

Disposition of ERSWG Measure 3: Synchronous Inertial Response at the BA Level

Recommendation

The NERC Planning and Operating Committees jointly created the Essential Reliability Services Task Force (later renamed to the Essential Reliability Services Working Group (ERSWG)) to identify necessary services for reliability of the bulk power system (BPS). The group has been working on these issues since 2014 and previously proposed a measure related to synchronous inertial response at the Balancing Authority (BA) level (identified as Measure 3 in earlier reports). Originally, the intent was to use data at the BA level to create (or "build up") the Interconnection-level data that is needed for the other essential reliability service (ERS) frequency measures since measuring and monitoring inertial and frequency response is only meaningful at the Interconnection level. However, since other data collection processes have evolved to provide the Interconnection-level data, ERS Measure 3 is no longer viewed as necessary or adding value. Therefore, the ERSWG recommends no further action on ERS Measure 3 (synchronous inertial response at the BA level) that was proposed in the *Measures Framework Report* in 2015.

Background

The Measures Framework Report² recommended that BAs provide three years of historical synchronous inertia (SI) values and a three-year projection of their expected SI values. The BA-level values were assumed to be necessary to develop Interconnection-wide SI profiles, both historical and prospectively. These interconnect values would be used to calculate system inertial response in the initial 0.5 second period after a disturbance event. Likewise, the prospective values would be used in a similar manner to project changes in inertial response in the future.

The NERC Resources Subcommittee developed a means of generating historical interconnect-wide SI values without requiring BAs to generate the data. Through these processes, the Resources Subcommittee has been collecting historical interconnect SI data since June of 2016.

As a part of ERSWG Measure 4 (frequency response at the Interconnection level), forward looking analysis will be performed as part of the NERC reliability assessment process and included in the NERC Long Term Reliability Assessment (LTRA) report. This analysis will model future SI and frequency response at the Interconnection level, therefore the need for BAs to provide a SI forecast to NERC is unnecessary.

Given that both the historical and forward-looking aspects of the frequency support measures are adequately addressed through these other means and since inertial and frequency response characteristics are a property of the Interconnection as a whole, the ERSWG recommends no further action on ERS Measure 3 as it was proposed in 2015.

¹ Essential Reliability Services 2015 Measures Framework Report

² Ibid.