

Wind Power Integration in Ontario Standing Committee



Meeting Minutes - Approved
Wind Power Integration in Ontario Standing Committee
Wednesday February 20, 9:00 am - 2:35 pm
Monte Carlo Inn, Mississauga

Name (Attending in Person)	Company
Adams, Tom	
Boland, Joe	Kruger, Group Énergie
Cary, Rob	Rob Cary & Associates
Cookson, Michael	Kruger, Group Énergie
Fleming, Ted	
Garner, Tracy	Northland Power Inc.
Goldberg, Dan	New Paradigm Capital Corp.
Hurd, Dave	Brookfield Power
Jenkins, Allan	Ministry of Energy
Kourtoff, John (PM)	Trillium Power
Leung, Allan	Ontario Power Authority
Leung, Linda	Ontario Power Generation
Pietrewicz, Andrew (PM)	Ontario Power Authority
Roy, Jean	Kruger, Group Énergie
Timm, David	Canadian Wind Energy Association (CanWEA)
Tuenter, Hans	Ontario Power Generation

IESO (Attending in person)
Chase, Maia
Facca, Mauro
Khan, Khaqan
Haynes, Daryl
Lam, Tim
Lodyga, Martin
MacNeil, Jim (PM)
Romeo, Rick
Wright-Hilbig, Rhonda

Agenda Item #1 Welcome and Introductions (Khaqan Khan)

Khaqan Khan welcomed the group and indicated that the Wind Power Integration in Ontario Working Group has been changed to a Wind Power Standing Committee. A restatement of the objectives to identify and address barriers to wind power integration in Ontario was made.

The main objective for today's meeting was to seek final comments on the IESO near term and mid term forecasting methodologies.

Committee members were invited to introduce themselves.

Agenda Item #2 Administration (Khaqan Khan)

(a) Finalize minutes from November 16, 2007 meeting

Minutes were approved.

(b) Action items from November 16, 2007 meeting

The action items list can be found at:

<http://www.ieso.ca/imoweb/pubs/consult/se29/se29-20071116-minutes.pdf>

The action items list from the previous meeting was reviewed.

Item #19 – IESO to circulate links of conference proceedings, (London and BC Hydro), if publicly available: The links are not publicly available. This item was closed.

Item #22 – IESO, with suggestions from participants, will develop a list of questions that when answered will compare the different wind forecasting performance measures used by other ISOs: List of questions replaced by information to be obtained from other ISOs (Item #24). This item was closed.

Item #24 – Working group members to collect information about other ISOs' forecasting accuracy levels and methodology and incentive programs by January 31, 2008: The IESO has not received information from the listed members except one. Collected information should focus on the near term period. The January 31, 2008 deadline will be changed to some date near the next scheduled meeting in May. This item remains open.

Hans Tuenter suggested that the collected information should also include the installed MW wind capacity for each ISO. Members agreed.

Dave Hurd suggested that European ISOs should be contacted since they a higher installed wind power capacity. Members agreed, but there likely will be some effort involved in finding the right contacts.

Action Item: Dave Hurd & Michael Cookson to contact European ISOs. David Timm to contact CanWEA's contacts in Europe.

Item #26 – IESO to hold a meeting with the OPA to discuss relevant issues and recommendations (including incentives/options, power management tools) for the upcoming RFP by January 15, 2008: IESO and OPA meeting was held January 10, 2008. Actions are being implemented based on wind working group recommendations and IESO will continue to pursue these items with OPA. This item was closed.

Rhonda Wright-Hilbig is now working with Jim MacDougall at the OPA on how best to move these items forward. Rhonda to update members when developments occur.

Item #27 – An updated Terms of Reference (for the Standing Committee) will be circulated to members and will be finalized at the next meeting: To be addressed as part of today's agenda – Agenda Item #3. This item remains open.

Item #28 – Members are to review the different wind capacity contribution calculation methods and send their comments to the IESO by January 15, 2008: The IESO has received comments. Responses to the comments will be posted on the IESO public website. Calculation methods to be addressed as part of today's agenda – Agenda Item # 4 and Agenda Item #5. This item remains open.

Item #29 – IESO to make a comparison between actual and simulated production data as an option for short term forecasting. This has been completed and is addressed as part of today's agenda – Agenda Item #5. This item was closed.

Item #31 – Members are to review the issues list from the website and let the IESO know the priority with which they would like to see these issues addressed going forward. This item remains open.

(c) Review of today's agenda

The agenda was reviewed. No changes or additions were suggested.

Agenda Item #3 Terms of Reference (Maia Chase)

The Terms of Reference can be found at:

http://www.ieso.ca/imoweb/pubs/consult/windpower/wpsc-20080220-Terms_of_Reference.pdf

Maia Chase discussed the Term of Reference (TOR) of the Standing Committee. Members were asked to review them and let Maia know if they have any comments. It was noted that the TOR outlines similar items that are generally applicable to all stakeholder standing committees. One

comment was made to make the issues the Committee will be dealing with more specific by adding the greater than 10 MW threshold. If no additional comments are received, the Terms of Reference will be finalized and posted on the web site.

**Agenda Item #4 Mid-Term Forecasting Requirements – Wind Capacity Contribution
(Tim Lam)**

The presentation by Tim Lam can be found at:

<http://www.ieso.ca/imoweb/pubs/consult/windpower/wpsc-20080220-Item4.pdf>

Tim Lam presented the proposed mid term forecasting methodology to be used in determining wind capacity contributions (WCC) for the IESO 18-Month Outlooks and Ontario Reliability Outlooks. The IESO sought final comments from the members on the proposed method.

The members indicated that the proposed method based on a median value (50th percentile) would be suitable as a normal weather wind scenario. However, Hans Tuenter, Tom Adams and Rob Cary wanted the method to recognize a wind capacity value with a higher probability of achievement. It was suggested that, as a minimum this should be the value used in the extreme weather scenario. In particular, it was suggested by OPG that this wind uncertainty scenario be based on an 85, 90, or 95 percentile and be associated with the extreme weather forecast in the 18-Month Outlook.

OPG indicated a wind contribution methodology based on a 90 percentile would result in lower wind capacity contributions, likely 2 to 3 percent in the summer.

Members recommended that the 18-Month Outlook include the following cases:

- A normal weather wind scenario with the normal weather forecast,
- A normal weather wind scenario with the extreme weather forecast, and
- An extreme weather wind scenario with the extreme weather forecast.

Rob Cary also recommended that the IESO should start using both wind scenarios in the next 18-Month Outlook.

Tom Adams suggested consideration be given to using a rolling 10 year backward view whereby win simulated data is gradually replaced by actual farm history.

In summary, members felt that the new proposed WCC method (by taking minimum of median of actual farm history or wind simulated data) was acceptable, however, they also wanted to include an additional scenario to account for uncertainty associated with wind under extreme case weather conditions.

Action Item: The IESO will take these recommendations to its management and notify members by email IESO managements' decision.

**Agenda Item #5 Near-Term Forecasting: Revised Method & Implementation Plan
(Martin Lodyga)**

The presentation by Marin Lodyga can be found at:

http://www.ieso.ca/imoweb/pubs/consult/windpower/wpsc-20080220-Item5_NearTermWind.pdf

Martin Lodyga presented the revised near term forecasting methodology to be used in providing wind capacity contributions (WCC) to generation resource forecasts from day 2 ahead to day 33 ahead, and the related implementation plan. The IESO sought final comments from the members on the proposed method and implementation plan.

Rob Cary asked why only the lowest hourly value is applied across all hours in a report that otherwise discriminates on an hourly basis. Martin indicated that the IESO was seeking a simple approach given our current toolset. Martin also indicated that a single value for all hours would be conservative and not cause any significant differences to outage releases.

OPG commented that the use of the lowest median value based on historical data of the existing wind fleet would be a good starting point.

Rhonda Wright-Hilbig asked the members how much notification time should be allotted before the IESO implements a wind capacity contribution to the generation resource forecast. Members indicated the notification period does not need to be long because the plan would improve and not restrict the operation of the IESO-administered market.

Members agreed to the revised near term wind capacity contribution forecasting method and implementation plan.

Agenda Item #6 Embedded Generation (SE57) Update (Daryl Haynes)

The presentation by Daryl Haynes can be found at:

<http://www.ieso.ca/imoweb/pubs/consult/windpower/wpsc-20080220-EG-update.pdf>

Daryl Haynes presented an update on the IESO embedded generation working group initiative.

Agenda Item #7 Recommendations on Short term Issues Update (Khaqan Khan)

Khaqan Khan provided a brief update on the short term issues list located at

<http://www.ieso.ca/imoweb/pubs/consult/se29/se29-20070820-item5.pdf>.

Agenda Item #8 Power System Restoration – Role of Wind Generators (Jim MacNeil)

The presentation by Jim MacNeil can be found at:

<http://www.ieso.ca/imoweb/pubs/consult/windpower/wpsc-20080220-Item8.pdf>

Jim MacNeil presented the “do’s and don’ts” of wind generators during a system restoration event. It was emphasized that wind generators following a system event must not reconnect or reload without IESO permission.

Agenda Item #9 Role of Wind Power in the Integrated Power System Plan (Andrew Pietrewicz, OPA)

The presentation by Andrew Pietrewicz can be found at:

<http://www.ieso.ca/imoweb/pubs/consult/windpower/wpsc-20080220-OPA.pdf>

Andrew Pietrewicz presented an overview of the integrated power system plan (IPSP) and the role of wind power within the IPSP.

Agenda Item #10 Next Steps and Wrap-up (Khaqan Khan)

Khaqan Khan reviewed and summarized the key items of the meeting. He reiterated that the standing committee’s recommendations will be presented to IESO management and members will be notified of the IESO’s response. He encouraged and commended the members for their continuous engagement and participation.

The next meeting is May 14, 2008.

Action Item Summary				
#	Date	Action	Comments	Status
24	November 16, 2007	Working group members to collect information about other ISO's forecasting accuracy levels and methodology and incentive programs for near-term forecasting, by April 30, 2008 .		Open
31	November 16, 2007	Members are to review the issues list from the website and let the IESO know the priority they would like to see these issues addressed going forward.		Open
32	February 20, 2008	Dave Hurd, Michael Cookson and David Timm to provide European ISO contacts to gather information from them on forecasting accuracy levels, methodology and incentive programs.		Open
33	February 20, 2008	To IESO to include comments made by the members at the meeting on Mid-Term Forecasting Requirements, when the recommendations are taken to IESO Senior Management. The IESO will communicate the IESO decision back to stakeholders.		Open