



UTILITY WIND INTEREST GROUP FALL TECHNICAL WORKSHOP

WIND INTEGRATION: FOCUS ON THE VALUE OF WIND FORECASTING

November 8-9, 2005

Sacramento Convention Center and Hyatt Regency, Sacramento, CA

PROGRAM AGENDA

Tuesday, November 8

7:00 a.m. – 8:00 a.m.

Registration & Continental Breakfast

Location: Sacramento Convention Center, Room 307

8:00 a.m. – 5:00 p.m.

Technical Workshop

Location: Sacramento Convention Center, Room 307

8:00 a.m. – 8:45 a.m.

Opening Session

Welcome & Introductions

Henry Durrwachter, UWIG President/TXU Energy

Local Welcome and CA Policy Overview

John Geesman, California Energy Commission

Meeting Overview

Charlie Smith, UWIG

8:45 a.m. – 10:15 a.m.

Technical Session: Wind Forecasting – What Does it all Mean?

Session Chair: Chuck McGowin, Electric Power Research Institute

Wind Forecasting: The State of the Art and Future Possibilities

Pascal Storck, 3Tier Environmental Forecast Group

Wind Forecasting PIRP System and CEC Research Project Results

John Zack, AWS TrueWind

Wind Forecasting: The Good, the Bad, and the Ugly

Abraham Ellis, Public Service New Mexico

Wind Forecasting: The \$92 Million Question

Dick Piwko, GE

10:15 a.m. - 10:45 a.m.

Break

Location: Sacramento Convention Center, outside Room 307

10:45 a.m. – 12:00 p.m.

Wind Forecasting – What Does it all Mean? (cont.)

Wind Forecasting: A Balancing Authority View

David Hawkins, California Independent System Operator

Wind Forecasting and the FERC Imbalance Penalty NOPR

Rob Gramlich, American Wind Energy Association

Wind Forecasting: The Business Case

Mark Ahlstrom, WindLogics

12:00 p.m. – 1:30 p.m.

Lunch

Location: Sacramento Convention Center, Room 306

1:30 p.m. – 3:00 p.m.

Moderated Panel Discussion on the Efficient Allocation of Transmission Risk: Regulatory Incentives, Transaction Design and Redispatch Markets

Moderator: Elliot Mainzer, Bonneville Power Administration

In the west, where little to no new firm transmission is currently available, concerns about non-firm transmission availability have paralyzed project development at worst and resulted in inefficient pricing of risk at best. Many utility RFPs have placed the burden of procuring transmission on developers, many of whom have limited expertise in managing power post-busbar and who have to lay off this risk to their equity and debt participants, who take a worst-case approach to pricing this risk.

- If the ultimate goal is to develop the most wind power at the lowest overall cost to consumers, how should transactions be structured in order to manage transmission risk?
- How can regulators incentivize utilities to purchase wind at the busbar and manage transmission risk using their system flexibilities and emerging redispatch markets?
- If loads ultimately pay for transmission risk, what can regulators do to give utilities long-term cost recovery for non-firm wind energy that they purchase at the busbar?
- How do you keep the cost of equity and debt as low as possible by shifting transmission risk away from these players?
- How will Grid West handle these problems?
- What has been the California experience with congestion management as it relates to wind?

Developer Perspective

Scott Piscitello, RES Americas

Utility Perspective

Ken Dragoon, PacifiCorp

Regulator Perspective

Lisa Schwartz, Oregon Public Utilities Commission

Transmission Provider Perspective
Elliot Mainzer, Bonneville Power Administration

RTO Perspective
David Hawkins, California Independent System Operator

3:00 p.m. – 3:30 p.m.

Break

Location: Sacramento Convention Center, outside Room 307

3:30 p.m. – 5:00 p.m.

California Wind Energy Developments

Session Chair: Ed DeMeo, Renewable Energy Consulting Services, Inc.

CEC Wind Energy R&D Program for Utility Applications
John Geesman, California Energy Commission

SCE Transmission Update: Renewable Energy Trunk Line Proposal and Tehachapi
Transmission Study
Patricia Arons, Southern California Edison

SMUD Wind Integration Study Update
Cliff Murley, Sacramento Municipal Utility District

Clipper WindPower Technology Update
Amir Mikhail, Clipper WindPower

5:00 p.m.

Adjourn for Day

6:00 p.m. – 8:00 p.m.

Reception Sponsored by Sacramento Municipal Utility District

Location: Capital View, 15th floor of the Hyatt Regency Sacramento

Wednesday, November 9

7:00 a.m. – 8:00 a.m.

Continental Breakfast

Location: Sacramento Convention Center, Room 307

8:00 a.m. – 12:00 noon.

Technical Workshop

Location: Sacramento Convention Center, Room 307

8:00 a.m. – 9:30 a.m.

Update on International Experience

Session Chair: Paul Smith, ESB National Grid

Wind Power – Northern European System and Market Developments
Bernie Ernst, RWE

New Developments in Ireland
Paul Smith, ESB National Grid

Spanish Electricity Market Developments
Alberto Cena, Asociacion Empresarial Eolica

9:30 a.m. – 10:00 a.m.

Break

Location: Sacramento Convention Center, outside Room 307

10:00 a.m. – 12:00 noon

Integration and Interconnection Study Update

Session Chair: Brian Parsons, NREL

Puget Sound Wind Energy Study Update
Doug Faulkner, Puget Sound Energy

BPA Lessons Learned with the Firming and Shaping Tariff
Elliot Mainzer, BPA

Xcel/PSCo Wind Integration Study Update
Brett Oakleaf, Xcel Energy/Public Service Colorado

Alberta Wind Integration Study Update
John Kehler, Alberta Electric System Operator

WECC Model Development and Verification Effort
Abraham Ellis, Public Service New Mexico

Report of the UWIG Modeling and Interconnection User Group
Bob Zavadil, EnerNex Corporation

12:00 noon

Closing Remarks

Ed DeMeo, UWIG Technical Advisor

Adjourn

Participants Pick up Box Lunch

Location: Hyatt Regency Sacramento, Lobby

12:30 p.m.

Tour Buses Depart Hotel

Location: Hyatt Regency Sacramento, Lobby

1:00 p.m. – 5:00 p.m.

Tour Opportunities – Transportation to be provided from and back to the hotel

CAISO Control Center (approximately 2 hours duration)

Solano Area Wind Farms (approximately 4 hours duration)