

# Proposed Revisions to Align Definitions in the Glossary of Terms and Rules of Procedure

## Project 2015-04 – Alignment of Terms

### **Part I. Executive Summary**

Currently there are fifty-five (55) defined terms that appear in both the [NERC Glossary of Terms Used in Reliability Standards](#) (Glossary) and [Rules of Procedure](#) (ROP) (“cross-over terms”), a complete list of which can be found in Attachment 1. Of the fifty-five (55) cross-over terms, forty (40) contain inconsistencies or differences in the definition narratives, which causes industry confusion and may lead to inconsistent interpretation or application of the meaning of a term. Consistency between the defined terms in the Glossary and the ROP will enhance reliability by providing the owners, users and operators of the BES, as well as the ERO Enterprise, with a better understanding of the terminology used in the Glossary and the ROP. To achieve this consistency, the SDT is proposing alignment revisions to twenty-six (26) Glossary terms and sixteen (16) ROP terms.

This document provides an overview of the work undertaken by the [Project 2015-04](#) standard drafting team (SDT) to align the cross-over terms and the revisions proposed by the SDT. Part II provides an overview of the purpose, scope and substance of the work undertaken by the SDT during this project. Parts III through VI provide the background information and research conducted by the SDT for each cross-over term under revision, and an analysis and justification to support the revisions being proposed by the team to align the terms.

### **Part II. Project Overview and Background Information**

#### **Background information regarding the Glossary and ROP**

In 2007, when FERC approved Version 0 of the Reliability Standards, it also approved the NERC Glossary of Terms. (See, [FERC Order No. 693](#)). In Order No. 693, FERC noted the importance of the defined terms in establishing a consistent understanding of the Reliability Standards Requirements and implementation. (See, FERC Order No. 693 at P 1893). The NERC Glossary provides continuity in the application of the glossary definitions industry-wide and eliminates multiple interpretations of the same term or function, which could otherwise create miscommunication or jeopardize reliability. Similarly, FERC approved the Rules of Procedure, which contained a number of FERC-approved defined terms. Later, in 2011, at FERC’s suggestion, NERC petitioned to move all of the defined terms contained in the various sections and Appendices of the ROP into one central location, Appendix 2 to the ROP. The definitions included in Appendix 2 were “taken largely from existing sources, including Section 215 of the Federal Power Act; the Commission’s regulations; the NERC Bylaws, the NERC Glossary of Terms Used in Reliability Standards; and existing definitions found in the ROP and Appendices...” (See, [NERC Petition](#), p. 8). Those definitions taken

from the Glossary were marked with a double asterisk (\*\*), while definitions taken from the Federal Power Act were marked with a double plus sign (++)).

Following FERC's approval of the Glossary and Appendix 2 to the ROP, there have been a number of necessary revisions to the defined terms contained therein. Glossary terms are revised through the Reliability Standards development process; whereas ROP terms are revised through the ROP revision process. (See, NERC Rules of Procedure, Appendix 3A: [Standards Process Manual](#) and [ROP, Section 1400](#)). As a result of various changes made to defined terms over the years through these distinct revision processes, a number of cross-over terms, which were once identical, now contain differences in their definition narratives. As outlined in the SAR for this project, the purpose of this project is to align the defined terms found in the Glossary and the ROP. Additionally, the SDT will also develop recommendations regarding how to enhance the current definition development processes in the Standards Process Manual and ROP to prevent misalignment or inconsistencies during future development of defined terms.

### **Work undertaken by the Project 2015-04 SDT**

First, the SDT identified all existing defined terms that are contained in both the Glossary and the ROP ("cross-over terms"), a complete list of which can be found in Attachment 1. From this complete list of cross-over terms, the team then identified those cross-over terms that contained definitional differences. After analyzing these definitional differences, the SDT identified common alignment issues and categorized the terms into different "groups" based upon the type of alignment issue identified. Below is a summary of each grouping:

**Group 1:** Group 1 cross-over terms contain differences in the substance or content of the definition. In some instances, the differences resulted in the defined terms having different meanings or application. For example, the definitions for "Net Energy for Load" are substantively different in the Glossary and ROP because they are used differently in the respective documents. In other instances, although the content or language of the definition was different, the end result or application of the definition was, nevertheless, the same. For example, the term "Adjacent Balancing Authority" is defined differently in the Glossary than the ROP, with the Glossary definition providing greater clarity. There are a total of nine (9) Group 1 cross-over terms, and the SDT is proposing alignment revisions to eight (8) of those terms.

**Group 2:** Group 2 cross-over terms are similar to Group 1 terms in that the definitions contain substantive differences in the definitions. However, these terms are grouped separately because they are currently under revision, not yet approved by the NERC Board of Trustees, or pending regulatory approval. There are six (6) Group 2 cross-over terms in total, and at this time, the SDT is recommending alignment revisions to one (1) of those terms. The SDT has, however, made recommendations for future action to address a number of the remaining Group 2 cross-over terms.

**Group 3:** Group 3 cross-over terms contain differences in the capitalization of terms that are included in the definition narrative, but are otherwise aligned in substance and content. Since capitalization of a term indicates that it is a defined term with a specific meaning, these inconsistencies in capitalization cause confusion and may lead to inconsistent application of the definition. For example, the definition narrative of "Interconnected Operations Services" is the same in the Glossary and ROP; however, the ROP

narrative capitalizes “Transmission Services” and “Reliable Operation,” while the Glossary does not. There are a total of twenty-two (22) Group 3 cross-over terms, and the SDT is recommending alignment revisions to all of those terms.

**Group 4:** Group 4 cross-over terms contain errata-type differences, such as the inadvertent omission of a word or letter. There are three (3) Group 4 cross-over terms in total, and the SDT is proposing alignment revisions to all of those terms.

Below is a detailed summary of the SDT’s recommendations for each of the cross-over terms, organized by Group. Also, Attachment 2 contains a summary of all alignment revisions proposed by the SDT.

The SDT undertook substantial background research before determining whether alignment revisions were appropriate for each of the cross-over terms under consideration, including an examination of the history of the term’s definition, previous drafting teams’ intent, relevant NERC filings to FERC, and any FERC orders approving the term’s definition. Additionally, the SDT examined how each term is used in the Glossary, Reliability Standards, and ROP provisions. Based on this thorough examination, the SDT determined whether revisions were appropriate. In some instances, the SDT concluded that alignment revisions were not appropriate due to differing application of the terms in the Glossary and/or ROP. Also, for a number of terms, the SDT identified areas where the definition language could be improved, given industry usage. For such terms, the SDT will develop a Standards Authorization Request (SAR) outlining the identified issues, and the team’s proposal for how to address each issue. Of the fifty-five (55) cross-over terms, forty (40) contain inconsistencies or differences in the definition narratives. To achieve consistency and alignment of these cross-over terms, the SDT is proposing revisions to twenty-six (26) Glossary terms and sixteen (16) ROP terms.

## Part III: Group 1 recommendations

There are a total of nine (9) Group 1 cross-over terms:

**Term 1: Adjacent Balancing Authority**

**Term 6: Bulk Power System**

**Term 17: Generator Operator**

**Term 18: Generator Owner**

**Term 29: Net Energy for Load or NEL**

**Term 40: Reliability Standard**

**Term 44: Sink Balancing Authority**

**Term 45: Source Balancing Authority**

**Term 48: System Operating Limit**

The SDT is recommending revisions to eight (8) of the Group 1 cross-over terms. Below is an overview of the SDT research, assessment, proposed revision(s), and justification for each of the recommendations.

## Term 1: Adjacent Balancing Authority

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
A Balancing Authority whose Balancing Authority Area is interconnected with another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.	a Balancing Authority Area that is interconnected to another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.**	The SDT is proposing to revise the ROP definition to align with the Glossary.  <b><u>Redline of ROP definition:</u></b> a Balancing Authority <del>Area</del> whose Balancing Authority Area <del>that</del> is interconnected with <del>to</del> another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.**

### I. HISTORY AND BACKGROUND INFORMATION REGARDING “ADJACENT BALANCING AUTHORITY” DEFINITION

***History of Glossary term:***

- Previous version(s): Effective dates: 3/16/2007 – 09/30/2014 (“A Balancing Authority Area that is interconnected another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.”)
- Current version: **Effective as of 10/01/2014**
  - o Revised by [Project 2008-12 Coordinate Interchange Standards](#)
  - o [NERC Petition](#) (02/27/2014) - “The proposed revisions are minor, non-substantive changes to improve the clarity of the term, as illustrated in Exhibit F. The proposed revisions are intended to clarify the various Balancing Authorities involved in the implementation of Interchange and their relationships with regards to Interchange.” (p. 29)
  - o [FERC Order](#) (06/30/2014) – FERC letter order approving revised Glossary definition

***History of ROP term:***

- Current version: **Effective as of 01/31/2012**
  - o [NERC Petition](#) (11/29/2011) - Added Appendix 2 to ROP and adopted existing Glossary definition for Adjacent Balancing Authority. (see p. 9)
  - o [FERC Order](#) (01/31/2012) - “These revisions are being proposed as a result of P 93 of the Commission’s Order issued October 21, 2010, in Docket No. RR10-11-000, in which the Commission invited NERC to submit a filing making consistent use of defined terms throughout the ROP and Appendices.” (p. 1)

### II. USAGE OF DEFINED TERM: ADJACENT BALANCING AUTHORITY

***List of usage of the term Adjacent Balancing Authority within Reliability Standards:***

	Reliability Standard
1	BAL-001-2
2	BAL-002-1a
3	BAL-005-0.2
4	BAL-006-2
5	COM-001-2
6	EOP-001-2.1b

7	INT-009-2.1
8	MOD-028-2
9	MOD-030-2
10	MOD-030-3

**List of ROP provisions (other than Appendix 2) where Adjacent Balancing Authority occurs:**

	ROP provision	Page # <a href="#">[Link to ROP]</a>
1	Appendix 5B – Functional type definition under Section II: Reserve Sharing Group	435 of 483

**List defined terms that include Adjacent Balancing Authority in definition narrative:**

	Glossary		ROP
1	Net Actual Interchange	1	N/A
2	Net Interchange Schedule	2	N/A
3	Reserve Sharing Group	3	Reserve Sharing Group

**List of other defined terms that are included in the Adjacent Balancing Authority definition narrative:**

Glossary: Balancing Authority Area, Balancing Authority

ROP: Balancing Authority Area

**III. DRAFTING TEAM ANALYSIS AND ASSESSMENT**

**Explanation of differences in definition narratives:** The differences in definition narratives are minor and non-substantive in nature. The Glossary definition clarifies the various Balancing Authorities involved in the implementation of the Interchange and their respective relationships with Interchange.

**How/why the terms may be applied differently as a result of the differences:** The language added through the [Project 2008-12 Coordinate Interchange Standards](#) did not impact the definitions. A review of the ROP and Reliability Standards containing the defined term was conducted, and the differences do not result in different application of the term. The Glossary definition simply provides greater clarity.

**Proposed revision(s):** The SDT proposes to revise the ROP definition to align with the Glossary. No changes are proposed to the Glossary definition.

**Redline of ROP definition:**

a Balancing Authority ~~Area whose Balancing Authority Area that is~~ interconnected ~~with to~~ another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.\*\*

**Justification for decision:** The ROP definition adopted the Glossary definition when Appendix 2 was created in 2012. Note that the ROP definition is marked with a double asterisk (\*\*), indicating it was taken from the Glossary. Subsequently, in 2014, the Glossary term was revised to provide greater clarity. The revised Glossary definition clarifies the various Balancing Authorities involved in the implementation of Interchange and their relationships with regard to Interchange. The ROP definition was not updated to reflect the clarifying revisions made to the Glossary definition.

## Term 6: Bulk Power System

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
<p>Bulk-Power System:  <b>A) facilities</b> and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and  <b>(B) electric energy from generation</b> facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy.</p>	<p>Bulk Power System” <b>means, depending on the context:</b>  <b>(i) Facilities</b> and control systems necessary for operating an interconnected electric energy <b>supply and</b> transmission network (or any portion thereof), and electric energy from <b>generating</b> facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy [++]. <b>(ii) Solely for purposes of Appendix 4E, Bulk Electric System.</b></p>	<p>The SDT is proposing to revise both definitions as follows:</p> <p><b><u>Redline of Glossary definition:</u></b>            Bulk-Power System:  <b>(A) facilities</b> and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and  <b>(B) electric energy from generation</b> facilities needed to maintain transmission system reliability.            The term does not include facilities used in the local distribution of electric energy. <u>(In order to remain consistent with the Federal Power Act [16 U.S.C. 824(o) and 18 C.F.R. 39.1], defined terms contained in this narrative are not capitalized.) Note that the terms “Bulk-Power System” or “Bulk Power System” shall have the same meaning.</u></p> <p><b><u>Redline of ROP, Appendix 2 definition:</u></b>            Bulk Power System” means, depending on the context:  <b>(i) (A) Facilities-facilities</b> and control systems necessary for operating an interconnected electric energy <b>supply and</b> transmission network (or any portion thereof); and  <b>(B) electric energy from generationg</b> facilities needed to maintain transmission system reliability.            The term does not include facilities used in the local distribution of electric energy. [++] <u>(In order to remain consistent with the Federal Power Act [16 U.S.C. 824(o) and 18 C.F.R. 39.1], defined terms contained in this narrative are not capitalized.)-Note that the terms “Bulk-Power System” or “Bulk Power System” shall have the same meaning.</u>  <b>(ii) Solely for purposes of Appendix 4E, Bulk Electric System.</b></p>

### I. HISTORY AND BACKGROUND INFORMATION REGARDING BULK POWER SYSTEM DEFINITION

**History of Glossary term:**

- Original version: Effective through 07/08/13
  - o [FERC Order No. 693](#) (03/16/07): “The Commission directs the ERO to modify the glossary through the Reliability Standards development process to include the statutory definitions of the terms Bulk-Power System, Reliable Operation and Reliability Standard. However, this determination does not negate our discussion in the Applicability section of the Final Rule. While the glossary should be revised to include the statutory definition of Bulk-Power System, the Reliability Standards refer to the bulk electric system, which is also defined in the glossary.” (P 1894)

- Current version: **Effective as of 07/09/13**
  - o Revised by [Project 2012-08.1](#) Phase 1 of the Glossary Updates for Statutory Definitions
  - o [NERC Petition](#) (05/10/13):
 

“The term “Bulk-Power System” is defined in section 215 of the FPA as follows:

(1) The term ‘bulk-power system’ means—

(A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and

(B) electric energy from generation facilities needed to maintain transmission system reliability.

The term does not include facilities used in the local distribution of electric energy.

The proposed definition of the term “Bulk-Power System” for inclusion in the NERC Glossary is as follows: “Bulk-Power System” means, (A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and (B) electric energy from generation facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy. The proposed definition of “Bulk-Power System” is identical to the definition in section 215 of the FPA and should therefore be accepted in compliance with the Commission’s directive in Order No. 693.” (pp. 5-6)
  - o [FERC Order](#) (07/9/13) - Letter order approving proposed definitions

#### **History of ROP term:**

- Original version:
  - o [ERO Application](#) (04/04/06) – NERC Bylaws: “Bulk power system” means facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof) and electric energy from generation facilities needed to maintain transmission system reliability, but does not include facilities used in the local distribution of electricity.
  - o [FERC Order](#) (07/20/06) - ‘We direct NERC to adopt definitions of the terms defined in Order No. 672 throughout its documents in its compliance filing. Any other definition of those terms is not acceptable.’ (P 727)
- Revised version:
  - o [NERC Compliance Filing Addressing Governance Issues](#) (09/18/2006): “NERC has modified the definitions of ‘bulk power system’, ‘electric reliability organization’, and ‘regional entity’ in Article I, Section 1 of the Bylaws to track the definitions in Order No. 672. NERC will also track the Order No. 672 definitions in its Rules of Procedure...”
  - o [NERC Non-Governance Compliance Filing](#) (10/18/06): “NERC has modified the definitions of ‘bulk power system’, ‘electric reliability organization’, and ‘regional entity’ in Article I, Section 1 of its Bylaws to track the definitions in Order No. 672. NERC has also revised definitions in its Rules of Procedure to match definitions in Section 215(a) of the Federal Power Act and/or Part 39 of the Commission’s regulations, including ‘bulk power system’, ‘electric reliability organization,’ ‘reliable operation,’ and ‘reliability standard’.” (pp. 71-72)
 

“Bulk power system” means facilities and control systems necessary for operating an interconnected electric energy supply and transmission network (or any portion thereof), and electric energy from generating facilities needed to maintain transmission system

reliability. The term does not include facilities used in the local distribution of electric energy. (Attachment 1, Revised ROP, at Section 202 Specific Definitions)

- [FERC Order Accepting Governance Compliance Filing](#) (10/30/06): “NERC has modified the definitions of ‘Bulk-Power System,’ ‘Electric Reliability Organization,’ and ‘Regional Entity’ in article I, section 1 of the Bylaws to track the definitions in Order No. 672. NERC states that it also intends to incorporate Order No. 672 definitions in its Rules of Procedure.” (P 125)
  - [FERC Order Accepting Non-Governance Compliance Filing](#) (01/18/07): “NERC has appropriately revised definitions in its Bylaws and its Rules of Procedure to reflect these same definitions in Order No. 672.” (P 223)
- Current version: **Effective as of 01/31/2012**
- [NERC Petition](#) to Revise ROP (11/29/11): “The purposes of the proposed revisions are (1) to place all definitions of defined terms used anywhere in the ROP in a single, readily-accessible location (proposed new Appendix 2); (2) to capitalize defined terms throughout the ROP where such terms are intended to be used in their defined meanings; and (3) to lower-case other terms that are currently capitalized in the ROP but are not defined terms.” (p. 1)
  - [FERC Order Approving Amendments to the ROP](#) (01/31/2012): “Pursuant to section 215(f) of the FPA and section 39.10(a) of the Commission’s regulations, we approve the proposed revisions to the NERC Rules of Procedure. We agree with NERC that the revisions do not substantively change any original definitions in the Rules of Procedure; moreover, the Rules of Procedure remains procedurally and substantively the same. In addition, the creation of Appendix 2 offers a central, readily-accessible document containing all defined terms as used within the Rules of Procedure.” (P 10)

**II. USAGE OF DEFINED TERM: BULK POWER SYSTEM**

**List of usage of the term Bulk-Power System within Reliability Standards:**

	Reliability Standard	Location
1	FAC-003-3	Background and Enforcement sections
2	IRO-004-2	Compliance Monitoring
3	MOD-001-2	Purpose
4	CIP-002-5.1	Guidelines and Technical Basis
5	CIP-003-3a	Appendix 1, Response to Question 1
6	MOD-001-2	Application Guidelines, Rationale for R5
7	PER-005-2	Application Guidelines, Rationale for TO
8	TPL-007-1	Application Guidelines, Requirement R2, R7

**List of ROP provisions (other than Appendix 2) where Bulk Power System occurs:** The term is used throughout the ROP, including all appendices.

**List defined terms that include Bulk Power System in definition narrative:**

	Glossary		ROP
1	N/A (not a glossary term)	1	Cyber Security Incident
2	N/A	2	Electric Reliability Organization or ERO
3	No	3	Interconnection
4	N/A	4	NERC Compliance Registry, Compliance Registry or NCR
5	N/A	5	Receiving Entity

6	N/A
7	N/A
8	Reliability Standard
9	Reliable Operation
10	N/A
11	N/A
12	N/A

6	Regional Criteria
7	Registered Entity
8	Reliability Standard
9	Reliable Operation
10	Remedial Action Directive
11	Sector
12	Submitting Entity

**List of other defined terms that are included in the Bulk Power System definition narrative:**

Glossary: facilities, transmission, system

ROP: Facilities, transmission, system

**III. DRAFTING TEAM ANALYSIS AND ASSESSMENT**

**Explanation of differences in definition narratives:** Both the ROP and Glossary definitions have been approved by FERC as tracking the definition provided in the Federal Power Act. (See, Glossary: [FERC Order](#); and ROP: [FERC Order on Compliance Filing](#), [FERC Order Approving Amendments to the ROP](#)). However, there are a number of differences in the definition narrative, including: (1) the ROP definition does not contain a hyphen for Bulk Power System, but the Glossary term does; (2) the ROP capitalizes the term “Facilities” in part (A) but the Glossary does not; (3) the ROP contains the language “electric energy supply and transmission network” whereas the Glossary provides “electric energy transmission network;” and, (4) the ROP contains the word “generating” whereas the Glossary contains “generation.”

**How/why the terms may be applied differently as a result of the differences:** The differences are relatively minor and do not result in inconsistent or different application of the term in the Glossary or ROP. However, the different language (*i.e.*, “electric energy supply and transmission network” vs. “electric energy transmission network”) may lead to confusion or imply that the terms are intended to have different meanings. Because both terms are intended to have the meaning of the definition in the Federal Power Act, the standard drafting team believes these differences should be eliminated.

**Proposed revision(s):** The SDT proposes revisions to both the Glossary and ROP definition in order to align the two terms and maintain consistency with the Federal Power Act. Redlines of both definitions are provided below.

**Redline of Glossary definition:**

Bulk- Power System:

- (A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and
- (B) electric energy from generation facilities needed to maintain transmission system reliability.

The term does not include facilities used in the local distribution of electric energy. [\(In order to remain consistent with the Federal Power Act \[16 U.S.C. 824\(o\) and 18 C.F.R. 39.1\], defined terms contained in this narrative are not capitalized.\) Note that the terms “Bulk-Power System” or “Bulk Power System” shall have the same meaning.](#)

**Redline of ROP, Appendix 2 definition:**

Bulk Power System” means, depending on the context:

- (i) ~~(A) Facilities~~ facilities and control systems necessary for operating an interconnected electric energy ~~supply and~~ transmission network (or any portion thereof); ~~and~~ and
- ~~(B) electric energy from generating~~ electric energy from generation facilities needed to maintain transmission system reliability.

The term does not include facilities used in the local distribution of electric energy. [++] (In order to remain consistent with the Federal Power Act [16 U.S.C. 824(o) and 18 C.F.R. 39.1], defined terms contained in this narrative are not capitalized.)-Note that the terms “Bulk-Power System” or “Bulk Power System” shall have the same meaning.

- (ii) Solely for purposes of Appendix 4E, Bulk Electric System.

***Justification for decision:*** Both the ROP and Glossary definitions have been approved by FERC (See, Glossary: [FERC Order](#); and ROP: [FERC Order on Compliance Filing](#), [FERC Order Approving Amendments to the ROP](#)).

However, there are a number of differences, mostly minor, in the two definitions. The different language may be perceived to mean that the terms are intended to have different meanings, when this is not the case. There is no reason for the terms to have differing definitions, as both terms are intended to have the meaning of the definition in Section 215 of the Federal Power Act. The SDT revisions align the terms by eliminating the unnecessary differences. Below is a summary of the proposed revisions:

- (1) The SDT is proposing to remove the hyphen from the term Bulk-Power System in the Glossary because it is not being used as a compound modifier (two words coupled together to make an adjective). Because “bulk” is being used to describe the “power grid,” no hyphen is needed. If instead, “bulk power” was being used to describe “grid,” then a hyphen (compound modifier) would be appropriate to connect bulk-power.
- (2) In both definitions, added a clarification sentence to explain that the defined terms contained in the definition (*e.g.*, system, transmission) are not capitalized in order to match the Federal Power Act definition (which does not capitalize the terms).
- (3) In part (A) of the ROP definition, changed “Facilities” to lowercase “facilities” for the reason outlined in (2).
- (4) In the ROP, revised “generating” to “generation” in order to match the Federal Power Act and Glossary definitions.
- (5) In the ROP, revised “electric energy supply and transmission network” to “electric energy transmission network” in order to match the Federal Power Act and Glossary definitions.

## Term 17: Generator Operator

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
<p>The entity that operates generating <b>unit(s)</b> and performs the functions of supplying energy and Interconnected Operations Services.</p>	<p>the entity that operates generating <b>Facility(ies)</b> and performs the functions of supplying energy and Interconnected Operations Services.**</p>	<p>The SDT is proposing to revise the Glossary definition to align with the ROP.</p> <p><b>Redline of Glossary definition:</b>                      The entity that operates generating <u>Facility(ies)</u> <del>unit(s)</del> and performs the functions of supplying energy and Interconnected Operations Services.</p> <p>Additionally, the SDT notes that during the course of its work on this project, the team reviewed and assessed the quality of the definition of “Facility.” The SDT believes the clarity and content of the current definition could be improved. As a result, the SDT will draft a SAR proposing to revise the definition in order to address the issues identified by the SDT.</p>

### I. HISTORY AND BACKGROUND INFORMATION REGARDING “GENERATOR OPERATOR” DEFINITION

**History of Glossary term:**

- Original and current version – **Effective as of 03/16/07**
  - o [FERC Order No. 693](#) (03/16/07): “In conclusion, the Commission approves the glossary. Further, pursuant to section 215(d)(5) of the FPA and § 39.5(f) of our regulations, the Commission directs ERO to modify the glossary through the Reliability Standards development process to...(2) modify the definition of “transmission operator” and “generator operator” to include aspects unique to ISO, RTO and pooled resource organizations... (P 1899)

**History of ROP term:**

- Original version: Effective 01/31/2012 – 03/18/15
  - o [NERC Petition](#) to Revise ROP (11/29/11): “The purposes of the proposed revisions are (1) to place all definitions of defined terms used anywhere in the ROP in a single, readily-accessible location (proposed new Appendix 2); (2) to capitalize defined terms throughout the ROP where such terms are intended to be used in their defined meanings; and (3) to lower-case other terms that are currently capitalized in the ROP but are not defined terms.” (p. 1)
  - o [FERC Order approving amendments to the ROP](#) (01/31/2012): “Pursuant to section 215(f) of the FPA and section 39.10(a) of the Commission’s regulations, we approve the proposed revisions to the NERC Rules of Procedure. We agree with NERC that the revisions do not substantively change any original definitions in the Rules of Procedure; moreover, the Rules of Procedure remains procedurally and substantively the same. In addition, the creation of Appendix 2 offers a central, readily-accessible document containing all defined terms as used within the Rules of Procedure.” (P 10)

- Current version: **Effective as of 03/19/15**
  - o Revisions were made by the [Risk Based Registration Initiative](#) – Replaced “units” with “Facility(ies)”
  - o [NERC Petition](#) (12/11/14)
  - o [FERC Order](#) (03/19/15) – Approving revised definition

**II. USAGE OF DEFINED TERM: GENERATOR OPERATOR**

**List of usage of the term Generator Owner within Reliability Standards:**

	Reliability Standard	Location
1	All Reliability Standards applicable to GOPs	Applicability
2	CIP-002-5.1	Attachment 1
3	IRO-010-1a	Appendix 1
4	PER-005-2	Application Guidelines
5	PRC-023-3	Attachment B
6	TOP-001-1a	Appendix 1
7	VAR-001-4	Application Guidelines
8	VAR-002-3	Application Guidelines
9	VAR-002-4	Application Guidelines

**List of ROP provisions (other than Appendix 2) where Generator Operator occurs:**

	ROP provision	Page # <a href="#">[Link to ROP]</a>
1	Section 302.1	8 of 483
2	Appendix 5A: Organization Registration and Certification Manual	401 of 483
3	Appendix 5B: Statement of Compliance Registry Criteria (Revision 5.2)	433-438 of 483
4	Appendix 8: NERC Blackout and Disturbance Response Procedures, Attachment E	482 of 483

**List defined terms that include Generator Operator in definition narrative:**

	Glossary		ROP
1	Bulk Electric System	1	Bulk Electric System
2	Control Center	2	N/A
3	Nuclear Plant Generator Operator	3	N/A
4	Nuclear Plant Interface Requirements	4	N/A
5	System Operator	5	N/A

**List of other defined terms that are included in the Generator Operator definition narrative:**

Glossary: Interconnected Operations Services  
ROP: Facility(ies), Interconnected Operations Services

### III. DRAFTING TEAM ANALYSIS AND ASSESSMENT

**Explanation of differences in definition narratives:** The definitions were previously aligned. However, as part of the Risk Based Registration (RBR) Initiative undertaken in 2014, the ROP definition was revised and the word “unit” was replaced with “Facility(ies).” The RBR team believed it necessary to replace “unit” with “Facility(ies)” in order to incorporate the BES Definition. The RBR project work focused on changes to the ROP, and the team did not consider whether changes were needed to align any affected Glossary definitions.

**How/why the terms may be applied differently as a result of the differences:** The term “unit” is not a defined term in the Glossary or ROP. However, “unit” or “generating unit” are both used in definition narratives of a number of Glossary (and ROP) terms, including, but not limited to: Blackstart Resource, Bulk Electric System, Cranking Path, Economic Dispatch, Forced Outage, Host Balancing Authority, and Joint Control. The Merriam-Webster definition for unit is, “a single thing, person, or group that is a constituent of a whole.” Click [here](#) for the Merriam-Webster website.

The term “Facility,” on the other hand, is a defined term in the Glossary and ROP. Facility is defined as, “a set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)” Also, the term “Element” (which is used in the definition of Facility) is, “any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An element may be comprised of one or more components.”

**Proposed revision(s):** The SDT proposes to revise the Glossary definition to align with the ROP. No changes are proposed to the ROP.

**Redline of Glossary definition:**

The entity that operates generating [Facility\(ies\)](#) ~~unit(s)~~ and performs the functions of supplying energy and Interconnected Operations Services.

**Justification for decision:** The SDT is proposing to revise the Glossary definition to align with the ROP. This is because the term “unit” (used in the current Glossary definition) is not a NERC defined term, and thus introduces the possibility of inconsistent use or application of the definition. The ROP definition provides greater clarity because it uses the term “Facility(ies),” which is defined by NERC as, “a set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)” (See also, [NERC Limited Answer to RBR Comments](#), pp. 6-7: “Finally, NERC’s proposed changes to the definitions of “Generator Owner” and “Generator Operator” which include replacing the undefined term “generating units” with the term “Facilities,” are appropriate. The term “Facilities” is defined in the NERC Glossary as a Bulk Electric System element, which ties in directly to the new BES definition. Use of the term “Facilities” has allowed NERC to eliminate the Part III threshold criteria and use the new Bulk Electric System core definition, inclusions and exclusions to identify Bulk Electric System generator assets.”)

## Term 18: Generator Owner

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP Appendix 2 Definitions <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
Entity that owns and maintains generating units.	an entity that owns and maintains generating Facility(ies).**	<p>The SDT is proposing to revise the Glossary definition to align with the ROP.</p> <p><b><u>Redline of Glossary definition:</u></b> Entity that owns and maintains generating Facility(ies)units.</p> <p>Additionally, the SDT notes that during the course of its work on this project, the team reviewed and assessed the quality of the definition of “Facility.” The SDT believes the clarity and content of the current definition could be improved. As a result, the SDT will draft a SAR proposing to revise the definition in order to address the issues identified by the SDT.</p>

### I. HISTORY AND BACKGROUND INFORMATION REGARDING “GENERATOR OWNER” DEFINITION

**History of Glossary term:**

- Original and current version – **Effective as of 03/16/07**
  - o [FERC Order No. 693](#) (03/16/07): “The Commission approves the glossary. The terms defined in the glossary have an important role in establishing consistent understanding of the Reliability Standards Requirements and implementation. The approval of the glossary will provide continuity in application of the glossary definitions industry-wide, and will eliminate multiple interpretations of the same term or function, which may otherwise create miscommunication and jeopardize Bulk-Power System reliability...” (P 1893)

**History of ROP term:**

- Original version: Effective 01/31/2012 – 03/18/15
  - o [NERC Petition](#) to Revise ROP (11/29/11): “The purposes of the proposed revisions are (1) to place all definitions of defined terms used anywhere in the ROP in a single, readily-accessible location (proposed new Appendix 2); (2) to capitalize defined terms throughout the ROP where such terms are intended to be used in their defined meanings; and (3) to lower-case other terms that are currently capitalized in the ROP but are not defined terms.” (p. 1)
  - o [FERC Order Approving Amendments to the ROP](#) (01/31/2012): “Pursuant to section 215(f) of the FPA and section 39.10(a) of the Commission’s regulations, we approve the proposed revisions to the NERC Rules of Procedure. We agree with NERC that the revisions do not substantively change any original definitions in the Rules of Procedure; moreover, the Rules of Procedure remains procedurally and substantively the same. In addition, the creation of Appendix 2 offers a central, readily-accessible document containing all defined terms as used within the Rules of Procedure.” (P 10)
- Current version: **Effective as of 03/19/15**
  - o Revisions were made by the [Risk Based Registration Initiative](#) – Replaced “units” with “Facility(ies)”
  - o [NERC Petition](#) (12/11/14)
  - o [FERC Order](#) (03/19/15) – Approving revised definition

**II. USAGE OF DEFINED TERM: GENERATOR OWNER**

**List of usage of the term Generator Owner within Reliability Standards:**

	Reliability Standard	Location
1	All Reliability Standards applicable to GOs	
2	PRC-005-1.1b	Appendix 1 Appendix 2
3	PRC-025-1	Attachment 1 Application Guideline
4	PRC-026-1	Application Guideline
5	TOP-005-2a	Appendix 2
6	TPL-007-1	Application Guideline
7	CIP-002-5.1	BES Cyber System Categorization
8	FAC-001-2	Application Guideline
9	FAC-003-3	Guideline & Technical Basis
10	IRO-010-1a	Appendix 1
11	MOD -025-2	Attachment 1
12	MOD-026-1	Attachment 1
13	MOD-027-1	Attachment 1
14	MOD-032-1	Application Guideline
15	PRC-004-3	Application Guideline
16	PRC-004-4	Application Guideline

**List of ROP provisions (other than Appendix 2) where Generator Owner occurs:**

	ROP provision	Page # <a href="#">[Link to ROP]</a>
1	Section 302.1	8 of 483
2	Section 1702.1	105 of 483
3	Appendix 5A: Organization Registration and Certification Manual	401 of 483
4	Appendix 5B: Statement of Compliance Registry Criteria (Revision 5.2)	433 of 483 434 of 483
5	Appendix 8: NERC Blackout and Disturbance Response Procedures, Attachment E	482 of 483

**List defined terms that include Generator Owner in definition narrative:**

	Glossary
1	Bulk Electric System
2	Nuclear Plant Generator Operator
3	Right-of-Way
4	Transmission Customer
5	Vegetation Inspection

	ROP
1	Bulk Electric System
2	N/A
3	N/A
4	Transmission Customer
5	N/A

**List of other defined terms that are included in the Generator Owner definition narrative:**Glossary: NoneROP: Facility(ies)**III. DRAFTING TEAM ANALYSIS AND ASSESSMENT**

**Explanation of differences in definition narratives:** The definitions were previously aligned. However, as part of the Risk Based Registration (RBR) Initiative undertaken in 2014, the ROP definition was revised and the word “unit” was replaced with “Facility(ies).” The RBR team believed it necessary to replace “unit” with “Facility(ies)” in order to incorporate the BES Definition. The RBR project work focused on changes to the ROP, and the team did not consider whether changes were needed to align any affected Glossary definitions.

**How/why the terms may be applied differently as a result of the differences:** The term “unit” is not a defined term in the Glossary or ROP. However, “unit” or “generating unit” are both used in definition narratives of a number of Glossary (and ROP) terms, including, but not limited to: Blackstart Resource, Bulk Electric System, Cranking Path, Economic Dispatch, Forced Outage, Host Balancing Authority, and Joint Control. The Merriam-Webster definition for unit is, “a single thing, person, or group that is a constituent of a whole.” Click [here](#) for the Merriam-Webster website.

The term “Facility,” on the other hand, is a defined term in the Glossary and ROP. Facility is defined as, “a set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)” Also, the term “Element” (which is used in the definition of Facility) is, “any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An element may be comprised of one or more components.”

**Proposed revision(s):** The SDT proposes to revise the Glossary definition to align with the ROP. No changes are proposed to the ROP.

**Redline of Glossary definition:**Entity that owns and maintains generating [Facility\(ies\)](#)~~units~~.

**Justification for decision:** The SDT is proposing to revise the Glossary definition to align with the ROP. This is because the term “unit” (used in the current Glossary definition) is not a NERC defined term, and thus introduces the possibility of inconsistent use or application of the definition. The ROP definition provides greater clarity because it uses the term “Facility(ies),” which is defined by NERC as, “a set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)” (See also, [NERC Limited Answer to RBR Comments](#), pp. 6-7: “Finally, NERC’s proposed changes to the definitions of “Generator Owner” and “Generator Operator” which include replacing the undefined term “generating units” with the term “Facilities,” are appropriate. The term “Facilities” is defined in the NERC Glossary as a Bulk Electric System element, which ties in directly to the new BES definition. Use of the term “Facilities” has allowed NERC to eliminate the Part III threshold criteria and use the new Bulk Electric System core definition, inclusions and exclusions to identify Bulk Electric System generator assets.”)

## Term 29: Net Energy for Load or NEL

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
Net <b>Balancing Authority Area</b> generation, plus energy received from <b>other Balancing Authority Areas</b> , less energy delivered to <b>Balancing Authority Areas</b> through interchange. It includes <b>Balancing Authority Area</b> losses but excludes energy required for storage at energy storage facilities.	<b>net generation of an electric system</b> plus energy received from <b>others</b> less energy delivered to <b>others</b> through interchange. It includes <b>system</b> losses but excludes energy required for <b>the storage of</b> energy at energy storage facilities.	No changes to either ROP or Glossary. The SDT recommends the terms remain unaligned. The differences in the definition narratives are appropriate given the differing uses of the term within the Glossary and ROP.

### I. HISTORY AND BACKGROUND INFORMATION REGARDING “NET ENERGY FOR LOAD” DEFINITION

**History of Glossary term:**

- Original and current version: **Effective as of 03/16/07**
  - o [FERC Order No. 693](#) (03/16/07): “The Commission approves the glossary. The terms defined in the glossary have an important role in establishing consistent understanding of the Reliability Standards Requirements and implementation. The approval of the glossary will provide continuity in application of the glossary definitions industry-wide, and will eliminate multiple interpretations of the same term or function, which may otherwise create miscommunication and jeopardize Bulk-Power System reliability...” (P 1893)

**History of ROP term:**

- Original version
  - o [FERC Order No. 672](#) (02/03/06): Net Energy for Load means balancing authority area generation (less station use), plus energy received from other balancing authority areas, less energy delivered to balancing authority areas through interchange. It includes balancing authority area losses, but excludes energy required for storage at electric energy storage facilities, such as pumped storage. (P 35, FN 7)
  - o [FERC Order](#) (07/20/06) - NERC’s application proposes to base allocation of all costs for statutory activities on net energy for load. (P 155, 167)
  - o [NERC Non-Governance Compliance Filing](#) (10/18/06): “Net Energy for Load” or “NEL” means net generation of an electric system plus energy received from others less energy delivered to others through interchange. It includes system losses but excludes energy required for the storage of energy at energy storage facilities. (Proposed Rules of Procedure, Section 202, Specific Definitions)
  - o [FERC Order Accepting Non-Governance Compliance Filing](#) (01/18/07): “NERC has appropriately revised definitions in its Bylaws and its Rules of Procedure to reflect these same definitions in Order No. 672.” (P 223)
- Current version: **Effective as of 01/31/2012**
  - o [NERC Petition](#) to Revise ROP (11/29/11): “The purposes of the proposed revisions are (1) to place all definitions of defined terms used anywhere in the ROP in a single, readily-accessible location (proposed new Appendix 2)...” (p.1; p. 12: Definition taken from NERC Bylaws, Article 1 and ROP, Section 200).

- [FERC Order Approving Amendments to the ROP](#) (01/31/2012): “Pursuant to section 215(f) of the FPA and section 39.10(a) of the Commission’s regulations, we approve the proposed revisions to the NERC Rules of Procedure. We agree with NERC that the revisions do not substantively change any original definitions in the Rules of Procedure; moreover, the Rules of Procedure remains procedurally and substantively the same. In addition, the creation of Appendix 2 offers a central, readily-accessible document containing all defined terms as used within the Rules of Procedure.” (P 10)

**II. USAGE OF DEFINED TERM: NET ENERGY FOR LOAD**

**List of usage of the term Net Energy for Load within Reliability Standards:**

	Reliability Standard
1	MOD-016-1.1
2	MOD-017-0.1
3	MOD-018-0
4	MOD-021-1
5	MOD-031-1
6	TPL-006-0.1

**List of ROP provisions (other than Appendix 2) where Net Energy for Load occurs:**

	ROP provision	Page # <a href="#">[Link to ROP]</a>
1	Section 804	71 of 483
2	Section 1101.1	84 of 483
3	Section 1101.4	84 of 483
4	Section 1103	93 of 483
5	Appendix 3A: Standards Process Manual – Footnote 10	141 of 483
6	Appendix 3B: Procedures for Election of Members of Standards Committee	186 of 483

**List defined terms that include Net Energy for Load in definition narrative:**

	Glossary		ROP
1	Peak Demand	1	N/A

**List of other defined terms that are included in the Net Energy for Load definition narrative:**

Glossary: Balancing Authority Area

ROP: None

**III. DRAFTING TEAM ANALYSIS AND ASSESSMENT**

**Explanation of differences in definition narratives:** The Glossary definition is more specific in that it provides “Balancing Authority Area generation” and “received from other Balancing Authority Areas” whereas the ROP definition refers more broadly to “generation of an electric system” and “received from others.”

**How/why the terms may be applied differently as a result of the differences:** The differences are significant and should remain due to the manner in which these terms are applied in their respective documents (ROP or Glossary). For example, as outlined above, FERC approved the ERO’s proposal to base allocation of all costs for

statutory activities on net energy for load (See ROP, Section 1100). In the context of Reliability Standards, the collection of Net Energy for Load data is required for certain modeling standards (See MOD-031-3).

***Proposed revision(s):*** Alignment is not recommended by SDT because the differences in the definition narrative are appropriate given the different uses of the term within the Glossary and ROP.

***Justification for decision:*** The differences are significant and should remain due to the manner in which these terms are applied in their respective documents (ROP or Glossary).

## Term 40: Reliability Standard

Glossary Definition (differences in definition narrative indicated in red)	ROP, Appendix 2 Definition (differences in definition narrative indicated in red)	SDT proposed revisions
<p>A requirement, approved by the United States Federal Energy Regulatory Commission under this Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions, to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk-Power System]. The term includes requirements for the operation of existing bulk-power system [Bulk-Power System] facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk-Power System], but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.</p>	<p>a requirement to provide for Reliable Operation of the Bulk Power System, including without limiting the foregoing, requirements for the operation of existing Bulk Power System Facilities, including cybersecurity protection, and including the design of planned additions or modifications to such Facilities to the extent necessary for Reliable Operation of the Bulk Power System, but the term does not include any requirement to enlarge Bulk Power System Facilities or to construct new transmission capacity or generation capacity. A Reliability Standard shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the Applicable Governmental Authority.</p>	<p>The SDT is proposing revisions to both the Glossary and ROP definitions, as follows:</p> <p><b>Redline of Glossary definition:</b>            A requirement, approved by the United States Federal Energy Regulatory Commission under this Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions, to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk-Power System]. The term includes requirements for the operation of existing bulk-power system [Bulk-Power System] facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk-Power System], but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity. <u>(In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.)</u></p> <p><b>Redline of ROP definition:</b>            a requirement, approved by the United States Federal Energy Regulatory Commission under Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions, to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk Power System], including without limiting the foregoing, The term includes requirements for the operation of existing bulk-power system [Bulk Power System] Facilitiesfacilities, including cyber-security protection, and includingthe design of planned additions or modifications to such Facilities-facilities to the extent necessary for reliable operation [Reliable Operation] of the bulk-power system [Bulk Power System], but the term does not include any requirement to enlarge Bulk Power System-such Facilities-facilities or to construct new transmission capacity or generation capacity.++ <u>(In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.) In certain contexts, this term may also refer to a "Reliability Standard" that is in the process of being developed, or not yet approved or recognized by FERC or an applicable governmental authority in other jurisdictions. A Reliability Standard</u></p>

		<p><del>shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the Applicable Governmental Authority.</del></p>
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**I. HISTORY AND BACKGROUND INFORMATION REGARDING “RELIABILITY STANDARD” DEFINITION**

***History of Glossary term:***

- Original version: 03/16/07 - 07/08/13
  - o [FERC Order No. 693](#) (03/16/07) - “The Commission directs the ERO to modify the glossary through the Reliability Standards development process to include the statutory definitions of the terms Bulk-Power System, Reliable Operation and Reliability Standard. However, this determination does not negate our discussion in the Applicability section of the Final Rule. While the glossary should be revised to include the statutory definition of Bulk-Power System, the Reliability Standards refer to the bulk electric system, which is also defined in the glossary.” (P 1894)
- Current version: **Effective as of 07/09/13**
  - o Revised by [Project 2012-08.1](#) Phase 1 of the Glossary Updates for Statutory Definitions
  - o [NERC Petition](#) (05/10/13) - The proposed definition borrows heavily from FPA, but makes slight alterations.

“The term “Reliability Standard” is defined in section 215 of the FPA as follows:

(3) The term ‘reliability standard’ means a requirement, approved by the Commission under this section, to provide for reliable operation of the bulk-power system. The term includes requirements for the operation of existing bulk-power system facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation of the bulk-power system, but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.

The proposed definition of the term “Reliability Standard” for inclusion in the NERC Glossary is as follows:

“Reliability Standard” means a requirement, approved by the United States Federal Energy Regulatory Commission under Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions, to provide for Reliable Operation of the Bulk-Power System. The term includes requirements for the operation of existing Bulk-Power System facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for Reliable Operation of the Bulk-Power System, but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.

As noted herein, the proposed definition of “Reliability Standard” is substantively identical to the definition in section 215 of the FPA, although the terms “Bulk-Power System” and “Reliable Operation” are capitalized to reflect the fact that they are defined terms and slight modifications were necessary to clarify the terms “Commission” and “section” (contained in the section 215 definition of the term “Reliability Standard”).

“Commission” refers to the Federal Energy Regulatory Commission in the United States and applicable governmental authorities approving, or recognizing the standard, in other jurisdictions; similarly, “section” has been replaced with “section 215 of the Federal Power Act.”

These minor modifications are fully consistent with section 215 and the recognized need for international agreements with the governments of Canada and Mexico to provide for effective compliance with Reliability Standards and the effectiveness of the ERO in the United States and Canada or Mexico. For these reasons, the proposed definition of “Reliability Standard” should be accepted in compliance with the Commission’s directive in Order No. 693.” (pp. 7-8)

- [FERC Order](#) (07/9/13) - Letter order approving proposed definitions

#### **History of ROP term:**

- Original version:

- [NERC Non-Governance Compliance Filing](#) (10/18/06): “NERC has also revised definitions in its Rules of Procedure to match definitions in Section 215(a) of the Federal Power Act and/or Part 39 of the Commission’s regulations, including ‘bulk power system’, ‘electric reliability organization,’ ‘reliable operation,’ and ‘reliability standard’.” (pp. 71-72)
  - “ ‘Reliability standard’ means a requirement to provide for reliable operation of the bulk power system, including without limiting the foregoing, requirements for the operation of existing bulk power system facilities, including cyber security protection, and including the design of planned additions or modifications to such facilities to the extent necessary for reliable operation of the bulk power system, but the term does not include any requirement to enlarge bulk power system facilities or to construct new transmission capacity or generation capacity. A reliability standard shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the applicable governmental authority.’ (Citing, Attachment 1, Revised ROP, at Section 202)
- [FERC Order Accepting Non-Governance Compliance Filing](#) (01/18/07): “NERC has appropriately revised definitions in its Bylaws and its Rules of Procedure to reflect these same definitions in Order No. 672.” (P 223)

- Current version: **Effective as of 01/31/2012**

- [NERC Petition](#) to Revise ROP (11/29/11): “The purposes of the proposed revisions are (1) to place all definitions of defined terms used anywhere in the ROP in a single, readily-accessible location (proposed new Appendix 2); (2) to capitalize defined terms throughout the ROP where such terms are intended to be used in their defined meanings; and (3) to lower-case other terms that are currently capitalized in the ROP but are not defined terms.” (p. 1)
- [FERC Order Approving Amendments to the ROP](#) (01/31/2012): “Pursuant to section 215(f) of the FPA and section 39.10(a) of the Commission’s regulations, we approve the proposed revisions to the NERC Rules of Procedure. We agree with NERC that the revisions do not substantively change any original definitions in the Rules of Procedure; moreover, the Rules of Procedure remains procedurally and substantively the same. In addition, the creation of Appendix 2 offers a central, readily-accessible document containing all defined terms as used within the Rules of Procedure.” (P 10)

**II. USAGE OF DEFINED TERM: RELIABILITY STANDARD**

**List of usage of the term “Reliability Standard” within the Complete Set of Reliability Standards:** The term appears at least 330 times within the [Complete Set of NERC Reliability Standards](#). The overwhelming majority of these uses are in reference to a particular Reliability Standard (e.g., Reliability Standard FAC-003-3). Such uses do not touch upon the concept of “Reliability Standard” in a way that revising the definition of the term would have any material impact. It also appears passim in the “Applicability” Section of the new CIP v5 Standards. Again, revision would have no material impact. Also, it appears in the “Effective Date” of many Reliability Standards. Again, revision would have no material impact.

**List of ROP provisions (other than Appendix 2) where Reliability Standard occurs:** The term appears over 850 times in the ROP. A number of the ROP provisions refer or apply to Reliability Standards that are currently under development, or are approved by the NERC Board of Trustees, but not yet approved by FERC or another applicable governmental authority.

**List defined terms that include Reliability Standard in definition narrative:**

Glossary		ROP <a href="#">[Link to ROP]</a>
1	Burden (not defined term)	The term is used in 38 ROP, Appendix 2 definitions.
2	Compliance Monitor (not defined term)	
3	Control Performance Standard (not defined term)	
4	Disturbance Control Standard (not defined term)	
5	Remedial Action Scheme	
6	Extraordinary Contingency (referencing WECC Reliability Standard)	
7	Functionally Equivalent Protection System	
8	Functionally Equivalent RAS	

**List of all other defined terms that are included in the Reliability Standard definition narrative:**

Glossary: Reliable Operation, Bulk-Power System, facility(ies)

ROP: Reliable Operation, Bulk Power System, Facility, Applicable Governmental Authority

**III. DRAFTING TEAM ANALYSIS AND ASSESSMENT**

**Explanation of differences in definition narratives:** The Glossary definition is somewhat more limiting because it defines “Reliability Standard” as a “requirement approved by the United States Federal Energy Regulatory Commission...” The ROP definition is broader than the Glossary definition because it does not include the “approved” language and includes those standards that are not yet FERC-approved.

**How/why the terms may be applied differently as a result of the differences:** The difference in these definitions is meaningful. The Glossary term is narrower than the ROP term. This difference may cause confusion when applying the definition in the ROP when addressing standards that are currently under development, or approved by the NERC Board of Directors, but not yet FERC-approved.

**Proposed revision(s):** The drafting team proposes revisions to both the Glossary and ROP definitions.

**Redline of Glossary definition:**

A requirement, approved by the United States Federal Energy Regulatory Commission under ~~this~~ Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions, to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk Power System]. The term includes requirements for the operation of existing bulk-power system [Bulk Power System] facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk Power System], but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity. (In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.)

**Redline of ROP Appendix 2 definition:**

a requirement, approved by the United States Federal Energy Regulatory Commission under Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions, to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk Power System], ~~including without limiting the foregoing,~~ The term includes requirements for the operation of existing bulk-power system [Bulk Power System] ~~Facilities~~facilities, including cyber-security protection, and ~~including~~ the design of planned additions or modifications to such ~~Facilities~~facilities to the extent necessary for reliable operation [Reliable Operation] of the bulk-power system [Bulk Power System], but the term does not include any requirement to enlarge ~~Bulk Power System such Facilities~~facilities or to construct new transmission capacity or generation capacity.~~++ (In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.) In certain contexts, this term may also refer to a "Reliability Standard" that is in the process of being developed, or not yet approved or recognized by FERC or an applicable governmental authority in other jurisdictions. A Reliability Standard shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the Applicable Governmental Authority.~~

**Justification for decision:** The SDT believes the proposed revisions will allow the ROP definition to align with the Glossary definition, which tracks the language in the Federal Power Act. The Glossary was revised through [Project 2012-08.1](#) to address a FERC directive to adopt the Federal Power Act definition. The Project 2012-08.1 drafting team noted in their response to industry comments that any necessary revisions to the ROP definition would be made through a separate project. The Project 2015-04 SDT is now proposing to make these revisions to align the definitions. Because a number of ROP provisions refer or apply to Reliability Standards that are currently under development, or are approved by the NERC Board of Trustees, but not yet FERC-approved, the SDT is proposing to add qualifying language to the ROP definition. The ROP definition explains that in certain contexts, "Reliability Standard" may refer to a standard that is in the process of being developed, and not yet FERC-approved.

## Term 44: Sink Balancing Authority

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
The Balancing Authority in which the <b>load</b> (sink) is located for an Interchange Transaction <b>and any resulting Interchange Schedule.</b>	the Balancing Authority in which the <b>Load</b> (sink) is located for an Interchange Transaction.**	The SDT is proposing to revise the ROP definition to align with the Glossary definition.  <b>Redline of ROP definition:</b> the Balancing Authority in which the <del>Load</del> <b>load</b> (sink) is located for an Interchange Transaction <b>and any resulting Interchange Schedule.</b> **

### I. HISTORY AND BACKGROUND INFORMATION REGARDING “SINK BALANCING AUTHORITY” DEFINITION

**History of Glossary term:**

- Original version: FERC approved 3/16/2007: “The Balancing Authority in which the load (sink) is located for an Interchange Transaction. (This will also be a Sending Balancing Authority for the resulting Interchange Schedule.)”
- Current version: **Effective as of 10/01/2014**
  - o Revisions made by [Project 2008-12 Coordinate Interchange Standards](#)
  - o [NERC Petition](#) (02/27/2014) - “The proposed revisions to “Sink Balancing Authority” are intended to clarify the various Balancing Authorities involved in the implementation of Interchange and their relationships with regards to Interchange.” (p. 33)
  - o [FERC Order](#) (06/30/2014) – Letter order approving the revised Glossary definition

**History of ROP term:**

- Current version: **Effective as of 07/01/13**
  - o [NERC Petition](#) (11/29/2011) - Added Appendix 2 to ROP and adopted existing Glossary definition for Sink Balancing Authority (p. 14)
  - o [FERC Order](#) (01/31/2012) - “These revisions are being proposed as a result of P 93 of the Commission’s Order issued October 21, 2010, in Docket No. RR10-11-000, in which the Commission invited NERC to submit a filing making consistent use of defined terms throughout the ROP and Appendices.” (p. 1)
  - o [NERC Petition](#) (01/25/12) – Minor revisions to “Sink Balancing Authority” to reflect changes resulting from new BES Definition

### II. USAGE OF DEFINED TERM: SINK BALANCING AUTHORITY

**List of usage of the term Sink Balancing Authority within Reliability Standards:**

	Reliability Standard
<b>1</b>	BAL-006-2
<b>2</b>	INT-001-3
<b>3</b>	INT-004-3.1
<b>4</b>	INT-005-3

5	INT-006-4
6	INT-010-2.1
7	IRO-006-East-1
8	MOD-028-2

**List of ROP provisions (other than Appendix 2) where Sink Balancing Authority occurs:** None.

**List defined terms that include Sink Balancing Authority in definition narrative:**

Glossary		ROP	
1	Intermediate Balancing Authority	1	N/A
2	Request for Interchange (Archive)	2	N/A
3	Contributing Schedule	3	N/A
4	Relief Requirement (Archive)	4	N/A

**List of other defined terms that are included in the Sink Balancing Authority definition narrative:**

Glossary: Balancing Authority, load, Interchange Transaction, Interchange Schedule

ROP: Balancing Authority, Load, Interchange Transaction

### III. DRAFTING TEAM ANALYSIS AND ASSESSMENT

**Explanation of differences in definition narratives:** There are two differences between the Glossary and ROP definitions: (1) the Glossary definition does not capitalize the term “load” whereas the ROP definition does; and, (2) the Glossary definition includes “an Interchange Transaction and any resulting Interchange Schedule” whereas the ROP definition only provides “an Interchange Transaction.”

**How/why the terms may be applied differently as a result of the differences:** The language added through the [Project 2008-12 Coordinate Interchange Standards](#) did not impact or change the meaning of the definitions. The changes to the Glossary definition clarified the various Balancing Authorities involved in the implementation of Interchange and their relationship to Interchange. Additionally, the Glossary definition correctly uses lowercase for “load” rather than the defined term, which is appropriate given that the use of load in the narrative does not appear to have the meaning of the NERC definition. The SDT is proposing to correct the ROP definition to reflect the lowercase usage of the word “load” so that it is aligned with the Glossary definition.

**Proposed revision(s):** The SDT proposes to revise the ROP definition to align with the Glossary definition.

**Redline of ROP definition:**

the Balancing Authority in which the ~~Load-load~~ (sink) is located for an Interchange Transaction ~~and any resulting Interchange Schedule~~.\*\*

**Justification for decision:** The original Glossary definition became effective in March 2007. The ROP definition adopted the Glossary definition when Appendix 2 was created in 2012. Note that the ROP definition is marked with a double asterisk (\*\*), indicating it was taken from the Glossary. Subsequently, in 2014, the Glossary term was revised to provide greater clarity. The ROP definition was not updated to reflect the revised Glossary definition.

## Term 45: Source Balancing Authority

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
The Balancing Authority in which the generation (source) is located for an Interchange Transaction <b>and for any resulting Interchange Schedule.</b>	the Balancing Authority in which the generation (source) is located for an Interchange Transaction.**	The SDT is proposing to revise the ROP definition to align with the Glossary definition.  <u>Redline of ROP definition:</u> the Balancing Authority in which the generation (source) is located for an Interchange Transaction <u>and for any resulting Interchange Schedule.</u> **

### I. HISTORY AND BACKGROUND INFORMATION REGARDING “SOURCE BALANCING AUTHORITY” DEFINITION

**History of Glossary term:**

- Original version: Effective dates 03/16/07 – 09/30/14 (Version 0: “The Balancing Authority in which the generation (source) is located for an Interchange Transaction. This will also be a Sending Balancing Authority for the resulting Interchange Schedule.”)
- Current version: **Effective as of 10/01/2014**
  - o Revisions made by [Project 2008-12 Coordinate Interchange Standards](#)
  - o [NERC Petition](#) (02/27/14) - “The proposed revisions to “Source Balancing Authority” are intended to clarify the various Balancing Authorities involved in the implementation of Interchange and their relationships with regards to Interchange.” (p. 34)
  - o [FERC Order](#) (06/30/2014) – FERC letter order approving revised Glossary definition

**History of ROP term:**

- Current version: **Effective as of 01/31/2012**
  - o [NERC Petition](#) (11/29/2011) - Added Appendix 2 to ROP and adopted existing Glossary definition for Adjacent Balancing Authority (see p. 9)
  - o [FERC Order](#) (01/31/2012) - “These revisions are being proposed as a result of P 93 of the Commission’s Order issued October 21, 2010, in Docket No. RR10-11-000, in which the Commission invited NERC to submit a filing making consistent use of defined terms throughout the ROP and Appendices.” (p. 1)

### II. USAGE OF DEFINED TERM: SOURCE BALANCING AUTHORITY

**List of all usage of the term Source Balancing Authority within Reliability Standards:**

	Reliability Standard
<b>1</b>	BAL-006-2
<b>2</b>	INT-005-3
<b>3</b>	INT-006-4
<b>74</b>	MOD-028-2

**List of all ROP provisions (other than Appendix 2) where Source Balancing Authority occurs:** None.

**List all defined terms that include Source Balancing Authority in definition narrative:**

Glossary		ROP	
1	Intermediate Balancing Authority	1	N/A
2	Contributing Schedule	2	N/A

**List of all other defined terms that are included in the Source Balancing Authority definition narrative:**

Glossary: Balancing Authority, Interchange Transaction, Interchange Schedule

ROP: Balancing Authority, Interchange Transaction

### III. DRAFTING TEAM ANALYSIS AND ASSESSMENT

**Explanation of differences in definition narratives:** The Glossary definition includes “and for any resulting Interchange Schedule” whereas the ROP does not.

**Explain how/why the terms may be applied differently as a result of the differences:** The language added through the [Project 2008-12 Coordinate Interchange Standards](#) did not impact or change the meaning of the definitions. The changes to the Glossary definition clarified the various Balancing Authorities involved in the implementation of Interchange and their relationship to Interchange.

**Proposed revision(s).** The SDT proposes to revise the ROP definition to align with the Glossary definition.

**Redline of ROP definition:**

the Balancing Authority in which the generation (source) is located for an Interchange Transaction [and for any resulting Interchange Schedule](#).\*\*

**Justification for decision:** The original Glossary definition became effective in March 2007. The ROP definition adopted the Glossary definition when Appendix 2 was created in 2012. Note that the ROP definition is marked with a double asterisk (\*\*), indicating it was taken from the Glossary. Subsequently, in 2014, the Glossary term was revised to provide greater clarity. The ROP definition was not updated to reflect the revised Glossary definition.

## Term 48: System Operating Limit (SOL)

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
<p>The value (such as MW, MVar, <b>Amperes, Frequency or Volts</b>) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. <b>System Operating Limits are based upon certain operating criteria. These include, but are not limited to:</b></p> <ul style="list-style-type: none"> <li>• <b>Facility Ratings (Applicable pre- and post-Contingency equipment or facility ratings)</b></li> <li>• <b>Transient Stability Ratings (Applicable pre- and post-Contingency Stability Limits)</b></li> <li>• <b>Voltage Stability Ratings (Applicable pre- and post-Contingency Voltage Stability)</b></li> <li>• <b>System Voltage Limits (Applicable pre- and post-Contingency Voltage Limits)</b></li> </ul>	<p>the value (such as MW, Mvar, <b>amperes, frequency or volts</b>) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria.**</p>	<p>The SDT is proposing to revise both the Glossary and ROP, as follows:</p> <p><b><u>Redline of Glossary definition:</u></b>                      The value (such as MW, MVar, <del>A</del>amperes, <del>F</del>requency-<del>frequency</del> or <del>V</del>olts<del>volts</del>) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. System Operating Limits are based upon certain operating criteria. These include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Facility Ratings (<del>Applicable</del>-<del>applicable</del> pre- and post-Contingency <del>equipment</del>-<del>Equipment</del> Ratings or <del>facility</del>-<del>Facility</del> ratings<del>Ratings</del>)</li> <li>• <del>Transient</del> transient <del>Stability</del>-<del>stability</del> Ratings ratings (<del>Applicable</del>-<del>applicable</del> pre- and post-Contingency <del>Stability</del>-<del>stability</del> Limits<del>Limits</del>)</li> <li>• <del>Voltage</del>-<del>voltage</del> <del>Stability</del>-<del>stability</del> Ratings-ratings (<del>Applicable</del>-<del>applicable</del> pre- and post-Contingency <del>Voltage</del>-<del>voltage</del> <del>Stability</del><del>stability</del>)</li> <li>• <del>System</del>-<del>system</del> <del>Voltage</del>-<del>voltage</del> Limits-limits (<del>Applicable</del>-<del>applicable</del> pre- and post-Contingency <del>Voltage</del>-<del>voltage</del> Limits<del>Limits</del>)</li> </ul> <p><b><u>Redline of ROP definition:</u></b>                      the value (such as MW, Mvar, amperes, frequency or volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. <u>System Operating Limits are based upon certain operating criteria. These include, but are not limited to:</u></p> <ul style="list-style-type: none"> <li>• <u>facility ratings (applicable pre- and post-contingency equipment ratings or facility ratings)</u></li> <li>• <u>transient stability ratings (applicable pre- and post-contingency stability limits)</u></li> <li>• <u>voltage stability ratings (applicable pre- and post-contingency voltage stability)</u></li> <li>• <u>system voltage limits (applicable pre- and post-contingency voltage limits).</u>**</li> </ul>

**I. HISTORY AND BACKGROUND INFORMATION REGARDING “SYSTEM OPERATING LIMIT” DEFINITION**

**History of Glossary term:**

- Original and current version: **Effective date 07/08/13**
  - o [FERC Order No. 693](#) (03/16/07) - “The Commission directs the ERO to modify the glossary through the Reliability Standards development process to include the statutory definitions of the terms Bulk-Power System, Reliable Operation and Reliability Standard. However, this determination does not negate our discussion in the Applicability section of the Final Rule. While the glossary should be revised to include the statutory definition of Bulk-Power System, the Reliability Standards refer to the bulk electric system, which is also defined in the glossary.” (P 1894)

**History of ROP term:**

- Current version: **Effective as of 01/31/2012**
  - o [NERC Petition](#) (11/29/2011) - Added Appendix 2 to ROP and adopted existing Glossary definition for System Operating Limit (see p. 14)
  - o [FERC Order](#) (01/31/2012) - “These revisions are being proposed as a result of P 93 of the Commission’s Order issued October 21, 2010, in Docket No. RR10-11-000, in which the Commission invited NERC to submit a filing making consistent use of defined terms throughout the ROP and Appendices.”

**II. USAGE OF DEFINED TERM: SYSTEM OPERATING LIMIT**

**List of usage of the term “System Operating Limit” within Reliability Standards:** The term appears over fifty times within the [Complete Set of NERC Reliability Standards](#). A majority of these occurrences are in the FAC, IRO and TOP standards (the term also appears in CIP, EOP, MOD, PER, and PRC standards).

**List of ROP provisions (other than Appendix 2) where System Operating Limit occurs:**

	ROP provision	Page # <a href="#">[Link to ROP]</a>
1	Appendix 4C – CMEP, Section 1.1.11	216 of 483
2	NERC Blackout and Disturbance Response Procedures	468 of 483

**List defined terms that include System Operating Limit in definition narrative:**

	Glossary		ROP
1	Burden	1	N/A
2	Constrained Facility	2	N/A
3	N/A	3	Exception Report
4	Interconnection Reliability Operating Limit	4	Interconnection Reliability Operating Limit
5	Total Flowgate Capability	5	N/A

**List of other defined terms that are included in the System Operating Limit definition narrative:**

Glossary: system, Facility Rating, Contingency, Equipment Rating

ROP: system

### III. DRAFTING TEAM ANALYSIS AND ASSESSMENT

**Explanation of differences in definition narratives:** The Glossary definition explains that System Operating Limits are based on certain operating criteria, and it provides a non-exhaustive listing of what that operating criteria may be. The ROP does not contain this additional level of detail.

**How/why the terms may be applied differently as a result of the differences:** The definitions are similar, however, the Glossary provides more clarity by giving examples of what the operating criteria might be. While the Glossary definition may provide more clarity with the examples, the definitions are consistent with one another and the differences should not result in different application of the term.

**Proposed revision(s):** The SDT is proposing revisions to both the Glossary and ROP definitions.

#### **Redline of Glossary definition:**

The value (such as MW, MVar, ~~A~~amperes, ~~Frequency~~frequency or ~~Volts~~volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. System Operating Limits are based upon certain operating criteria. These include, but are not limited to:

- Facility Ratings (~~Applicable~~applicable pre- and post-Contingency ~~equipment~~Equipment Ratings or ~~facility~~Facility ratingsRatings)
- ~~Transient~~transient Stability-stability Ratings-ratings (~~Applicable~~ applicable pre- and post-Contingency ~~Stability~~stability Limitslimits)
- ~~Voltage~~voltage Stability-stability Ratings-ratings (~~Applicable~~applicable pre- and post-Contingency ~~Voltage~~voltage Stabilitystability)
- ~~System~~system ~~Voltage~~voltage Limits-limits (~~Applicable~~applicable pre- and post-Contingency ~~Voltage~~voltage Limitslimits).

#### **Redline of ROP definition:**

the value (such as MW, Mvar, amperes, frequency or volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. System Operating Limits are based upon certain operating criteria. These include, but are not limited to:

- facility ratings (applicable pre- and post-contingency equipment ratings or facility ratings)
- transient stability ratings (applicable pre- and post-contingency stability limits)
- voltage stability ratings (applicable pre- and post-contingency voltage stability)
- system voltage limits (applicable pre- and post-contingency voltage limits)\*\*

**Justification for decision:** The ROP definition adopted the Glossary definition when Appendix 2 was created in 2012. Note that the ROP definition is marked with a double asterisk (\*\*), indicating it was taken from the Glossary. However, despite the double asterisk (\*\*) indicator, the ROP definition only adopted a portion of the Glossary definition. The SDT is proposing to align the ROP with the Glossary definition. The Glossary definition

provides more clarity with the non-exhaustive list of examples. Additionally, the SDT revised the Glossary definition to lowercase those terms that are not defined terms, and thus, should not be capitalized in the definition narrative.

## Part IV: Group 2 recommendations

There are a total of six (6) Group 2 cross-over terms:

**Term 8: Critical Assets**

**Term 9: Critical Cyber Assets**

**Term 10: Cyber Assets**

**Term 11: Cyber Security Incident**

**Term 25: Interconnection**

**Term 46: Special Protection System**

The SDT is recommending revisions to one (1) of the Group 2 cross-over terms. Below is an overview of the SDT research, assessment, proposed revision(s), and justification for each of the recommendations.

## CIP-RELATED CROSS-OVER TERMS

### Term 8: Critical Assets

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
<p><b>Glossary term (inactive 03/31/16):</b> Facilities, systems, and equipment which, if destroyed, degraded, or otherwise rendered unavailable, would affect the reliability or operability of the Bulk Electric System.</p>	<p>Facilities, systems, and equipment which, if destroyed, degraded, or otherwise rendered unavailable, would affect the reliability or operability of the Bulk Electric System.**</p>	<p>The SDT is not proposing revisions to the cross-over terms at this time. This is because the changes that would be necessary to align the terms would necessitate a large number of other changes that are outside the scope of the SAR for this project. For the reasons outlined below, the SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.</p>

### Term 9: Critical Cyber Assets

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
<p><b>Glossary term (inactive 03/31/2016):</b> Cyber Assets <b>essential</b> to the reliable operation of Critical Assets.</p>	<p>Cyber Assets <b>critical</b> to the reliable operation of Critical Assets.**</p>	<p>The SDT is not proposing revisions to the cross-over terms at this time. This is because the changes that would be necessary to align the terms would necessitate a large number of other changes that are outside the scope of the SAR for this project. For the reasons outlined below, the SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.</p>

### Term 10: Cyber Assets

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
<p><b>Current definition (inactive 3/31/16):</b></p>		<p>The SDT is not proposing revisions to the cross-over terms at this time. This is because the changes that</p>

<p>Programmable electronic devices and communication networks including hardware, software, and data.</p> <p><b>Revised definition (effective 4/1/2016):</b>          Programmable electronic devices, including the hardware, software, and data in those devices.</p>	<p>programmable electronic devices and communication networks including hardware, software, and data.**</p> <p>programmable electronic devices and communication networks including hardware, software, and data.**</p>	<p>would be necessary to align the terms would necessitate a large number of other changes that are outside the scope of the SAR for this project. For the reasons outlined below, the SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.</p>
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### Term 11: Cyber Security Incident

Glossary Definition (differences in definition narrative indicated in red)	ROP, Appendix 2 Definition (differences in definition narrative indicated in red)	SDT proposed revisions
<p><b>Current definition (inactive 03/31/16):</b>            Any malicious act or suspicious event that:</p> <ul style="list-style-type: none"> <li>• Compromises, or was an attempt to compromise, the Electronic Security Perimeter or Physical Security Perimeter of a Critical Cyber Asset, or,</li> <li>• Disrupts, or was an attempt to disrupt, the operation of a Critical Cyber Asset.</li> </ul> <p><b>Revised definition (effective 04/01/16):</b>            A malicious act or suspicious event that:</p> <ul style="list-style-type: none"> <li>• Compromises, or was an attempt to compromise, the Electronic Security Perimeter or Physical Security Perimeter or,</li> <li>• Disrupts, or was an attempt to disrupt, the operation of a BES Cyber System.</li> </ul>	<p>any malicious or suspicious event that disrupts, or was an attempt to disrupt, the operation of those programmable electronic devices and communications networks including hardware, software and data that are essential to the Reliable Operation of the Bulk Power System.++</p> <p>any malicious or suspicious event that disrupts, or was an attempt to disrupt, the operation of those programmable electronic devices and communications networks including hardware, software and data that are essential to the Reliable Operation of the Bulk Power System.++</p>	<p>The SDT is not proposing revisions to the cross-over terms at this time. This is because the changes that would be necessary to align the terms would necessitate a large number of other changes that are outside the scope of the SAR for this project. For the reasons outlined below, the SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.</p>

#### I. HISTORY AND BACKGROUND INFORMATION REGARDING THE CIP-RELATED CROSS OVER TERMS

In 2008, in [Order No. 706](#), FERC approved a number of revised CIP standards and CIP-related Glossary definitions, including the cross-over terms that are currently under review in this project. Thereafter, in 2011, NERC filed a [Petition](#) requesting approval to create a ROP Appendix 2 which would house all of the defined terms used or necessary for the ROP provisions. In 2012, FERC issued an [Order Approving Amendments to the ROP](#). In the ROP, Appendix 2, defined terms that were taken from the Glossary were marked with a double asterisk (\*\*); whereas terms taken from the Federal Power Act were marked with a double plus sign (++). All of the cross-over terms that are currently under review by the SDT were added to the ROP, Appendix 2 in this filing. Of those terms, three terms-- Critical Assets, Critical Cyber Assets, and Cyber Assets-- are marked with a double asterisk (\*\*) because they were

taken from the Glossary; one term-- Cyber Security Incident-- is marked with a double plus sign (++) because it was taken from the Federal Power Act.

In 2012, Project 2008-06 made substantial revisions to the CIP Reliability Standards, including revisions to a number of the defined terms used therein. In NERC's petition for approval of the revised standards, "NERC proposes nineteen CIP-related definitions for inclusion in the NERC Glossary. This includes fifteen new definitions and four revised definitions, as well as the retirement of two definitions." See, [FERC Order No. 791](#) P 113.

The 15 newly proposed Glossary definitions included:

1. BES Cyber Asset
2. BES Cyber System
3. BES Cyber System Information
4. CIP Exceptional Circumstances
5. CIP Senior Manager
6. Control Center
7. Dial-up Connectivity
8. Electronic Access Control or Monitoring Systems (EACMS)
9. Electronic Access Point (EAP)
10. External Routable Connectivity
11. Interactive Remote Access
12. Intermediate System
13. Physical Access Control Systems (PACS)
14. Protected Cyber Assets (PCA)
15. Reportable Cyber Security Incident

Also, NERC proposed revisions to four existing Glossary definitions:

1. **Cyber Assets**
2. **Cyber Security Incident**
3. Electronic Security Perimeter (ESP)
4. Physical Security Perimeter (PSP)

Further, NERC proposed to retire two existing Glossary definitions:

1. **Critical Assets**
2. **Critical Cyber Assets**

These proposed revisions to the Glossary terms were approved by FERC, and become effective March 31, 2016 (retired terms) and April 01, 2016 (new and revised terms). (See, [FERC Order No. 791](#)). However, no conforming changes were proposed for the defined terms contained in the ROP, Appendix 2. As a result, beginning March 31, 2016, a number of CIP-related defined terms will not be aligned.

## **II. USAGE OF CIP-RELATED DEFINED TERMS**

The four (4) cross-over terms at issue are used throughout the CIP Reliability Standards. Also, the terms are used in a number of [ROP provisions](#), including:

1. Section 400 – Compliance Enforcement, Section 401.10 and 403.13 (see pp. 29-39 of 483);
2. Section 1500 – Confidential Information (see, p. 96 of 483);
3. Appendix 4C: Compliance Monitoring and Enforcement Program, Section 1.1.5 – Definitions (see, p. 262 of 483);
4. Appendix 4C: Compliance Monitoring and Enforcement Program – Attachment 2 - Section 1.5.10, 1.7.4 (see, pp. 291, 299, 301 of 483);

5. Appendix D – Technically Feasible Exception Procedure (*see*, pp. 309-310 of 483);
6. Compliance and Certification Committee Hearing Procedures - 1.1.5 Definitions (*see*, pp. 334, 336, 357, 363, 364 of 483);
7. Appendix 5B – Statement of Compliance Registry Criteria (*see*, p. 438 of 483);
8. Hearing Procedures for Use in Appeals of Certification Matters (*see*, pp. 373, 384, 389 of 483)

### **III. DRAFTING TEAM ANALYSIS AND ASSESSMENT**

The SDT is not proposing any revisions to the cross-over terms at this time. This is because the changes that are necessary to align the four cross-over terms would also necessitate a large number of other changes that are outside the scope of the SAR for this project. For example, if changes were made to revise the ROP definition to align with the future enforceable Glossary definition of Cyber Security Incident, three (3) new defined terms would need to be introduced to the ROP-- BES Cyber System, Physical Security Perimeter and Electronic Security Perimeter. Also, the defined term "BES Cyber System" contains the defined term "BES Cyber Asset," which is not defined in the ROP. These four defined terms would need to be added to the ROP because they are not currently defined terms in the ROP, and the definition narratives that would be adopted contain the defined terms.

Another example is the terms, Critical Asset and Critical Cyber Asset, which were retired by the Project 2008-06 team. The CIP version 5 drafting team retired these two terms in the Glossary because the revisions associated with the Version 5 CIP standards "moves away from the CIP version 4 'bright-line' approach of only identifying Critical Assets (and applying CIP requirements only to their associated Critical Cyber Assets), to requiring a minimum classification of 'Low Impact' for all BES Cyber Systems." (See, FERC Order No. 791, P14). In conjunction with the retirement of these two Glossary terms, however, the CIP SDT made a number of revisions to other defined terms and added new definitions to reflect the paradigm shift to classifying BES Cyber Systems. Therefore, in order for this drafting team to adopt the approach taken by the CIP version 5 changes, the team could not simply retire the two cross-over terms that are currently within the scope of the SAR. Rather, the team would have to make all of the other corresponding and necessary changes that were made in conjunction with the CIP version 5 work. For example, the team added the new term, "BES Cyber Asset" to replace the retired terms. This is not a defined term in the ROP, so it would need to be added to Appendix 2. The Glossary definition of "BES Cyber Asset" includes two defined terms-- Electronic Security Perimeter and Cyber Asset. These two defined terms would need to be added to the ROP and align with the Glossary definition.

Additionally, any changes to the ROP definitions would necessitate a thorough review and analysis of the provisions of the ROP that use any of those terms-- both defined and lowercase usage. This is because the ROP currently contains a number of provisions which use the cross-over terms according to the manner in which they are currently defined in the ROP. The alignment changes may alter or affect the meaning of these ROP provisions (see above listing for examples of ROP provisions that use the current ROP definitions).

For the reasons outlined above, the SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.

## Term 25: Interconnection

Glossary Definition <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 Definition <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
<p><u>Currently effective (inactive as of 06/30/16):</u> When capitalized, any one of the three major electric system networks in North America: Eastern, Western, and ERCOT.</p> <p><u>FERC-approved (effective date 07/01/16)</u> When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.</p>	<p>a geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain Reliable Operation of the Facilities within their control.++</p>	<p>The SDT is proposing to revise both the Glossary and ROP definitions (effective no earlier than 07/01/16), as follows:</p> <p><b>Redline of Glossary definition:</b>  <a href="#">A geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain Reliable Operation of the Facilities within their control.</a> When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.</p> <p><b>Redline of ROP definition:</b>                      a geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain Reliable Operation of the Facilities within their control.++ <a href="#">When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.**</a></p>

### I. HISTORY AND BACKGROUND INFORMATION REGARDING “INTERCONNECTION” DEFINITION

**History of Glossary term:**

- Original and current version: Effective 03/16/07 – current
  - o [FERC Order No. 693](#) (03/16/07) “When capitalized, any one of the three major electric system networks in North America: Eastern Western, and ERCOT.” (P 1898)
- Future version: **Effective beginning 07/01/16**
  - o Revised by [Project 2010-14.1](#) - Phase 1 Balancing Authority Reliability-based Controls.
  - o [NERC Petition](#) (04/02/14) – Revised definition to include Quebec interconnection.
  - o [FERC Order No. 810](#) (04/16/15) – Revised definition approved.

**History of ROP term:**

- Original version: Effective 03/17/07 – 01/30/12). Version 0: “Interconnection” means an electric energy supply and transmission network in which the component electric facilities are interconnected and operated synchronously and to which the only connections to other electric networks are asynchronous. (See, [FERC Order Certifying NERC as ERO](#)).

- Revised and current version: **Effective as of 01/31/2012**
  - o [FERC Order](#) (01/31/2012) – The current version is taken from 18 C.F.R. Part 39.1 and the Federal Power Act, Section 215.

**II. USAGE OF DEFINED TERM: INTERCONNECTION**

**List of all usage of the term Interconnection within Reliability Standards:** The term appears in at least thirty-five (35) times in the [Complete Set of Reliability Standards](#). The majority of the occurrences are in the BAL, EOP, IRO, MOD and TOP standards.

**List of all ROP provisions (other than Appendix 2) where Interconnection occurs:**

	ROP provision	Page # <a href="#">[Link to ROP]</a>
1	Section 300, 302, 312	8-20 of 483
2	Section 803	70 -71 of 483
3	Section 1102	84 of 483
4	Appendix 3A – Standards Process Manual, Section 9	167 of 483
5	Appendix 5B – Statement of Compliance Registry Criteria (Revision 5.2)	431-434 of 483
6	Appendix 5C – Exceptions to BES Definition	452 of 483
7	NERC Blackout and Disturbance Procedures	469-473 of 483

**List all defined terms that include Interconnection in definition narrative:**

	Glossary		ROP
1	Adverse Reliability Impact	1	N/A
2	Area Control Error	2	N/A
3	Balancing Authority	3	Balancing Authority
4	Bulk Electric System	4	Bulk Electric System
5	Burden	5	N/A
6	Frequency Bias	6	N/A
7	Frequency Bias Setting	7	N/A
8	Frequency Deviation	8	N/A
9	Frequency Regulation	9	N/A
10	Frequency Response Obligation	10	N/A
11	Interchange Distribution Calculator	11	Interchange Distribution Calculator
12	Interconnection Reliability Operating Limit Tv	12	N/A
13	Reporting ACE	13	N/A
14	Tie Line Bias	14	N/A
15	Time Error	15	N/A
16	Time Error Correction	16	N/A

**List of all other defined terms that are included in the Interconnection definition narrative:**

Glossary: None

ROP: Bulk Power System; Reliable Operation; Facilities

### III. DRAFTING TEAM ANALYSIS AND ASSESSMENT

**Explanation of differences in definition narratives:** The ROP definition provides a description of what an interconnection is conceptually, and the criteria for use in identifying one. The Glossary definition, on the other hand, “defines” the term by applying the ROP definition and identifying the specific geographical areas that meet the criteria outlined in the ROP definition. The difference in these two definitions would be similar to defining the term “Federal Holiday” by listing all eleven federal holidays in the United States (e.g., New Year’s Day, MLK Jr. Day, Inauguration Day, etc.) as opposed to defining the term by describing what constitutes a “Federal Holiday” in the abstract (i.e., “an authorized holiday which has been recognized by the US government and on which non-essential federal government offices are closed”).

**How/why the terms may be applied differently as a result of the differences:** The ROP definition is broader than the Glossary because it provides a description of what constitutes an interconnection, as opposed to identifying the specific geographical areas in North America that currently constitute an interconnection. Because the Glossary limits application of the definition to the specific interconnections identified therein, it could be perceived as intended to be more limiting and/or intentionally different than the ROP definition.

**Proposed revision(s).** The SDT proposes revisions to both the Glossary and ROP definition in order to align the two terms and maintain consistency with the Federal Power Act. Redlines of both definitions are provided below.

**Redline of Glossary definition:**

A geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain Reliable Operation of the Facilities within their control. When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.

**Redline of ROP definition:**

a geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain Reliable Operation of the Facilities within their control.++ When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.\*\*

**Justification for decision:** The ROP definition tracks the Federal Power Act (note it is marked with ++ indicating such). In order to align the two definitions, without losing the clarity provided by the FERC-approved Glossary definition, which specifically identifies the current Interconnections in North America, the SDT is proposing to combine the two definitions. However, because the recently FERC-approved Glossary definition is not effective until July 1, 2016, the SDT is proposing that the alignment revisions do not take effect until July 1, 2016, at the earliest.

## Term 46: Special Protection System

<b>Glossary Definition</b> (differences in definition narrative indicated in red)	<b>ROP, Appendix 2 Definition</b> (differences in definition narrative indicated in red)	<b>SDT proposed revisions</b>
<p>An automatic protection system designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components to maintain system reliability. Such action may include changes in demand, generation (MW and Mvar), or system configuration to maintain system stability, acceptable voltage, or power flows. <b>An SPS</b> does not include (a) underfrequency or undervoltage load shedding or (b) fault conditions that must be isolated or (c) out-of-step relaying (not designed as an integral part of an SPS). <b>Also called Remedial Action Scheme.</b></p>	<p>an automatic protection system designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components to maintain system reliability. Such action may include changes in demand, generation (MW and Mvar), or system configuration to maintain system stability, acceptable voltage, or power flows. <b>A Special Protection System</b> does not include (a) underfrequency or undervoltage Load shedding or (b) fault conditions that must be isolated, or (c) out-of-step relaying (not designed as an integral part of a Special Protection System).**</p>	<p>The SDT is not proposing any alignment revisions at this time. This is because the <a href="#">Project 2010-5.3</a> drafting team work is still underway and the team may propose changes to this definition. Once the Project 2010-5.3 team finalizes its work, then it will be appropriate to make any necessary alignment changes to the definition of Special Protection System.</p>

## Part V: Group 3 recommendations

There are a total of twenty-two (22) Group 3 cross-over terms:

- Term 2: Balancing Authority**
- Term 3: Balancing Authority Area**
- Term 4: Blackstart Resource**
- Term 7: Cascading**
- Term 13: Distribution Provider**
- Term 14: Element**
- Term 16: Flowgate**
- Term 24: Interconnected Operations Service**
- Term 28: Load Serving Entity**
- Term 31: Planning Authority**
- Term 33: Point of Receipt**
- Term 36: Reactive Power**
- Term 37: Real Power**
- Term 38: Reliability Coordinator**
- Term 41: Reliable Operation**
- Term 42: Reserve Sharing Group**
- Term 43: Resource Planner**
- Term 49: Transmission Customer**
- Term 50: Transmission Operator**
- Term 51: Transmission Owner**
- Term 52: Transmission Planner**
- Term 54: Transmission Service Provider**

The SDT is recommending revisions to all twenty-two (22) of the Group 3 cross-over terms. Below is an overview of the SDT research, assessment, proposed revision(s), and justification for each of the recommendations.

#	Term	Glossary <i>(differences in definition narrative indicated in red)</i>	ROP, Appendix 2 <i>(differences in definition narrative indicated in red)</i>	SDT proposed revisions
2	Balancing Authority	The responsible entity that integrates resource plans ahead of time, maintains <b>load</b> -interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.	the responsible entity that integrates resource plans ahead of time, maintains <b>Load</b> -interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.**	<p>The SDT is recommending changes to the ROP definition to align with the Glossary. Specifically, the ROP definition uses the defined term for "Load" whereas the Glossary does not. Due to the manner in which the term "Load" is used in the definition, it is not proper to use the defined term. This is because the current ROP definition of Load is, "an end-user device or customer that receives power from the electric system." In the definition narrative of Balancing Authority, use of the word load is not intended to mean an end-user device or customer. Instead, as used in the definition narrative, the term load is actually referring to the ability to maintain demand, or sufficient levels of generation to meet demand. Essentially, it is addressing a measure of energy available to meet the current demand.</p> <p>Additionally, during the course of its work on this project, the SDT reviewed and assessed the quality and correctness of the definition of "Balancing Authority." The SDT believes the current definition is unclear and could be improved by a few minor changes. Specifically, use or application of the term "load-interchange-generation" contained in the definition narrative is unclear. As a result, will draft a SAR proposing to revise the definition of Balancing Authority in order to address this issue.</p> <p><b>Redline of ROP definition:</b> the responsible entity that integrates resource plans ahead of time, maintains <del>Load</del><b>load</b>-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.**</p>
3	Balancing Authority Area	The collection of generation, transmission, and <b>loads</b> within the metered boundaries of the Balancing Authority. The Balancing Authority maintains <b>load</b> -resource balance within this area.	the collection of generation, transmission, and <b>Loads</b> within the metered boundaries of the Balancing Authority. The Balancing Authority maintains <b>Load</b> -resource balance within this area.**	<p>The SDT is recommending changes to the ROP definition to align with the Glossary. Specifically, the ROP definition uses the defined term for "Load" whereas the Glossary does not. Due to the manner in which the term "Load" is used in the definition, it is not proper to use the defined term. This is because the current ROP definition of Load is, "an end-user device or customer that receives power from the electric system." In the definition narrative of Balancing Authority Area, use of the word load is not intended to mean an end-user device or customer. Instead, as used in the definition narrative, the term load is actually referring to the ability to maintain demand, or sufficient levels of generation to meet demand. Essentially, it is addressing a measure of energy available to meet the current demand.</p> <p><b>Redline of ROP definition:</b> the collection of generation, transmission, and <del>Loads</del><b>loads</b> within the metered boundaries of the Balancing Authority. The Balancing Authority maintains <del>Load</del><b>load</b>-resource balance within this area.**</p>

4	Blackstart Resource	A generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator's restoration plan needs for <b>real</b> and <b>reactive power</b> capability, frequency and voltage control, and that has been included in the Transmission Operator's restoration plan.	a generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator's restoration plan needs for <b>Real</b> and <b>Reactive Power</b> capability, frequency and voltage control, and that has been included in the Transmission Operator's restoration plan.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the terms "Real Power" and "Reactive Power" because they are defined terms in the Glossary and their usage in this definition narrative is intended to have the meaning of the defined terms.</p> <p><b>Redline of Glossary term:</b> A generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator's restoration plan needs for <del>real-Real</del> and <del>reactive-Reactive power-Power</del> capability, frequency and voltage control, and that has been included in the Transmission Operator's restoration plan.</p>
7	Cascading	The uncontrolled successive loss of <b>system elements</b> triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be restrained from sequentially spreading beyond an area predetermined by studies.	the uncontrolled successive loss of <b>System Elements</b> triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be restrained from sequentially spreading beyond an area predetermined by studies.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the terms "System" and "Elements" because they are defined terms in the Glossary and their usage in this definition narrative is intended to have the meaning of the defined terms.</p> <p><b>Redline of Glossary term:</b> The uncontrolled successive loss of <del>system-System elements-Elements</del> triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be restrained from sequentially spreading beyond an area predetermined by studies.</p>
13	Distribution Provider	Provides and operates the "wires" between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the <b>Distribution</b> function at any voltage.	<b>the entity that</b> provides and operates the "wires" between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the <b>distribution</b> function at any voltage.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to remove the capitalization from the term "Distribution" because it is not a defined term in Glossary (or the ROP).</p> <p><b>Redline of Glossary term:</b> Provides and operates the "wires" between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the <del>Distribution-distribution</del> function at any voltage.</p>

14	Element	Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An <b>element</b> may be comprised of one or more components.	any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An <b>Element</b> may be comprised of one or more components.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Element" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An <del>element</del>-<b>Element</b> may be comprised of one or more components.</p>
16	Flowgate	<p>1.) A portion of the <b>Transmission</b> system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions.</p> <p>2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System.</p>	<p>1.) A portion of the <del>transmission</del> system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions.</p> <p>2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System.**</p>	<p>The SDT is recommending the following changes:</p> <ol style="list-style-type: none"> <li>(1) Revise the ROP definition to capitalize the word "Transmission."</li> <li>(2) Add the definition of "Transmission" to the ROP. The term is used (and capitalized) in other ROP definition narratives (see, for example, definition of Bulk Electric System). It is appropriate to capitalize it in this particular narrative because its usage in this definition narrative is intended to have the meaning of the defined term. Additionally, as part of the work for this project, the SDT will develop a set of recommendations regarding improvements to the current ROP and Glossary resources. One of the recommendations will be to conduct a comprehensive review of both the ROP and Glossary to identify all instances where a defined term is used, but it is not capitalized (to indicate applicability or use of the definition). The SDT will recommend that for each occurrence of the term, an assessment is conducted to determine whether the term is intended to have the defined meaning; and in the event it is, then the appropriate revisions should be made.</li> </ol> <p><b>Redline of ROP term:</b> 1.) A portion of the <del>transmission</del>-<b>Transmission</b> system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions.</p> <p>2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System.**</p> <p><b>Add new defined term ("Transmission") to the ROP:</b> <b>"Transmission" means an interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.**</b></p>

24	Interconnected Operations Service	A service (exclusive of basic energy and <b>transmission services</b> ) that is required to support the <b>reliable operation</b> of interconnected Bulk Electric Systems.	a service (exclusive of basic energy and <b>Transmission Services</b> ) that is required to support the <b>Reliable Operation</b> of interconnected Bulk Electric Systems.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the terms "Transmission Services" and "Reliable Operation" because they are defined terms in the Glossary and their usage in this definition narrative is intended to have the meaning of the defined terms.</p> <p><b>Redline of Glossary term:</b> A service (exclusive of basic energy and <del>transmission-Transmission services</del><b>Services</b>) that is required to support the <del>reliable-Reliable</del> <b>operation Operation</b> of interconnected Bulk Electric Systems.</p>
28	Load-Serving Entity	Secures energy and <b>transmission service</b> (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.	<b>an entity that</b> secures energy and <b>Transmission Service</b> (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Transmission Service" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> Secures energy and <del>transmission-Transmission service</del> <b>Service</b> (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.</p>
31	Planning Authority	The responsible entity that coordinates and integrates transmission <b>facility</b> and service plans, resource plans, and <b>protection systems</b> .	the responsible entity that coordinates and integrates transmission <b>Facilities</b> and service plans, resource plans, and <b>Protection Systems</b> **	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the terms "Facilities" and "Protection Systems" because they are defined terms in the Glossary and their usage in this definition narrative is intended to have the meaning of the defined terms.</p> <p><b>Redline of Glossary term:</b> The responsible entity that coordinates and integrates transmission <del>facility</del> <b>Facilities</b> and service plans, resource plans, and <del>protection-Protection</del> <b>systemsSystems</b>.</p>
33	Point of Receipt	A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a <b>Generator</b> delivers its output.	a location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a <b>generator</b> delivers its output.	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to remove the capitalization from the term "Generator" because it is not a defined term in Glossary or the ROP. Also, because the proposed revisions to the Glossary term will result in alignment of the two definition narratives, the SDT is recommending that a double asterisk (**) is added to the ROP definition.</p>

				<p><b>Redline of Glossary term:</b> A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a <del>Generator</del><a href="#">generator</a> delivers its output.</p> <p><b>Redline of ROP term:</b> a location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a generator delivers its output.**</p>
36	Reactive Power	The portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive <del>power</del> must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive <del>power</del> is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar).	the portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive <del>Power</del> must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive <del>Power</del> is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar).**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Power" because "Reactive Power" is a defined term and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> The portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive <del>power</del><a href="#">Power</a> must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive <del>power</del><a href="#">Power</a> is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar).</p>
37	Real Power	The portion of electricity that supplies energy to the <del>load</del> .	the portion of electricity that supplies energy to the <del>Load</del> .**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "load" in the Glossary because it is a defined term and its usage in this definition narrative is intended to have the meaning of the defined term. In the definition narrative of Real Power, use of the word load is intended to mean an end-use device or customer.</p> <p><b>Redline of Glossary definition:</b> The portion of electricity that supplies energy to the <del>load</del><a href="#">Load</a>.</p>

38	Reliability Coordinator	The entity that is the highest level of authority who is responsible for the <b>reliable operation</b> of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.	the entity that is the highest level of authority who is responsible for the <b>Reliable Operation</b> of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Reliable Operation" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b>          The entity that is the highest level of authority who is responsible for the <del>reliable</del> <del>Reliable operation</del> <del>Operation</del> of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.</p>
41	Reliable Operation	Operating the <del>elements</del> of the <del>bulk-power system [Bulk-Power System]</del> within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or <del>cascading</del> failures of such system will not occur as a result of a sudden disturbance, including a <del>cybersecurity incident</del> , or unanticipated failure of system <del>elements</del> .	operating the <del>Elements</del> of the <del>Bulk Power System</del> within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or <del>Cascading</del> failures of such system will not occur as a result of a sudden disturbance, including a <del>Cyber Security Incident</del> , or unanticipated failure of system <del>Elements</del> .++	<p>The SDT is recommending changes to capitalization in the ROP definition to align with the Glossary and the Federal Power Act. Specifically, the SDT is proposing to remove capitalization of the terms "Elements," "Bulk Power System" "Cascading," and "Cyber Security incident," in order for the definition to remain consistent with the language in the Federal Power Act. Additionally, for both definitions, the SDT is recommending the addition of an explanatory sentence to clarify why defined terms contained in the definition narrative are not capitalized.</p> <p><b>Redline of Glossary term:</b>          Operating the <del>elements</del> of the <del>bulk-power system [Bulk-Power System]</del> within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements. <a href="#">(In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.)</a></p> <p><b>Redline of ROP term:</b>          operating the <del>Elements</del> <del>elements</del> of the <del>bulk-power system [Bulk Power System]</del> within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or <del>Cascading</del> <del>cascading</del> failures of such system will not occur as a result of a sudden disturbance, including a <del>Cyber Security Incident</del> <del>cybersecurity incident</del>, or unanticipated failure of system <del>Elements</del> <del>elements</del>.++ <a href="#">(In</a></p>

				<a href="#">order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.)</a>
42	Reserve Sharing Group	A group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker (e.g., between zero and ten minutes) then, for the purposes of <b>Disturbance Control Performance</b> , the <b>Areas</b> become a Reserve Sharing Group.	a group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g. ten minutes). If the transaction is ramped in quicker, (e.g., between zero and ten minutes), then, for the purposes of <b>disturbance control performance</b> , the <b>areas</b> become a Reserve Sharing Group.**	<p>The SDT is recommending changes to both the Glossary and ROP definitions. Specifically, the SDT is proposing to revise the Glossary definition by removing the capitalization for the terms "Disturbance Control Performance" and "Area" because these are not defined terms. (Note that Disturbance Control Standard and Disturbance are both defined terms). Also, in the ROP definition, the SDT is proposing removal of the unnecessary commas to align with the Glossary definition.</p> <p><b>Redline of Glossary term:</b>  A group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker (e.g., between zero and ten minutes) then, for the purposes of <a href="#">Disturbance Control Performance</a>, the <a href="#">Areas</a> become a Reserve Sharing Group.</p> <p><b>Redline of ROP term:</b>  a group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker, (e.g., between zero and ten minutes), then, for the purposes of disturbance control performance, the areas become a Reserve Sharing Group.**</p>
43	Resource Planner	The entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority <b>Area</b> .	the entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority <b>area</b> .**	The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to remove the capitalization from the term "Area" because it is not a defined term in Glossary or the ROP.

				<p><b>Redline of Glossary term:</b> The entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority <del>Area</del><a href="#">area</a>.</p>
49	Transmission Customer	<p>1. Any eligible customer (or its designated agent) that can or does execute a <del>transmission service</del> agreement or can or does receive <del>transmission service</del>.</p> <p>2. Any of the following <del>responsible</del> entities: Generator Owner, Load-Serving Entity, or Purchasing-Selling Entity.</p>	<p>1. any eligible customer (or its designated agent) that can or does execute a <del>Transmission Service</del> agreement or can and does receive <del>Transmission Service</del>.</p> <p>2. Any of the following <del>responsible</del> entities: Generator Owner, Load-Serving Entity, or Purchasing-Selling Entity.**</p>	<p>The SDT is recommending the following changes:</p> <ol style="list-style-type: none"> <li>(1) Revise the Glossary definition to capitalize the term “Transmission Service” because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</li> <li>(2) Remove the word “responsible” to align with the ROP definition. The word “responsible” was originally included in the ROP definition, but was recently removed by the Risk-Based Registration project. The Glossary should be updated to reflect these recent changes.</li> </ol> <p><b>Redline of Glossary term:</b> 1. Any eligible customer (or its designated agent) that can or does execute a <del>transmission-Transmission service-Service</del> agreement or can or does receive <del>transmission-Transmission serviceService</del>.</p> <p>2. Any of the following <del>responsible</del> entities: Generator Owner, Load-Serving Entity, or Purchasing-Selling Entity.</p>
50	Transmission Operator	<p>The entity responsible for the reliability of its “local” transmission system, and that operates or directs the operations of the transmission <del>facilities</del>.</p>	<p>the entity responsible for the reliability of its “local” transmission system, and that operates or directs the operations of the transmission <del>Facilities</del>.**</p>	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term “Facilities” because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> The entity responsible for the reliability of its “local” transmission system, and that operates or directs the operations of the transmission <del>facilities</del><a href="#">Facilities</a>.</p>
51	Transmission Owner	<p>The entity that owns and maintains transmission <del>facilities</del>.</p>	<p>the entity that owns and maintains transmission <del>Facilities</del>.**</p>	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term “Facilities” because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> The entity that owns and maintains transmission <del>facilities</del><a href="#">Facilities</a>.</p>

52	Transmission Planner	The entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority <b>Area</b> .	the entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority <b>area</b> .**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to remove the capitalization from the term "Area" because it is not a defined term in Glossary or the ROP.</p> <p><b>Redline of Glossary term:</b>          The entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority <del>Area</del>area.</p>
54	Transmission Service Provider	The entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable <b>transmission service</b> agreements.	the entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable <b>Transmission Service</b> agreements.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Transmission Service" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b>          The entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable <del>transmission</del> <b>Transmission service</b> <del>Service</del> agreements.</p>

## Part VI: Group 4 recommendations

There are a total of three (3) Group 4 cross-over terms:

**Term 20: Interchange Authority**

**Term 27: Load**

**Term 34: Protection System**

The SDT is recommending revisions to all of the Group 4 cross-over terms. Below is an overview of the SDT research, assessment, proposed revision(s), and justification for each of the recommendations.

### Term 20: Interchange Authority

Glossary (differences indicated in red)	ROP, Appendix 2 (differences indicated in red)	SDT proposed revisions
<p>The responsible entity that authorizes implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information for reliability assessment purposes.</p>	<p>The responsible entity that authorizes <b>the</b> implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication<b>s</b> of Interchange information for reliability assessment purposes.**</p>	<p>The SDT is recommending errata changes to both the Glossary and ROP definitions, as follows:</p> <ol style="list-style-type: none"> <li>(1) For the Glossary, add the word "the" to align with the ROP definition.</li> <li>(2) For the ROP, remove the "s" from "communications" to align with the Glossary definition.</li> </ol> <p><b>Redline of Glossary term:</b> The responsible entity that authorizes <b>the</b> implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information for reliability assessment purposes.</p> <p><b>Redline of ROP term:</b> The responsible entity that authorizes the implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication<b>s</b> of Interchange information for reliability assessment purposes.**</p>

### Term 27: Load

Glossary (differences indicated in red)	ROP, Appendix 2 (differences indicated in red)	SDT proposed revisions
<p>An end-use device or customer that receives power from the electric system.</p>	<p>an end-user<b>r</b> device or customer that receives power from the electric system.**</p>	<p>The SDT is recommending an errata change to the ROP definition to align with the Glossary. Specifically, the SDT is proposing to remove the letter "r" from the word "user" in the ROP definition because it was inadvertently included when the definition was added to Appendix 2 of the ROP. On January 26, 2012, NERC filed a petition for approval of various revisions to the ROP, including the addition of new terms to Appendix 2. See, <a href="#">NERC petition</a>. The definition of "Load" was adopted from the Glossary, and marked with a double asterisk (**) to indicate as such. However, the definition included in the NERC petition added the letter "r" to the word "use" which did not (and does not currently) exist in the Glossary definition. For these reasons, the SDT is recommending removal of the "r" from the word "user" in the ROP definition in order to align the Glossary and ROP narratives.</p> <p><b>Redline of ROP term:</b> an end-user<b>r</b> device or customer that receives power from the electric system.**</p>

		<p>Additionally, the SDT notes that during the course of its work on this project, the team reviewed and assessed the quality and correctness of the definition of "Load." The SDT believes the current definition is deficient and could be improved in quality and content. As a result, will draft a SAR proposing to revise the definition in order to address the issues identified by the SDT.</p>
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### Term 34: Protection System

<b>Glossary</b> (differences indicated in red)	<b>ROP, Appendix 2</b> (differences indicated in red)	<b>SDT proposed revisions</b>
<ul style="list-style-type: none"> <li>• Protective relays which respond to electrical quantities,</li> <li>• Communications systems necessary for correct operation of protective functions</li> <li>• Voltage and current sensing devices providing inputs to protective relays,</li> <li>• Station dc supply associated with protective functions (including <b>station</b> batteries, battery chargers, and non-battery-based dc supply), and</li> <li>• Control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting device.</li> </ul>	<p>protective relays which respond to electrical quantities, communications systems necessary for correct operation of protective functions, voltage and current sensing devices providing inputs to protective relays, station dc supply associated with protective functions (including batteries, battery chargers, and non-battery-based dc supply), and control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.**</p>	<p>The SDT is recommending an errata change to the ROP definition to align with the Glossary. Specifically, the SDT is proposing to add the word "station" to qualify the Protection System component batteries because it was inadvertently left out of the ROP definition narrative. In 2013, FERC approved the currently effective Glossary definition, which included the qualifier of "station" to the battery term in the definition narrative. However, when the term was adopted in Appendix 2 of the ROP, the qualifier "station" was not included in the definition narrative.</p> <p><b><u>Redline of ROP definition:</u></b>                      protective relays which respond to electrical quantities, communications systems necessary for correct operation of protective functions, voltage and current sensing devices providing inputs to protective relays, station dc supply associated with protective functions (including <b>station</b> batteries, battery chargers, and non-battery-based dc supply), and control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.**</p>

## ATTACHMENT 1 COMPLETE LIST OF CROSS-OVER TERMS

### GROUP 1: Content/substance differences

Term 1: Adjacent Balancing Authority  
Term 6: Bulk Power System  
Term 17: Generator Operator  
Term 18: Generator Owner  
Term 29: Net Energy for Load or NEL  
Term 40: Reliability Standard  
Term 44: Sink Balancing Authority  
Term 45: Source Balancing Authority  
Term 48: System Operating Limit

### GROUP 2: Definitions currently in flux

Term 8: Critical Assets  
Term 9: Critical Cyber Assets  
Term 10: Cyber Assets  
Term 11: Cyber Security Incident  
Term 25: Interconnection  
Term 46: Special Protection System

### GROUP 3: Capitalization differences

Term 2: Balancing Authority  
Term 3: Balancing Authority Area  
Term 4: Blackstart Resource  
Term 7: Cascading  
Term 13: Distribution Provider  
Term 14: Element  
Term 16: Flowgate  
Term 24: Interconnected Operations Service  
Term 28: Load Serving Entity  
Term 31: Planning Authority  
Term 33: Point of Receipt  
Term 36: Reactive Power  
Term 37: Real Power  
Term 38: Reliability Coordinator  
Term 41: Reliable Operation  
Term 42: Reserve Sharing Group  
Term 43: Resource Planner  
Term 49: Transmission Customer  
Term 50: Transmission Operator  
Term 51: Transmission Owner  
Term 52: Transmission Planner  
Term 54: Transmission Service Provider

### GROUP 4: Miscellaneous/Errata

Term 20: Interchange Authority  
Term 27: Load  
Term 34: Protection System

#	Term	Glossary (differences indicated in red)	ROP, Appendix 2 (differences indicated in red)	GROUP
1	Adjacent Balancing Authority	A Balancing Authority whose Balancing Authority Area is interconnected with another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.	a Balancing Authority Area that is interconnected to another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.**	GROUP 1
2	Balancing Authority	The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.	the responsible entity that integrates resource plans ahead of time, maintains Load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.**	GROUP 3
3	Balancing Authority Area	The collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.	the collection of generation, transmission, and Loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains Load-resource balance within this area.**	GROUP 3
4	Blackstart Resource	A generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator's restoration plan needs for real and reactive power capability, frequency and voltage control, and that has been included in the Transmission Operator's restoration plan.	a generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator's restoration plan needs for Real and Reactive Power capability, frequency and voltage control, and that has been included in the Transmission Operator's restoration plan.**	GROUP 3
5	Bulk Electric System or BES	Unless modified by the lists shown below, all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This does not include facilities used in the local distribution of electric energy...	unless modified by the lists shown below, all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This does not include facilities used in the local distribution of electric energy...**	
6	Bulk Power System	Bulk-Power System: A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and B) electric energy from generation facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy.	"Bulk Power System" means, depending on the context: (i) Facilities and control systems necessary for operating an interconnected electric energy supply and transmission network (or any portion thereof), and electric energy from generating facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy [++]. (ii) Solely for purposes of Appendix 4E, Bulk Electric System.	GROUP 1
7	Cascading	The uncontrolled successive loss of system elements triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be restrained from sequentially spreading beyond an area predetermined by studies.	the uncontrolled successive loss of System Elements triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be restrained from sequentially spreading beyond an area predetermined by studies.**	GROUP 3

8	Critical Assets	<p><b>Inactive beginning 3/31/2016:</b> Facilities, systems, and equipment which, if destroyed, degraded, or otherwise rendered unavailable, would affect the reliability or operability of the Bulk Electric System.</p>	Facilities, systems, and equipment which, if destroyed, degraded, or otherwise rendered unavailable, would affect the reliability or operability of the Bulk Electric System.**	GROUP 2
9	Critical Cyber Assets	<p><b>Inactive beginning 3/31/2016:</b> Cyber Assets essential to the reliable operation of Critical Assets.</p>	Cyber Assets critical to the reliable operation of Critical Assets.**	GROUP 2
10	Cyber Assets	<p><b>Inactive beginning 3/31/16:</b> Programmable electronic devices and communication networks including hardware, software, and data.</p> <p><b>Effective beginning 4/1/2016:</b> Programmable electronic devices, including the hardware, software, and data in those devices.</p>	<p>programmable electronic devices and communication networks including hardware, software, and data.**</p> <p>programmable electronic devices and communication networks including hardware, software, and data.**</p>	GROUP 2
11	Cyber Security Incident	<p><b>Inactive beginning 3/31/2016:</b> Any malicious act or suspicious event that:</p> <ul style="list-style-type: none"> <li>Compromises, or was an attempt to compromise, the Electronic Security Perimeter or Physical Security Perimeter of a Critical Cyber Asset, or,</li> <li>Disrupts, or was an attempt to disrupt, the operation of a Critical Cyber Asset.</li> </ul> <p><b>Effective beginning 4/1/2016:</b> A malicious act or suspicious event that:</p> <ul style="list-style-type: none"> <li>Compromises, or was an attempt to compromise, the Electronic Security Perimeter or Physical Security Perimeter or,</li> <li>Disrupts, or was an attempt to disrupt, the operation of a BES Cyber System.</li> </ul>	“Cyber Security Incident” means any malicious or suspicious event that disrupts, or was an attempt to disrupt, the operation of those programmable electronic devices and communications networks including hardware, software and data that are essential to the Reliable Operation of the Bulk Power System.++	GROUP 2
12	Distribution Factor	The portion of an Interchange Transaction, typically expressed in per unit that flows across a transmission facility (Flowgate).	the portion of an Interchange Transaction, typically expressed in per unit that flows across a transmission facility (Flowgate).**	
13	Distribution Provider	Provides and operates the “wires” between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the Distribution function at any voltage.	the entity that provides and operates the “wires” between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the distribution function at any voltage.**	GROUP 3

14	Element	Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An <b>element</b> may be comprised of one or more components.	any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An <b>Element</b> may be comprised of one or more components.**	GROUP 2
15	Facility	A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)	a set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)**	
16	Flowgate	1.) A portion of the <b>Transmission</b> system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions. 2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System.	1.) A portion of the <b>transmission</b> system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions. 2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System.**	GROUP 3
17	Generator Operator	The entity that operates generating <b>unit(s)</b> and performs the functions of supplying energy and Interconnected Operations Services.	the entity that operates generating <b>Facility(ies)</b> and performs the functions of supplying energy and Interconnected Operations Services.**	GROUP 1
18	Generator Owner	Entity that owns and maintains generating <b>units</b> .	an entity that owns and maintains generating <b>Facility(ies)</b> **	GROUP 1
19	Interchange	Energy transfers that cross Balancing Authority boundaries.	energy transfers that cross Balancing Authority boundaries.**	
20	Interchange Authority	The responsible entity that authorizes implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information for reliability assessment purposes.	the responsible entity that authorizes the implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communications of Interchange information for reliability assessment purposes.**	GROUP 4
21	Interchange Distribution Calculator	The mechanism used by Reliability Coordinators in the Eastern Interconnection to calculate the distribution of Interchange Transactions over specific Flowgates. It includes a database of all Interchange Transactions and a matrix of the Distribution Factors for the Eastern Interconnection.	the mechanism used by Reliability Coordinators in the Eastern Interconnection to calculate the distribution of Interchange Transactions over specific Flowgates. It includes a database of all Interchange Transactions and a matrix of the Distribution Factors for the Eastern Interconnection.**	
22	Interchange Schedule	An agreed-upon Interchange Transaction size (megawatts), start and end time, beginning and ending ramp times and rate, and type required for delivery and receipt of power and energy between the Source and Sink Balancing Authorities involved in the transaction.	an agreed-upon Interchange Transaction size (megawatts), start and end time, beginning and ending ramp times and rate, and type required for delivery and receipt of power and energy between the Source and Sink Balancing Authorities involved in the transaction.**	
23	Interchange Transaction	An agreement to transfer energy from a seller to a buyer that crosses one or more Balancing Authority Area boundaries.	an agreement to transfer energy from a seller to a buyer that crosses one or more Balancing Authority Area boundaries.**	

24	Interconnected Operations Service	A service (exclusive of basic energy and <b>transmission services</b> ) that is required to support the <b>reliable operation</b> of interconnected Bulk Electric Systems.	a service (exclusive of basic energy and <b>Transmission Services</b> ) that is required to support the <b>Reliable Operation</b> of interconnected Bulk Electric Systems.**	GROUP 3
25	Interconnection	<b>Inactive beginning 6/30/16:</b> When capitalized, any one of the three major electric system networks in North America: Eastern, Western, and ERCOT.  <b>Effective beginning 7/1/16:</b> When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.	a geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain <b>Reliable Operation of the Facilities within their control</b> .++	GROUP 2
26	Interconnection Reliability Operating Limit	A System Operating Limit that, if violated, could lead to instability, uncontrolled separation, or Cascading outages that adversely impact the reliability of the Bulk Electric System.	a System Operating Limit that, if violated, could lead to instability, uncontrolled separation, or Cascading outages that adversely impact the reliability of the Bulk Electric System.**	
27	Load	An end-use device or customer that receives power from the electric system.	an end-user device or customer that receives power from the electric system.**	GROUP 4
28	Load-Serving Entity	Secures energy and <b>transmission service</b> (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.	<b>an entity that secures energy and Transmission Service</b> (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.**	GROUP 3
29	Net Energy for Load or NEL	Net <b>Balancing Authority Area generation</b> , plus energy received from <b>other Balancing Authority Areas</b> , less energy delivered to <b>Balancing Authority Areas</b> through interchange. It includes <b>Balancing Authority Area</b> losses but excludes energy required for storage at energy storage facilities.	<b>net generation of an electric system</b> plus energy received from <b>others</b> less energy delivered to <b>others</b> through interchange. It includes <b>system</b> losses but excludes energy required for <b>the storage of</b> energy at energy storage facilities.	GROUP 1
30	Open Access Transmission Tariff	Electronic transmission tariff accepted by the U.S. Federal Energy Regulatory Commission requiring the Transmission Service Provider to furnish to all shippers with non-discriminating service comparable to that provided by Transmission Owners to themselves.	an electronic transmission tariff accepted by the U.S. Federal Energy Regulatory Commission requiring the Transmission Service Provider to furnish to all shippers with non-discriminating service comparable to that provided by Transmission Owners to themselves.**	
31	Planning Authority	The responsible entity that coordinates and integrates transmission <b>facility</b> and service plans, resource plans, and <b>protection systems</b> .	the responsible entity that coordinates and integrates transmission <b>Facilities</b> and service plans, resource plans, and <b>Protection Systems</b> .**	GROUP 3
32	Point of Delivery	A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction leaves or a Load-Serving Entity receives its energy.	a location that a Transmission Service Provider specifies on its transmission system where an Interchange Transaction leaves or a Load-Serving Entity receives its energy.**	
33	Point of Receipt	A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a <b>Generator</b> delivers its output.	a location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a <b>generator</b> delivers its output.	GROUP 3

34	Protection System	<p>Protection System –</p> <ul style="list-style-type: none"> <li>• Protective relays which respond to electrical quantities,</li> <li>• Communications systems necessary for correct operation of protective functions</li> <li>• Voltage and current sensing devices providing inputs to protective relays,</li> <li>• Station dc supply associated with protective functions (including station batteries, battery chargers, and non-battery-based dc supply), and</li> <li>• Control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.</li> </ul>	<p>protective relays which respond to electrical quantities, communications systems necessary for correct operation of protective functions, voltage and current sensing devices providing inputs to protective relays, station dc supply associated with protective functions (including batteries, battery chargers, and non-battery-based dc supply), and control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.**</p>	GROUP 4
35	Purchasing-Selling Entity	<p>The entity that purchases or sells, and takes title to, energy, capacity, and Interconnected Operations Services. Purchasing-Selling Entities may be affiliated or unaffiliated merchants and may or may not own generating facilities.</p>	<p>the entity that purchases, or sells, and takes title to, energy, capacity, and Interconnected Operations Services. Purchasing-Selling Entities may be affiliated or unaffiliated merchants and may or may not own generating facilities.**</p>	
36	Reactive Power	<p>The portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive power must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive power is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar).</p>	<p>the portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive Power must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive Power is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar).**</p>	GROUP 3
37	Real Power	<p>The portion of electricity that supplies energy to the load.</p>	<p>the portion of electricity that supplies energy to the Load.**</p>	GROUP 3
38	Reliability Coordinator	<p>The entity that is the highest level of authority who is responsible for the reliable operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.</p>	<p>the entity that is the highest level of authority who is responsible for the Reliable Operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.**</p>	GROUP 3
39	Reliability Coordinator Area	<p>The collection of generation, transmission, and loads within the boundaries of the Reliability Coordinator. Its boundary coincides with one or more Balancing Authority Areas.</p>	<p>the collection of generation, transmission and loads within the boundaries of the Reliability Coordinator. Its boundary coincides with one or more Balancing Authority Areas.**</p>	

40	Reliability Standard	A requirement, approved by the United States Federal Energy Regulatory Commission under this Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions, to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk-Power System]. The term includes requirements for the operation of existing bulk-power system [Bulk-Power System] facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk-Power System], but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.	a requirement to provide for Reliable Operation of the Bulk Power System, including without limiting the foregoing, requirements for the operation of existing Bulk Power System Facilities, including cyber security protection, and including the design of planned additions or modifications to such Facilities to the extent necessary for Reliable Operation of the Bulk Power System, but the term does not include any requirement to enlarge Bulk Power System Facilities or to construct new transmission capacity or generation capacity. A Reliability Standard shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the Applicable Governmental Authority.	GROUP 1
41	Reliable Operation	Operating the elements of the bulk-power system [Bulk-Power System] within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.	operating the Elements of the Bulk Power System within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or Cascading failures of such system will not occur as a result of a sudden disturbance, including a Cyber Security Incident, or unanticipated failure of system Elements.**	GROUP 3
42	Reserve Sharing Group	A group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker (e.g., between zero and ten minutes) then, for the purposes of Disturbance Control Performance, the Areas become a Reserve Sharing Group.	a group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g. ten minutes). If the transaction is ramped in quicker, (e.g., between zero and ten minutes), then, for the purposes of disturbance control performance, the areas become a Reserve Sharing Group.**	GROUP 3
43	Resource Planner	The entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority Area.	the entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority area.**	GROUP 3
44	Sink Balancing Authority	The Balancing Authority in which the load (sink) is located for an Interchange Transaction and any resulting Interchange Schedule.	the Balancing Authority in which the Load (sink) is located for an Interchange Transaction.**	GROUP 1
45	Source Balancing Authority	The Balancing Authority in which the generation (source) is located for an Interchange Transaction and for any resulting Interchange Schedule.	the Balancing Authority in which the generation (source) is located for an Interchange Transaction.**	GROUP 1
46	Special Protection System	An automatic protection system designed to detect abnormal or predetermined system conditions, and	an automatic protection system designed to detect abnormal or predetermined system conditions, and	GROUP 2

		take corrective actions other than and/or in addition to the isolation of faulted components to maintain system reliability. Such action may include changes in demand, generation (MW and Mvar), or system configuration to maintain system stability, acceptable voltage, or power flows. <b>An SPS</b> does not include (a) underfrequency or undervoltage load shedding or (b) fault conditions that must be isolated or (c) out-of-step relaying (not designed as an integral part of an SPS). <b>Also called Remedial Action Scheme.</b>	take corrective actions other than and/or in addition to the isolation of faulted components to maintain system reliability. Such action may include changes in demand, generation (MW and Mvar), or system configuration to maintain system stability, acceptable voltage, or power flows. <b>A Special Protection System</b> does not include (a) underfrequency or undervoltage Load shedding or (b) fault conditions that must be isolated, or (c) out-of-step relaying (not designed as an integral part of a Special Protection System).**	
47	System	A combination of generation, transmission, and distribution components.	a combination of generation, transmission and distribution components.**	
48	System Operating Limit	The value (such as MW, MVar, <b>Amperes, Frequency or Volts</b> ) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. <b>System Operating Limits are based upon certain operating criteria. These include, but are not limited to:</b> <ul style="list-style-type: none"> <li>• <b>Facility Ratings (Applicable pre- and post-Contingency equipment or facility ratings)</b></li> <li>• <b>Transient Stability Ratings (Applicable pre- and post-Contingency Stability Limits)</b></li> <li>• <b>Voltage Stability Ratings (Applicable pre- and post-Contingency Voltage Stability)</b></li> <li>• <b>System Voltage Limits (Applicable pre- and post-Contingency Voltage Limits)</b></li> </ul>	the value (such as MW, Mvar, <b>amperes, frequency or volts</b> ) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria.**	<b>GROUP 1</b>
49	Transmission Customer	1. Any eligible customer (or its designated agent) that can or does execute a transmission service agreement or can or does receive <b>transmission service</b> . 2. Any of the following responsible entities: Generator Owner, Load-Serving Entity, or Purchasing-Selling Entity.	1. any eligible customer (or its designated agent) that can or does execute a Transmission Service agreement or can and does receive <b>Transmission Service</b> . 2. Any of the following <b>responsible</b> entities: Generator Owner, Load-Serving Entity, or Purchasing-Selling Entity.**	<b>GROUP 3</b>
50	Transmission Operator	The entity responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission <b>facilities</b> .	the entity responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission <b>Facilities</b> .**	<b>GROUP 3</b>
51	Transmission Owner	The entity that owns and maintains transmission <b>facilities</b> .	the entity that owns and maintains transmission <b>Facilities</b> .**	<b>GROUP 3</b>
52	Transmission Planner	The entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority <b>Area</b> .	the entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority <b>area</b> .**	<b>GROUP 3</b>
53	Transmission Service	Services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.	services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.**	

54	Transmission Service Provider	The entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable <b>transmission service</b> agreements.	the entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable <b>Transmission Service</b> agreements.**	<b>GROUP 3</b>
55	Wide Area	The entire Reliability Coordinator Area as well as the critical flow and status information from adjacent Reliability Coordinator Areas as determined by detailed system studies to allow the calculation of Interconnected Reliability Operating Limits.	the entire Reliability Coordinator Area as well as the critical flow and status information from adjacent Reliability Coordinator Areas as determined by detailed system studies to allow the calculation of Interconnected Reliability Operating Limits.**	

## ATTACHMENT 2

# COMPLETE LIST OF CROSS-OVER TERMS WITH PROPOSED REVISIONS

### GROUP 1: Content/substance differences

Term 1: Adjacent Balancing Authority  
Term 6: Bulk Power System  
Term 17: Generator Operator  
Term 18: Generator Owner  
Term 29: Net Energy for Load or NEL  
Term 40: Reliability Standard  
Term 44: Sink Balancing Authority  
Term 45: Source Balancing Authority  
Term 48: System Operating Limit

### GROUP 2: Definitions currently in flux

Term 8: Critical Assets  
Term 9: Critical Cyber Assets  
Term 10: Cyber Assets  
Term 11: Cyber Security Incident  
Term 25: Interconnection  
Term 46: Special Protection System

### GROUP 3: Capitalization differences

Term 2: Balancing Authority  
Term 3: Balancing Authority Area  
Term 4: Blackstart Resource  
Term 7: Cascading  
Term 13: Distribution Provider  
Term 14: Element  
Term 16: Flowgate  
Term 24: Interconnected Operations Service  
Term 28: Load Serving Entity  
Term 31: Planning Authority  
Term 33: Point of Receipt  
Term 36: Reactive Power  
Term 37: Real Power  
Term 38: Reliability Coordinator  
Term 41: Reliable Operation  
Term 42: Reserve Sharing Group  
Term 43: Resource Planner  
Term 49: Transmission Customer  
Term 50: Transmission Operator  
Term 51: Transmission Owner  
Term 52: Transmission Planner  
Term 54: Transmission Service Provider

### GROUP 4: Miscellaneous/Errata

Term 20: Interchange Authority  
Term 27: Load  
Term 34: Protection System

#	Cross-Over Term	Glossary (differences indicated in red)	ROP, Appendix 2 (differences indicated in red)	SDT Proposed Revisions
1	Adjacent Balancing Authority	A Balancing Authority whose Balancing Authority Area is interconnected with another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.	a Balancing Authority Area that is interconnected to another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.**	<p>The SDT is proposing to revise the ROP definition to align with the Glossary.</p> <p><b>Redline of ROP definition:</b> a Balancing Authority <del>Area whose Balancing Authority Area that is</del> interconnected with <del>to</del> another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.**</p>
2	Balancing Authority	The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.	the responsible entity that integrates resource plans ahead of time, maintains Load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.**	<p>The SDT is recommending changes to the ROP definition to align with the Glossary. Specifically, the ROP definition uses the defined term for "Load" whereas the Glossary does not. Due to the manner in which the term "Load" is used in the definition, it is not proper to use the defined term. This is because the current ROP definition of Load is, "an end-user device or customer that receives power from the electric system." In the definition narrative of Balancing Authority, use of the word load is not intended to mean an end-user device or customer. Instead, as used in the definition narrative, the term load is actually referring to the ability to maintain demand, or sufficient levels of generation to meet demand. Essentially, it is addressing a measure of energy available to meet the current demand.</p> <p>Additionally, during the course of its work on this project, the SDT reviewed and assessed the quality and correctness of the definition of "Balancing Authority." The SDT believes the current definition is unclear and could be improved by a few minor changes. Specifically, use or application of the term "load-interchange-generation" contained in the definition narrative is unclear. As a result, will draft a SAR proposing to revise the definition of Balancing Authority in order to address this issue.</p> <p><b>Redline of ROP definition:</b> the responsible entity that integrates resource plans ahead of time, maintains <del>Load</del>load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.**</p>

3	Balancing Authority Area	The collection of generation, transmission, and <b>loads</b> within the metered boundaries of the Balancing Authority. The Balancing Authority maintains <b>load</b> -resource balance within this area.	the collection of generation, transmission, and <b>Loads</b> within the metered boundaries of the Balancing Authority. The Balancing Authority maintains <b>Load</b> -resource balance within this area.**	<p>The SDT is recommending changes to the ROP definition to align with the Glossary. Specifically, the ROP definition uses the defined term for "Load" whereas the Glossary does not. Due to the manner in which the term "Load" is used in the definition, it is not proper to use the defined term. This is because the current ROP definition of Load is, "an end-user device or customer that receives power from the electric system." In the definition narrative of Balancing Authority Area, use of the word load is not intended to mean an end-user device or customer. Instead, as used in the definition narrative, the term load is actually referring to the ability to maintain demand, or sufficient levels of generation to meet demand. Essentially, it is addressing a measure of energy available to meet the current demand.</p> <p><b>Redline of ROP definition:</b> the collection of generation, transmission, and <del>Loads-loads</del> within the metered boundaries of the Balancing Authority. The Balancing Authority maintains <del>Loadload</del>-resource balance within this area.**</p>
4	Blackstart Resource	A generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator's restoration plan needs for <b>real</b> and <b>reactive power</b> capability, frequency and voltage control, and that has been included in the Transmission Operator's restoration plan.	a generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator's restoration plan needs for <b>Real</b> and <b>Reactive Power</b> capability, frequency and voltage control, and that has been included in the Transmission Operator's restoration plan.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the terms "Real Power" and "Reactive Power" because they are defined terms in the Glossary and their usage in this definition narrative is intended to have the meaning of the defined terms.</p> <p><b>Redline of Glossary term:</b> A generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator's restoration plan needs for <del>real-Real</del> and <del>reactive-Reactive power-Power</del> capability, frequency and voltage control, and that has been included in the Transmission Operator's restoration plan.</p>
5	Bulk Electric System or BES	Unless modified by the lists shown below, all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This	unless modified by the lists shown below, all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This	Definitions are aligned.

		does not include facilities used in the local distribution of electric energy...	does not include facilities used in the local distribution of electric energy...**	
6	Bulk Power System	<p>Bulk-Power System:</p> <p>A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and</p> <p>B) electric energy from generation facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy.</p>	<p>"Bulk Power System" means, depending on the context:</p> <p>(i) Facilities and control systems necessary for operating an interconnected electric energy supply and transmission network (or any portion thereof), and electric energy from generating facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy [++]. (ii) Solely for purposes of Appendix 4E, Bulk Electric System.</p>	<p>The SDT is proposing to revise both definitions as follows:</p> <p><b>Redline of Glossary definition:</b>            Bulk-Power System:            (A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and            (B) electric energy from generation facilities needed to maintain transmission system reliability.            The term does not include facilities used in the local distribution of electric energy. (In order to remain consistent with the Federal Power Act [16 U.S.C. 824(o) and 18 C.F.R. 39.1], defined terms contained in this narrative are not capitalized.) Note that the terms "Bulk-Power System" or "Bulk Power System" shall have the same meaning.</p> <p><b>Redline of ROP, Appendix 2 definition:</b>            Bulk Power System" means, depending on the context:            (i) (A) Facilities-facilities and control systems necessary for operating an interconnected electric energy supply and transmission network (or any portion thereof); and            (B) electric energy from generati<u>o</u>ng facilities needed to maintain transmission system reliability.            The term does not include facilities used in the local distribution of electric energy [++]. (In order to remain consistent with the Federal Power Act [16 U.S.C. 824(o) and 18 C.F.R. 39.1], defined terms contained in this narrative are not capitalized.) -Note that the terms "Bulk-Power System" or "Bulk Power System" shall have the same meaning.            (ii) Solely for purposes of Appendix 4E, Bulk Electric System.</p>
7	Cascading	The uncontrolled successive loss of system elements triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be	the uncontrolled successive loss of System Elements triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be	The SDT is recommending changes to the Glossary definition to align with the ROP. -Specifically, the SDT is proposing to capitalize the terms "System" and "Elements" because they are defined terms in the

		restrained from sequentially spreading beyond an area predetermined by studies.	restrained from sequentially spreading beyond an area predetermined by studies.**	Glossary and their usage in this definition narrative is intended to have the meaning of the defined terms.  <b>Redline of Glossary term:</b> The uncontrolled successive loss of <del>system-System elements-Elements</del> triggered by an incident at any location. Cascading results in widespread electric service interruption that cannot be restrained from sequentially spreading beyond an area predetermined by studies.
8	Critical Assets	<b>Inactive beginning 3/31/2016:</b> Facilities, systems, and equipment which, if destroyed, degraded, or otherwise rendered unavailable, would affect the reliability or operability of the Bulk Electric System.	Facilities, systems, and equipment which, if destroyed, degraded, or otherwise rendered unavailable, would affect the reliability or operability of the Bulk Electric System.**	The SDT is not proposing revisions to the cross-over terms at this time. This is because the changes that would be necessary to align the terms would necessitate a large number of other changes that are outside the scope of the SAR for this project. The SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.
9	Critical Cyber Assets	<b>Inactive beginning 3/31/2016:</b> Cyber Assets <b>essential</b> to the reliable operation of Critical Assets.	Cyber Assets <b>critical</b> to the reliable operation of Critical Assets.**	The SDT is not proposing revisions to the cross-over terms at this time. This is because the changes that would be necessary to align the terms would necessitate a large number of other changes that are outside the scope of the SAR for this project. The SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.

10	Cyber Assets	<p><b>Inactive beginning 3/31/16:</b> Programmable electronic devices and communication networks including hardware, software, and data.</p> <p><b>Effective beginning 4/1/2016:</b> Programmable electronic devices, including the hardware, software, and data in those devices.</p>	<p>programmable electronic devices and communication networks including hardware, software, and data.**</p> <p>programmable electronic devices and communication networks including hardware, software, and data.**</p>	<p>The SDT is not proposing revisions to the cross-over terms at this time. This is because the changes that would be necessary to align the terms would necessitate a large number of other changes that are outside the scope of the SAR for this project. The SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.</p>
11	Cyber Security Incident	<p><b>Inactive beginning 3/31/2016:</b> Any malicious act or suspicious event that:</p> <ul style="list-style-type: none"> <li>• Compromises, or was an attempt to compromise, the Electronic Security Perimeter or Physical Security Perimeter of a Critical Cyber Asset, or,</li> <li>• Disrupts, or was an attempt to disrupt, the operation of a Critical Cyber Asset.</li> </ul> <p><b>Effective beginning 4/1/2016:</b> A malicious act or suspicious event that:</p> <ul style="list-style-type: none"> <li>• Compromises, or was an attempt to compromise, the Electronic Security Perimeter or Physical Security Perimeter or,</li> <li>• Disrupts, or was an attempt to disrupt, the operation of a BES Cyber System.</li> </ul>	<p>"Cyber Security Incident" means any malicious or suspicious event that disrupts, or was an attempt to disrupt, the operation of those programmable electronic devices and communications networks including hardware, software and data that are essential to the Reliable Operation of the Bulk Power System.++</p>	<p>The SDT is not proposing revisions to the cross-over terms at this time. This is because the changes that would be necessary to align the terms would necessitate a large number of other changes that are outside the scope of the SAR for this project. The SDT will submit a SAR to address the alignment of terms for all CIP-related definitions. The proposed SAR will include alignment of the defined terms to incorporate the changes to the ROP definitions made through the Version 5 revisions, and also any revisions necessary to provisions of the ROP as a result of proposed changes to the ROP defined terms contained in Appendix 2. The SAR will propose that members of the Project 2008-06 SDT are involved with the revisions to the ROP.</p>
12	Distribution Factor	<p>The portion of an Interchange Transaction, typically expressed in per unit that flows across a transmission facility (Flowgate).</p>	<p>the portion of an Interchange Transaction, typically expressed in per unit that flows across a transmission facility (Flowgate).**</p>	<p>Definitions are aligned.</p>

13	Distribution Provider	Provides and operates the “wires” between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the <b>Distribution</b> function at any voltage.	<b>the entity that</b> provides and operates the “wires” between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the <b>distribution</b> function at any voltage.**	The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to remove the capitalization from the term “Distribution” because it is not a defined term in Glossary (or the ROP).  <b><u>Redline of Glossary term:</u></b> Provides and operates the “wires” between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the <u>Distribution-distribution</u> function at any voltage.
14	Element	Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An <b>element</b> may be comprised of one or more components.	any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An <b>Element</b> may be comprised of one or more components.**	The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term “Element” because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.  <b><u>Redline of Glossary term:</u></b> Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An <u>element-Element</u> may be comprised of one or more components.
15	Facility	A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)	a set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)**	Definitions are aligned.
16	Flowgate	1.) A portion of the <b>Transmission</b> system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions. 2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities,	1.) A portion of the <b>transmission</b> system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions. 2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities,	The SDT is recommending the following changes: (1) Revise the ROP definition to capitalize the word “Transmission.” (2) Add the definition of “Transmission” to the ROP. The term is used (and capitalized) in other ROP definition narratives (see, for example, definition of Bulk Electric System). It is appropriate to capitalize it in this particular narrative because

		used to analyze the impact of power flows upon the Bulk Electric System.	used to analyze the impact of power flows upon the Bulk Electric System.**	<p>its usage in this definition narrative is intended to have the meaning of the defined term. Additionally, as part of the work for this project, the SDT will develop a set of recommendations regarding improvements to the current ROP and Glossary resources. One of the recommendations will be to conduct a comprehensive review of both the ROP and Glossary to identify all instances where a defined term is used, but it is not capitalized (to indicate applicability or use of the definition). The SDT will recommend that for each occurrence of the term, an assessment is conducted to determine whether the term is intended to have the defined meaning; and in the event it is, then the appropriate revisions should be made.</p> <p><b>Redline of ROP term:</b>          1.) A portion of the <del>transmission</del> Transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions.          2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System.**</p> <p><b>Add new defined term (“Transmission”) to the ROP:</b>  <i>“Transmission” means an interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.**</i></p>
17	Generator Operator	The entity that operates generating <del>unit(s)</del> and performs the functions of supplying energy and Interconnected Operations Services.	the entity that operates generating <del>Facility(ies)</del> and performs the functions of supplying energy and Interconnected Operations Services.**	<p>The SDT is proposing to revise the Glossary definition to align with the ROP.</p> <p><b>Redline of Glossary definition:</b>          The entity that operates generating <del>Facility(ies)</del> <del>unit(s)</del> and performs the functions of supplying energy and Interconnected Operations Services.</p>

				<p>Additionally, the SDT notes that during the course of its work on this project, the team reviewed and assessed the quality of the definition of "Facility." The SDT believes the clarity and content of the current definition could be improved. As a result, the SDT will draft a SAR proposing to revise the definition in order to address the issues identified by the SDT.</p>
18	Generator Owner	Entity that owns and maintains generating units.	an entity that owns and maintains generating Facility(ies).**	<p>The SDT is proposing to revise the Glossary definition to align with the ROP.</p> <p><b>Redline of Glossary definition:</b> Entity that owns and maintains generating <a href="#">Facility(ies)units</a>.</p> <p>Additionally, the SDT notes that during the course of its work on this project, the team reviewed and assessed the quality of the definition of "Facility." The SDT believes the clarity and content of the current definition could be improved. As a result, the SDT will draft a SAR proposing to revise the definition in order to address the issues identified by the SDT.</p>
19	Interchange	Energy transfers that cross Balancing Authority boundaries.	energy transfers that cross Balancing Authority boundaries.**	Definitions are aligned.
20	Interchange Authority	The responsible entity that authorizes implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information for reliability assessment purposes.	the responsible entity that authorizes the implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communications of Interchange information for reliability assessment purposes.**	<p>The SDT is recommending errata changes to both the Glossary and ROP definitions, as follows:</p> <ol style="list-style-type: none"> <li>(1) For the Glossary, add the word "the" to align with the ROP definition.</li> <li>(2) For the ROP, remove the "s" from "communications" to align with the Glossary definition.</li> </ol> <p><b>Redline of Glossary term:</b> The responsible entity that authorizes <a href="#">the</a> implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information for reliability assessment purposes.</p>

				<p><b>Redline of ROP term:</b> The responsible entity that authorizes the implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communications of Interchange information for reliability assessment purposes.**</p>
21	Interchange Distribution Calculator	The mechanism used by Reliability Coordinators in the Eastern Interconnection to calculate the distribution of Interchange Transactions over specific Flowgates. It includes a database of all Interchange Transactions and a matrix of the Distribution Factors for the Eastern Interconnection.	the mechanism used by Reliability Coordinators in the Eastern Interconnection to calculate the distribution of Interchange Transactions over specific Flowgates. It includes a database of all Interchange Transactions and a matrix of the Distribution Factors for the Eastern Interconnection.**	Definitions are aligned.
22	Interchange Schedule	An agreed-upon Interchange Transaction size (megawatts), start and end time, beginning and ending ramp times and rate, and type required for delivery and receipt of power and energy between the Source and Sink Balancing Authorities involved in the transaction.	an agreed-upon Interchange Transaction size (megawatts), start and end time, beginning and ending ramp times and rate, and type required for delivery and receipt of power and energy between the Source and Sink Balancing Authorities involved in the transaction.**	Definitions are aligned.
23	Interchange Transaction	An agreement to transfer energy from a seller to a buyer that crosses one or more Balancing Authority Area boundaries.	an agreement to transfer energy from a seller to a buyer that crosses one or more Balancing Authority Area boundaries.**	Definitions are aligned.
24	Interconnected Operations Service	A service (exclusive of basic energy and <b>transmission services</b> ) that is required to support the <b>reliable operation</b> of interconnected Bulk Electric Systems.	a service (exclusive of basic energy and <b>Transmission Services</b> ) that is required to support the <b>Reliable Operation</b> of interconnected Bulk Electric Systems.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the terms "Transmission Services" and "Reliable Operation" because they are defined terms in the Glossary and their usage in this definition narrative is intended to have the meaning of the defined terms.</p> <p><b>Redline of Glossary term:</b> A service (exclusive of basic energy and <del>transmission</del> <b>Transmission Services</b>) that is required to support the <del>reliable-Reliable operation</del> <b>Operation</b> of interconnected Bulk Electric Systems.</p>

25	Interconnection	<p><b>Inactive beginning 6/30/16:</b> When capitalized, any one of the three major electric system networks in North America: Eastern, Western, and ERCOT.</p> <p><b>Effective beginning 7/1/16:</b> When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.</p>	<p>a geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain Reliable Operation of the Facilities within their control.++</p>	<p>The SDT is proposing to revise both the Glossary and ROP definitions (effective no earlier than 07/01/16), as follows:</p> <p><b>Redline of Glossary definition:</b> <a href="#">A geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain Reliable Operation of the Facilities within their control.</a> When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.</p> <p><b>Redline of ROP definition:</b> a geographic area in which the operation of Bulk Power System components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain Reliable Operation of the Facilities within their control.++ <a href="#">When capitalized, any one of the four major electric system networks in North America: Eastern, Western, ERCOT and Quebec.**</a></p>
26	Interconnection Reliability Operating Limit	A System Operating Limit that, if violated, could lead to instability, uncontrolled separation, or Cascading outages that adversely impact the reliability of the Bulk Electric System.	a System Operating Limit that, if violated, could lead to instability, uncontrolled separation, or Cascading outages that adversely impact the reliability of the Bulk Electric System.**	Definitions are aligned.
27	Load	An end-use device or customer that receives power from the electric system.	an end-user device or customer that receives power from the electric system.**	The SDT is recommending an errata change to the ROP definition to align with the Glossary. Specifically, the SDT is proposing to remove the letter "r" from the word "user" in the ROP definition because it was inadvertently included when the definition was added to Appendix 2 of the ROP. On January 26, 2012, NERC filed a petition for approval of various revisions to the ROP, including the addition of new terms to Appendix 2. (See, <a href="#">NERC petition</a> ). The definition of "Load" was adopted from the Glossary, and marked with a double asterisk (**) to indicate as such. However, the definition included in the NERC petition added the letter "r" to the word "use" which did not (and does not currently) exist in the Glossary definition. For these reasons, the SDT is recommending

				<p>removal of the “r” from the word “user” in the ROP definition in order to align the Glossary and ROP narratives.</p> <p><b>Redline of ROP term:</b> an end-use<del>r</del> device or customer that receives power from the electric system.**</p> <p>Additionally, the SDT notes that during the course of its work on this project, the team reviewed and assessed the quality and correctness of the definition of “Load.” The SDT believes the current definition is deficient and could be improved in quality and content. As a result, will draft a SAR proposing to revise the definition in order to address the issues identified by the SDT.</p>
28	Load-Serving Entity	Secures energy and <b>transmission service</b> (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.	<b>an entity that secures energy and Transmission Service</b> (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term “Transmission Service” because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> Secures energy and <del>transmission-Transmission service</del> <b>Service</b> (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.</p>
29	Net Energy for Load or NEL	Net <b>Balancing Authority Area</b> generation, plus energy received from <b>other Balancing Authority Areas</b> , less energy delivered to <b>Balancing Authority Areas</b> through interchange. It includes <b>Balancing Authority Area</b> losses but excludes energy required for storage at energy storage facilities.	<b>net generation of an electric system</b> plus energy received from <b>others</b> less energy delivered to <b>others</b> through interchange. It includes <b>system</b> losses but excludes energy required for <b>the storage of</b> energy at energy storage facilities.	No changes to either ROP or Glossary. The SDT recommends the terms remain unaligned. The differences in the definition narratives are appropriate given the differing uses of the term within the Glossary and ROP.

30	Open Access Transmission Tariff	Electronic transmission tariff accepted by the U.S. Federal Energy Regulatory Commission requiring the Transmission Service Provider to furnish to all shippers with non-discriminating service comparable to that provided by Transmission Owners to themselves.	an electronic transmission tariff accepted by the U.S. Federal Energy Regulatory Commission requiring the Transmission Service Provider to furnish to all shippers with non-discriminating service comparable to that provided by Transmission Owners to themselves.**	Definitions are aligned.
31	Planning Authority	The responsible entity that coordinates and integrates transmission <b>facility</b> and service plans, resource plans, and <b>protection systems</b> .	the responsible entity that coordinates and integrates transmission <b>Facilities</b> and service plans, resource plans, and <b>Protection Systems</b> .**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the terms "Facilities" and "Protection Systems" because they are defined terms in the Glossary and their usage in this definition narrative is intended to have the meaning of the defined terms.</p> <p><b>Redline of Glossary term:</b> The responsible entity that coordinates and integrates transmission <del>facility</del> <b>Facilities</b> and service plans, resource plans, and <del>protection</del> <b>Protection systems</b> <del>Systems</del>.</p>
32	Point of Delivery	A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction leaves or a Load-Serving Entity receives its energy.	a location that a Transmission Service Provider specifies on its transmission system where an Interchange Transaction leaves or a Load-Serving Entity receives its energy.**	Definitions are aligned.
33	Point of Receipt	A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a <b>Generator</b> delivers its output.	a location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a <b>generator</b> delivers its output.	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to remove the capitalization from the term "Generator" because it is not a defined term in Glossary or the ROP. Also, because the proposed revisions to the Glossary term will result in alignment of the two definition narratives, the SDT is recommending that a double asterisk (**) is added to the ROP definition.</p> <p><b>Redline of Glossary term:</b> A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a <del>Generator</del> <b>generator</b> delivers its output.</p>

				<p><b>Redline of ROP term:</b> a location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a generator delivers its output.**</p>
34	Protection System	<p>Protection System –</p> <ul style="list-style-type: none"> <li>• Protective relays which respond to electrical quantities,</li> <li>• Communications systems necessary for correct operation of protective functions</li> <li>• Voltage and current sensing devices providing inputs to protective relays,</li> <li>• Station dc supply associated with protective functions (including <b>station</b> batteries, battery chargers, and non-battery-based dc supply), and</li> <li>• Control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.</li> </ul>	<p>protective relays which respond to electrical quantities, communications systems necessary for correct operation of protective functions, voltage and current sensing devices providing inputs to protective relays, station dc supply associated with protective functions (including batteries, battery chargers, and non-battery-based dc supply), and control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.**</p>	<p>The SDT is recommending an errata change to the ROP definition to align with the Glossary. Specifically, the SDT is proposing to add the word “station” to qualify the Protection System component batteries because it was inadvertently left out of the ROP definition narrative. In 2013, FERC approved the currently effective Glossary definition, which included the qualifier of “station” to the battery term in the definition narrative. However, when the term was adopted in Appendix 2 of the ROP, the qualifier “station” was not included in the definition narrative.</p> <p><b>Redline of ROP definition:</b> protective relays which respond to electrical quantities, communications systems necessary for correct operation of protective functions, voltage and current sensing devices providing inputs to protective relays, station dc supply associated with protective functions (including <b>station</b> batteries, battery chargers, and non-battery-based dc supply), and control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.**</p>
35	Purchasing-Selling Entity	<p>The entity that purchases or sells, and takes title to, energy, capacity, and Interconnected Operations Services. Purchasing-Selling Entities may be affiliated or unaffiliated merchants and may or may not own generating facilities.</p>	<p>the entity that purchases, or sells, and takes title to, energy, capacity, and Interconnected Operations Services. Purchasing-Selling Entities may be affiliated or unaffiliated merchants and may or may not own generating facilities.**</p>	<p>Definitions are aligned.</p>
36	Reactive Power	<p>The portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive <b>power</b> must be supplied to most types of magnetic equipment, such as motors and transformers. It</p>	<p>the portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive <b>Power</b> must be supplied to most types of magnetic equipment, such as motors and transformers. It</p>	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term “Power” because “Reactive Power” is a defined term and its usage in this definition narrative is intended to have the meaning of the defined term.</p>

		also must supply the reactive losses on transmission facilities. Reactive <b>power</b> is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar).	also must supply the reactive losses on transmission facilities. Reactive <b>Power</b> is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar).**	<p><b>Redline of Glossary term:</b> The portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive <del>power</del><b>Power</b> must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive <del>power</del><b>Power</b> is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar).</p>
37	Real Power	The portion of electricity that supplies energy to the <b>load</b> .	the portion of electricity that supplies energy to the <b>Load</b> **	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "load" in the Glossary because it is a defined term and its usage in this definition narrative is intended to have the meaning of the defined term. In the definition narrative of Real Power, use of the word load is intended to mean an end-use device or customer.</p> <p><b>Redline of Glossary definition:</b> The portion of electricity that supplies energy to the <del>load</del><b>Load</b>.</p>
38	Reliability Coordinator	The entity that is the highest level of authority who is responsible for the <b>reliable operation</b> of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.	the entity that is the highest level of authority who is responsible for the <b>Reliable Operation</b> of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Reliable Operation" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> The entity that is the highest level of authority who is responsible for the <del>reliable</del><b>Reliable</b> <del>operation</del><b>Operation</b> of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of</p>

				transmission systems beyond any Transmission Operator's vision.
39	Reliability Coordinator Area	The collection of generation, transmission, and loads within the boundaries of the Reliability Coordinator. Its boundary coincides with one or more Balancing Authority Areas.	the collection of generation, transmission and loads within the boundaries of the Reliability Coordinator. Its boundary coincides with one or more Balancing Authority Areas.**	Definitions are aligned.
40	Reliability Standard	A requirement, <b>approved by the United States Federal Energy Regulatory Commission under this Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions,</b> to provide for <b>reliable operation</b> [Reliable Operation] of the <b>bulk-power system</b> [Bulk-Power System]. <b>The term includes</b> requirements for the operation of existing <b>bulk-power system</b> [Bulk-Power System] <b>facilities,</b> including <b>cybersecurity</b> protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for <b>reliable operation</b> [Reliable Operation] of the <b>bulk-power system</b> [Bulk-Power System], but the term does not include any requirement to enlarge <b>such facilities</b> or to construct new transmission capacity or generation capacity.	a requirement to provide for Reliable Operation of the Bulk Power System, including <b>without limiting the foregoing,</b> requirements for the operation of existing Bulk Power System <b>Facilities,</b> including <b>cyber security</b> protection, and <b>including</b> the design of planned additions or modifications to such <b>Facilities</b> to the extent necessary for Reliable Operation of the Bulk Power System, but the term does not include any requirement to enlarge <b>Bulk Power System Facilities</b> or to construct new transmission capacity or generation capacity. <b>A Reliability Standard shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the Applicable Governmental Authority.</b>	<p>The SDT is proposing revisions to both the Glossary and ROP definitions, as follows:</p> <p><b>Redline of Glossary definition:</b>  A requirement, approved by the United States Federal Energy Regulatory Commission under <del>this</del> Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions, to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk-Power System]. The term includes requirements for the operation of existing bulk-power system [Bulk-Power System] facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation [Reliable Operation] of the bulk-power system [Bulk-Power System], but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity. <u>(In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.)</u></p> <p><b>Redline of ROP definition:</b>  a requirement, <u>approved by the United States Federal Energy Regulatory Commission under Section 215 of the Federal Power Act, or approved or recognized by an applicable governmental authority in other jurisdictions,</u> to provide for <u>reliable operation</u> [Reliable Operation] of the <u>bulk-power system</u> [Bulk Power System], <del>including without limiting the foregoing,</del> <u>The term includes</u> requirements for the operation of existing <u>bulk-power system</u> [Bulk Power System] <del>Facilities</del><u>facilities,</u> including cyber security protection, and <del>including</del> the design of planned additions or</p>

				<p>modifications to such <del>Facilities</del> <u>facilities</u> to the extent necessary for <u>reliable operation</u> [Reliable Operation] of the <u>bulk-power system</u> [Bulk Power System], but the term does not include any requirement to enlarge <del>Bulk Power System</del> <u>such Facilities</u> <u>facilities</u> or to construct new transmission capacity or generation capacity.++  <u>(In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.)</u> In certain contexts, this term may also refer to a "Reliability Standard" that is in the process of being developed, or not yet approved or recognized by FERC or an applicable governmental authority in other jurisdictions. A Reliability Standard shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the Applicable Governmental Authority.</p>
41	Reliable Operation	<p>Operating the <del>elements</del> of the <del>bulk-power system</del> <u>[Bulk-Power System]</u> within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or <del>cascading</del> failures of such system will not occur as a result of a sudden disturbance, including a <del>cybersecurity incident</del>, or unanticipated failure of system <del>elements</del>.</p>	<p>operating the <del>Elements</del> of the <del>Bulk Power System</del> within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or <del>Cascading</del> failures of such system will not occur as a result of a sudden disturbance, including a <del>Cyber Security Incident</del>, or unanticipated failure of system <del>Elements</del>.++</p>	<p>The SDT is recommending changes to capitalization in the ROP definition to align with the Glossary and the Federal Power Act. Specifically, the SDT is proposing to remove capitalization of the terms "Elements," "Bulk Power System" "Cascading," and "Cyber Security incident," in order for the definition to remain consistent with the language in the Federal Power Act. Additionally, for both definitions, the SDT is recommending the addition of an explanatory sentence to clarify why defined terms contained in the definition narrative are not capitalized.</p> <p><b>Redline of Glossary term:</b>          Operating the elements of the bulk-power system [Bulk-<del>Power System</del>] within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements. <u>(In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.)</u></p>

				<p><b>Redline of ROP term:</b> operating the <del>Elements</del>elements of the <del>bulk-power system</del> [Bulk Power System] within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or <del>Cascading</del>cascading failures of such system will not occur as a result of a sudden disturbance, including a <del>Cyber Security Incident</del> cybersecurity incident, or unanticipated failure of system <del>Elements</del>elements.++ (In order to remain consistent with the Federal Power Act, defined terms contained in this narrative are not capitalized.)</p>
42	Reserve Sharing Group	A group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker (e.g., between zero and ten minutes) then, for the purposes of <b>Disturbance Control Performance</b> , the <b>Areas</b> become a Reserve Sharing Group.	a group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g. ten minutes). If the transaction is ramped in quicker, (e.g., between zero and ten minutes), then, for the purposes of <b>disturbance control performance</b> , the <b>areas</b> become a Reserve Sharing Group.**	<p>The SDT is recommending changes to both the Glossary and ROP definitions. Specifically, the SDT is proposing to revise the Glossary definition by removing the capitalization for the terms "Disturbance Control Performance" and "Area" because these are not defined terms. (Note that Disturbance Control Standard and Disturbance are both defined terms). Also, in the ROP definition, the SDT is proposing removal of the unnecessary commas to align with the Glossary definition.</p> <p><b>Redline of Glossary term:</b> A group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker (e.g., between zero and ten minutes) then, for the purposes of <del>Disturbance</del>disturbance <del>Control</del>control <del>Performance</del>performance, the <del>Areas</del>areas become a Reserve Sharing Group.</p> <p><b>Redline of ROP term:</b> a group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply</p>

				operating reserves required for each Balancing Authority's use in recovering from contingencies within the group. Scheduling energy from an Adjacent Balancing Authority to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker, (e.g., between zero and ten minutes), then, for the purposes of disturbance control performance, the areas become a Reserve Sharing Group.**
43	Resource Planner	The entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority <b>Area</b> .	the entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority <b>area</b> .**	The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to remove the capitalization from the term "Area" because it is not a defined term in Glossary or the ROP.  <b>Redline of Glossary term:</b> The entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority <a href="#">Areaarea</a> .
44	Sink Balancing Authority	The Balancing Authority in which the <b>load</b> (sink) is located for an Interchange Transaction <b>and any resulting Interchange Schedule</b> .	the Balancing Authority in which the <b>Load</b> (sink) is located for an Interchange Transaction.**	The SDT is proposing to revise the ROP definition to align with the Glossary definition.  <b>Redline of ROP definition:</b> the Balancing Authority in which the <del>Load</del> <b>load</b> (sink) is located for an Interchange Transaction <a href="#">and any resulting Interchange Schedule</a> .**
45	Source Balancing Authority	The Balancing Authority in which the generation (source) is located for an Interchange Transaction <b>and for any resulting Interchange Schedule</b> .	the Balancing Authority in which the generation (source) is located for an Interchange Transaction.**	The SDT is proposing to revise the ROP definition to align with the Glossary definition.  <b>Redline of ROP definition:</b> the Balancing Authority in which the generation (source) is located for an Interchange Transaction <a href="#">and for any resulting Interchange Schedule</a> .**

46	Special Protection System	An automatic protection system designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components to maintain system reliability. Such action may include changes in demand, generation (MW and Mvar), or system configuration to maintain system stability, acceptable voltage, or power flows. <b>An SPS</b> does not include (a) underfrequency or undervoltage load shedding or (b) fault conditions that must be isolated or (c) out-of-step relaying (not designed as an integral part of an SPS). <b>Also called Remedial Action Scheme.</b>	an automatic protection system designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components to maintain system reliability. Such action may include changes in demand, generation (MW and Mvar), or system configuration to maintain system stability, acceptable voltage, or power flows. <b>A Special Protection System</b> does not include (a) underfrequency or undervoltage Load shedding or (b) fault conditions that must be isolated, or (c) out-of-step relaying (not designed as an integral part of a Special Protection System).**	The SDT is not proposing any alignment revisions at this time. This is because the <a href="#">Project 2010-5.3</a> drafting team work is still underway and the team may propose changes to this definition. Once the Project 2010-5.3 team finalizes its work, then it will be appropriate to make any necessary alignment changes to the definition of Special Protection System.
47	System	A combination of generation, transmission, and distribution components.	a combination of generation, transmission and distribution components.**	Definitions are aligned.
48	System Operating Limit	The value (such as MW, MVar, <b>Amperes, Frequency or Volts</b> ) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. <b>System Operating Limits are based upon certain operating criteria. These include, but are not limited to:</b> <ul style="list-style-type: none"> <li>• <b>Facility Ratings (Applicable pre- and post-Contingency equipment or facility ratings)</b></li> <li>• <b>Transient Stability Ratings (Applicable pre- and post-Contingency Stability Limits)</b></li> <li>• <b>Voltage Stability Ratings (Applicable pre- and post-Contingency Voltage Stability)</b></li> <li>• <b>System Voltage Limits (Applicable pre- and post-Contingency Voltage Limits)</b></li> </ul>	the value (such as MW, Mvar, <b>amperes, frequency or volts</b> ) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria.**	The SDT is proposing to revise both the Glossary and ROP, as follows:  <b>Redline of Glossary definition:</b> The value (such as MW, MVar, <b>A</b> amperes, <b>F</b> requency- <b>f</b> requency or <b>V</b> olts <b>v</b> olts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. System Operating Limits are based upon certain operating criteria. These include, but are not limited to: <ul style="list-style-type: none"> <li>• Facility Ratings (<del>Applicable-applicable</del> pre- and post-Contingency <del>equipment-Equipment Ratings</del> or <del>facility-Facility ratings</del><del>Ratings</del>)</li> <li>• <del>Transient-transient</del> <del>Stability-stability Ratings-ratings</del> (<del>Applicable applicable</del> pre- and post-Contingency <del>Stability-stability Limits</del><del>Limits</del>)</li> <li>• <del>Voltage-voltage</del> <del>Stability-stability Ratings-ratings</del> (<del>Applicable applicable</del> pre- and post-Contingency <del>Stability-stability</del> <del>Stability</del><del>stability</del>)</li> </ul>

				<ul style="list-style-type: none"> <li>• <del>System system Voltage-voltage Limits-limits</del> (Applicable <del>applicable</del> pre- and post-Contingency <del>Voltage-voltage Limits-limits</del>)</li> </ul> <p><b>Redline of ROP definition:</b> the value (such as MW, Mvar, amperes, frequency or volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. <u>System Operating Limits are based upon certain operating criteria. These include, but are not limited to:</u></p> <ul style="list-style-type: none"> <li>• <u>facility ratings (applicable pre- and post-contingency equipment ratings or facility ratings)</u></li> <li>• <u>transient stability ratings (applicable pre- and post-contingency stability limits)</u></li> <li>• <u>voltage stability ratings (applicable pre- and post-contingency voltage stability)</u></li> <li>• <u>system voltage limits (applicable pre- and post-contingency voltage limits)**</u></li> </ul>
49	Transmission Customer	<p>1. Any eligible customer (or its designated agent) that can or does execute a transmission service agreement or can or does receive <del>transmission service</del>.</p> <p>2. Any of the following responsible entities: Generator Owner, Load-Serving Entity, or Purchasing-Selling Entity.</p>	<p>1. any eligible customer (or its designated agent) that can or does execute a Transmission Service agreement or can and does receive <del>Transmission Service</del>.</p> <p>2. Any of the following <del>responsible</del> entities: Generator Owner, Load-Serving Entity, or Purchasing-Selling Entity.**</p>	<p>The SDT is recommending the following changes:</p> <ol style="list-style-type: none"> <li>(1) Revise the Glossary definition to capitalize the term "Transmission Service" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</li> <li>(2) Remove the word "responsible" to align with the ROP definition. The word "responsible" was originally included in the ROP definition, but was recently removed by the Risk-Based Registration project. The Glossary should be updated to reflect these recent changes.</li> </ol> <p><b>Redline of Glossary term:</b></p> <ol style="list-style-type: none"> <li>1. Any eligible customer (or its designated agent) that can or does execute a <del>transmission-Transmission service-Service</del> agreement or can or does receive <del>transmission</del> <u>Transmission serviceService</u>.</li> <li>2. Any of the following <del>responsible</del> entities: Generator Owner, Load-Serving Entity, or Purchasing-Selling Entity.</li> </ol>

50	Transmission Operator	The entity responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission <b>facilities</b> .	the entity responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission <b>Facilities</b> .**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Facilities" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> The entity responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission <del>facilities</del><b>Facilities</b>.</p>
51	Transmission Owner	The entity that owns and maintains transmission <b>facilities</b> .	the entity that owns and maintains transmission <b>Facilities</b> .**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Facilities" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b>Redline of Glossary term:</b> <del>The</del> entity that owns and maintains transmission <del>facilities</del><b>Facilities</b>.</p>
52	Transmission Planner	The entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority <b>Area</b> .	the entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority <b>area</b> .**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to remove the capitalization from the term "Area" because it is not a defined term in Glossary or the ROP.</p> <p><b>Redline of Glossary term:</b> The entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority <del>Area</del><b>area</b>.</p>
53	Transmission Service	Services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.	services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.**	Definitions are aligned.

54	Transmission Service Provider	The entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable <b>transmission service</b> agreements.	the entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable <b>Transmission Service</b> agreements.**	<p>The SDT is recommending changes to the Glossary definition to align with the ROP. Specifically, the SDT is proposing to capitalize the term "Transmission Service" because it is a defined term in the Glossary and its usage in this definition narrative is intended to have the meaning of the defined term.</p> <p><b><u>Redline of Glossary term:</u></b>          The entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable <del>transmission</del> <u>Transmission service</u> <del>Service</del> agreements.</p>
55	Wide Area	The entire Reliability Coordinator Area as well as the critical flow and status information from adjacent Reliability Coordinator Areas as determined by detailed system studies to allow the calculation of Interconnected Reliability Operating Limits.	the entire Reliability Coordinator Area as well as the critical flow and status information from adjacent Reliability Coordinator Areas as determined by detailed system studies to allow the calculation of Interconnected Reliability Operating Limits.**	Definitions are aligned.