



Outline Agenda.

(As at 12 February 2008)

NE Region System Operators' Wind Integration Seminar

By invitation

To bring together System Operators to explore actions to facilitate the grid integration of wind energy in the North East

**HYDRO-QUÉBEC TRANSÉNERGIE
ISO NEW ENGLAND
MARITIME ELECTRIC
NEW BRUNSWICK SO
NEWFOUNDLAND AND LABRADOR HYDRO
NORTHERN MAINE ISA
NOVA SCOTIA POWER SO**

Dates: 12 & 13 February 2008

Venue: Montréal. Palais des Congrès. Seminar Room 519

Goals:

The following will be undertaken with a specific focus on the North East

1. Evaluate the issues that inhibit the transmission of wind
2. Identify actions that will improve the integration of wind
3. Investigate processes to facilitate and promote the uptake of wind.

Day 1. Tuesday 12 February

Seminar Room 519. Palais des Congrès, Montréal

Moderators for both days of this event will be;

Charlie Smith, Executive Director - UWIG

Rob Cary, President - Rob Cary and Associates

7:30 8:00 Continental breakfast served in Seminar room

8:00 8:15 Introduction - Key regional political drivers. Lt. Governor Dubie. Vermont

8:15 10:15 An overview of key drivers behind wind industry growth

8:15 8:35 Global drivers of wind integration. *Andrew Garrad - CEO, Garrad Hassan*

8:35 9:10 Wind Plant Integration in North America. *Charlie Smith, Executive Director - UWIG*

Wind industry perspectives on integration.

9:10 9:35 CanWEA. *Sean Whittaker - CanWEA Policy Director*

9:35 10:00 AWEA. *Mike Jacobs, VP Transmission - UPC Wind*

10:00 10:15 Group discussion of issues and solutions in the North East context

10:15 10:30 Break

10:30 11:50 The regional perspective. An SO overview of wind integration in the North East

A 10 minute summary of key issues from each SO

10:30 10:40 Hydro-Québec TransÉnergie. *Richard Mailhot - Manager Support and Integration*

10:40 10:50 ISO New England. *John Norden - Manager of Renewable Resource Integration*

10:50 11:00 Maritime Electric. *Bob Younker - Director Corporate Planning*

11:00 11:10 New Brunswick SO. *George Porter - Director Market Development & Settlement*

11:10 11:20 Newfoundland and Labrador Hydro. *Greg Jones - Senior Business Development Analyst*

11:20 11:30 Northern Maine ISA. *Ken Belcher - CEO*

11:30 11:40 Nova Scotia Power SO. *Mike Sampson - Director Control Centre Operations*

11:40 11:50 Ontario IESO. *Khaqan Khan - Senior Engineer/Technical Officer Reliability Standards and Assessments*

11:50 12:00 Group discussion of issues and solutions in the North East context

12:00 13:00 Lunch

13:00 13:50 The European experience of wind integration. Thomas Ackermann, CEO - Energynautics

13:50 14:40 International Grid Code Developments. Sigrid Bolik, Head of Power Systems - Econnect Consulting

14:40 15:00 Group discussion of issues and solutions in the North East context

15:00 15:15 Break

15:15 17:15 Technology drivers. Developers/manufacturers present how they plan to meet the grid codes

15:15 16:10 GE. *Jason MacDowell, Senior Engineer - Energy Applications and Systems Engineering, GE*

16:10 17:05 Vestas. *Steve Saylor, Chief Electrical Engineer - Vestas Americas*

17:05 17:15 Group discussion of issues and solutions in the North East context

17:15 17:30 Day 1 closing discussion. Summarise action items and agree tasks

19:30 21:00 Seminar Dinner. Aix Cuisine du Terroir. 711 Côte de la Place d'Armes, Old Montreal

Day 2. Wednesday 13 February

Seminar Room 519. Palais des Congrès, Montréal

8:00 8:30 Continental breakfast served in Seminar Room

8:30 10:35 Forecasting

8:30 8:55 European experience. Ensemble forecasts. *Bernhard Ernst - RWE Transportnetz Strom GmbH*
 8:55 9:20 Alberta's forecasting studies. *Darren McCrank, Senior Systems Engineer - AESO*
 9:20 9:45 Hydro Quebec and Environment Canada Wind Energy Forecasting project. *Alain Forcione - Hydro Quebec*
 9:45 10:10 Getting forecasts into the SO Control Room. *Mark Ahlstrom, CEO - WindLogics*
 10:10 10:35 Group discussion of issues and solutions in the North East context

10:35 10:50 Break

10:50 12:20 Balancing

10:50 11:40 Summary of US wind integration experience and related market mechanisms. *Bob Zavadil, VP - Enernex*
 11:40 12:05 ACE Diversity Interchange - Sharing area control errors. *Rohan Soulsby - Director Business Development. BCTC*
 12:05 12:20 Group discussion of issues and solutions in the North East context

12:20 13:05 Lunch

13:05 14:35 Transmission planning, cost allocation and regulation

13:05 13:30 Texas Competitive Renewable Energy Zone (CREZ) process.
Warren Lasher. Manager System Assessment - ERCOT
 13:30 13:55 Providing transmission for locational constrained resources in the CAISO.
Dave Hawkins. Principal Investigator Integration of Renewables - CAISO
 13:55 14:20 MISO: The proposed 765kV backbone for wind energy and cost allocation
Dale Osborn. Transmission Technical Director - MISO
 14:20 14:35 Group discussion of issues and solutions in the North East context
 14:35 15:05 Seminar closing discussion. Summarise action items and agree tasks
 15:05 End of wind integration seminar