

## **Draft Charter**

### **Integration of Variable Generation Task Force**

#### **Purpose and Deliverables**

The Task Force will prepare 1) a concepts document that includes the philosophical and technical considerations for integrating variable resources into the Interconnection, and 2) specific recommendations for practices and requirements, including reliability standards, that cover the planning, operations planning, and real-time operating timeframes. The document will include:

1. Planning timeframe issues, such as contribution to reserve margins and modeling requirements to test system reliability,
2. Operational Planning and Real-time operating timeframe issues, including Interconnection frequency, and primary and secondary generation control
3. Gaps in NERC Standards, and
4. Conclusions and recommendations.

#### **Approach and Milestones**

The Task Force will work with the Planning Committee's Resources Issues and Transmission Issues Subcommittees, and the Operating Committee's Resources Subcommittee. The TF will provide updates and discuss philosophical and technical issues with the Planning Committee and Operating Committee at the Committee's March and June 2008 meetings, with final approval of the paper slated for September 2008.

#### **Background**

As variable resources are expected to grow substantially throughout North America (in some locations targeted over 30% of overall capacity), understanding how to reliably integrate them into the bulk power system and their influence on reliability becomes increasingly important.

Transmission systems that connect to significant amounts of variable resources must be designed for reliable delivery of energy while supporting a multitude of generation patterns. Traditional peak period analysis of transmission requirements does not represent the variable generation patterns. Hourly simulations of generation variations within the transmission systems are required to ensure transmission systems are designed to deliver the variable resources when they are available. Indeed, the transmission owners and operators and balancing authorities may need new planning and operating "tools" and reliability guides that focus on delivering energy. Energy margins and expected unserved energy are important ways to determine system adequacy.

## **Membership**

NERC will seek membership from industry's subject experts, with final selection agreed to by the officers of the Planning Committee and Operating Committee. Members must be willing to commit their time to participate in the task force discussions and contribute to writing the final report.