WECC Low Voltage Ride Through Standard

This Standard was developed to address reliability concerns associated with un-planned generation tripping resulting from low voltage excursions following disturbances.

New Standard

1. Generators are required to remain in-service during system faults (three phase faults with normal clearing and single line to ground faults with delayed clearing) unless clearing the fault effectively disconnects the generator from the system. This requirement does not apply to faults that would occur between the generator terminals and the high side of the generator step-up transformer or to faults that would result in a voltage lower than 0.15 per unit on the high side of the generator step-up transformer.
2. In the post–fault transient period, generators are required to remain in-service for the low voltage excursions specified in WECC Table W-1 as applied to a load bus. These performance criteria are applied to the generator interconnection point, not the generator terminals.
3. Generators may be tripped after the fault period if this action is intended as part of a special protection system
4. This Standard does not apply to a site where the sum of the installed capabilities of all machines is less than 10MVA, unless it can be proven that reliability concerns exist.
5. This Standard applies to any generation independent of the interconnected voltage level.
6. This Standard can be met by the performance of the generators or by installing additional equipment (e.g., SVC, etc.).
7. Existing individual generator units that are interconnected to the network at the time of the adoption of this Standard are exempt from meeting this Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet this Standard.