



**UTILITY WIND INTEGRATION GROUP  
FALL TECHNICAL WORKSHOP  
WESTERN ROUNDUP OF WIND INTEGRATION**

**October 23-25, 2006  
Sheraton Oklahoma City, OK**

**PROGRAM AGENDA**

**Monday, October 23 User Group Meetings (UWIG Members and Invited Guests Only) at Sheraton**

7:00 a.m. – 8:00 a.m.

**Registration & Continental Breakfast**

8:00 a.m. – 5:00 p.m.

**User Group Meetings – Parallel Sessions**

8:00 a.m. – 12:00 p.m.

**Operating Impact and Integration Study User Group Meeting**

Chair: Ed DeMeo, Renewable Energy Consulting Services

8:00 a.m. – 9:30 a.m.

**Distributed Wind Applications User Group Meeting**

Chair: Tom McDermott, EnerNex Corporation

9:30 a.m. – 10:00 a.m.

**Break**

10:00 a.m. – 12:00 p.m.

**Market Operations and Transmission Policy User Group Meeting**

Chair: Charlie Smith, UWIG

12:00 p.m. – 1:00 p.m.

**Lunch**

1:00 p.m. – 5:00 p.m.

**Wind Plant Modeling and Interconnection User Group Meeting**

Chair: Bob Zavadil, EnerNex Corporation

1:00 p.m. – 5:00 p.m.

**Wind Turbine Operations and Maintenance User Group Meeting**

Chair: Dave Kobus, Energy Northwest

2:30 p.m. – 3:00 p.m.

**Break**

7:30 p.m. – 9:00 p.m.

**Board Meeting**

**Tuesday, October 24, 2006 – Technical Program at the Sheraton**

7:00 a.m. – 8:00 a.m.

**Registration & Continental Breakfast**

8:00 a.m. – 5:00 p.m.

**Technical Workshop**

8:00 a.m. – 8:30 a.m.

**Opening Session**

Welcome & Introductions

Henry Durrwachter, UWIG President/TXU Wholesale

Local Welcome

Jesse Langston, Oklahoma Gas & Electric

IEEE Welcome

Professor Rama Ramakumar, Oklahoma State University

Meeting Overview

Charlie Smith, UWIG

8:30 a.m. – 10:15 a.m.

**Opening Session: Recent Integration and Operation Experience**

Session Chair: Brian Parsons, NREL

Wind Integration at Northwestern Energy

Casey Johnston, Northwestern Energy

AESO Status of Operating Concerns

Darren McCrank, Alberta Electric System Operator

Incorporating Wind Forecasting in Short Term Operations

Jay Godfrey, American Electric Power

WFEC Integration & Operation Experience

Carl Liles, Western Farmers Electric Cooperative

OG&E Integration & Operation Experience

Allen Gould, Oklahoma Gas & Electric

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

**Break**

10:45 a.m. – 12:30 p.m.

**Recent Integration and Operation Experience**

Session Chair: Gary Thompson, Nebraska Public Power District

### California Study Update

Dick Piwko, GE

### Great Britain High Penetration Study Review

Michael Milligan, National Renewable Energy Laboratory

### Avista Study

Clint Kalich, Avista Utilities

### Idaho Power Study Results

Phil DeVol, Idaho Power

### PSCO 20 Percent Wind Penetration Study Results

Brett Oakleaf, Xcel Energy

12:30 p.m. – 1:30 p.m.

### **Lunch**

1:30 p.m. – 3:00 p.m.

### **Grid Code Evolution and Operating Experience**

Session Chair: Abraham Ellis, Public Service New Mexico

#### Impact of Wind on Generation Reserve Requirements in Ireland

Mark O'Malley, University College Dublin

#### NERC/FERC Order 661 and Related Developments

Mike Jacobs, American Wind Energy Association

#### Irish Grid Code and Related Developments

Paul Smith, EirGrid

#### Proposed Changes to the German Grid Code (*short update*)

Bernie Ernst, RWE

#### Wind Turbine Modeling User Group Update

Bob Zavadil, EnerNex Corporation

3:00 p.m. – 3:30 p.m.

### **Break**

3:30 p.m. – 5:00 p.m.

### **Regional and National Developments**

Session Chair: Richard Walker, Sustainable Energy Strategies Inc.

#### Clean and Diversified Energy Advisory Committee Activities

Bob Anderson, Consultant

#### Ainsworth Operating Experience

Doug Mollet, Nebraska Public Power District

SPP Constraint Mitigation in Higher Wind Areas  
Jay Caspary, Southwest Power Pool

Action Plans to Reduce Transmission Barriers and Operating Issues for  
Wind Generation in California  
James Blatchford, California Independent System Operator

5:00 p.m.

**Adjourn for Day**

6:00 p.m. – 8:00 p.m.

**Reception – Sheraton Oklahoma City**

**Wednesday, October 25, 2006 – Technical Meeting at the Sheraton**

7:00 a.m. – 8:30 a.m.

**Registration & Continental Breakfast**

8:30 a.m. – 12:15 p.m.

**Technical Workshop**

8:30 a.m. – 10:00 a.m.

**International Experience**

Session Chair – Ana Estanqueiro, INETI, Portugal

IEA Annex 25 on Large Wind Integration  
Hannele Holttinen, VTT, Finland

Portuguese Wind Integration Experience  
Joao da Silva Ricardo, REN, Portugal

German Wind Forecasting Experience and European Wind Integration  
Study  
Bernie Ernst, RWE, Germany

Nordpool Market Operations  
Lennart Söder, Royal Institute of Technology

10:00 a.m. – 10:30 a.m.

**Break**

10:30 a.m. – 12:00 p.m.

**Markets and More**

Session Chair: Charlie Smith

BPA Regional Wind Integration Initiative  
Elliot Mainzer, Bonneville Power Administration

FERC Order 888 and Corridor Studies Outlook  
Rob Gramlich, American Wind Energy Association

PJM Generation Attribute Tracking System  
Joe Kerecman, PJM Environmental Information Services, Inc.

Wind Impacts on MISO Markets  
Dale Osborn, Midwest Independent System Operator

12:00 p.m. – 12:15 p.m.

**Closing Remarks**

**Adjourn**

1:30 p.m. – 6:00 p.m.

**Blue Canyon Wind Plant Tour**