

Standard Development Timeline

This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.

Development Steps Completed

1. SAR posted for comment (July 2, 2008 through July 31, 2008).
2. Revised SAR and response to comments posted (December 1, 2008).
3. SC authorized moving the SAR forward to standard development (December 16–17, 2008).
4. SDT appointed on (February 12, 2009).
5. First draft of proposed standard posted (November 10, 2009).
6. Project became inactive until February, 2013.
7. Second draft of standard posted for 30 day informal comment period (July 25-August 23, 2013).
- 7.8. Third draft of standard posted for 45 day formal comment period with parallel initial ballot (September 30 – November 15, 2013).

Description of Current Draft

This is the fourth ~~third~~ draft of the proposed standard and is being posted for stakeholder comments and an additional initial ballot. This draft includes the modifications based on comments submitted by stakeholders, ~~as well as items identified in the SAR and applicable FERC directives from FERC Order 693.~~

Anticipated Actions	Anticipated Date
45-day Formal Comment Period with Parallel Initial Ballot	<u>December 2013-</u> <u>January</u> 2014 <u>September-</u> October 2013
Recirculation ballot	<u>January</u> December <u>2014</u> 13
BOT adoption	<u>February</u> January <u>2014</u>
File standard with regulatory authorities.	February 2014

Effective Dates

First day of the second calendar quarter after the date that this standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is six months after the date this standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New
1	May 2, 2006	Adopted by the NERC Board of Trustees	Revised
2	October 9, 2007	Adopted by the NERC Board of Trustees (Removal of WECC Waiver)	Revised
2	July 21, 2008	Approved by FERC	Revised
3	TBD	Adopted by the NERC Board of Trustees	Revised under Project 2008-12

When this standard has received ballot approval, the text boxes will be moved to the Application Guidelines Section of the Standard.

A. Introduction

1. **Title:** Dynamic Transfers
2. **Number:** INT-004-3
3. **Purpose:** To ensure Dynamic Schedules and Pseudo-Ties are communicated and accounted for appropriately in congestion management procedures.
4. **Applicability:**
 - 4.1. Balancing Authority
 - 4.2. ~~Load-Serving~~Purchasing-Selling Entity
5. **Background:**

This standard was revised as part of the Project 2008-12 Coordinate Interchange Standards effort to ensure the transparency of dynamic transfers.

- R1 is modified from Requirement R1 of INT-001-3 and transferred into INT-004-3. The revised requirement ~~replaces the Purchasing Selling Entity with the Load-Serving Entity and now includes~~ Pseudo-Ties ~~were added~~.
- R2 is modified from INT-004-2 to separate the triggers for the review of the dynamic transfer and when a modification is required for the dynamic transfer.
- R1 and R2 now also apply to Pseudo-Ties. The requirements to create an RFI for Pseudo-Ties ensure that all entities involved are aware of the dynamic transfer and agree that ~~that~~ the various responsibilities associated with the dynamic transfer have been agreed upon.
- R3 is created to ensure that coordination occurs between all entities involved prior to the initial implementation of a Pseudo-Tie.
- The Guidelines and Technical Basis section was added to provide a summary of the considerations that must be given when establishing any dynamic transfer.

B. Requirements and Measures

- R1.** Each ~~Load-Serving~~ 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 on-time 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. [*Violation Risk Factor: Lower*]

Rationale for R1: This Requirement is intended to ensure that an RFI is submitted for a Dynamic Schedule or Pseudo-Tie. 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.

[Time Horizon: Operations Planning, Same-day Operations]

M1. The ~~Load-Serving~~Purchasing-Selling Entity shall have evidence (such as dated and time-stamped electronic logs or other evidence) that a Request for Interchange was submitted for Dynamic Schedules and Pseudo-Ties as an on-time Arranged Interchange to the Sink Balancing Authority for the Dynamic Schedule or Pseudo-Tie. For Pseudo-Ties included in congestion management procedure(s) via an alternate method, the ~~Load-Serving~~Purchasing-Selling Entity shall have evidence such as Interchange Distribution Calculator model data or written / electronic agreement with a Balancing Authority to include the Pseudo-Tie in the congestion management procedure(s). (R1)

R2. ~~The Each Load-Serving~~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: [Violation Risk Factor: Lower]

Rationale for R2: This requirement does not preclude tags from being updated at any time. The requirement specifies conditions under which the tag must be updated.

[Time Horizon: Operations Planning, Same Day Operations, Real Time Operations]

- 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 Load-Serving~~Purchasing-Selling Entity receives notification from a Reliability Coordinator or Transmission Operator to update the Confirmed Interchange.

M2. The ~~Load-Serving~~Purchasing-Selling Entity shall have evidence (such as dated and time-stamped electronic logs, reliability studies or other evidence) that it updated its Confirmed Interchange Requests for Interchange when the deviation met the criteria in Requirement R2, Parts 2.1- 2.3. (R2)

R3. Each ~~Attaining~~ Balancing Authority shall only implement or operate a register each Pseudo-Tie for which data is used in its ACE equation that is included in the NAESB Electric Industry Registry publication in order to support congestion management procedures. [Violation Risk

Rationale for R3: This Requirement is intended to ensure that a Pseudo-Tie is properly established prior to its implementation. Transparency of all Pseudo-Ties ensures proper modeling by all impacted entities. This requirement will become effective when the NAESB Electric Industry Registry (EIR) accepts Pseudo-Tie registrations. Requirements for Pseudo-Tie registration will be defined in NAESB business practices which are developed through open industry practices. All existing Pseudo-Ties will need to be registered and verified. This will be addressed in the Project 2008-12 implementation plan.

Factor: Lower] [*Time Horizon: Operations Planning*]

- M3. The Balancing Authority shall have evidence (such as dated and time-stamped electronic logs or other evidence) that it only implemented or operated registered-a Pseudo-Tie that is included in the NAESB Electric Industry Registry publication-prior to its implementation. (R3)

C. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

Regional Entity

1.2. Evidence Retention

The Load-ServingPurchasing-Selling Entity shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority (CEA) to retain specific evidence for a longer period of time as part of an investigation. For instances where the evidence retention period specified below is shorter than the time since the last audit, the CEA may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

- The Load-ServingPurchasing-Selling Entity shall maintain evidence to show compliance with R1 and R2 for the most recent 3 calendar months plus the current month.
- The Balancing Authority shall maintain evidence to show compliance with R3 for the most recent 3 calendar months plus the current month.

If a Load-ServingPurchasing-Selling Entity or Balancing Authority is found non-compliant, it shall keep information related to the non-compliance until found compliant.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

1.3. Compliance Monitoring and Assessment Processes:

Compliance Audit

Self-Certification

Spot Check

Compliance Investigation

Self-Reporting

Complaint

1.4. Additional Compliance Information

None

Table of Compliance Elements

R #	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	Operations Planning, Same Day Operations	Lower	N/A	N/A	N/A	The Load-Serving <u>Purchasing-Selling</u> Entity secured energy to serve Load via a Dynamic Schedule or Pseudo-Tie, <u>but</u> did not ensure that a Request for Interchange was submitted as on-time Arranged Interchange to the Sink Balancing Authority, and did not include information about the Pseudo-Tie in congestion management procedure(s) via an alternate method,
R2	Operations Planning, Same Day Operations	Lower	N/A	N/A	N/A	A deviation met or exceeded the criteria in Requirement R2 Parts 2.1- 2.3 <u>and was expected to persist</u> , but the Load-Serving <u>Purchasing-Selling</u> Entity did not ensure that the Confirmed Interchange associated with that Dynamic Schedule or Pseudo-Tie was updated

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						for future hours.
R3	Operations Planning	Lower	N/A	N/A	N/A	The Balancing Authority did not register <u>implement or operate</u> a Pseudo-Tie for which data was used in its ACE equation that was <u>included</u> in the NAESB Electric Industry Registry <u>publication</u> .

D. Regional Variances

None.

E. Interpretations

None.

F. Associated Documents

The complete Dynamic Transfer Reference Guidelines document is included in the NERC Operating Manual at: http://www.nerc.com/files/opman_3_2012.pdf.

Application Guidelines

Guidelines and Technical Basis

This standard requires the submittal of an Arranged Interchange for both Dynamic Schedules and Pseudo-Ties. In general, Pseudo-Ties are accounted for by all parties as actual Interchange and Dynamic Schedules are accounted for as sScheduled iInterchange. The obligations of the entities involved in each type of dynamic transfer are dependent on the type of dynamic transfer selected. These guidelines provide items that should be considered when determining which type of dynamic transfer should be utilized for a given situation.

General Considerations When Establishing and Implementing Dynamic Transfers:

- During the setup of a dynamic transfer, a common source of data is established. During that setup, plans should also be established for what will occur when that normal source of data is not available.
- Following any reliability adjustments to a Dynamic Schedule, each Balancing Authority shall use agreed upon values that ensure any limit established by the reliability adjustment is not exceeded.
 - Since the Net Scheduled Interchange term used in its control ACE (or alternate control process) is not the value from the Confirmed Interchange, but from some common source, each Balancing Authority must be prepared to take action to control the data feeding that common source.
- Each Attaining Balancing Authority shall incorporate resources attained via Dynamic Schedules or Pseudo-Ties into its processes for establishing Contingency Reserve requirements, as well as for the purposes of measuring Contingency Reserve response.

The table below describes and outlines the obligations associated with the typical historical application of Pseudo-Ties and Dynamic Schedules related to many of the topics addressed above. In practical application, however, both the Native Balancing Authority and Attaining Balancing Authority can agree to exchange the obligations from that shown in the table below.

BA's Obligation/modeling	Pseudo-Tie	Dynamic Schedule
Generation planning and reporting and outage coordination	Attaining BA	Typically, Native BA but may be re-assigned (wholly or a portion) to the Attaining BA
CPS and DCS recovery /reporting and RMS	Attaining BA	Attaining and/or Native BA (depending on agreements)
Operational responsibility	Attaining BA	Native BA
BA services FERC OATT Schedules 3–6 and other ancillary services as	Attaining BA	Native BA

Application Guidelines

required		
Ancillary services associated with transmission FERC OATT Schedules 1–2 and other ancillary services as required	Attaining/Native BA (as agreed)	Attaining/Native BA (as agreed)
ACE <u>F</u> requency <u>b</u> Bias calc/setting	The Native and Attaining BA(s) shall adjust the control logic that determines their <u>F</u> requency <u>B</u> bias setting to account for the frequency bias characteristics of the loads and/or resources being assigned between BA(s) by the <u>p</u> Pseudo- <u>t</u> Tie	The Attaining BA should include the <u>H</u> load from its dynamic schedule as a part of its forecast load to set frequency bias requirement. The Native BA should change its <u>H</u> load used to set <u>f</u> Frequency <u>b</u> Bias setting by the same amount in the opposite direction.
Load forecasting and reporting	Attaining BA	Native BA
Manual load shedding during an Energy Emergency Alert (EEA)	Attaining BA	Native BA

General Considerations for Curtailments of Dynamic Transfers

In NERC's Dynamic Transfer Reference Guidelines, Version 2, it describes unique handling of curtailments of dynamic transfers.

For Dynamic Schedules:

If transmission service between the sSource and sSink BA(s) is curtailed then the allowable range of the magnitude of the schedules between them, including dDynamic sSchedules, may have to be curtailed accordingly. All BAs involved in a dDynamic sSchedule curtailment must also adjust the dDynamic sSchedule signal input to their respective ACE equations to a common value. The value used must be equal to or less than the curtailed Dynamic sSchedule tag. Since dDynamic sSchedule tags are generally not used as dynamic transfer signals for ACE, this adjustment may require manual entry or other revision to a telemetered or calculated value used by the ACE.

For Pseudo-Ties:

If transmission service between the nNative and aAttaining BA(s) is curtailed, then the allowable range of the magnitude of the pPseudo-tTies between them must be limited accordingly to these constraints.

Application Guidelines

Both sections above describe that when eCurtailments (typically communicated through e-Tags) of dynamic transfers occur, they require additional action by Balancing Authorities to ensure compliance with the Curtailment.

Curtailments of most tagged transactions are implemented through a change in the Source and Sink Balancing Authorities' ACE equations. However, changes, including Curtailments, in Dynamic Schedule and Pseudo-Tie tagged transactions do not change the Source and Sink Balancing Authorities' ACE equations directly. These types of transactions impact the ACE equation via the Dynamic Transfer Signal, not by the e-Tag. As such, Balancing Authorities need to develop additional automation or perform additional manual actions to reduce the Dynamic Transfer Signal in order to comply with the curtailment.

Requirement R1:

Requirement R2:

Requirement R3: