

A. Introduction

1. **Title:** Interchange ~~Transaction Tagging~~ Information

2. **Number:** INT-001-01

3. **Purpose:**

To ensure that ~~Interchange information is submitted to the NERC-identified reliability analysis service. Interchange Transactions, certain Interchange Schedules, and intra-Balancing Authority Area transfers using Point-to-Point Transmission Service are Tagged in adequate time to allow the transactions to be assessed for reliability impacts by the affected Reliability Coordinators, Transmission Service Providers, and Balancing Authorities, and to allow adequate time for implementation.~~

4. **Applicability:**

4.1. Purchase-Selling Entities.

4.2. Balancing Authorities.

5. **Proposed Effective Date:** ~~April 1, 2005~~ May 1, 2006

B. Requirements

R1. The Load-serving Purchasing-Selling Entity shall ~~be responsible for ensuring~~ Interchange information Tags are is submitted to the NERC-identified reliability analysis service for:

~~Each:~~

~~R1.1. All Interchange Transactions that are between Balancing Authority Areas~~

~~R1.2. R1.1. All transfers that is are~~ entirely within a Balancing Authority Area using Point-to-Point Transmission Service (including all grandfathered and “non-Order 888” Point-to-Point Transmission Service).

~~R1.3. R1.2. All Dynamic Schedules at the expected average MW profile for each hour.~~

R2. The Sink Balancing Authority shall ~~be responsible for ensuring a that~~ Arranged Interchange is submitted to the Interchange Authority Tag is provided:

R2.1. If a Purchasing-Selling Entity is not involved in the ~~Transaction~~ Interchange, such as delivery from a jointly owned generator.

~~R2.2. For To replace unexpected generation loss, such as through prearranged reserve sharing agreements or other arrangements. If the duration of the Emergency Transaction to replace the generation loss is less than 60 minutes, then the Transaction shall be exempt from Tagging.~~

~~R2.3. R2.2. A each~~ bilateral Inadvertent Interchange payback.

~~R3. The Purchasing Selling Entity responsible for submitting the Tag shall submit all Tags to the Sink Balancing Authority according to timing tables in Attachment 1-INT-001-0.~~

~~R4. The Balancing Authority or Purchasing Selling Entity responsible for submitting the Tag shall include the reliability data listed in Attachment 2-INT-001-0 in the Tag.~~

~~R5. Each Purchasing Selling Entity with title to an Interchange Transaction shall have, or shall arrange to have, personnel directly and immediately available for notification of Interchange Transaction changes. These personnel shall be available from the time that the title to the Interchange Transaction is acquired until the Interchange Transaction has been completed.~~

C. Measures

Adopted by NERC Board of Trustees: February 8, 2005

Proposed Effective Date: ~~April 1, 2005~~ May 1, 2006

Standard INT-001-0_1 — Interchange ~~Transaction Tagging~~Information

~~MI. A Balancing Authority shall provide documentation to show all scheduled interchanges between Balancing Authority Areas were Tagged. Not Specified.~~

D. Compliance

Not Specified.

E. Regional Differences

1. [WECC Tagging Dynamic Schedules and Inadvertent Payback Waiver](#) effective on November 21, 2002.
2. [MISO Energy Flow Information Waiver](#) effective on July 16, 2003.

Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New

~~Attachment 1-INT-001-0 — Tag Submission and Response Timetables for New Transactions~~

~~Eastern Interconnection — New Transactions~~

The table below represents the Tag submission and assessment deadlines within the Eastern Interconnection. These are default requirements; some regulatory or provincially approved provider practices may have requirements that are more stringent. Under these instances, the more restrictive criteria shall be adhered to. The table describes the various minimum submission and assessment timing requirements.

Table 1: Eastern Interconnection — Timing Requirements

Transaction Duration	PSE Submit Deadline*	Actual Tag Submission Time	Provider Assessment Time	Time to Start of Transaction
Less than 24 Hours	20 Minutes prior to start	≤1 Hour prior to start	≤10 Minutes from Tag receipt	≥10 Min
		>1 to <4 hours prior to start	≤20 Minutes from Tag receipt	≥40 Min
		≥4 Hours prior to start	≤2 Hours from Tag receipt	≥2 Hours
24 Hours or longer	4 Hours prior to start	Any	≤2 Hours from Tag receipt	≥2 Hours
*Start time references are for start of the Transaction not the start of the Ramp.				

Tag submission timing requirements are based on the duration of the Transaction. Tags representing Transactions that run for less than one day (24 hours) must be submitted at least 20 minutes prior to the start of the Transaction (excluding Ramp time). Tags representing Transactions running for one day or more (24 hours or more) must be submitted at least four hours prior to the start. Tags submitted that meet these requirements shall be considered “on-time” and may be granted conditional approval. Tags submitted that do not meet these requirements shall be considered “late,” and consequently will be denied if not explicitly approved by all parties.

Tag assessment timing requirements are based on the submission time of the Tag, as well as the duration. Hourly Tags submitted one hour or less prior to start must be evaluated in ten minutes. Hourly Tags submitted more than one hour but less than four hours prior to start must be evaluated in 20 minutes. Tags of a duration less than 24 hours that are submitted four hours or more prior to start must be evaluated in two hours. Tags of duration 24 hours or more must be evaluated in two hours.

1) Eastern Interconnection — Reallocation During a Transmission Loading Relief (TLR) Event

During a NERC TLR event, Transactions may be submitted to replace existing Transactions with a lower transmission priority. The new Transaction Tag must be received no later than 35 minutes prior to the top of the hour to allow time for Reliability Coordinator to assess the impact of reallocation.

Standard INT-001-0.1 — Interchange Transaction Tagging Information

Western Interconnection—New Transactions

The table below represents the Tag submission and assessment deadlines within the Western Interconnection. These are default requirements. The tables describe the various minimum submission and assessment timing requirements.

Table 2: Western Interconnection—Timing Requirements

Transaction Start/Submittal Time	Late Status Deadline	Actual Tag Submission Time*	Provider Assessment Time	Approval/Denial Notes	Time to Start of Transaction*
Start 00:00 next day or beyond when submitted prior to 18:00 of the current day	15:00 day prior to start	Any	3 hours	Passive approval if submitted before deadline; else passive denial. Deferred denial	≥ 6 Hours
Start 00:00 next day and submitted between 18:00 and 23:59:59 on day prior to start—OR—start within current day		≥ 4 Hours prior to start	2 Hours from Tag receipt	Passive approval Deferred denial	≥ 2 Hours
		<4 Hours to ≥1 Hour prior to start	20 minutes from Tag receipt	Passive approval Deferred denial	≥ 40 Min
		<1 hour to ≥30 minutes prior to start	10 minutes from Tag receipt	Passive approval Deferred denial	≥ 20 Min
		<30 minutes to ≥20 minutes prior to start	10 minutes from Tag receipt	Passive approval Deferred denial	≥ 10 Min
	20 minutes prior to start	<20 minutes prior to start	5 minutes from Tag receipt	Passive denial. Deferred denial	Submission time minus maximum time of 5 minutes

Notes/Clarification:

All clock times are in Pacific Prevailing Time (PPT).

Tags falling under the criteria in the first row are deemed pre-schedule Tags.

Tags falling under the criteria in the remaining rows are deemed real-time Tags.

Pre-schedule Tags submitted between 15:00 and 18:00 will be assigned LATE composite status.

Real-time Tags submitted after 20 minutes prior to the start of the Transaction will be assigned LATE composite status.

*Start time references are for start of the Transaction, not the start of the Ramp.

Tag submission timing requirements are based on the type and duration of the Transaction. Tags representing Transactions that run for less than one day (24 hours) within the current day must be submitted at least 20 minutes prior to the start of the Transaction (excluding Ramp time). Tags representing Transactions that are pre-scheduled to start the next day must be submitted by 1500 PST the

Standard INT-001-0.1 — Interchange ~~Transaction Tagging~~Information

~~day prior to the day the Transaction is to start. Tags submitted that meet these requirements shall be considered “on time” and may be granted conditional approval. Tags submitted that do not meet these requirements shall be considered “late,” and consequently will be denied if not explicitly approved by all parties.~~

~~Tag assessment timing requirements are based on the submission time of the Tag, as well as the duration. Hourly Tags submitted one hour or less prior to start must be evaluated in ten minutes. Hourly Tags submitted more than one hour but less than four hours prior to start must be evaluated in 20 minutes. Tags of a duration less than 24 hours that are submitted four hours or more prior to start must be evaluated in two hours. Tags submitted for pre-scheduled service starting the next day or a future day must be evaluated in three hours.~~

Attachment 2-INT-001-0 — Required Tag Data

The following is the reliability information necessary to assess a Transaction:

1. ~~Physical path — the description of physically scheduling parties, always containing a generation segment, at least one transmission segment, and a Load segment.~~
2. ~~Generation — the physical characteristics of the energy source.~~
3. ~~Resource service point — the physical point at which the energy is being generated. This may vary in granularity, depending on local practices.~~
4. ~~Energy profile — energy to be produced by the generator for each time segment of the Transaction.~~
5. ~~Transmission — the physical characteristics of a wheel (import, export, or through).~~
6. ~~Transmission Service Provider — the identity of the Transmission Service Provider that is wheeling the energy.~~
7. ~~Point of receipt — valid point of receipt for scheduled transmission reservation.~~
8. ~~Point of delivery — valid point of delivery for scheduled transmission reservation.~~
9. ~~Scheduling entity(ies) — entities that are physically scheduling interchange on behalf of the Transmission Service Provider in order to provide wheeling services. Typically this is the Balancing Authority providing a service for the Transmission Service Provider, but several Balancing Authorities may be supporting a regional transmission service.~~
10. ~~Loss provision — the manner in which losses are accounted when they are not scheduled as in-kind megawatt distributions through the original transaction or through a separately Tagged transaction.~~
11. ~~POR and POD profiles — schedule of energy flow imported at the Point of Receipt and Exported at the Point of Delivery.~~
12. ~~Transmission reservation number — reference to a particular transmission reservation being used to provide transmission capacity to support the transaction being described.~~
13. ~~Transmission reservation profile — information describing the transmission reservation commitment.~~
14. ~~Transmission product — the firmness of service associated with the transmission reservation being used.~~
15. ~~Load — the physical characteristics of the energy sink.~~
16. ~~Resource service point (sink) — the physical point at which the energy is being consumed. This may vary in granularity, dependent on local practices.~~
17. ~~Energy profile — energy to be consumed by the Load for this Transaction.~~
18. ~~Contact information of person representing the Purchasing-Selling Entity responsible for the Tag.~~

The following information is required to modify a Transaction:

19. ~~The Transaction being curtailed or reloaded.~~
20. ~~All necessary profile changes to set the maximum flow allowed for the transaction during the appropriate hours.~~
21. ~~A contact person that initiated the curtailment or reload.~~

A. Introduction

1. **Title:** ~~Interchange Transaction Tag Communication and Reliability Assessment~~

2. **Number:** ~~INT-002-0~~

3. **Purpose:**

~~To ensure that Interchange Transaction information is provided to all entities needing to make reliability assessments and to ensure all affected reliability entities assess the reliability impacts of Interchange Transactions before approving or denying a Tag. To communicate the approvals and denials of the Tag and the final composite status of the Tag.~~

4. **Applicability:**

~~4.1. Balancing Authorities~~

~~4.2. Transmission Service Providers~~

5. **Proposed Effective Date:** ~~April~~ May 1, 20056

B. Requirements

~~R1. The Sink Balancing Authority shall ensure that all Tags and any modifications to Tags are provided via a secure network to the following entities on the Scheduling Path:~~

~~R1.1. Sink and Source Balancing Authority for the Transaction.~~

~~R1.2. Intermediate Balancing Authorities on the Schedule Path.~~

~~R1.3. Transmission Service Provider(s) on the Schedule Path.~~

~~R1.4. Reliability analysis services (IDC or other regional reliability tools).~~

~~R1.5. Transmission Operators and Reliability Coordinators who may receive the information through Reliability analysis services.~~

~~R2. Transmission Service Providers on the Scheduling Path shall be responsible for assessing and approving or denying the Interchange Transaction based on established reliability criteria and adequacy of Interconnected Operating Services and transmission rights as well as the reasonableness of the Interchange Transaction Tag. The Transmission Service Provider shall verify and assess:~~

~~R2.1. Valid OASIS reservation number or transmission contract identifier.~~

~~R2.2. Transmission priority matches reservation.~~

~~R2.3. Energy profile fits within OASIS reservation.~~

~~R2.4. OASIS reservation accommodates all Interchange Transactions.~~

~~R2.5. Connectivity of adjacent Transmission Service Providers.~~

~~R2.6. Loss accounting.~~

~~R3. Balancing Authorities on the Scheduling Path shall be responsible for assessing and approving or denying the Interchange Transaction. The Balancing Authority shall verify and assess:~~

~~R3.1. Transaction start and end time.~~

~~R3.2. Energy profile (ability to support the magnitude of the transaction).~~

~~R3.3. Ramp (ability of generation maneuverability to accommodate).~~

~~R3.4. Scheduling path (proper connectivity of adjacent Balancing Authorities).~~

~~R4. Each Balancing Authority and Transmission Service Provider on the Scheduling Path shall communicate their approval or denial of the Interchange Transaction to the Sink Balancing Authority.~~

~~R5. Upon receipt of approvals or denials from all of the individual Balancing Authorities and Transmission Service Providers, the Sink Balancing Authority shall communicate the composite approval status of the Interchange Transaction to the Purchasing-Selling Entity and all other Balancing Authorities and Transmission Service Providers on the Scheduling Path and through the Reliability analysis service to affected Transmission Operators and Reliability Coordinators.~~

C. Measures

Not specified.

D. Compliance

Not specified.

E. Regional Differences

~~1. MISO Scheduling Agent Waiver dated November 21, 2002.~~

~~2. MISO Enhanced Scheduling Agent Waiver dated July 16, 2003.~~

Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New

A. Introduction

1. **Title:** Interchange Transaction Implementation

2. **Number:** INT-003-01

3. **Purpose:**

To ensure Balancing Authorities confirm Interchange Schedules with Adjacent Balancing Authorities prior to implementing the schedules in their Area Control Error (ACE) equations.
~~To ensure Balancing Authorities incorporate all confirmed Schedules into their ACE equations.~~

4. **Applicability**

4.1. Balancing Authorities.

5. **Proposed Effective Date:** ~~April~~ May 1, 20056

B. Requirements

R1. Each Receiving Balancing Authority shall confirm Interchange Schedules with the Sending Balancing Authority prior to implementation in the Balancing Authority's ACE equation.

R1.1. The Sending Balancing Authority and Receiving Balancing Authority shall agree on:

R1.1.1. Interchange Schedule start and end time.

R1.1.2. Energy profile.

~~**R1.1.3.** Ramp start time and duration (Balancing Authorities shall use the Ramp duration established for their Interconnection unless they agree to an alternative Ramp duration.) Default Ramps durations are as follows:~~

- ~~• Default Ramp duration for the Eastern Interconnection shall be 10 minutes equally across the Interchange Schedule start and end times.~~
- ~~• Default Ramp duration for the Western Interconnection shall be 20 minutes equally across the Interchange Schedule start and end times.~~
- ~~• Ramp durations for Interchange Schedules implemented for compliance with NERC's Disturbance Control Standard (recovery from a disturbance condition) and Interchange Transaction curtailment in response to line loading relief procedures may be shorter than the above defaults, but must be identical for the Sending Balancing Authority and Receiving Balancing Authority.~~

R1.2. If a high voltage direct current (HVDC) tie is on the Scheduling Path, then the Sending Balancing Authorities and Receiving Balancing Authorities shall coordinate the Interchange Schedule with the Transmission Operator of the HVDC tie.

~~**R1.3.** Balancing Authorities that implement Interchange Schedules that cross an Interconnection boundary shall use the same start time and Ramp durations.~~

~~**R2.** Balancing Authorities shall implement Interchange Schedules only with Adjacent Balancing Authorities.~~

~~**R3.** Balancing Authorities shall begin and end Interchange Schedules at a time agreed to by the Source Balancing Authority, Sink Balancing Authority, and Intermediate Balancing Authorities.~~

~~**R4.** The Sink Balancing Authority shall be responsible for initiating implementation of each Interchange Transaction as tagged. Upon receiving composite approval from the Sink~~

Standard INT-003-0-1 — Interchange Transaction Implementation

~~Balancing Authority, each Balancing Authority on the scheduling path shall enter confirmed Schedules into its Automatic Generation Control ACE equation.~~

~~R5. Balancing Authorities shall operate such that Interchange Schedules do not knowingly cause any other systems to violate established operating criteria.~~

~~R6. Balancing Authorities shall operate such that the maximum Net Interchange Schedule between any two Balancing Authorities does not exceed the lesser of:~~

~~R6.1. The total capacity of both the owned and arranged for transmission facilities in service for any Transmission Service Provider along the path, or~~

~~R6.2. The established network Total Transfer Capability between Balancing Authorities, which considers other transmission facilities available to them under specific arrangements, and the overall physical constraints of the transmission network.~~

C. Measures

Not specified.

D. Compliance

Not specified.

E. Regional Differences

1. [MISO Scheduling Agent Waiver](#) dated November 21, 2002.
2. [MISO Enhanced Scheduling Agent Waiver](#) dated July 16, 2003.
3. [MISO Energy Flow Information Waiver](#) dated July 16, 2003.

Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New

A. Introduction

1. **Title:** Dynamic Interchange Transaction Modifications
2. **Number:** INT-004-01
3. **Purpose:** ~~To allow modifications to Interchange Transactions to address potential or actual System Operating Limit (SOL) or Interconnection Reliability Operating Limit (IROL) violations or other reliability conditions.~~ To ensure Dynamic Transfers are adequately tagged to be able to determine their reliability impacts.
4. **Applicability**
 - 4.1. Balancing Authorities
 - 4.2. Reliability Coordinators
 - 4.3. Transmission Operators
 - 4.4. Purchasing-Selling Entities
5. **Proposed Effective Date:** ~~April 1, 2005~~ May 1, 2006

B. Requirements

- ~~**R1.** If a Reliability Coordinator, Transmission Operator, or Source or Sink Balancing Authority, due to a reliability event, needs to modify an Interchange Transaction that is in progress or scheduled to be started, the entity shall, within 60 minutes of the start of the emergency Transaction, modify the Interchange Transaction tag, and shall communicate the modification to the Sink Balancing Authority. Reliability events may include:~~
- ~~**R1.1.** Transmission Loading Relief procedure curtailment — Eastern Interconnection.~~
 - ~~**R1.2.** Interconnection, regional, or local overload relief or congestion management procedures.~~
 - ~~**R1.3.** SOL or IROL potential or actual limit violation.~~
 - ~~**R1.4.** Loss of generation.~~
 - ~~**R1.5.** Loss of Load.~~
- ~~**R2.** A Generator Operator or Load Serving Entity may request the Host Balancing Authority to modify an Interchange Transaction due to loss of generation or Load.~~
- ~~**R2.1.** When a loss of generation necessitates curtailing Interchange Transactions, the Source Balancing Authority shall coordinate the modifications to the appropriate tags.~~
 - ~~**R2.2.** When a loss of Load necessitates curtailing Interchange Transactions, the Sink Balancing Authority shall coordinate the modifications to the appropriate tags.~~
- ~~**R3.** Upon receipt of modification to an Interchange Transaction as described in Requirement R1, the Sink Balancing Authority (Source Balancing Authority in the case of a loss of generation) shall communicate the modified information about the Interchange Transaction, including its composite approval status, to all Balancing Authorities and Transmission Service Providers on the Transaction path and the Purchasing-Selling Entity responsible for the Transaction.~~
- ~~**R4.R1.** _____ At such time as the reliability event allows for the reloading of the transaction, the entity that initiated the curtailment shall release the limit on the Interchange Transaction tag to allow reloading the transaction and shall communicate the release of the limit to the Sink Balancing Authority.~~

R5.R2. The Purchasing-Selling Entity responsible for tagging a Dynamic Interchange Schedule shall ensure the tag is updated for the next available scheduling hour and future hours when any one of the following occur:

R5.1.R2.1. The average energy profile in an hour is greater than 250 MW and in that hour the actual hourly integrated energy deviates from the hourly average energy profile indicated on the tag by more than $\pm 10\%$.

R5.2.R2.2. The average energy profile in an hour is less than or equal to 250 MW and in that hour the actual hourly integrated energy deviates from the hourly average energy profile indicated on the tag by more than ± 25 megawatt-hours.

R5.3.R2.3. A Reliability Coordinator or Transmission Operator determines the deviation, regardless of magnitude, to be a reliability concern and notifies the Purchasing-Selling Entity of that determination and the reasons.

C. Measures

M1. The Sink Balancing Authority shall provide evidence that the responsible Purchasing-Selling Entity revised a tag when the deviation exceeded the criteria in [Reliability Standard INT-004 Requirement R52](#).

D. Compliance

1. Compliance Monitoring Process

Periodic tag audit as prescribed by NERC. For the requested time period, the Sink Balancing Authority shall provide the instances when Dynamic Schedule deviation exceeded the criteria in [Requirement Reliability Standard INT-004 Requirement 2](#) and shall provide evidence that the responsible Purchasing-Selling Entity submitted a revised tag.

1.1. Compliance Monitoring Responsibility

Regional Reliability Organization.

1.2. Compliance Monitoring Period and Reset Timeframe

One calendar year without a violation from the time of the violation.

1.3. Data Retention

Three months.

1.4. Additional Compliance Information

Not specified.

2. Levels of Non-Compliance

2.1. Level 1: Not specified.

2.2. Level 2: Not specified.

2.3. Level 3: Not specified.

2.4. Level 4: Not specified.

E. Regional Differences

1. [WECC Tagging Dynamic Schedules and Inadvertent Payback Waiver](#) dated November 21, 2002.

Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New

Attachment 1-INT-004-0

Interchange Transaction Modifications

Curtailments, reloads, market initiated modifications, and other Transaction modifications that affect energy profiles must be received by and evaluated within certain times. The following tables describe the submission and evaluation requirements for such changes.

Modification requests received by the deadlines specified below shall be considered “on time,” and are eligible for passive approval. Modification requests received past the deadlines shall be considered “late,” and are considered denied unless explicitly approved by all parties.

Table 1: Eastern Interconnection—Modifications

Modification Type	Requestor Submission Deadline***	Actual Submission Time***	Evaluation Time
Reliability (Curtailments or Reloads)	20 minutes prior to modification start**	Less than 30 minutes to start	10 minutes
		30 minutes or more prior to start	15 minutes
Market—Committed transmission reservation(s) Reductions	N/A	N/A	N/A
Market—Committed transmission reservation(s) Increases, Energy Reductions, Energy Increases*	20 minutes prior to modification start**	Less than 30 minutes to start	10 minutes
		30 minutes or more prior to start	15 minutes
***Start time references are for start of the Transaction not the start of the Ramp.			

Table 2: Western Interconnection—Modifications

Modification Type	Requestor Submission Deadline***	Actual Submission Time***	Evaluation Time
Reliability (Curtailments or Reloads)	25 minutes prior to modification start**	Less than 30 minutes to start	10 minutes
		30 minutes or more prior to start	15 minutes

Standard INT-004-0-1 — Dynamic Interchange Transaction Modifications

Market—Committed transmission reservation(s) Reductions	N/A	N/A	N/A
Market—Committed transmission reservation(s) Increases, Energy Reductions, Energy Increases*	25 minutes prior to modification start**	Less than 30 minutes to start	10 minutes
		30 minutes or more prior to start	15 minutes
***Start time references are for start of the Transaction not the start of the Ramp.			

*See Special Exception for Cancellations below.

**If received after deadline, requires active approval or will be passively denied

Special Exception for Cancellations

A cancellation is defined as setting both committed transmission reservation(s) and energy flow to zero for the duration of the Transaction prior to the start of a Transaction but following that Transaction's approval. In the event that a Purchasing-Selling Entity submitting the tag elects to cancel a Transaction, the following timelines should be utilized:

Table 3: Special Exception for Cancellations Submission and Evaluation Timing

Region	Submission Deadline*	Evaluation Time
Eastern Interconnection	15 minutes prior to transaction start	If received by deadline, no evaluation required. Request is automatically approved.
		If not received by deadline, request is not eligible for special exception for cancellations, and must be processed normally.
Western Interconnection	20 minutes prior to transaction start	If received by deadline, no evaluation required. Request is automatically approved.
		If not by deadline, request is not eligible for special exception for cancellations, and must be processed normally.
*Start time references are for start of the Transaction not the start of the Ramp.		