



Inverter-Based Resource Workshop Follow Up Update

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Transmission Planning

ROS
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Inverter-Based Resource Workshop Follow Up Status Dashboard

Issues	Status (Tentative Schedule)	Workgroups	Target Dates
Better Communication of Existing Requirements	<p>Develop a reference document to facilitate the understanding of the existing requirements, procedures, and practices. (Q4, 2019)</p> <p>Consider a NPRR on IBR definition. (Q4, 2019)</p>	<p>Resource Integration Workshop (RIW)</p> <p>Resource Definition Task Force (RDTF)</p>	RIW (9/26/2019)
Nuisance Tripping and Artificially Limiting Plant Capability	Continue discussion on this topic.		No scheduled activity
Voltage Ride Through and Momentary Cessation	<p>Consider a NOGRR to clarify VRT and momentary cessation (Q3, 2019)</p> <p>Consider a NOGRR to add transient overvoltage ride through requirement (Q3, 2019)</p> <p>Identify the need of more detailed FIS stability analysis (like PSCAD study) (Q3, 2019)</p>	<p>Dynamics Working Group (DWG)</p> <p>DWG</p> <p>DWG, RIW</p>	DWG (8/27/2019)
Dynamic Models	<p>Consider a PGRR to improve dynamic model quality (Q3, 2019)</p> <p>To strengthen the model validation requirements (Q4, 2019)</p>	<p>DWG, RIW</p> <p>DWG, RIW</p>	<p>RIW (6/20/2019, 7/30/2019, 9/26/2019)</p> <p>DWG (8/27/2019)</p>
Battery Energy Storage Operational Requirements	Develop requirements for battery energy storage (Q1, 2020)	ROS, RIW	ROS (monthly)
Advanced Features and Others	<p>Continue discussion on this topic.</p> <p>Zero MW reactive support (a study to demonstrate the benefit, Delaware Basin)</p>		No scheduled activity

PGRR xxx: Dynamic Model Quality Test Requirement

- Purpose of this PGRR
 - Identify dynamic model issues as early as possible so that study delays can be avoided
 - Reduce/eliminate iterations of model troubleshooting among REs/IEs, TSPs, vendors and ERCOT
 - Allow study engineers to focus on reliability studies instead of model issues
 - Presented to Resource Integration Workshop in July
 - Presented to DWG in August
- Next Steps
 - Incorporate comments provided by DWG/RIW (September)
 - Provide an update to RIW (September)
 - Submit the PGRR (October)

Battery Energy Storage Operational Requirements

Items	Progress	Initial Stakeholder Discussion*
Voltage Support and Coordination	In Progress	OWG
Reactive and AVR Testing	In Progress	OWG
Voltage Ride Through	In Progress	PLWG, OWG
Frequency Ride Through	In Progress	PDCWG, OWG
Frequency Support and Response Testing	In Progress	PDCWG, OWG
Ramp Rate Limitations	In Progress	OWG
Dispatch instructions	In Progress	QMWG, WMWG
Measurement and Monitoring (HSL Testing, PMUs)	In Progress	PLWG, OWG
Ancillary Service Performance and Testing Requirements	In Progress	ROS (9/5/2019)
Dynamic Performance and Model Submittal	TBD	
Power System Stabilizers (Damping Support)	TBD	

*A preliminary list of proposed stakeholder working groups. Request for feedback and suggestions.

- Next Steps
 - Discuss these items with stakeholder groups (4Q, 2019)
 - Draft and submit Protocol and Guide Revision Request (1Q, 2020)

Questions

Comments are welcome

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