

Meteosim Truewind SL en EWEC '07 (Milan)

Meteosim Truewind SL presenta sus últimas novedades en la European Wind Energy Conference 2007 que se realizó la primera semana de Mayo de 2007 en el centro de Convenciones de Milán.



Este evento reunió a las empresas más importantes de la industria eólica internacional. La feria comercial permitió el encuentro entre sus representantes en un entorno muy familiar, ya que el evento mantuvo diferentes actos sociales en paralelo.

Por otro lado, la conferencia, donde participaron activamente miembros de Meteosim Truewind (ver la ponencia en página siguiente), permitió conocer el *state of the art* de todo el conocimiento sobre el recurso eólico y su explotación.

En particular Meteosim TrueWind presentó las últimas novedades en referencia a los estudios del recurso eólico para zonas extensas (MesoMap – WindSurvey) así como los estudios de evaluación energética con finalidades de micrositing (SiteWind).

Una vez más, la industria eólica se ofrece como la vanguardia de un nuevo modelo energético global que permitirá afrontar la lucha contra el cambio climático.



Para más información:

spares@meteosimtruewind.com (+34 93 403 45 23)

OPTIMIZATION OF WIND POWER PRODUCTION FORECAST PERFORMANCE DURING CRITICAL PERIODS FOR GRID MANAGEMENT

John Zack, AWS Truewind, LLC, United States of America

Summary

AWS Truewind is engaged in a research effort to optimize forecast performance for events characterized by large changes in power production. State-of-the-art forecast systems typically do not perform well for such events because the meteorological processes associated with them have much different characteristics than for the typical cases. AWST has developed a forecast system that uses a phenomenon-switching approach in which the system configuration is automatically switched when the probability of a particular phenomenon is estimated to be high. Initial tests indicate that this approach yields a considerable improvement in forecast performance for the targeted events.

Full description

Most wind power production forecast systems are designed to minimize forecast errors over all forecasts and they are typically evaluated with metrics that provide a measure of their overall forecast performance. However, although it is not widely recognized, the sensitivity of forecast users to forecast error often varies substantially. Forecasts made for certain critical time periods or phenomena are often more critical than those at other times. Thus, there may be considerable value in optimizing a forecast system to provide the best overall performance subject to the constraint that it provide the best possible forecasts during the critical periods. One example of a critical phenomenon for grid operations is a large ramp event in which the wind power production increases or decreases by a large amount over a short time period.

AWS Truewind is currently engaged in a research effort to optimize forecast performance for large ramp events in both the hours-ahead and day-ahead modes. A study of these events in a variety of locations indicates that state-of-the-art forecast systems typically do not perform well for such events because the meteorological processes associated with them have much different characteristics than for the typical cases. AWST is developing a forecast system that uses a phenomenon-switching approach in which the forecast system configuration is automatically switched when the probability of a particular phenomenon is estimated to be high. The initial tests indicate that this approach yields a considerable improvement in forecast performance for these critical events. This paper presents an overview of the conceptual design and implementation of this approach and performance results from initial tests.