
Project QC-2024-04

Project of definitions related to the calculation of Reporting ACE used in Reliability Standards

1. OVERVIEW

1.1. Applicability

The proposed changes to the Glossary of Terms and Acronyms used in Reliability Standards (hereinafter, the “Glossary”) align with the NERC Glossary currently in effect. No changes to the Reliability Standards in which these terms are used are proposed as part of this project.

1.2. Purpose of the Glossary changes

The Coordinator proposes the following modifications to the Glossary of Terms and Acronyms Used in Reliability Standards (hereinafter the “Glossary”) in accordance with the changes to the Glossary. North American Electric Reliability Corporation’s (hereinafter, “NERC”) primary purpose of these modifications was to improve the definition of Reporting Area Control Error (hereinafter, “Reporting ACE”), a term used in the Balancing and Control (hereinafter, “BAL”) family of Reliability Standards, to improve long-term average frequency performance as well as allow other Interconnections beyond the Western Interconnection (hereinafter, “WECC”) the ability to pursue an automatic time error correction control methodology or similar functions. In NERC’s opinion, if average Frequency and Time Error were better controlled, there would be less need for manual Time Error Corrections, thereby improving reliability.

1.3. Regulatory context

In revising the Reporting ACE definition In its project 2022-01 – Reporting ACE Definition and Associated Terms, NERC identified the opportunity to further clarify and improve upon related Glossary terms, many of which have not been revised since their initial approval by the Federal Energy Regulatory Commission (hereinafter, “FERC”) in Order 693¹ in 2007, as well as retire NERC Glossary terms that are or will no longer be used following FERC’s approval of the new and modified terms in the project.

On April 29, 2024, FERC issued its letter order² in which it approved the proposed two (2) new, thirty (30) modified and four (4) retired definitions of terms related to the calculation of Reporting ACE.

1.4. Proposed effective date

NERC’s implementation plan proposes that all proposed Glossary terms become effective twelve (12) months following FERC’s approval.

The Régie’s requires that standards come into force on the first day of a calendar quarter³ with at least 60 days⁴ between the date of the standard’s adoption and its effective date. Despite the fact that no changes are made to any Reliability Standards in this project, given the importance of having standardized practices with the United States, the Coordinator proposes that the Glossary terms come into effect on the first day

¹ FERC Order 693, retrieved on May 15, 2024 at: <https://www.ferc.gov/sites/default/files/2020-04/E-13.pdf>.

² FERC letter order Docket No. RD24-6-000, retrieved on May 15, 2024 at: https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20240429-3009.

³ In Decision [D-2015-168](#), the Régie set the effective date of standards as the first day of the calendar quarters following the date of adoption.

⁴ In Decision [D-2016-011](#), the Régie set a minimum of 60 days between the adoption of standards and their effective date.

of the first calendar quarter that is twelve (12) months after its adoption by the Régie.

1.5. Modifications to the Glossary

The proposed changes to the Glossary are outlined in the document Proposed Modifications to the Glossary. In summary, the revisions are categorized as follows:

i. Modifications to the Reporting ACE definition

The proposed definition of Reporting ACE represents an improvement upon the currently effective definition by correcting grammar and capitalization of terms, and by replacing the general and Western Interconnection specific calculations of Reporting ACE with a single calculation that would apply across all Interconnections. The calculation for the Western Interconnection would still reflect Automatic Time Error Correction, a formula that is only applicable in the Western Interconnection; however, the calculation would also accommodate any other regional procedure for managing inadvertent interchange and correcting time error, should one be created.

ii. Modifications to the Area Control Error definition

NERC proposes modifications to the Area Control Error definition, which is a defined term used in the definition of Reporting ACE, so that it is no longer limited to Balancing Authorities (hereinafter, “BA”) and may include entities such as Reserve Sharing Groups (RSG). NERC also proposes to update terms to reflect current NERC defined terms, add newly proposed terms related to the term Reporting ACE, and add a clarifying statement to refer to the term Reporting ACE for compliance purposes.

iii. Modifications to components of the Reporting ACE definition

Revisions to the definitions of the following terms that comprise the Reporting ACE calculation were made to correct capitalization, grammar, and reflect current terminology and practice:

- Actual Net Interchange
- Scheduled Net Interchange
- Frequency Bias Setting
- Scheduled Frequency
- Interchange Meter Error

Furthermore, a new component to the calculation of Reporting ACE, Inadvertent Interchange Management, was added to allow for Interconnections other than the Western Interconnection to implement time error and inadvertent interchange correction procedures.

Lastly, the definition of Automatic Time Error Correction (ATEC) represents an improvement upon the currently effective definition in the following ways. First, the standard drafting team added an islanding term, “BA_{island}”, to reflect that a Balancing Authority that has lost synchronism with the remainder of the interconnection cannot have an impact on the interconnection’s Time Error. Second, the standard drafting team amended the method of allocating Primary Inadvertent Interchange to use actual Bias settings to reflect each BA’s share of Time Error impact more accurately. Third, the standard drafting team made several conforming and correction changes throughout. The proposed definition advances a more accurate calculation of Automatic Time Error Correction and provides for increased clarity and consistency.

iv. New ACE Diversity Interchange definition

NERC proposes a new defined term in the revised definition of Reporting ACE, ACE Diversity Interchange

in the second of the four criteria that define a valid alternative to the Reporting ACE equation. NERC noted that not all participants may choose to include ACE Diversity Interchange in their Reporting ACE, which would result in the sum of Reporting ACE not being equal to zero for that Interconnection. To address this concern, NERC proposed a new definition of ACE Diversity Interchange, which includes a clarification note in the proposed revised definition of Reporting ACE to reference this term so that Reporting ACE accounts appropriately for ACE Diversity Interchange implementations.

v. Proposed definitions of related terms

NERC proposes a series of revisions to other NERC Glossary terms related to the calculation of Reporting ACE, defined terms used directly or indirectly in the definition of Reporting ACE, or terms that refer to ACE or Reporting ACE.

vi. Proposed definition of Reserve Sharing Group

The proposed changes to the currently effective definition are modest in nature and consists of the capitalization of the phrase “operating reserves” to accurately reflect current terminology, and the replacement of the phrase “disturbance control performance” to better reflect the terminology used in the BAL-002-3 standard.

vii. Proposed terms for retirement

NERC proposes to retire four (4) terms that are no longer used or will no longer be needed following the approval of the new and revised definitions in this filing of the terms stemming from NERC project 2022-01.

2. ASSESSMENT OF RELEVANCE

The proposed Glossary terms define, or are related to, the components of Reporting ACE, which is one of the most important single measurements available to indicate the current state of the responsible entity's contribution to Interconnection reliability. Reporting ACE is also used as an integral part of the measurements used in Reliability Standards BAL-001-2 and BAL-002-3. The technical requirements associated with parameters used in the calculation of Reporting ACE are specified in Reliability Standards BAL-003-2 and BAL-005-1.

NERC identified a large amount of accumulated time error in the Eastern Interconnection and investigated acceptable methods for correction in alignment with current reliability standards, reliability guidelines and reference documents. Based on its review, NERC recommended that the Reporting ACE definition, which presently refers to Automatic Time Error Correction as a component only in the WECC, be modified to accommodate any Interconnection that has an approved automatic time error correction methodology or other process to control inadvertent accumulation. The revised definition of Reporting ACE would advance reliability by implementing NERC's recommendation and allowing for any Interconnection to implement an approved automatic time error correction methodology or other process to control inadvertent accumulation, as well as by improving clarity regarding the components that make up the ACE used for reporting.

In Québec, since there is only one BA in the Québec Interconnection the I_{IM} is null and is not included in the BA's Reporting ACE calculation. Furthermore, given that HQ is the only BA in Québec, there is no inadvertent interchange from another BA in the Québec Interconnection.

In the United States, FERC concluded in its letter order ⁵ that the proposed Glossary terms are just, reasonable, not unduly discriminatory or preferential, and in the public interest.

In accordance with the 2009 agreement between the Régie, NERC and the NPCC and with the authorization of the Québec government,⁶ these Glossary revisions were developed and approved by recognized agencies in North America, including Québec or in neighboring systems. In the opinion of the Coordinator, the proposed revisions to the Glossary are relevant in Québec.

3. PRELIMINARY IMPACT ASSESSMENT

This project only concerns modifications to the Glossary that are of little to no impact in Québec for the reasons stated above. Furthermore, the majority of the modifications deal with definitions used by the BA in the BAL family of standards. Consequently, the impact is low, even negligible for Registered Entities where entities may be required to update their documentation to reflect the new definitions. Furthermore, the modifications concern definitions used by the BA in the

The following table provides the Reliability Coordinator's preliminary assessment of the impact on Québec entities.

Glossaire	Impacts		
	Implantation	Maintien	Suivi
Glossary terms	Low	Low	Low

Legend :

- Low:** Normal industry practice or standard that only requires minor adjustments to existing processes or practices.
- Moderate:** Change that requires the mobilization of some physical, human or financial resources to implement the proposed standard, enforce it or monitor compliance.
- High:** Change that requires provision and mobilization of significant physical, human or financial resources to plan and implement the proposed standard, enforce it or monitor compliance.

4. FINAL IMPACT ASSESSMENT

This section will be completed upon receipt of the impact assessment forms and at the conclusion of the consultation process prior to filing of the standards with the Régie

⁵ See footnote 2.

⁶ Agreement entered into pursuant to Decree No. 443-2009, issued on April 8, 2009. http://www.regie-llennergie.qc.ca/audiences/normes_fiab_tranp_elec/Entente_Regie_NERC_NPCC_5mai09.pdf (in French only)