

Notes

Generator Verification SDT — Project 2007-09

April 1, 2009
Conference Call

The System Protection and Control Subcommittee (SPCS) held a conference call and WebEx to formalize its comments to our posted draft standard PRC-024-1.

The conference call/WebEx attendees were:

Baj Agrawal,	Dean Sikes,	John Cuifo,
Joe Spencer,	Bob Cummings,	Jonathan Sykes,
Sam Francis,	Phil Tatro,	Jon Gardell,
Rick Terrill,	Jim Ingleson,	Harry Tom,
Mike McDonald,	Tom Weidman,	Bill Miller,
Phil Winston,	John Mulhausen,	Murty Yalla,
Rich Quest		

Rick Terrill and I were able to listen in on the discussions. Since the deadline for any comments on PRC-024-1 is tomorrow April 2, 2009 at 8PM, the SPCS worked collectively to draft their comments for submission to the GV SDT during this meeting.

Some of the issues discussed are:

- Where should the voltage be measured/observed...at point of interconnection or at generator terminal? Some stated that it should be at the point of interconnection for wind, and on the high side of the GSU or at the generator terminals for synchronous generators.
- PRC-024-1 does not meet the SAR objective for generators to remain on line through voltage and frequency excursions. However, now one could propose a way to measure compliance or set requirements for meeting this ahead of an actual event.
- The proposed standard should involve auxiliary bus equipment relay settings, motor contactors and other controls in addition to generator relay settings. However, now one could propose a way to measure compliance or set requirements for meeting this ahead of an actual event.
- The SDT should draft a separate set of requirements for wind generators to address the point of interconnection issue...

- The specification of 9 cycles is inadequate. Typically 12 to 15 cycles is more reasonable, in order to stay online during a breaker failure during an event.
- The proposed standard should be clear that it applies only to activated/implemented protection relays and that it does not require activation where it is not currently in use.
- Settings should be specified with a tolerance.
- Coordination of generator protective relay settings with transmission protections systems should be addressed in standard PRC-001 – Protection Coordination, and not in piece-meal fashion as is the case here.
- PRC-024-1 requirements with respect to voltage and frequency should only apply to non-synchronous machines. Leave synchronous generator requirements to PRC-001. Write this standard only for Wind Generators.
- Set Voltage Relays to alarm, not trip, per IEEE C37.102. However, this may not work for nuclear units.
- There are concerns that 63 hertz should be the high side limit for frequency.
- There are concerns that the UF curve does not match the regions. Suggested a regional standard as opposed to a national UF standard.

The SPCS's full set of comments along with those by other industry stakeholders will be included in a consolidated Comment Report. This report will be generated by NERC admin staff shortly following the conclusion of the comment period.

Harry S. Tom
Standards Development Coordinator