**B**lack **S**tart **W**orking **G**roup

**Report to ROS**

**March 14, 2013 Meeting**

**Topic 1:** New NERC standard affects Black Start in ERCOT.

NERC EOP-005-2 becomes affective in the ERCOT region in July of 2013. BSWG is reviewing EOP-005, Requirement 6*,* and how it affects Transmission Operator’s and ERCOT.

EOP-005 R6 states:

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| R6. Each Transmission Operator shall verify through analysis of actual events, steady state and dynamic simulations, or testing that its restoration plan accomplishes its intended function. This shall be completed every five years at a minimum. Such analysis, simulations or testing shall verify: *[Time Horizon = Long-term Planning]*  R6.1. The capability of Blackstart Resources to meet the Real and Reactive Power requirements of the Cranking Paths and the dynamic capability to supply initial Loads.  R6.2. The location and magnitude of Loads required to control voltages and frequency within acceptable operating limits.  R6.3. The capability of generating resources required to control voltages and frequency within acceptable operating limits. |

**Topic 1 Resolution:**

BSWG established a small group to define “intended function” from the NERC language to represent all of the TOP’s in ERCOT. This group will also define “acceptable operating limits” for voltages and frequency as it applies to the ERCOT region. This group has met several times and will present its finding to the BSWG at its March 11th meeting.

BSWG met with Frank Vick from TRE to receive direction on the compliance expectations for EOP-005-2, R6. Frank Vick stated R6.1 shall be validated through a dynamic simulation. He then stated R6.2 and R6.3 may be validated through steady-state simulation.

BSWG continues to investigate the use of the ERCOT Black Start Simulator to provide evidence for NERC EOP-005-2, R6. Use of the ERCOT Black Start Simulator for gathering NERC evidence for individual TOP’s has challenges.

Challenges include:

* All entities (TOPs and QSEs) must participate to conduct a valid simulation.
* Determining how to capture evidence for individual TOPs from the ERCOT Black Start Simulator that can be used in a NERC audit.
* Maintaining high quality System Operator training while capturing practical NERC evidence.
* Costs to ERCOT and entities (TOPs and QSEs) of additional time on the ERCOT Black Start Simulator to gather evidence for this NERC requirement.

The responsibilities for EOP-005-2 were not resolved at the February TOP CFR meeting. This item was “tabled” for further discussion. The TOP CFR group will revisit this standard at its March meeting. BSWG will continue to investigate the use of the ERCOT Black Start Simulator to meet EOP-005-2, R6.

**Topic 2: ERCOT Black Start Service - Black Start Unit Selection Process**

Greeshma Nissankala (ERCOT) gave a presentation on the Black Start Unit Selection process. She explained Black Start Resource Unit bidding, testing, and selection. The timeline for FRP submission and notification was discussed. The Black Start Resource Unit testing period meets the NERC requirements. A simulator looking at connectivity between Black Start and Next Start Resources aids in unit selection. Actual testing considers a units ability to support voltage and frequency as load is added to the transmission system.

**Next BSWG Meeting: March 11, 2013**