

March 11, 2014

## VIA ELECTRONIC FILING

Jim Crone
Director, Energy Division
Manitoba Innovation, Energy and Mines
1200-155 Carlton Street
Winnipeg MB R3C 3H8

Re: North American Electric Reliability Corporation

Dear Mr. Crone:

The North American Electric Reliability Corporation ("NERC") hereby submits Notice of Filing of the North American Electric Reliability Corporation of Proposed Reliability Standards for Interchange Scheduling and Coordination. NERC requests, to the extent necessary, a waiver of any applicable filing requirements with respect to this filing.

NERC understands that the Province of Manitoba enacted on April 1, 2012, the Reliability Standards Regulation, which was implemented through an Order of Council. It is NERC's understanding that the Reliability Standards Regulation makes compliance with the NERC reliability standards a legal requirement in Manitoba and adopted the NERC Reliability Standards listed in Schedule 1 of the Regulation for implementation in Manitoba. The Regulation further provides that a reliability standard made by NERC that is listed in Schedule 1 is adopted as a reliability standard for Manitoba.

NERC requests that Manitoba take all necessary action to include the proposed Reliability Standards INT-004-3 – Dynamic Transfers, INT-006-4 – Evaluation of Interchange Transactions, INT-009-2 – Implementation of Interchange, INT-010-2 – Interchange Initiation and Modification for Reliability, and INT-011-1 – Intra-Balancing Authority Transaction Identification, as well as ten revised definitions and four new definitions for inclusion in the *Glossary of Terms Used in NERC Reliability Standards*, as described in the attached filing, in Schedule 1 of the Reliability Standards Regulation, so that they may be adopted as reliability standards for Manitoba, as well as the retirement of INT-001-3 – Interchange Information, INT-003-3 – Interchange Transaction Implementation, INT-005-3 – Interchange Authority Distributes Arranged Interchange, INT-007-1– Interchange Confirmation, and INT-008-3—Interchange Authority Distributes Status.

Please contact the undersigned if you have any questions.

3353 Peachtree Road NE Suite 600, North Tower Atlanta, GA 30326 404-446-2560 | www.nerc.com

Respectfully submitted,

/s/ Holly A. Hawkins
Holly A. Hawkins
Assistant General Counsel for
North American Electric Reliability
Corporation

Enclosure

## BEFORE THE PROVINCE OF MANITOBA

NORTH AMERICAN ELECTRIC	)
RELIABILITY CORPORATION	)

# NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF PROPOSED RELIABILITY STANDARDS FOR INTERCHANGE SCHEDULING AND COORDINATION

Gerald W. Cauley
President and Chief Executive Officer
North American Electric Reliability
Corporation
3353 Peachtree Road, N.E.
Suite 600, North Tower
Atlanta, GA 30326
(404) 446-2560
(404) 446-2595 – facsimile

Charles A. Berardesco
Senior Vice President and General Counsel
Holly A. Hawkins
Assistant General Counsel
Stacey Tyrewala
Senior Counsel
North American Electric Reliability
Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
(202) 644-8099 – facsimile
charlie.berardesco@nerc.net
holly.hawkins@nerc.net
stacey.tyrewala@nerc.net

Counsel for the North American Electric Reliability Corporation

## **TABLE OF CONTENTS**

I.	E	XECUTIVE SUMMARY	2
A	4.	Proposed Reliability Standards	. 3
I	3.	Proposed Definitions	3
(	<b>C.</b>	Technical Background: Interchange Transactions	. 4
	1.	Parties Involved in Interchange Transactions	. 4
	2.	Mechanics of an Interchange Transaction	. 5
	3.	Dynamic Interchange Schedules and Pseudo-Ties	. 7
II.	N	OTICES AND COMMUNICATIONS	. 8
III.	В	ACKGROUND	. 9
A	4.	NERC Reliability Standards Development Procedure	. 9
IV.	JŲ	JSTIFICATION OF PROPOSED RELIABILITY STANDARDS	. 9
A	4.	Proposed Reliability Standard INT-004-3- Dynamic Transfers	10
	1.	Procedural History	10
	2.	Requirement-by-Requirement Justification	10
I	3.	Proposed Reliability Standard INT-006-4 – Evaluation of Interchange Transactions	12
	1.	Procedural History	12
	2.	Requirement-by-Requirement Justification	12
(	<b>Z.</b>	Proposed Reliability Standard INT-009-2- Implementation of Interchange	15
	1.	Procedural History	15
	2.	Requirement-by-Requirement Justification	15
I	Э.	Proposed Reliability Standard INT-010-2 – Interchange Initiation and	•••
		Modification for Reliability	17
	1.	Procedural History	17
	2.	Requirement-by-Requirement Justification	17
I	Ξ.	Proposed Reliability Standard INT-011-1 – Intra-Balancing Authority	•••
		Transaction Identification	18
	1.	Requirement-by-Requirement Justification	19
V.	JĮ	JSTIFICATION FOR PROPOSED RETIREMENT OF RELIABILITY STANDARDS	20
A	4.	Proposed Retirement of Reliability Standard INT-001-3 – Interchange	•••
		Information	20
	1.	Procedural History	20

## TABLE OF CONTENTS

2.	Retirement Justification	20
B.	Proposed Retirement of Reliability Standard INT-003-3 – Interchange	
	Transaction Implementation	21
1.	Procedural History	21
2.	Retirement Justification	21
C.	Proposed Retirement of Reliability Standard INT-005-3 – Interchange	
	Authority Distributes Arranged Interchange	222
1.	Procedural History	222
2.	Retirement Justification	233
D.	Proposed Retirement of Reliability Standard INT-007-1- Interchange	
	Confirmation	23
1.	Procedural History	23
2.	Retirement Justification	23
E.	Proposed Retirement of Reliability Standard INT-008-3—Interchange	
	Authority Distributes Status	24
1.	Procedural History	244
2.	Retirement Justification	255
VI. JU	STIFICATION FOR PROPOSED DEFINITIONS	25
A.	Proposed Revised Definition of "Adjacent Balancing Authority"	25
B.	Proposed Revised Definition of "Arranged Interchange"	26
C.	Proposed Revised Definition of "Confirmed Interchange"	26
D.	Proposed Revised Definition of "Dynamic Interchange Schedule or Dynamic	
	Schedule"	26
E.	Proposed Revised Definition of "Intermediate Balancing Authority"	27
F.	Proposed Revised Definition of "Operational Planning Analysis"	27
G.	Proposed Revised Definition of "Pseudo-Tie"	28
H.	Proposed Revised Definition of "Request for Interchange"	29
I.	Proposed Revised Definition of "Sink Balancing Authority"	29
J.	Proposed Revised Definition of "Source Balancing Authority"	30
K.	Proposed Newly Defined Term "Attaining Balancing Authority"	300
L.	Proposed Newly Defined Term "Composite Confirmed Interchange"	300
M.	Proposed Newly Defined Term "Native Balancing Authority"	311

## **TABLE OF CONTENTS**

N.	Proposed Newly Defined Term "Reliability Adjustment Arranged		
	Interchange"		
O.	Enforceability of the Proposed Reliability Standards		
E 1.91.94			
Exhibit	A Proposed Reliability Standards and Definitions		
Exhibit	<b>B</b> Implementation Plan for Proposed Reliability Standards and Definitions		
Exhibit	C Reliability Standards Criteria		
Exhibit	D Mapping Document		
Exhibit	E White Paper on Order No. 693 Directive, Paragraph 866		
Exhibit	F Analysis of Proposed Definitions		
Exhibit	G Analysis of Violation Risk Factors and Violation Security Levels		
Exhibit	H Summary of Development History and Complete Record of Development		
Exhibit	I Standard Drafting Team Roster for Project 2008-12		

## BEFORE THE PROVINCE OF MANITOBA

NORTH AMERICAN ELECTRIC	)
RELIABILITY CORPORATION	)

# NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF PROPOSED RELIABILITY STANDARDS FOR INTERCHANGE SCHEDULING AND COORDINATION

The North American Electric Reliability Corporation ("NERC") hereby submits the following five proposed Reliability Standards:

- INT-004-3 Dynamic Transfers;
- INT-006-4 Evaluation of Interchange Transactions;
- INT-009-2 Implementation of Interchange;
- INT-010-2 Interchange Initiation and Modification for Reliability; and
- INT-011-1 Intra-Balancing Authority Transaction Identification.

As explained below, NERC proposes to retire five currently-effective Reliability Standards and proposes ten revised definitions and four new definitions for inclusion in the *Glossary of Terms Used in NERC Reliability Standards*.<sup>1</sup> The Interchange Scheduling and Coordination ("INT") group of Reliability Standards addresses interchange transactions, which occur when electricity is transmitted from a seller to a buyer across the power grid.

1

Available at: <a href="http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary">http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary</a> of Terms.pdf. ("NERC Glossary").

The proposed Reliability Standards and definitions are just, reasonable, not unduly discriminatory or preferential, and in the public interest.<sup>2</sup> NERC also provides notice of the associated implementation plan (**Exhibit B**), Violation Risk Factors ("VRFs") and Violation Severity Levels ("VSLs") (**Exhibit G**), and retirement of the currently effective Reliability Standards and definitions as detailed in this filing.

This filing presents the technical basis and purpose of the proposed Reliability Standards, a summary of the development history (**Exhibit H**), and a demonstration that the proposed Reliability Standards meet the Reliability Standards criteria (**Exhibit C**). The proposed Reliability Standards and definitions were approved by the NERC Board of Trustees on February 6, 2014.

## I. <u>EXECUTIVE SUMMARY</u>

Interchange refers to energy transfers that cross Balancing Authority boundaries.<sup>3</sup> The proposed Reliability Standards improve reliability by making transactions more apparent for reliability assessments and by clarifying which functional entities perform Interchange Authority tasks. Collectively, the proposed five Reliability Standards also consolidate this body of standards. The currently enforceable set of Interchange Scheduling and Coordination Reliability Standards consists of nine Reliability Standards with thirteen requirements. NERC is proposing to revise four of the currently-effective Reliability Standards and is proposing one new Reliability Standard, INT-011-1 – Intra-Balancing Authority Transaction Identification, resulting in a set of five proposed Reliability Standards consisting of fourteen requirements.<sup>4</sup>

Unless otherwise designated, all capitalized terms shall have the meaning set forth in the *Glossary of Terms Used in NERC Reliability Standards*, available at http://www.nerc.com/files/Glossary of Terms.pdf.

See NERC Glossary, available at:

http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary\_of\_Terms.pdf.

These revisions and retirements are supported by the recommendation of the Independent Expert Review Panel to retire 85% of the requirements in the Interchange Scheduling and Coordination body of Reliability

## A. Proposed Reliability Standards

NERC proposes the following five Reliability Standards:<sup>5</sup>

## **Proposed Reliability Standards**

- INT-004-3 Dynamic Transfers;
- INT-006-4 Evaluation of Interchange Transactions;
- INT-009-2 Implementation of Interchange;
- INT-010-2 Interchange Initiation and Modification for Reliability; and
- INT-011-1 Intra-Balancing Authority Transaction Identification.

NERC proposes to retire the following five currently-effective Reliability Standards in entirety:

## **Proposed Retirement of Reliability Standards**

- INT-001-3 Interchange Information;
- INT-003-3 Interchange Transaction Implementation;
- INT-005-3 Interchange Authority Distributes Arranged Interchange;
- INT-007-1– Interchange Confirmation; and
- INT-008-3—Interchange Authority Distributes Status.

## **B.** Proposed Definitions

NERC submits accompanying proposed revisions to ten definitions in the NERC Glossary of

Terms and proposes four new definitions, as follows:

## **Proposed Revised Definitions:**

§ Adjacent Balancing Authority § Operational Planning Analysis

§ Arranged Interchange § Pseudo-Tie

Standards. Available at:

http://www.nerc.com/pa/Stand/Standards%20Development%20Plan%20Library/Standards Independent Experts R eview\_Project\_Report.pdf.

The currently-effective versions of these Reliability Standards would be retired upon approval of the proposed Reliability Standards (INT-004-2; INT-006-3; INT-009-1; INT-010-1).

- **§** Confirmed Interchange
- **§** Dynamic Interchange Schedule or Dynamic Schedule
- § Intermediate Balancing Authority

- **§** Request for Interchange
- § Sink Balancing Authority
- **§** Source Balancing Authority

## **Proposed New Definitions:**

- **§** Attaining Balancing Authority
- **§** Composite Confirmed Interchange
- **§** Native Balancing Authority
- § Reliability Adjustment Arranged Interchange

The proposed revisions to the defined terms "Adjacent Balancing Authority," "Intermediate Balancing Authority," "Sink Balancing Authority," "Source Balancing Authority," and the proposed new definitions of "Attaining Balancing Authority" and "Native Balancing Authority" are necessary to define the various Balancing Authorities involved in the implementation of Interchange and their relationships with respect to Interchange. Each of the proposed revised and new definitions is explained below in greater detail.

## C. Technical Background: Interchange Transactions

An Interchange Transaction refers to an agreement to transfer energy from a seller to a buyer that crosses one or more Balancing Authority Area boundaries. Provided below is an overview of the parties involved in Interchange Transactions and the mechanics of those transactions.

### 1. Parties Involved in Interchange Transactions

An Interchange Transaction begins with a Request for Interchange, which is a collection of data for the purpose of implementing an energy transfer between one or more Balancing Authorities. The "Source Balancing Authority" is the Balancing Authority in which the

generation (or source) is located. The "Sink Balancing Authority" is the Balancing Authority in which the load (or sink) is located. If there is another Balancing Authority on the scheduling path of an Interchange Transaction, it is known as an "Intermediate Balancing Authority."

For Dynamic Transfers, NERC proposes to define the terms "Attaining Balancing Authority" and "Native Balancing Authority." The Attaining Balancing Authority is the "Balancing Authority bringing generation or load into its effective control boundaries through a Dynamic Transfer from the Native Balancing Authority." The Native Balancing Authority is the "Balancing Authority from which a portion of its physically interconnected generation and/or load is transferred from its effective control boundaries to the Attaining Balancing Authority through a Dynamic Transfer."

The Interchange Authority is 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.

## 2. <u>Mechanics of an Interchange Transaction</u>

An Interchange Schedule is the method by which the Source and Sink Balancing

Authorities agree upon the Interchange Transaction size (measured in megawatts), the start and
end time, beginning and ending ramp times and rate, and type required for delivery and receipt of
the power and energy. Net Scheduled Interchange is the algebraic sum of all Interchange

Schedules across a given path or between Balancing Authorities for a given period or instant in
time. An Interchange Transaction Tag or Tag is an electronic tag that contains all of the
transaction information and is used to populate the Interchange Distribution Calculator which

5

A "Dynamic Transfer" is defined in the NERC Glossary as the "provision of the real-time monitoring, telemetering, computer software, hardware, communications, engineering, energy accounting (including inadvertent interchange), and administration required to electronically move all or a portion of the real energy services associated with a generator or load out of one Balancing Authority Area into another."

identifies transactions that are impacting Flowgates.<sup>7</sup> Communication, submission, assessment and approval of a Tag must be completed for reliability consideration before implementation of the transaction. The Distribution Factor is the portion of an Interchange Transaction that flows across a transmission facility (Flowgate).

Arranged Interchange is the state where a Request for Interchange (initial or revised) has been submitted for approval. Confirmed Interchange is the state where no party has denied and all required parties have approved the Arranged Interchange. Implemented Interchange is the state where the Balancing Authority enters the Confirmed Interchange into its Area Control Error equation. The proposed definition of "Composite Confirmed Interchange" is "[t]he energy profile (including non-default ramp) throughout a given time period, based on the aggregate of all Confirmed Interchange occurring in that time period."

Net Actual Interchange is the algebraic sum of all metered interchange over all interconnections between two physically Adjacent Balancing Authority Areas. Inadvertent Interchange is the difference between the Balancing Authority's Net Actual Interchange and Net Scheduled Interchange.

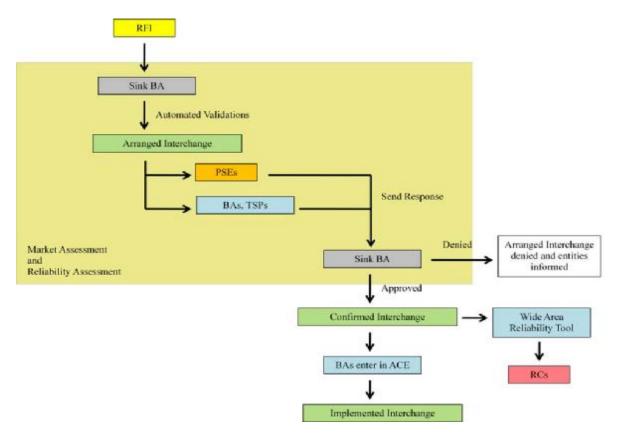
The proposed definition of "Reliability Adjustment Arranged Interchange" is a request to modify a Confirmed Interchange or Implemented Interchange for reliability purposes.

Provided below is Figure **A**, which depicts the typical reliability-related steps in coordinating Interchange and is provided for informational purposes.

6

A "Flowgate" is defined in the NERC Glossary as: "1.) A portion of the 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."

Area Control Error or "ACE" is the instantaneous difference between a Balancing Authority's net actual and scheduled interchange, taking into account the effects of Frequency Bias and correction for meter error.



The North American Energy Standards Board ("NAESB") has several Coordinate

Interchange Business Practice Standards that establish the Interchange Transaction requirements
for coordination of commercial arrangements and that complement the NERC Reliability

Standards.

## 3. <u>Dynamic Interchange Schedules and Pseudo-Ties</u>

A Dynamic Schedule is implemented as an Interchange Transaction that is modified in real-time to transfer time-varying amounts of power between Balancing Authorities.

Dynamic Schedules are commonly used for scheduling jointly-owned generation to or from another Balancing Authority Area. The proposed revisions to the term "Dynamic Interchange Schedule or Dynamic Schedule" clarify that a Dynamic Schedule is updated in Real-time and is included in the Scheduled Net Interchange term in the affected Balancing Authorities' control ACE equations (or alternative control processes).

Pseudo-Ties are often employed to assign generators, loads, or both from the Balancing Authority to which they are physically connected into a Balancing Authority that has effective operational control of them. Thus, Pseudo-Ties often provide for change of Balancing Authority operational responsibility from the native to the Attaining Balancing Authority and at the same time make the Attaining Balancing Authority provider of Balancing Authority services. In practice, Pseudo-Ties may be implemented based upon metered or calculated values. All Balancing Authorities involved account for the power exchange and associated transmission losses as actual interchange between the Balancing Authorities, both in their ACE equations and throughout all of their energy accounting processes.

## II. NOTICES AND COMMUNICATIONS

Notices and communications with respect to this filing may be addressed to the following:

Charles A. Berardesco
Senior Vice President and General Counsel
Holly A. Hawkins
Assistant General Counsel
Stacey Tyrewala
Senior Counsel
North American Electric Reliability
Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
(202) 644-8099 – facsimile
charlie.berardesco@nerc.net
holly.hawkins@nerc.net
stacey.tyrewala@nerc.net

Mark G. Lauby
Vice President and Director of Standards
Laura Hussey
Director of Standards Development
North American Electric Reliability
Corporation
3353 Peachtree Road, N.E.
Suite 600, North Tower
Atlanta, GA 30326
(404) 446-2560
(404) 446-2595 – facsimile
mark.lauby@nerc.net
laura.hussey@nerc.net

## III. BACKGROUND

## A. NERC Reliability Standards Development Procedure

The proposed Reliability Standards were developed in an open and fair manner and in accordance with the Reliability Standard development process. NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC Standard Processes Manual. NERC's proposed rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing Reliability Standards and thus satisfies certain of the criteria for approving Reliability Standards. The development process is open to any person or entity with a legitimate interest in the reliability of the Bulk-Power System. NERC considers the comments of all stakeholders, and a vote of stakeholders and the NERC Board of Trustees is required to approve a Reliability Standard before the Reliability Standard is submitted to the applicable governmental authorities.

## IV. JUSTIFICATION OF PROPOSED RELIABILITY STANDARDS

As discussed in detail in **Exhibit C**, the proposed Reliability Standards are just, reasonable, not unduly discriminatory or preferential, and in the public interest. Provided below is the following: (1) a description of each proposed Reliability Standard and discussion of how applicable Federal Energy Regulatory Commission ("FERC") directives are satisfied; and (2) justification for the proposed Reliability Standards on a Requirement-by-Requirement basis.

http://www.nerc.com/comm/SC/Documents/Appendix 3A StandardsProcessesManual.pdf.

9

The NERC Rules of Procedure are available at <a href="http://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx">http://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx</a>. The NERC Standard Processes Manual is available at

## A. Proposed Reliability Standard INT-004-3– Dynamic Transfers

The purpose of proposed Reliability Standard INT-004-3 is to ensure that Dynamic Schedules and Pseudo-Ties are communicated and accounted for appropriately in congestion management procedures.

## 1. Procedural History

Reliability Standard INT-004-1, was submitted on September 11, 2006. Reliability Standard INT-004-2 was submitted on May 13, 2009.

## 2. Requirement-by-Requirement Justification

Proposed Reliability Standard INT-004-3 consists of three Requirements and is applicable to Balancing Authorities and Purchasing-Selling Entities. Provided below is an explanation of each of the Requirements of proposed Reliability Standard INT-004-3.

### INT-004-3, Requirement R1

R1 Each Purchasing-Selling Entity that secures energy to serve Load via a Dynamic Schedule or Pseudo-Tie shall ensure that a Request for Interchange is submitted as an ontime<sup>1</sup> Arranged Interchange to the Sink Balancing Authority for that Dynamic Schedule or Pseudo-Tie, unless the information about the Pseudo-Tie is included in congestion management procedure(s) via an alternate method.

[FN 1 Please refer to the timing tables of INT-006-4.]

Proposed Requirement R1 is intended to ensure that a Request for Interchange is submitted for a Dynamic Schedule or for a Pseudo-Tie that is not otherwise considered in congestion management procedure(s). If a forecast is available, it is expected that the forecast will be used to indicate the energy profile on the RFI. If no forecast is available, the energy profile cannot exceed the maximum expected transaction MW amount. This requirement was formerly included in Reliability Standard INT-001-3, which is proposed for retirement. The proposed revisions to Requirement R1 now include Pseudo-Ties.

10

.

The Standard Drafting Team considered the remarks of Santa Clara in determining the appropriate applicability of the INT Reliability Standards, in compliance with FERC Order No. 693 at P 819.

The requirement to create a Request for Interchange for Pseudo-Ties ensures that all entities involved are aware of the Dynamic Transfer and that the various responsibilities associated with the Dynamic Transfer have been agreed upon.

## INT-004-3, Requirement R2

- **R2.** The Purchasing-Selling Entity that submits a Request for Interchange in accordance with Requirement R1 shall ensure the Confirmed Interchange associated with that Dynamic Schedule or Pseudo-Tie is updated for future hours in order to support congestion management procedures if any one of the following occurs:
  - **2.1.** For Confirmed Interchange greater than 250 MW for the last hour, the actual hourly integrated energy deviates from the Confirmed Interchange by more than 10% for that hour and that deviation is expected to persist.
  - **2.2.** For Confirmed Interchange less than or equal to 250 MW for the last hour, the actual hourly integrated energy deviates from the Confirmed Interchange by more than 25 MW for that hour and that deviation is expected to persist.
  - **2.3.** The Purchasing-Selling Entity receives notification from a Reliability Coordinator or Transmission Operator to update the Confirmed Interchange.

Proposed Requirement R2 specifies conditions under which the Confirmed Interchange is updated in order to support congestion management procedures. The elements of this requirement were formerly included in Reliability Standard INT-004-2, Requirement R2 and like proposed Requirement R1, Requirement R2 has been revised to include Pseudo-Ties.

## INT-004-3, Requirement R3

**R3.** Each Balancing Authority shall only implement or operate a Pseudo-Tie that is included in the NAESB Electric Industry Registry publication in order to support congestion management procedures.

Proposed Requirement R3 applies to Balancing Authorities and was created to ensure that coordination occurs between all entities involved, prior to the initial implementation of a Pseudo-Tie. The NAESB Electric Industry Registry is where all of the interfaces for Interchange are

defined. A request to revise the NAESB Electric Industry Registry has already been submitted for implementation.<sup>11</sup>

## B. Proposed Reliability Standard INT-006-4 – Evaluation of Interchange Transactions

The purpose of proposed Reliability Standard INT-006-4 is to ensure that responsible entities conduct a reliability assessment of each Arranged Interchange before it is implemented.

## 1. <u>Procedural History</u>

Reliability Standard INT-006-1 was submitted on September 11, 2006. INT-006-2 was submitted on May 13, 2009. Reliability Standard INT-006-3 is currently in effect.

## 2. Requirement-by-Requirement Justification

Proposed Reliability Standard INT-006-4 consists of five Requirements and is applicable to Balancing Authorities and Transmission Service Providers. Attachment 1 provides timing requirements for each of the Interconnections and is incorporated into each of the Requirements of INT-006-4. Provided below is an explanation of each of the Requirements of proposed Reliability Standard INT-006-4.

## INT-006-4, Requirement R1

**R1.** Each Balancing Authority shall approve or deny each on-time Arranged Interchange or emergency Arranged Interchange that it receives and shall do so prior to the expiration of the time period defined in Attachment 1, Column B.

- **1.1.** Each Source and Sink Balancing Authority shall deny the Arranged Interchange or curtail Confirmed Interchange if it does not expect to be capable of supporting the magnitude of the Interchange, including ramping, throughout the duration of the Arranged Interchange.
- 1.2. Each Balancing Authority shall deny the Arranged Interchange or curtail Confirmed Interchange if the Scheduling Path (proper connectivity of Adjacent Balancing Authorities) between it and its Adjacent Balancing Authorities is invalid.

12

This requirement is proposed to become effective on the first calendar day two calendar quarters after the NAESB Electric Industry Registry is able to accept Pseudo-Tie registrations. All existing and future Pseudo-Ties are to be registered in the NAESB Electric Industry Registry.

Proposed Requirement R1 requires Balancing Authorities to take action on a received Arranged Interchange within a certain timeframe, which is specified in Attachment 1.

Requirement R1, Parts 1.1 and 1.2 provide reliability-related reasons that a Balancing Authority must deny an Arranged Interchange, but Balancing Authorities may deny for other reasons, such as economic or contractual issues, as outlined in the NAESB Business Practices. If the conditions described in Requirement R1, Parts 1.1 or 1.2 are recognized after approval is granted, the Balancing Authority may curtail the Confirmed Interchange prior to implementation. Proposed Requirement R1 is based on Requirement R1 of the currently-effective Reliability Standard INT-006-3.

## INT-006-4, Requirement R2

- **R2.** Each Transmission Service Provider shall approve or deny each on-time Arranged Interchange or emergency Arranged Interchange that it receives and shall do so prior to the expiration of the time period defined in Attachment 1, Column B.
  - **2.1.** Each Transmission Service Provider shall deny the Arranged Interchange or curtail Confirmed Interchange if the transmission path (proper connectivity of adjacent Transmission Service Providers) between it and its adjacent Transmission Service Providers is invalid.

Transmission Service Providers must take action on a received Arranged Interchange within a certain timeframe, which is specified in Attachment 1. Requirement R2, Part 2.1 provides reliability-related reasons that a Transmission Service Provider must deny an Arranged Interchange, but Transmission Service Providers may deny for other reasons. If the conditions described in Requirement R2, Part 2.1 are recognized after approval is granted, the Transmission Service Provider may curtail the Confirmed Interchange prior to implementation. Proposed Requirement R2 is based on Requirement R1 of the currently-effective Reliability Standard INT-006-3.

## INT-006-4, Requirement R3

- **R3.** The Source Balancing Authority and the Sink Balancing Authority receiving a Reliability Adjustment Arranged Interchange shall approve or deny it prior to the expiration of the time period defined in Attachment 1, Column B.
  - **3.1.** If a Balancing Authority denies a Reliability Adjustment Arranged Interchange, the Balancing Authority must communicate that fact to its Reliability Coordinator no more than 10 minutes after the denial.

Proposed Requirement R3 ensures that Balancing Authorities who receive a Reliability Adjustment Arranged Interchange actively approve or deny the transition to Confirmed Interchange. Proposed Requirement R3 is based on Requirement R1 of the currently-effective Reliability Standard INT-006-3.

## INT-006-4, Requirement R4

- **R4.** Each Sink Balancing Authority shall confirm that none of the following conditions exist prior to transitioning an Arranged Interchange to Confirmed Interchange:
  - It is a Reliability Adjustment Arranged Interchange, the time period specified in Attachment 1, Column B has elapsed, and the Source Balancing Authority or the Sink Balancing Authority associated with the Arranged Interchange has not communicated its approval of the transition.
  - It is not a Reliability Adjustment Arranged Interchange, the time period specified in Attachment 1, Column B, has elapsed, and not all Balancing Authorities and Transmission Service Providers associated with the Arranged Interchange have communicated their approval of the transition.
  - It is not a Reliability Adjustment Arranged Interchange, the time period specified in Attachment 1, Column B, has elapsed, and any entity associated with the Arranged Interchange has communicated its denial of the transition.

Proposed Requirement R4 lists criteria for when a Sink Balancing Authority shall not transition an Arranged Interchange to Confirmed Interchange. This is designed to ensure that there is appropriate verification of information prior to the transition from Arranged Interchange to Confirmed Interchange. Proposed Requirement R4 is based on Requirement R1 of currently-effective Reliability Standard INT-007-1, which is proposed for retirement.

### INT-006-4, Requirement R5

- **R5.** For each Arranged Interchange that is transitioned to Confirmed Interchange, the Sink Balancing Authority shall notify the following entities of the on-time Confirmed Interchange such that the notification is delivered in time to be incorporated into scheduling systems prior to ramp start as specified in Attachment 1, Column D:
  - **5.1.** The Source Balancing Authority,
  - **5.2.** Each Intermediate Balancing Authority,
  - **5.3.** Each Reliability Coordinator associated with each Balancing Authority included in the Arranged Interchange,
  - **5.4.** Each Transmission Service Provider included in the Arranged Interchange, and
  - **5.5.** Each Purchasing Selling Entity included in the Arranged Interchange.

This requirement lists the entities to which a Sink Balancing Authority must distribute notifications of whether an Arranged Interchange has transitioned to Confirmed Interchange.

Proposed Requirement R5 is based on Requirement R1 of currently-effective Reliability

Standard INT-008-3 (proposed for retirement herein). 12

## C. Proposed Reliability Standard INT-009-2– Implementation of Interchange

The purpose of proposed Reliability Standard INT-009-2 is to ensure that Balancing Authorities implement the Interchange as agreed upon in the Interchange confirmation process.

## 1. <u>Procedural History</u>

Reliability Standard INT-009-1 was submitted on September 11, 2006

## 2. Requirement-by-Requirement Justification

Proposed Reliability Standard INT-009-2 consists of three Requirements and is applicable to Balancing Authorities. Provided below is an explanation of each of the Requirements of proposed Reliability Standard INT-009-2.

## INT-009-2, Requirement R1

**R1.** Each Balancing Authority shall agree with each of its Adjacent Balancing Authorities that its Composite Confirmed Interchange with that Adjacent Balancing Authority, at mutually agreed upon time intervals, excluding Dynamic Schedules and Pseudo-Ties and including any Interchange per INT-010-2 not yet captured in the Composite Confirmed Interchange, is:

15

*Infra.* at [will add page numbers in final version].

- **1.1.** Identical in magnitude to that of the Adjacent Balancing Authority, and
- **1.2.** Opposite in sign or direction to that of the Adjacent Balancing Authority.

This proposed Requirement has been revised to ensure that a Balancing Authority agrees to a Composite Confirmed Interchange with each of its Adjacent Balancing Authorities.

Proposed Requirement R1 is based on Requirement R1 of currently-effective Reliability

Standard INT-003-3 (proposed for retirement herein). 13

## INT-009-2, Requirement R2

**R2.** The Attaining Balancing Authority and the Native Balancing Authority shall use a dynamic value emanating from an agreed upon common source to account for the Pseudo-Tie in the Actual Net Interchange (NIA) term of their respective control ACE (or alternate control process).

Proposed Requirement R2 is a new Requirement that is intended to ensure that Adjacent Balancing Authorities incorporating a Pseudo-Tie agree to a common source for their Actual Net Interchange term for their ACE controls. Requirement R12.3 of currently-effective Reliability Standard BAL-005-0.2b addresses common metering for Dynamic Schedules and Pseudo-Ties but not their implementation into ACE. Requirement R2 is parallel to R10 of BAL-005-0.2b, which only addresses Dynamic Schedules, although this proposed Requirement applies to Pseudo-Ties.

## INT-009-2, Requirement R3

**R3.** Each Balancing Authority in whose area the high-voltage direct current tie is controlled shall coordinate the Confirmed Interchange prior to its implementation with the Transmission Operator of the high-voltage direct current tie.

This proposed Requirement ensures that the Balancing Authority that controls a high-voltage direct current tie coordinates the Confirmed Interchange. Proposed Requirement R3 is

Infra. at [will add page numbers in final version].

based on Requirement R1.2 from currently-effective Reliability Standard INT-003-3 (proposed for retirement herein).<sup>14</sup>

By incorporating Requirements from currently-effective Reliability Standard INT-003-3, the proposed Reliability Standard INT-009-2 is intended to ensure that Balancing Authorities confirm Interchange Schedules and implement the Interchange as agreed upon in the Interchange confirmation process.

## D. Proposed Reliability Standard INT-010-2 – Interchange Initiation and Modification for Reliability

The purpose of proposed Reliability Standard INT-010-2 is to provide guidance for required actions on Confirmed Interchange or Implemented Interchange to address reliability.

## 1. Procedural History

Reliability Standard INT-010-1 was submitted on September 11, 2006.

## 2. Requirement-by-Requirement Justification

Proposed Reliability Standard INT-010-2 consists of three Requirements and is applicable to Balancing Authorities. Provided below is an explanation of each of the Requirements of proposed Reliability Standard INT-010-2.

## INT-010-2, Requirement R1

R1. The Balancing Authority that experiences a loss of resources covered by an energy sharing agreement or other reliability needs covered by an energy sharing agreement shall ensure that a Request for Interchange (RFI) is submitted with a start time no more than 60 minutes beyond the resource loss. If the use of the energy sharing agreement does not exceed 60 minutes from the time of the resource loss, no RFI is required.

Proposed Requirement R1 has been modified to replace the term "request for Arranged Interchange" with the corrected term "Request for Interchange," which is a defined term in the

17

Supra at [will add page numbers in final version].

NERC Glossary. Revisions to the definition of "Request for Interchange" are also proposed herein. 15

## INT-010-2, Requirement R2

**R2.** Each Sink Balancing Authority shall ensure that a Reliability Adjustment Arranged Interchange reflecting a modification is submitted within 60 minutes of the start of the modification if a Reliability Coordinator directs the modification of a Confirmed Interchange or Implemented Interchange for actual or anticipated reliability-related reasons.

Proposed Requirement R2 has been revised to apply to "Sink Balancing Authorities" instead of "Reliability Coordinators" to provide clarity as to which entity is to perform the reliability task. The revised language clarifies that the Sink Balancing Authority is the responsible entity.

### INT-010-2, Requirement R3

**R3.** Each Sink Balancing Authority shall ensure that a Request for Interchange is submitted reflecting that Interchange Schedule within 60 minutes of the start of the scheduled Interchange if a Reliability Coordinator directs the scheduling of Interchange for actual or anticipated reliability-related reasons.

Proposed Requirement R3 has been revised to apply to "Sink Balancing Authorities" instead of "Reliability Coordinators" to provide clarity as to which entity is to perform the reliability task. The revised language clarifies that the Sink Balancing Authority is the responsible entity.

E. Proposed Reliability Standard INT-011-1 – Intra-Balancing Authority Transaction Identification

Proposed Reliability Standard INT-011-1 is a new Reliability Standard, and the purpose of the Standard is to ensure that transfers within a Balancing Authority Area using Point-to-Point

18

Supra at [will add page numbers in final version].

Transmission Service are communicated and accounted for in congestion management procedures.

#### 1. Requirement-by-Requirement Justification

Proposed Reliability Standard INT-011-1 consists of one Requirement and is applicable to Load-Serving Entities. Provided below is the full text and a subsequent explanation of Requirement R1.

### INT-011-1, Requirement R1

R1. Each Load-Serving Entity that uses Point to Point Transmission Service for intra-Balancing Authority Area transfers shall submit a Request for Interchange unless the information about intra-Balancing Authority transfers is included in congestion management procedure(s) via an alternate method.

Proposed Requirement R1 of INT-011-1 addresses FERC's directive in Paragraph 817 of Order No. 693. FERC "direct[ed] the ERO to include a modification to INT-001-2 that includes a Requirement that interchange information must be submitted for all point-to-point transfers entirely within a balancing authority area, including all grandfathered and 'non-Order No. 888' transfers." 16 While Reliability Standard INT-001-3 is proposed for retirement, FERC's directive is addressed via proposed Reliability Standard INT-011-1.

The transfers within a Balancing Authority Area using Point to Point Transmission Service can impact transmission congestion, and proposed Reliability Standard INT-011-1 ensures that these transfers are communicated and accounted for in congestion management procedures. If a transfer within a Balancing Authority Area is submitted as a Request for Interchange or otherwise accounted for in congestion management procedures, it can be evaluated and processed comparable to a Request for Interchange that crosses Balancing Authority Areas.

Order No. 693 at P 817.

## V. <u>JUSTIFICATION FOR PROPOSED RETIREMENT OF RELIABILITY STANDARDS</u>

NERC proposes to retire the following five currently-effective Reliability Standards: INT-001-3– Interchange Information; INT-003-3 – Interchange Transaction Implementation; INT-005-3 – Interchange Authority Distributes Arranged Interchange; INT-007-1– Interchange Confirmation; and INT-008-3—Interchange Authority Distributes Status. Provided below is the following: (1) a description of each proposed Reliability Standard, including the procedural history; and (2) justification for the proposed retirement.

## A. Proposed Retirement of Reliability Standard INT-001-3 – Interchange Information

The purpose of Reliability Standard INT-001-3 is to "ensure that Interchange Information is submitted to the NERC-identified reliability analysis service."

## 1. <u>Procedural History</u>

Reliability Standard INT-001-2, which superseded the Version 1 Reliability Standard INT-001-1, was submitted on September 11, 2006. Reliability Standard INT-001-3 was submitted on May 13, 2009.

## 2. Retirement Justification

Reliability Standard INT-001-3 consists of two Requirements and applies to Purchasing-Selling Entities and Balancing Authorities. Requirement R1 has been revised and incorporated into proposed Reliability Standard INT-004-3– Dynamic Transfers, as explained herein. Requirement R2 of INT-001-3 is proposed for retirement, and this retirement can be removed with little or no effect on reliability, because the proposed Requirement R1 of Reliability Standard INT-009-2 makes it clear that the Net Scheduled Interchange term in the control equation can only include Confirmed Interchange as agreed to between Balancing Authorities.

-

Supra at [will add page numbers in final version].

This, by definition, requires that an Arranged Interchange be created in order to implement the schedules listed in Requirements R2.1 and R2.2.

## B. Proposed Retirement of Reliability Standard INT-003-3 – Interchange Transaction Implementation

The purpose of Reliability Standard INT-003-3 is to ensure that Balancing Authorities confirm Interchange Schedules with Adjacent Balancing Authorities prior to implementing the schedules in their ACE equations.

## 1. Procedural History

In approving INT-003-1, FERC proposed to direct NERC to submit a modification to INT-003-1 that includes Measures and Levels of Non-Compliance. NERC filed INT-003-2 on December 5, 2006 to replace the Version 1 Reliability Standard INT-003-1 and add Measures and Levels of Non-Compliance pursuant to FERC directives. On December 7, 2009, NERC submitted Reliability Standard INT-003-3, which would supersede INT-003-2 and remove the MISO tagging waivers that were once necessary to accommodate the operation of the MISO market in a multi-Balancing Authority environment. Because MISO is now a single Balancing Authority for the geographic region it encompasses, NERC determined this waiver was not needed.

## 2. Retirement Justification

Reliability Standard INT-003-3 consists of one Requirement and is applicable to Balancing Authorities. While this Reliability Standard is proposed for retirement, Requirement R1 has been incorporated into Requirement R1 of the proposed Reliability Standard, INT-009-2. The purpose of INT-003-3, to ensure that a Balancing Authority agrees to a Composite Confirmed Interchange with each of its Adjacent Balancing Authorities, is maintained in

-

Supra at [will add page numbers in final version].

proposed Reliability Standard INT-009-2. As explained herein, Requirement R3 of proposed Reliability Standard INT-009-2 is based on Requirement R1.2 of INT-003-3 and ensures that Confirmed Interchange on a high-voltage direct current tie is coordinated with the Transmission Operators.<sup>19</sup>

## C. Proposed Retirement of Reliability Standard INT-005-3 – Interchange Authority Distributes Arranged Interchange

The purpose of Reliability Standard INT-005-3 is to ensure that the implementation of Interchange between Source and Sink Balancing Authorities is distributed by an Interchange Authority such that Interchange information is available for reliability assessments.

## 1. Procedural History

Reliability Standard INT-005-1 was submitted on September 11, 2006. In Order No. 693, FERC directed NERC to consider adding additional Measures and Levels of Non-Compliance to the Reliability Standard. Reliability Standard INT-005-2, which superseded the Version 1 Reliability Standard INT-005-1, was one of several standards that aimed to increase the timeframe for applicable WECC entities to perform the reliability assessment from five to ten minutes for next hour interchange tags submitted in the first thirty minutes of the hour before. INT-005-2 was submitted on May 13, 2009. Reliability Standard INT-005-3 is currently in effect and was submitted to help facilitate the reliable operation of the Bulk-Power System by providing WECC entities sufficient time to assess and response to requests for interchange service before the underlying e-Tags for these requests expire, and by clarifying timing requirements for all affected entities.

Supra at [will add page numbers in final version].

Order No. 693 at P 847, 848

## 2. Retirement Justification

Currently-effective Reliability Standard INT-005-3 consists of one Requirement and is applicable to Interchange Authorities. The *Electronic Tagging Functional Specification*, which is a NAESB document, describes the functional requirements and detailed technical specifications for the implementation of an electronic tag or e-Tag. Section 3.6.1.1.1 of this document requires the identification of a distribution list for an e-Tag. Accordingly, the task set forth in Requirement R1 of INT-005-3 is not necessary and the proposed retirement of this Reliability Standard will not create a reliability gap.

## D. Proposed Retirement of Reliability Standard INT-007-1– Interchange Confirmation

The purpose of Reliability Standard INT-007-1 is to ensure that Arranged Interchange is checked for reliability before it is implemented. Reliability Standard INT-007 requires that before changing the status of submitted Arranged Interchange to Confirmed Interchange, the Interchange Authority must verify that the submitted Arranged Interchange is valid and complete with relevant information and approvals from the Balancing Authorities and transmission service providers.

### 1. Procedural History

Reliability Standard INT-007-1 was submitted on September 11, 2006. On March 19, 2013, NERC submitted a filing proposing retirement of Requirement R1.2 of INT-007-1 due to the fact that this requirement was considered an outdated administrative task after the implementation of the NAESB Electric Industry Registry.

## 2. Retirement Justification

Currently-effective Reliability Standard INT-007-1 consists of one Requirement and applies to Interchange Authorities. The reliability purpose of INT-007-1 is to ensure that each

Arranged Interchange is checked for reliability before it is implemented, and this purpose is unaffected by the proposed retirement, as proposed Reliability Standard INT-006-4 is designed to ensure that this action occurs. Specifically, proposed Requirement R4 of INT-006-4 specifies conditions under which the Sink Balancing Authority shall not transition to Confirmed Interchange. Requirement R1.4 of currently-effective Reliability Standard INT-007-1 is also addressed via the proposed revisions to the definition of the term "Confirmed Interchange," which clarify that this is a "state where no party has denied and all required parties have approved the Arranged Interchange." For these reasons, the proposed retirement of Reliability Standard INT-007-1 presents no reliability gap.

## E. Proposed Retirement of Reliability Standard INT-008-3—Interchange Authority Distributes Status

The purpose of Reliability Standard INT-008-3 is to ensure that the implementation of Interchange between Source and Sink Balancing Authorities is coordinated by an Interchange Authority.

### 1. Procedural History

Reliability Standard INT-008-1 was submitted on September 11, 2006. Reliability Standard INT-008-2, which superseded the Version 1 Reliability Standard INT-008-1 and was submitted on May 13, 2009, was proposed by the NERC Standards Committee through the urgent action process in February 2007 as part of an effort to increase an aspect of the timing table commonly contained in each reliability standard. Finally, Reliability Standard INT-008-3, which superseded the Version 2 Reliability Standard INT-008-2 and is currently in effect, included a variety of insubstantial changes to the timing tables in addition to those included in the original urgent action process.

#### 2. **Retirement Justification**

Currently-effective Reliability Standard INT-008-3 consists of one Requirement and is applicable to Interchange Authorities. The reliability purpose of INT-008-3 is unaffected by this proposed retirement as Requirement R5 of proposed Reliability Standard INT-006-4 lists the entities to which a Sink Balancing Authority must distribute notifications of whether an Arranged Interchange has transitioned to Confirmed Interchange.<sup>21</sup> For this reason, the proposed retirement of Reliability Standard INT-008-3 presents no reliability gap.

#### VI. **JUSTIFICATION FOR PROPOSED DEFINITIONS**

NERC proposes revisions to ten definitions in the NERC Glossary of Terms (Adjacent Balancing Authority; Arranged Interchange; Confirmed Interchange; Dynamic Interchange Schedule or Dynamic Schedule; Intermediate Balancing Authority; Operational Planning Analysis; Pseudo-Tie; Request for Interchange; Sink Balancing Authority; and Source Balancing Authority) and four new definitions (Attaining Balancing Authority; Composite Confirmed Interchange; Native Balancing Authority; and Reliability Adjustment Arranged Interchange). Provided below is the full text of each proposed definition and an explanation of the proposed revisions.

#### A. Proposed Revised Definition of "Adjacent Balancing Authority"

NERC proposes the following revised definition of the term "Adjacent Balancing Authority:"

**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.

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

<sup>21</sup> Supra at [will add page numbers in final version].

Balancing Authorities involved in the implementation of Interchange and their relationships with regards to Interchange.

## B. Proposed Revised Definition of "Arranged Interchange"

NERC proposes the following revised definition of the term "Arranged Interchange:" **Arranged Interchange** - The state where a Request for Interchange (initial or revised) has been submitted for approval.

The proposed revisions to the term "Arranged Interchange" remove references to the "Interchange Authority," to provide clarity. This proposed term is now based solely on NAESB Business Practice Standards and definitions rather than any entity that may be responsible for its application for reliability.

## C. Proposed Revised Definition of "Confirmed Interchange"

NERC proposes the following revised definition of the term "Confirmed Interchange:" **Confirmed Interchange** - The state where no party has denied and all required parties have approved the Arranged Interchange.

The proposed revisions to the term "Confirmed Interchange" are necessary to clarify the various stages of Interchange and are designed to ensure that Arranged Interchange is checked for reliability purposes before it is implemented.

## D. Proposed Revised Definition of "Dynamic Interchange Schedule or Dynamic Schedule"

NERC proposes the following revised definition of the term "Dynamic Interchange Schedule or Dynamic Schedule:"

**Dynamic Interchange Schedule or Dynamic Schedule:** A time-varying energy transfer that is updated in Real-time and included in the Scheduled Net Interchange term in the same manner as an Interchange Schedule in the affected Balancing Authorities' control ACE equations (or alternate control processes).

This defined term was revised to provide clarity that a Dynamic Schedule is updated in Real-time and is included in the Scheduled Net Interchange term in the affected Balancing Authorities' control ACE equations (or alternate control processes). Dynamic Schedules are commonly used for scheduling jointly owned generation to or from another Balancing Authority Area.

## E. Proposed Revised Definition of "Intermediate Balancing Authority"

NERC proposes the following revised definition of the term "Intermediate Balancing Authority:"

**Intermediate Balancing Authority** - A Balancing Authority on the scheduling path of an Interchange Transaction other than the Source Balancing Authority and Sink Balancing Authority.

The proposed revisions to "Intermediate Balancing Authority" are intended to clarify the various Balancing Authorities involved in the implementation of Interchange and their relationships with regards to Interchange.

## F. Proposed Revised Definition of "Operational Planning Analysis"

NERC proposes the following revised definition of the term "Operational Planning Analysis:"

**Operational Planning Analysis:** An analysis of the expected system conditions for the next day's operation. (That analysis may be performed either a day ahead or as much as 12 months ahead.) Expected system conditions include things such as load forecast(s), generation output levels, Interchange, and known system constraints (transmission facility outages, generator outages, equipment limitations, etc.).

The proposed revisions to the term "Operational Planning Analysis" are presented as an equally effective and efficient alternative to addressing FERC's concerns regarding Reliability Standard INT-006-1 in Order No. 693. FERC directed:

the ERO to develop a modification to INT-006-1 through the Reliability Standards development process that: (1) makes it applicable to reliability coordinators and

transmission operators and (2) requires reliability coordinators and transmission operators to review energy interchange transactions from the wide-area and local area reliability viewpoints respectively and, where their review indicates a potential detrimental reliability impact, communicate to the sink balancing authorities necessary transaction modifications before implementation.<sup>22</sup>

The term "Operational Planning Analysis" is used in Reliability Standards that apply to both Reliability Coordinators and Transmission Operators. Currently-effective Reliability Standard IRO-008-1 applies to Reliability Coordinators and Requirement R1 requires each Reliability Coordinator to perform an Operational Planning Analysis.<sup>23</sup> By explicitly including "Interchange" in the definition of "Operational Planning Analysis," the Reliability Coordinator must consider Interchange when performing the analysis required in Reliability Standard IRO-008-1. This addresses FERC's concern in Order No. 693 regarding the need for Reliability Coordinators to review energy Interchange Transactions from a wide-area perspective for potential detrimental reliability impacts. When the results of the analysis indicate the need for action, Requirement R3 of Reliability Standard IRO-008-1 requires the Reliability Coordinator to share its results with those entities that are expected to take those actions.<sup>24</sup> The proposed modified to "Operational Planning Analysis" is intended to ensure that Transmission Operators would be able to review Interchange Transactions from a local area reliability perspective.

## G. Proposed Revised Definition of "Pseudo-Tie"

NERC proposes the following revised definition of the term "Pseudo-Tie:"

-

Order No. 693 at P 866.

IRO-008-1, Requirement R1 provides: R1. Each Reliability Coordinator shall perform an Operational Planning Analysis to assess whether the planned operations for the next day within its Wide Area, will exceed any of its Interconnection Reliability Operating Limits (IROLs) during anticipated normal and Contingency event conditions.

<sup>&</sup>lt;sup>24</sup> IRO-008-1, Requirement R3 provides: R3. When a Reliability Coordinator determines that the results of an Operational Planning Analysis or Real-Time Assessment indicates the need for specific operational actions to prevent or mitigate an instance of exceeding an IROL, the Reliability Coordinator shall share its results with those entities that are expected to take those actions.

**Pseudo-Tie:** A time-varying energy transfer that is updated in Real-time and included in the Actual Net Interchange term (NI<sub>A</sub>) in the same manner as a Tie Line in the affected Balancing Authorities' control ACE equations (or alternate control processes).

The proposed revisions to this defined term are intended to clarify that a Pseudo-Tie is updated in Real-time and is included in the Actual Net Interchange (NI<sub>A</sub>) term in the affected Balancing Authorities' control ACE equations (or alternate control processes). Pseudo-Ties are commonly used as a "virtual" tie line flow in the ACE equation but for which no physical tie or energy metering actually exists.

## H. Proposed Revised Definition of "Request for Interchange"

NERC proposes the following revised definition of the term "Request for Interchange:"

**Request for Interchange -** A collection of data as defined in the NAESB Business Practice Standards submitted for the purpose of implementing bilateral Interchange between Balancing Authorities or an energy transfer within a single Balancing Authority.

The proposed revisions to "Request for Interchange" are intended to eliminate ambiguity by removing references to the Interchange Authority. The proposed revisions are also consistent with NAESB Business Practice Standards. This defined term is also contained within the term "Emergency Request for Interchange" and the proposed revisions are consistent with that intended meaning.

## I. Proposed Revised Definition of "Sink Balancing Authority"

NERC proposes the following revised definition of the term "Sink Balancing Authority:" **Sink Balancing Authority** - The Balancing Authority in which the load (sink) is located for an Interchange Transaction and any resulting Interchange Schedule.

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.

## J. Proposed Revised Definition of "Source Balancing Authority"

NERC proposes the following revised definition of the term "Source Balancing Authority:"

**Source Balancing Authority** - The Balancing Authority in which the generation (source) is located for an Interchange Transaction and for any resulting Interchange Schedule.

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.

## K. Proposed Newly Defined Term "Attaining Balancing Authority"

NERC proposes the following new definition for the term "Attaining Balancing Authority:"

**Attaining Balancing Authority:** A Balancing Authority bringing generation or load into its effective control boundaries through a Dynamic Transfer from the Native Balancing Authority.

The proposed term "Attaining Balancing Authority" is intended to clarify the various Balancing Authorities involved in the implementation of Interchange and their relationships with regards to Interchange. The term "Attaining Balancing Authority" is also used in the NERC Operating Manual.<sup>25</sup>

## L. Proposed Newly Defined Term "Composite Confirmed Interchange"

NERC proposes the following new definition for the term "Composite Confirmed Interchange:"

**Composite Confirmed Interchange** – The energy profile (including non-default ramp) throughout a given time period, based on the aggregate of all Confirmed Interchange occurring in that time period.

\_

Available at: http://www.nerc.com/files/opman 3 2012.pdf.

The proposed term "Composite Confirmed Interchange" was developed to define what is included in proposed Reliability Standard INT-009-2, Requirement R1 to ensure that a Balancing Authority agrees to a Composite Confirmed Interchange with each of its Adjacent Balancing Authorities.

## M. Proposed Newly Defined Term "Native Balancing Authority"

NERC proposes the following new definition for the term "Native Balancing Authority:"

**Native Balancing Authority:** A Balancing Authority from which a portion of its physically interconnected generation and/or load is transferred from its effective control boundaries to the Attaining Balancing Authority through a Dynamic Transfer.

The proposed term "Native Balancing Authority" is intended to clarify the various Balancing Authorities involved in the implementation of Interchange and their relationships with regards to Interchange. The term "Native Balancing Authority" is also used in the NERC Operating Manual.<sup>26</sup>

## N. Proposed Newly Defined Term "Reliability Adjustment Arranged Interchange"

NERC proposes the following new definition for the term "Reliability Adjustment Arranged Interchange:"

**Reliability Adjustment Arranged Interchange** – A request to modify a Confirmed Interchange or Implemented Interchange for reliability purposes.

The proposed term "Reliability Adjustment Arrange Interchange" was developed to accurately reflect the types of Interchange that are adjusted for reliability reasons.

### O. Enforceability of the Proposed Reliability Standards

The proposed Reliability Standards include Violation Risk Factors ("VRFs") and Violation Severity Levels ("VSLs"). The VSLs provide guidance on the way that NERC will

\_

Available at: http://www.nerc.com/files/opman 3 2012.pdf.

enforce the Requirements of the proposed Reliability Standards. The VRFs are one of several elements used to determine an appropriate sanction when the associated Requirement is violated. The VRFs assess the impact to reliability of violating a specific Requirement. The VRFs and VSLs for the proposed Reliability Standards comport with NERC and FERC guidelines related to their assignment. For a detailed review of the VRFs, the VSLs, and the analysis of how the VRFs and VSLs were determined using these guidelines, please see **Exhibit G**.

The proposed Reliability Standards also include Measures that support each Requirement by clearly identifying what is required and how the Requirement will be enforced. These Measures help ensure that the Requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party.

## Respectfully submitted,

## /s/ Stacey Tyrewala

Charles A. Berardesco
Senior Vice President and General Counsel
Holly A. Hawkins
Assistant General Counsel
Stacey Tyrewala
Senior Counsel
North American Electric Reliability
Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
(202) 644-8099 – facsimile
charlie.berardesco@nerc.net
holly.hawkins@nerc.net
stacey.tyrewala@nerc.net

Counsel for the North American Electric Reliability Corporation

Date: March 11, 2014

## Exhibits A, B, and D – H

## (Available on the NERC Website at

 $\frac{http://www.nerc.com/FilingsOrders/ca/Canadian\%20Filings\%20and\%20Orders\%20DL/Attachments\_IN}{T\_filing.pdf)}$ 

### **Reliability Standards Criteria**

The discussion below identifies these factors and explains how the proposed Reliability Standard has met or exceeded the Reliability Standards criteria.

1. Proposed Reliability Standards must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve that goal.

The proposed Reliability Standards achieve specific reliability goals. Proposed Reliability Standard INT-004-3— Dynamic Transfers, ensures that Dynamic Schedules and Pseudo-Ties are communicated and accounted for appropriately in congestion management procedures. Proposed Reliability Standard INT-006-4— Evaluation of Interchange Transactions, ensures that responsible entities conduct a reliability assessment of each Arranged Interchange before it is implemented. Proposed Reliability Standard INT-009-2— Implementation of Interchange, ensures that Balancing Authorities implement the Interchange as agreed upon in the Interchange confirmation process. Proposed Reliability Standard INT-010-2— Interchange Initiation and Modification for Reliability, provides guidance for required actions on Confirmed Interchange or Implemented Interchange to address reliability. Proposed Reliability Standard INT-011-1— Intra-Balancing Authority Transaction Identification, ensures that transfers within a Balancing Authority Area using Point-to-Point Transmission Service are communicated and accounted for in congestion management procedures.

2. Proposed Reliability Standards must be applicable only to users, owners and operators of the bulk power system, and must be clear and unambiguous as to what is required and who is required to comply.

Proposed Reliability Standard INT-004-3– Dynamic Transfers, applies to Balancing Authorities and Purchasing-Selling Entities and is clear and unambiguous as to what is required

and who is required to comply. The requirements clearly state who is required to comply with the standard.

Proposed Reliability Standard INT-006-4— Evaluation of Interchange Transactions, applies to Balancing Authorities and Transmission Service Providers and is clear and unambiguous as to what is required and who is required to comply. The requirements clearly state who is required to comply with the standard.

Proposed Reliability Standard INT-009-2– Implementation of Interchange, applies to Balancing Authorities and is clear and unambiguous as to what is required and who is required to comply. The requirements clearly state who is required to comply with the standard.

Proposed Reliability Standard INT-010-2– Interchange Initiation and Modification for Reliability, applies to Balancing Authorities and is clear and unambiguous as to what is required and who is required to comply. The requirements clearly state who is required to comply with the standard.

Proposed Reliability Standard INT-011-1– Intra-Balancing Authority Transaction Identification, applies to Load-Serving Entities and is clear and unambiguous as to what is required and who is required to comply. The requirements clearly state who is required to comply with the standard.

3. A proposed Reliability Standard must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.

The VRFs and VSLs for each of the proposed standards comport with NERC and FERC guidelines related to their assignment. The assignment of the severity level for each VSL is consistent with the corresponding Requirement and the VSLs should ensure uniformity and consistency in the determination of penalties. The VSLs do not use any ambiguous terminology,

thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. For these reasons, the proposed Reliability Standards include clear and understandable consequences.

4. A proposed Reliability Standard must identify clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non preferential manner.

The proposed Reliability Standards contain measures that support each requirement by clearly identifying what is required and how the requirement will be enforced. These measures help provide clarity regarding how the requirements will be enforced, and ensure that the requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party.

5. Proposed Reliability Standards should achieve a reliability goal effectively and efficiently — but do not necessarily have to reflect "best practices" without regard to implementation cost or historical regional infrastructure design.

The proposed Reliability Standards achieve the reliability goals effectively and efficiently. The proposed Reliability Standards improve reliability by making transactions more apparent for reliability assessments and by clarifying which functional entities perform Interchange Authority tasks. Collectively, the proposed five Reliability Standards also consolidate this body of standards.

6. Proposed Reliability Standards cannot be "lowest common denominator," i.e., cannot reflect a compromise that does not adequately protect Bulk-Power System reliability. Proposed Reliability Standards can consider costs to implement for smaller entities, but not at consequences of less than excellence in operating system reliability.

The proposed Reliability Standards and definitions do not reflect a "lowest common denominator" approach. To the contrary, the proposed Standards and definitions represent a significant improvement over the previous versions as described herein.

7. Proposed Reliability Standards must be designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one geographic area or regional model. It should take into account regional variations in the organization and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design if these affect the proposed Reliability Standard.

The proposed Reliability Standards and definitions apply throughout North America and do not favor one geographic area or regional model.

8. Proposed Reliability Standards should cause no undue negative effect on competition or restriction of the grid beyond any restriction necessary for reliability.

The proposed Reliability Standards and definitions do not restrict the available transmission capability or limit use of the bulk-power system in a preferential manner.

9. The implementation time for the proposed Reliability Standard is reasonable.

The proposed effective dates for the proposed Reliability Standards and definitions are just and reasonable and appropriately balance the urgency in the need to implement the standards against the reasonableness of the time allowed for those who must comply to develop necessary procedures, software, facilities, staffing or other relevant capability.

This will allow applicable entities adequate time to ensure compliance with the requirements.

The proposed effective dates are explained in the proposed Implementation Plan, attached as

Exhibit B.

10. The Reliability Standard was developed in an open and fair manner and in accordance with the Reliability Standard development process.

The proposed Reliability Standards and definitions were developed in accordance with NERC's ANSI- accredited processes for developing and approving Reliability Standards.

Exhibit H includes a summary of the Reliability Standard development proceedings, and details the processes followed to develop the standard.

These processes included, among other things, multiple comment periods, pre-ballot review periods, and balloting periods. Additionally, all meetings of the drafting team were properly noticed and open to the public. The initial and recirculation ballots both achieved a quorum and exceeded the required ballot pool approval levels.

## 11. NERC must explain any balancing of vital public interests in the development of proposed Reliability Standards.

NERC has identified no competing public interests regarding the request for approval of these proposed Reliability Standards and definitions. No comments were received that indicated the proposed Standards and definitions conflict with other vital public interests.

## 12. Proposed Reliability Standards must consider any other appropriate factors.

No other negative factors relevant to whether the proposed Reliability Standards are just and reasonable were identified.