

Draft Minutes: Meeting 10

October 6, 2004 1:15 pm to 4:00 pm
Clarkson System Control Centre, Room 216

Attendees:

Peter Gruttke	Ontario Power Generation
Greg Hine	Independent Electricity Market Operator
Craig Lemon	Union Gas
Mike Boland	Hydro One
Tom Wasik	Enersource
Dave Abbott (by phone)	Bruce Power
Nora Vasquez (by phone)	TransCanada Energy

The FASC welcomed new people to the meeting, including Mike Boland from Hydro One, and Tom Wasik, attending on behalf of George Rosati of Enersource.

Item #1: Resource Adequacy Market [Jason Chee-Aloy]

Jason Chee-Aloy provided an overview of the draft high level design for the Resource Adequacy Market. Members are also made aware of the information posted on the IMO web-site at the following URL:
http://www.theimo.com/imoweb/consult/mep_ra.asp

The closure date for written submissions regarding the RAM High Level Design is October 12, 2004

The Resource Adequacy Market High-Level Design Document is a DRAFT of the RAM high-level design. The document represents the expected design of the RAM and will form the basis of further design work. The document is not intended to represent the final RAM design.

The high level design DRAFT document can be found at:

http://www.theimo.com/imoweb/pubs/consult/mep/LTRA_WG_RAM_HighLevelDesign.pdf.

Stakeholders can provide input to the development of the Long Term Resource Adequacy initiative through membership in the Working Group or by communicating to the IMO through its dedicated consultation line (905-403-6931) or email imo.consultation@theimo.com.

Transmission constraints within Ontario may result in locational resource adequacy requirements, but the locations could differ from the 10-zones presently defined in the Outlooks.

Item #2: Review of minutes: Meeting #9 [all]

There were no changes to the Minutes of the previous Meeting #9, held on April 7, 2004. These minutes were accepted as final, with no revisions from the draft.

Item #3: 2004Q3 18-Month Outlook [all]

A high level overview of the results of the latest 18-Month quarterly Outlook was provided. This Outlook was published on the IMO web-site on September 24, 2004.

The resource outlook continues to look positive with the forecast available resources exceeding the planning requirements in all but four weeks of the next 18 months, under the planned resource scenario. Where planning requirements are not met, the deficiencies are small enough to present little concern.

The Ontario government continues its process to address future electricity supply through Requests for Proposals for 300 MW of renewable energy supply and for 2,500 MW of new clean generation and demand-side projects. New electricity demand, supply and transmission projects that may arise from these processes are not reflected in this Outlook. Future reports will reflect these new projects after contractual arrangements are completed.

Pickering G1 is identified in the Planned Resource Scenario as returning to service on September 1, 2005.

Both resource scenarios include an increase in the quantity of forecast demand response since the previous Outlook. By the end of the 18 month study timeframe, demand response is forecast to exceed 500 MW, due to the introduction of more dispatchable load into the IMO-administered markets. FASC members suggested that Outlook documents should provide greater detail regarding the demand response projects. Members felt that the general philosophy should be to provide the same level of detail on demand response projects that is provided on new generation projects. Members felt that this general philosophy should be considered throughout the IMO, in all reporting mechanisms.

Item #4: Criteria for Adding Supply Additions in 18-Month and 10-Year Outlooks

It was suggested that the present criteria of including supply resources in the Planned Resource Scenario, once they have started construction could be modified in future Outlooks to consider new supply resources, coming into service on the scheduled date of the contract, once an RFP contract was signed. The inclusion of new resource may depend on the form of the contract, and whether or not the IMO will know the details of the contract.

Another criterion that could be applied is to consider a scenario where the government targets were met, and could consider the supply side and demand side resources.

The criterion used to include demand-side resources should also be made clear in each scenario presented.

Item #5 Wind Generation Treatment [all]

Consideration of the amount of reliable capacity from wind powered generation will be required when wind-powered generation is considered in an Outlook scenario.

Consideration of the energy capability forecast from wind-powered generation will also be required for the 18-Month Outlook presentation of energy capability from generation sources.

The IMO plans to consider how other jurisdictions account for wind-powered generation, but it is recognized that the Ontario wind resources could be different in terms of the quantity of reliability of wind powered generation.

PJM Wind Treatment:

For example, PJM provides for a “Wind Class Average Capacity Factor” for each summer where there is incomplete operating data on a specific wind farm. The mean of single year capacity factors for each of the prior three years results in a Capacity Factor representative of the three prior years. That Capacity Factor, when multiplied by the current Net Maximum Capacity yields the current capacity value for that wind farm. This two-step process accommodates any changes in the Net Maximum Capacity that may have occurred during the prior three summers of operation or the current year of operation.

“Wind Class Average Capacity Factor” is a factor that is used only in the calculations for the Capacity Value of an immature wind farm. This factor was initially set at 20% but is subject to change upon the emergence of operating data from additional wind farms upon which to base the analysis.

Ontario Information

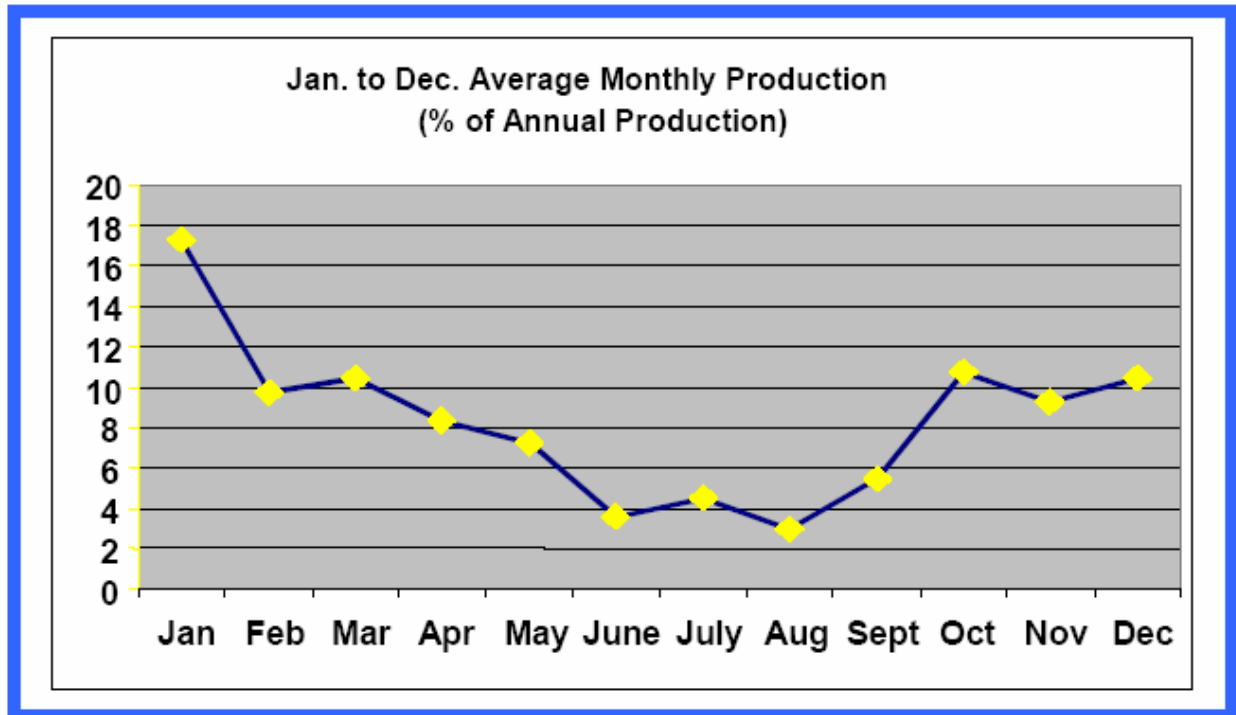
According to [The Wind Power Task Force Report, released in February 2002](#), the following observations have been reported regarding wind powered generation in Ontario.

Turbines in good wind areas typically achieve annual capacity factors between 25% and 35%. However, the predictability of this production is quite good. Studies of Ontario wind speed patterns reveal that wind can make a predictable and reliable contribution to our electricity supply mix.

There is a good correlation between Ontario’s peak demand and the characteristics of Ontario wind speeds. On a daily basis, summer and winter, the highest production from wind parks would generally track the curve of load demand.

It is also reported that Ontario enjoys stronger winds in winter months when electricity demand is high.

- Higher winter wind speeds coupled with colder dense air combine to deliver a big energy yield.
- The graph below shows the monthly distribution of production from a typical Ontario wind turbine.
- Approximately 68% of annual energy production would occur during the heating season (October to March).



Various wind project developers are installing test towers to gain more site specific data on wind speeds, frequency and duration to better estimate the expected contributions.

New York State

A preliminary report on the potential of wind generation in New York concluded that New York has little opportunity to add wind generation downstate, where new capacity is needed the most, and that the value of wind power is reduced on summer afternoons and evenings, when it is needed the most. The report added that even this major infusion of wind generation would provide relatively little reliability value¹.

Item #6: 2004Q4 18-Month Outlook [all]

The next 18-Month full quarterly Outlook is scheduled for publication near the end of December.

¹ The report, "The Effects of Integrating Wind Power on Transmission System Planning, Reliability, and Operations" was commissioned by the New York State Energy Research and Development Authority and the New York Independent System Operator (NYISO). The report was released Jan. 8, 2004 and was prepared by GE Power Systems Energy Consulting.

It is uncertain how much RFP contract information may be available to consider RFP contracts in this Outlook's Planned Resource Scenario. The Existing and Planned Resource Scenarios may be defined in a similar way that the present 2004Q3 Outlook has the resources defined.

FASC members suggested that it would be helpful to have outages reported by fuel type. Up until now, it has been assumed this would include generator outages by fuel type, but the FASC members suggested that the outages should also include outages to the demand response plants also.

FASC members were of the opinion that various IMO published reports that provide details regarding generator facilities should extent to cover demand response facilities. For example, the generator disclosure report should extend to include similar information for demand response facilities.

Item #7: 2005 10-Year Outlook [all]

Due to time constraints, this item was not covered in any detail at the meeting.

Inputs for the next 10-Year Outlook are required from market participants by November 30, 2004.

The IMO does not intend to repeat the results of all assessments made in the past in the 2005 10-Year Outlook report. For example, the reported information pertaining to the local area information will not be repeated.

It is anticipating that the OPA will be developing and maintaining an integrated system plan. The IMO's 10-Year Outlook will provide a higher level treatment of transmission assessment compared to previous Outlooks.

The 10-Year Outlook is expected to continue with the usual full treatment of resource assessments.

Item #8 Future of FASC [all]

There was a suggestion made that the FASC issues could be dealt with at the MOSC meetings, rather than having separate FASC meetings. The FASC members that were present at the meeting felt that the FASC meetings are still useful, and would prefer to see the FASC meetings continue.

Item #9: Meeting 11 (January, 2005) [all]

The usual annual schedule would call for a meeting held in January. It was suggested that a date after January 15 may be better than before January 15. January 19, or January 26 seem to be the best candidate days for the next meeting. Any suggestions for future agenda items are welcomed.

The meeting was adjourned at 4:00 p.m.