# ERCOT ROS Inverter-Based Resource Working Group (IBRWG)

### Scope

The Inverter-Based Resource Working Group (IBRWG) is a working group reporting to the Reliability and Operations Subcommittee (ROS).

**Background**

Inverter-Based Resources (IBRs) make up a significant portion of ERCOT Generation Resources today, and are forecasted to rapidly increase even further and become the dominant resource technology on the ERCOT System. IBR technology differences may at times necessitate different requirements, testing, and/or performance monitoring to identify and correct performance deficiencies to ensure reliable operations. Several events have occurred in the last 10 years both in ERCOT and other electric grids that highlight the need to address these concerns. Coordination and comprehensive expertise from generation owners/operators, transmission owners/operators, IBR vendors/original equipment manufacturers (“OEMs”), and ERCOT is needed to properly diagnose and mitigate these issues. The IBRWG reports to the ROS on a regular basis.

**Membership**

Membership is open to all concerned parties. Participation is encouraged from Transmission and/or Distribution Service Providers (TDSPs), Qualified Scheduling Entities (QSEs), Resource Entities, ERCOT, OEMs, and other subject matter experts (“SMEs”) in the IBR field.

ERCOT IBRWG meetings may be held as either open or closed sessions. Open sessions will be open to the public. Closed sessions will be scheduled, as needed, to facilitate the discussion or disclosure of Protected Information and/or other confidential information. Participation in closed sessions is limited to the following Entities: ERCOT, the Public Utility Commission of Texas (PUCT) or other relevant state agencies, North American Electric Reliability Corporation (NERC), Texas Reliability Entity (TRE), QSEs who represent Resources, Resource Entities, TDSPs, manufacturers of inverter-based Resources or related equipment, and relevant industry SMEs. ERCOT, in coordination with the IBRWG chair, will determine whether a manufacturer or SME is qualified to participate in closed sessions. All participants at open or closed sessions must comply with the terms of the Antitrust Admonition.

Any prospective member who seeks to participate in closed sessions must sign the appropriate ERCOT Confidentiality Agreement (CA) or Non-Disclosure Agreement (NDA) and receive approval from ERCOT. To facilitate this process, prospective members must email the ERCOT Legal department at NDA@ercot.com.

Management of the membership list shall be the responsibility of ERCOT and coordinated with the IBRWG chair. Once approved, members who have executed the requisite NDA will be permitted to access the IBRWG email distribution list, to access appropriate ERCOT Secure Documents Library, and to attend IBRWG closed meetings.

**Chair and Vice-Chair**

The Chair and Vice-Chair positions shall be nominated by the IBRWG for approval by ROS to a term not to exceed 12 months, on a one year, rolling basis.

The Vice-Chair shall act as Chair in the absence of the Chair.

**Meetings**

The IBRWG shall meet as often as necessary to perform their duties and functions.

All IBRWG meetings shall be called by the Chair and/or Vice-Chair and all such meeting notices shall be sent and posted to the ERCOT website at least one week prior to the meeting. IBRWG meetings will be communicated via IBRWG email distribution list.

The Chair shall preside at all meetings and is responsible for preparation of agendas for such meetings which will be posted to the ERCOT website in advance of the meeting. In the absence of the Chair and the Vice-Chair, the group shall select another IBRWG member to preside at the meeting. The Chair, or the presiding member, shall be guided by input from the membership in the conduct of the meetings.

Notes of IBRTF meetings shall be recorded and distributed, along with other communications to all members of the IBRTF. Additionally, such information will be posted on the ERCOT website as authorized by the IBRTF and author of document.

**Purpose & Scope**

The purpose of the IBRWG is to assess, review, and recommend improvements and mitigation activities to support IBR performance that is specific to inverter-based technologies. Functions of the IBRWG include:

* Respond to assignments from the ROS.
* Review ERCOT Nodal Protocols, Operating Guides and the Planning Guide for alignment with Institute of Electrical and Electronics Engineers (IEEE) Standards and NERC Reliability Standards Alerts, Guidelines, Event reports and recommendations, and to make recommendations to ROS.
* Assess and review known specific inverter and plant controller setting and modeling issues for potentially common issues with other units that have the same IBR vendor/OEM and/or inverter model . Support other ROS Working Groups to validate models based on actual system performance observed during events.
* Review IBR-related topics and make recommendations to ROS on how to resolve issues related to the topic.
* Review emergency events having a significant impact on the ERCOT System and make recommendations to ROS.
* Communicate potential reliability risk to ROS.
* Support any necessary technical workshops.