from an overall Ontario efficiency point of view, it is clear that what is being done improves the efficiency of the market. The IESO recognized there are transitional costs to particular groups and in that circumstance the IESO made the recommendation to use this source of funds to ease transition costs associated with making this market change.

Mr. Humphries noted that the payout is one-time whereas, the three times ramp rate is an ongoing impact. He expressed concern that the calculation of impact is not truly representative of the overall impact. Mr. Campbell said that he believed the materials were clear on this point and he would ensure that that was the case.

Mr. Picardi said that the marketers/brokers group need more information about what's going into the account and what's coming out. If the account is pure auction revenue generated from when companies pay for these rights, it's hard to argue that that's not customer money. There are other issues in relation to the administration of the transmission rights market. If a surplus is created then companies paid too much for these rights; in other words, there wasn't as much congestion as we thought there would be, so we paid more for these rights. Is that some of the money surplus in the account? Is there excess congestion revenue in the account? Is there money from some transmission rights that were withheld to help with potential shortfalls on the system? The IESO undertook to provide a document describing the transmission rights

account and the flow of monies including the threshold to deal with potential shortfalls within a week or so, and offered to speak to the matter at the next Committee meeting at the Committee's request.

(d) Update Smart Meter Initiative - Meter Data Management (MDMR)

<http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20070124-SmartMeter-Data-Repository.pdf>

The contract has been entered into and there is a news release regarding the contract posted on the IESO website. (http://www.ieso.ca/imoweb/media/md_newsitem.asp?newsID=3231) The IESO is working closely with the distributors on ensuring that all of the components of this initiative are proceeding in a coordinated fashion. The project is expected to be on time and on budget. Mr. Reeves enquired about how the Smart Meter Initiative (SMI) initiative would work in relation to water meter bills and suggested that at some point water meter readings should flow into the MDMR. Mr. Bentz said the objective of this is to get the base level functionality working and get some of the 800,000 smart meters on time-of-use billing by the end of the year, not all of them. There is functionality in the meter that is not going to be turned on in the first phase. It is important that there is a dialogue between the LDC communities on how you turn on functionality at a later date such as water. The mandate is to get the time of use electric reads going and time-of-use billing going forward.

(e) Update on Seams Issues/Efforts

<http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20070124-seams-issues.pdf>

Mr. Campbell provided an update on work regarding ongoing seams issues. Mr. Picardi enquired about the IESO's priorities on this because he was concerned that they did not match the priorities of the surrounding jurisdictions. Mr. Finkbeiner of the IESO responded that the top three seams issues that the IESO is working on now are: 1) the MISO transmission release protocols; 2) enhancing existing protocols with the New York IESO which are based on a two-hour ahead pre-dispatch process; and 3) a four-party initiative between MISO, PJM, New York ISO, and the IESO to look at coordinated interregional dispatch during times of congestion to provide for a more economic choice to re-dispatch to relieve the congestion.

Mr. McMillan said that the traders community has met and will be bringing forward to the IESO suggestions for dealing with critical issues; he questioned whether the intertie traders working group was getting this done. In response to Mr. Whyte the IESO advised that the resources for these initiatives are included in the current employee envelope.

(f) The Northern Pulp & Paper Electricity Transition Program

<http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20070124-NorthernPulpPaperBackgrounder.pdf>

Mr. Campbell clarified for members of the Committee that the payments to these industries are not coming directly from the electricity consumer. They are tax-based payments from the

Government which are based on electricity consumption figures. Mr. Campbell, in response to Mr. Humphries, noted that the conclusions on pricing impacts as set out in the Navigant Consulting report are consistent with those of the IESO.

Mr. Reeves asked if it was of any value for the Committee to reflect on whether these types of programs are appropriate or not? Mr. Bentz said that it is more of a public policy issue than an IESO issue and that the Committee could discuss it in the afternoon.

(g) Prudential Review

Mr. Campbell advised that the report of the Prudential Review should be released around the end of this month.

Item No. 4: Demand Forecast Deviation

Mr. Doran from the IESO indicated he is Chair of the Demand Forecast Working Group and was attending on behalf of the Working Group which had been formed at the request of the Committee following the September 2006 meeting. The purpose of the Working Group was to review the methodologies used by the IESO in forecasting demand and to look at means/recommendations for improving forecast demand error.

The presentation by Pat Doran can be found at

<http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20070124-DFWG-Presentation.pdf>

In response to a question Mr. Doran said that the IESO did not do a survey of the methodologies used in other jurisdictions, but that the IESO has done some work in both benchmarking against other jurisdictions and looking at the tools that they are using. The IESO is currently testing a neural network tool which is being used with good success by both OPG and neighbours.

Mr. Horrobin enquired as to the magnitude of the challenge and the improvement that will be achieved? To what extent do the recommendations put forward go towards meeting that challenge? Mr. Doran said that the IESO did not set any hard targets for the types of improvements that we can see. The analysis around more granularity with weather inputs showed some improvement, in the order of 0.6 to 0.8 per cent, so the IESO is expecting improvements of that magnitude for that part. The IESO has looked at the model error with a lot of forecasting tools, and the model error itself is in the range of 1 per cent. The IESO does not expect to do better than 1 per cent day-ahead forecast error. The IESO's existing target is 2.5 per cent day-ahead and it is currently performing at around 2 per cent or less.

Mr. Dorey questioned how this relates to the DAM work and price-responsiveness. Mr. Doran advised that the IESO wants as accurate a day-ahead forecast as it can achieve for use as an input to the DAM. The IESO will have an accurate demand forecast if it can forecast the impact

of programs that the IESO will have dispatchable control over, demand response, and time of use impacts. Mr. Heaton of OPG thanked Mr. Doran for the work in the Working Group and asked whether there would be timelines set for implementation of the recommendations. Mr. Doran said that the recommendations that relate to tools are all inputs into our user requirements and that as it is the IESO's intention to replace this tool in the fall of 2007 the user requirements are being developed now. In relation to recommendation number 6 the IESO has committed to OPG to publish the information. The IESO will also publish the recommendations of the IESO as they relate to changes in corporate performance measures for comment and then bring those comments to the Committee meeting where corporate performance measures will be discussed.

Mr. Bentz asked what is the all-in cost, on an ongoing basis, to implement these recommendations. What is the benefit in terms of improving the accuracy of weather forecast and any other benefit like closing the gap between pre-dispatch and dispatch price forecasts? How do we quantify why the Committee should endorse these six recommendations? Mr. Doran said that from a cost perspective, there are two components. The ongoing costs associated with information that we would get through weather service providers, and approximately \$2,000 a month and the costs associated with IESO activities to implement the recommendations. For five-minute granularity, if we chose to do that, the recommendation is really just to review whether it's feasible based on the forecast accuracy that we do achieve at five minutes at a cost of approximately \$50,000. The third part is to provide the capability to back out some of the components of demand such as demand response and dispatchable loads in our forecasts and to be able to publish what the demand would be had no actions been taken. This is estimated to cost \$50,000. The benefits relate to improvements in the accuracy of the demand forecast; the part that we can quantify is the 0.6 to 0.8 per cent improvement that we're looking at.

Ms. Girvan commented that in relation to performance measures there would be an impact due to the introduction of smart meters. Mr. Doran said that the IESO expects implementation to be over a long period of time, learned behaviour will be recognized by a neural network type tool and will be built into the forecast automatically. They are gradual changes and learned behaviours which the tool is expected to pick up without it being a separate input to the tool. The Committee endorsed the recommendations of the Working Group and said that it will follow up regarding the implementation of the recommendations.

Item No. 5: Day-Ahead Market (DAM)

Mr. Kozlik delivered a presentation to the Committee on DAM for its information and feedback. The stakeholder engagement plan was posted for the IESO's work on developing a day-ahead market for Ontario. The Plan is somewhat unusual in that it sets out both the timeline and a discussion about some of the challenges that exist in developing a day-ahead market in Ontario.

The presentation from Mr. Kozlik can be found at:

http://www.ieso.ca/imoweb/pubs/consult/se21/SE21-stakeholder-plan_r2.pdf

Mr. Humphries commented favourably on the presentation and enquired about stakeholder funding. Mr. Kozlik said that the IESO wants full participation in this stakeholder event, and there's a possibility that smart meters are going to create an opportunity for even better use of a day-ahead market. Some of the population that may benefit from a DAM has not been well represented at IESO stakeholder events. The IESO is seeking as rich a feedback from stakeholders as possible. Mr. Campbell added that the plan is targeting the funding of the consumers' side and that the IESO is proposing to take guidelines around this to the Board for approval.

Mr. Dorey also stated this was a good presentation on the benefits and that he wanted to get a similar presentation on the costs and implications. Mr. Kozlik agreed and said that the IESO needs to collect and analyze information from the stakeholders to fully understand both the potential benefits and costs to do what Mr. Dorey was suggesting.

Mr. Picardi asked if the IESO was going to look at the benefit if we had LSEs (Load Serving Entities), locational pricing, and a virtual market that would bring a correlation between the day-ahead and the real-time. Mr. Kozlik confirmed that the IESO would look at these things and emphasized that the IESO is not sure where this analysis will lead. The IESO does not know what the answer is going to be. It may be an answer that says a DAM plan makes sense and here are all the reasons why a DAM plan makes sense. Alternatively there may be an outcome that concludes that the IESO does not see a strong case in today's environment for building this day-ahead market or it might be something in the middle advocating a simple approach and maybe some fine-tuning of the current DACP.

In response to a request from Mr. Kozlik for clarification regarding the virtual market Mr. Picardi said that virtual markets are an element in a many of the Northeastern markets where they have a day-ahead and a real-time market. It enables the movement of exposure between the two as a way of further managing risk in those markets.

Mr. Cary, representing Sithe, recommended that the IESO hold joint stakeholder events earlier in the process than currently contemplated as he felt this interactive component was an important part of the process.

Mr. Bentz noted that RPP (Regulated Price Plan) customers who are on a fixed energy charge are going to migrate to a time of use rate structure that will be fixed. As such they are essentially insulated from many of these wholesale market mechanisms. Mr. Kozlik said a customer on RPP may well not be interested in a DAM but that as you get smart meters, you will be provided with options. Time of use clearly is an option.

Mr. Rothman from Navigant Consulting endorsed Mr. Cary's comment on the benefits of stakeholdering as including an educational component. Stakeholdering can inform the people who are involved what the issues are, what the alternatives are, what has happened in other jurisdictions, and how they might apply in the jurisdiction where the process is going on.

Mr. Whyte enquired about the IESO's plans with respect to stakeholdering DAM with the government? Mr. Campbell said that the IESO makes sure that the Government has a good awareness of the topics that are coming up, the kind of information that is available, the direction that the stakeholdering seems to be leading to and, as decisions are made, the rationale is clear and well explained. In the end, IESO management is going to bring a recommendation to the Board and the Board is going to deal with it.

Mr. Alpajaro from Bruce Power endorsed the comments of Mr. Cary and Mr. Rothman. He suggested that the Committee request the IESO to reconsider its stakeholdering model and to consider incorporating the creation of a specific day-ahead market Working Group. Mr. Campbell said that the IESO has not committed itself to only one particular kind of stakeholder processes. The IESO has had some very strong suggestions that an educational component around some of these issues has to take place where a sector can come together and learn from their sector's perspective, ask the questions that pertain particularly to them. The IESO is trying to respond to that. The IESO think it is a reasonable balance at this time, but will consider the views that have been presented. If the Committee as a group has some particular advice around this issue, the IESO would welcome it.

Mr. Horrobin endorsed the prior comments encouraging group discussions and added that he has also been asked to pass on the similar views of Ms. Sandy O'Connor from TransAlta supporting favour of the formation of a Working Group.

Mr. Bentz summarized the Committee's sentiment that the IESO to consider the creation of a Working Group. Mr. Carey commented that the stakeholdering process is slightly unusual in that the stakeholder plan itself did not go out with a request for comment. Mr. Campbell corrected Mr. Carey, noting that a draft stakeholder plan was issued in the fall of 2006 and that the current plan reflects careful consideration of some of the issues that were raised regarding the earlier draft. Though there are many voices on the correct approach to take, the IESO will take away the views on how best to achieve an appropriate balance which is what it is trying to achieve.

Item No. 6: Market Surveillance Panel

Mr. Richard Penn of the IESO introduced the new chair of the Market Surveillance Panel, Mr. Neil Campbell, and provided an overview of the recently released Market Surveillance Panel report. The presentation from Mr. Penn can be found at:

http://www.ieso.ca/imoweb/pubs/consult/sac/sac-20070124-msp_report.pdf

The Market Surveillance Panel report can be found at:

http://www.oeb.gov.on.ca/documents/msp/msp_report_final_20061222.pdf

In light of the prior discussion regarding the Transmission Rights Market Mr. Penn noted that a previous Market Surveillance Panel report Transmission Rights Market in detail. This report can be found at: http://www.oeb.gov.on.ca/documents/msp/msp_report_final_130606.pdf

Following the presentation Mr. Dorey asked if the Panel was suggesting that in a world where the OPA has a clear mandate to eliminate congestion that either historic or current nodal prices are a reasonable basis for making investment or long-term consumption decisions. Mr. Penn responded that the reality is that we have these particular nodal prices. Mr. Tom Rusnov (a Panel member) has said that people should be looking at investing in transmission to try and get rid of some of these congestion issues.

Mr. Dorey said that if you are a wholesale load in the Northwest, you probably shouldn't operate on the assumption that the historical HOEP or that congestion is going to be there forever. There's clearly a mandate to eliminate it and, similarly, you're making your choice about where to locate your new generation, those historical numbers are not particularly relevant to where you're going to go. Mr. Penn said that the Panel is highlighting nodal prices so everyone can make the right choice of where to invest or fix transmission.

Mr. McGee of Energy Profiles commented favourably on the extensive information and commentary in the Report. He took issue however with the Panel's concern that "inducing customers to curtail the consumption at times when the value they derive from the service is greater than the incremental cost of providing it does not conserve resources in the true sense of the word." He said that in the absence of proper price signals to loads, demand response programs provide great value at this time though in a perfect economic market they may not be warranted. The demand response programs that the IESO has started and the OPA has followed are really just the early stages of developing demand response as a very necessary part of this market.

Mr. Hunter from Manitoba Hydro raised a concern regarding a statement that the zonal price map represented what one should be paid in a nodal world. Earlier the IESO has made use of a similar map but used a disclaimer to state that it did not represent actual prices. Similarly, Navigant Consulting released a study of the Northwest and they concluded that the nodal prices, in fact, do not represent the price under LMP that would be paid in the Northwest. There are also issues with the calculation of losses. As such why make use of the nodal price map? Mr. Penn responded that though there are issues with losses, the magnitude of the price differences indicate that price differences are caused not by losses but by congestion. There are a lot of locked-in resources in the Northwest with declining load in the Northwest.

Mr. Lourie asked if there was an inconsistency between the Panel's concern regarding demand response programs while peaks are increasing. Mr. Penn replied that PJM spent about \$13-million to achieve \$600-million of lower market prices but a few months later they needed investment. If you do not expose the price and you are just trying to pay some load to go away so you can end up with a lower price, is it very efficient? It is more efficient to let the natural prices flow and let people make the proper consumption decisions rather than paying people to go away. In relation to peak shaving programs, Mr. Penn said that the Toronto Hydro program, Peaksaver program, where there is infrastructure money paid to expose people whose opportunity cost is zero or very low is a good idea. If you're simply trying to get somebody who valued the product higher to go away, then that is not a good idea.

Administrative Matters

The next IESO Board meeting is on February 8th. Mr. Bentz will attend that meeting.

The meeting adjourned.