



CREW Seminar Series: Fall 2010

Grid Integration of Wind Energy – The Eastern Wind Integration and Transmission Study

Abstract

Wind energy is the fastest growing source of energy in the United States. As this important energy source continues to grow, evaluating its impact on the operation of electrical systems on a regional basis becomes increasingly important. Evaluating wind energy's interaction with the utility grid allows for a better understanding of how to manage the wind resource during planning and actual day to day operations. Quantifying the actual impact of wind energy on specific regional electrical systems provides information that is also used in transmission planning.

The Eastern Wind Integration and transmission Study (EWITS) was the largest wind integration study to date. The technical work conducted in EWITS yielded detailed quantitative information on:

- Wind generation required to produce 20% and 30% of the projected electric energy demand over the U.S. portion of the Eastern Interconnection in 2024
- Transmission concepts for delivering energy economically for each scenario
- Economic sensitivity simulations of the hourly operation of the power system defined by a wind generation forecast scenario and the associated transmission overlay
- The contribution made by wind generation to resource adequacy and planning capacity margin.

By **David Corbus** from **NREL**

**On Friday, November 5, 2010, at 1:00pm
In Room ECCS 1B12**

(CAETE studio, Engineering Center, University of Colorado at Boulder)
Refreshments will be available at 12:50pm



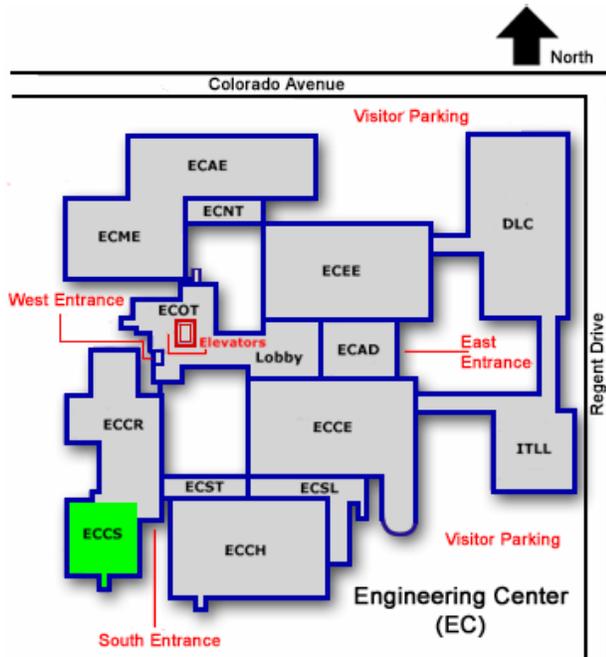
David Corbus is a Senior Engineer working at the National Renewable Energy Laboratory's (NREL's) Transmission and Grid Integration Group (TGIG). He is the project manager for the Eastern Wind Integration and Transmission Study (EWITS) evaluating wind power interaction with utility operations and transmission planning. Previous to working with the TGIG, Mr. Corbus worked as a test engineer, field engineer, and modeler at NREL conducting wind turbine loads and power performance certification testing as well small wind turbine testing and international applications of renewable energy systems. Before working at NREL, Mr. Corbus worked for 5 years at Parsons Brinckerhoff engineering firm in the field of environmental engineering and power systems. He holds a Masters degree in applied science/mechanical engineering from New York University.



How to get to the CU-Boulder Engineering Center

From 28th Street (Hwy 36), go west on Colorado Ave., which leads into the University. You will see the Engineering Center on the left, one block further along Colorado Ave.

Parking is available at visitor parking lots and nearby meters.



Room **ECCS 1B12** is located in the 1st basement (courtyard level) of the Computer Science Wing (ECCS).

Broadcasting option

While we highly encourage students, faculty and researchers to come attend the seminar in person, the seminar will also be broadcast at the following URL:

URL: <http://my.dimdim.com/caetestudio1>

The dial-in information will be displayed at the top of the DimDim meeting.

Unplanned technical problems are always a possibility, so we apologize in advance. Nonetheless, if technical problems are encountered, please feel free to call Mark Dehus at 303-735-6275.

