



Voltage Ride-through for Wind Generation Resources

ERCOT Planning

Operations Working Group

October 20, 2010

Status of VRT for WGRs

- **NOGRR043 was passed to synchronize to zonal OGRR208.**
- **As in zonal, all WGRs with IAs signed on or after 11/1/2008 must comply with VRT requirements.**
- **WGRs with IAs signed before 11/1/2008 do not retrofit just to meet standard.**
- **Current applicability language:**
 - WGRs that are part of a Standard Generation Interconnection Agreement (SGIA) signed on or after November 1, 2008 shall comply with this section.
 - WGRs that are part of an SGIA signed prior to November 1, 2008 are not required to meet this section However, individual WGRs that are newly installed or replaced shall be VRT capable in accordance with the VRT requirements of this section.
 - Notwithstanding any of the foregoing provisions, VRT capability of WGRs shall be maintained or improved over time.
 - WGRs shall provide a status of compliance to ERCOT System Planning upon request.

- **WGRs with IAs signed before 11/1/2008 do not retrofit just to meet standard, however VRT capability should be included going forward when replacing, upgrading, or adding turbines.**
 - Allow small window to replace turbines in-kind (same make, same model) as long as VRT capability is not diminished, then require VRT capability for all replacements .
 - Require VRT capability for all turbines added or that cannot be replaced in-kind.
 - Purpose of grandfather clause is to avoid retrofit requirements, and should not be considered a reason to avoid providing system support in the future.
- **From a reliability perspective, it is certainly more reliable if all WGRs possess VRT capability.**

- **WGRs that are part of an SGIA signed prior to November 1, 2008 are not required to comply with the VRT requirements as outlined in this section, with the following provisions:**
 - Individual wind turbines may be replaced with identical turbines (the same model and size) up to a cumulative nameplate capacity of ten (10) MW over the life of the facility as long as the VRT capability of the WGR is maintained or improved, after which all turbine replacements shall comply with the VRT requirements as outlined in this section.
 - All wind turbine replacements with non-identical turbines (a different model or size) and all new wind turbine installations shall comply with the VRT requirements as outlined in this section.