

NAESB Coordinate Interchange Business Practice Standard (Request For Interchange, RFI)

Background:

In light of the continuing restructuring of the Electric industry, and FERC's rulemaking to ensure open and non-discriminatory access to the nation's transmission systems, NERC is developing Reliability Standards to replace current Operating Policies and Procedures.

With regards to Policy 3, NERC currently is developing the Coordinate Interchange Standard to address the reliability issues associated with bilateral Interchange. The Standard is being developed using the Functional Model as a basis for defining the "Functions" necessary for Bulk Electric System reliability rather than the existing NERC Operating Policies for "Control Areas".

Introduction:

The NAESB Standards Review Subcommittee requested the development of a NAESB Business Practice Standard complementary to NERC's Coordinate Interchange Standard in June, 2003. This Standard development was approved by the Joint Interface Committee (JIC) representatives from NERC, NAESB, and RTO/ISO and assigned to NAESB for development.

This Standard identifies market-supported processes necessary to facilitate fair & "equitable" Interchange practices. It specifies the arrangements that need to be made and the data that needs to be communicated to the Interchange Authority (IA) and to all involved parties of the Request for Interchange (RFI) in order for Interchange to take place between Source and Sink Balancing Authorities (BA). It also implements the flow of data and approval mechanisms to facilitate Interchange.

Although this Standard specifies that NAESB is to determine the protocols needed to implement the Standard, it is not NAESB's intent to replace the existing ETAG specifications and protocols.

This Standard only covers the business arrangements and data requirements necessary to get the RFI to the IA and transition it into Arranged Interchange. The transition from Arranged Interchange to Confirmed Interchange and ultimately to Implemented Interchange will be accomplished in accordance with NERC Standards.

The Standard recognizes that FERC approved tariffs may supersede some provisions in this Standard.

The Standard applies Functional Model definitions to provide consistency with NERC's Reliability Standards. Terms used in this Standard which are defined by the Functional Model are not defined herein.

Until such time that the Entities defined by the NERC Functional Model are certified, the existing entities currently performing those functions will continue to do so.

Terms defined in the proposed NERC Coordinate Interchange Standard are included for reference only. Although these terms have not been approved as a Standard, the ESS believes these definitions will provide clarity to the various transition states of Interchange. For the purposes of this standard, only these terms are defined as follows:

Arranged Interchange – The state where required information is provided to the Interchange Authority

Confirmed Interchange - The state where the Interchange Authority has verified the Arranged Interchange and it is provided to the Balancing Authorities.

Interchange – Energy transfers that cross Balancing Authority boundaries.

Implemented Interchange- The state where the Balancing Authority enters the Confirmed Interchange into its area control error (ACE) equation's net scheduled Interchange component

Definitions

RFI Standard 1.0 For the purposes of this Standard, the following definitions shall be applied:

RFI Standard 1.1 Approval Entities – Those entities responsible for providing active approvals during the Market and/or Reliability Periods.

RFI Standard 1.2 Interchange Block Accounting – Energy accounting that assumes a beginning and ending ramp time of zero minutes. For accounting purposes, this moves the energy associated with the starting and ending ramps into the adjacent starting and ending clock time of the Interchange.

RFI Standard 1.3 Market Adjustment – A desired modification to the energy and/or transmission profile during the Confirmed Interchange period.

RFI Standard 1.4 Market Assembly – Function responsible for coordinating the submittal of the completed and balanced RFI from the Requesting PSE, or its designee, to the Interchange Authority.

RFI Standard 1.5 Market Period – The period of time when a Requesting PSE is making purchase, sale, and Transmission service arrangements needed to support a RFI.

RFI Standard 1.6 Reliability Period – The segment of time from when the IA has received the RFI from the requesting PSE, or its designee, to physical implementation (beginning of ramp time).

RFI Standard 1.7 Request For Interchange, RFI- A collection of data as defined in the NAESB RFI Datasheet to be submitted to the IA for the purpose of implementing bilateral Interchange.

RFI Standard 1.8 Requesting PSE – The PSE submitting the Request For Interchange (RFI). Under current policy this entity would be called the “Tag Author”.

RFI Standard 1.9 Sink BA – The Balancing Authority responsible for monitoring and/or controlling the load identified as the sink of a bilateral Interchange.

RFI Standard 1.10 Source BA – The Balancing Authority responsible for monitoring and/or controlling the generation identified as the source of a bilateral Interchange.

RFI Standard 1.11 Interchange Correction – Modifications to non-reliability data of a Request For Interchange (RFI) while it is Arranged Interchange. This non-reliability data is located in the NAESB RFI Datasheet and is labeled as “correctable”.

Business Practices

RFI Standard 2.0 All requests to implement bilateral Interchange shall be accomplished by the submission of a completed “Request For Interchange”, RFI, to the Interchange Authority (IA).

RFI Standard 2.1 A completed RFI shall contain, at a minimum, the NERC required information specified in the most current version of the **NAESB RFI Datasheet** (attached).

RFI Standard 2.2 It shall be the responsibility of the load serving Purchasing-Selling-Entity (PSE), or their designee, to ensure the completed RFI has been submitted to IA.

RFI Standard 3.0 All energy purchase, energy sale, and Transmission service arrangements necessary to implement the bilateral Interchange shall be performed during the Market Period.

RFI Standard 4.0 The Requesting PSE shall verify all necessary business and transmission arrangements prior to the RFI being submitted to the IA and shall distribute a copy of the RFI to all involved parties. At its discretion, the Requesting PSE may defer this responsibility to the Market Assembly Function.

RFI Standard 4.1 In the current ETAG environment, the Market Assembly Function shall be accomplished by the Tagging Authority.

RFI Standard 5.0 The completed RFI shall be submitted to the IA and concurrently to all involved parties in accordance with the timing requirements of the most current version of the **NAESB RFI Submission and Response Timetables** (attached).

RFI Standard 5.1 Upon receipt of the RFI by the IA, the RFI transitions into Arranged Interchange.

RFI Standard 6.0 The Arranged Interchange shall be assessed by all reliability Approval Entities and those assessments communicated back to the IA in accordance with the timing requirements of the most current version of the **NAESB RFI Submission and Response Timetables**.

RFI Standard 6.1 The results of that assessment shall be promptly communicated by the IA to all involved parties.

RFI Standard 6.2 All denials of a requested RFI by any reliability Approval Entity shall be communicated to all involved parties and shall be accompanied by the reason for such denial.

RFI Standard 7.0 Any changes to the status of the RFI shall be communicated by the IA to all involved parties of the RFI, including BAs, IAs, RAs, all PSEs, and the TSPs.

RFI Standard 7.1 In the current ETAG environment this shall be accomplished by the Tagging Authority.

RFI Standard 8.0 The primary method for submitting a RFI to the IA shall be by electronic means using protocols to be determined by NAESB.

RFI Standard 8.1 A backup or redundant electronic system shall be available for immediate use should the primary electronic means become disabled.

RFI Standard 8.2 Submitting a RFI to the IA via facsimile is acceptable only as a last resort when the electronic means and its required backup or redundant system are not available.

RFI Standard 8.3 Until such time as NERC and/or NAESB establish replacement protocols, the preferred method of submitting data to the IA shall be the most current version of the NERC E-Tag Specifications.

RFI Standard 9.0 Corrections to the Arranged Interchange shall be allowed until the Arranged Interchange has been approved by the reliability Approval Entities.

RFI Standard 9.1 Timing for corrections shall be in accordance with the **NAESB RFI Submission and Response Timetables**.

RFI Standard 10.0 Market adjustments made to the Confirmed Interchange by the PSE, or their designee, must be submitted to the IA and the reliability Approval Entities.

RFI Standard 10.1 Timing of the approval assessment on the Market Adjustment by the reliability Approval Entities shall be in accordance with the **NAESB RFI Submission and Response Timetables**. If the adjustment is denied by any Approval Entity, the original request remains valid for the original RFI duration period.

RFI Standard 11.0 All parties involved in the bilateral Interchange shall have, or arrange to have, personnel on site and immediately available 24 x 7 for notification of changes to the Request for Interchange.

RFI Standard 11.1 The personnel shall be available from the beginning of the Market Period through the implementation of the Confirmed Interchange.

RFI Standard 12.0 Unless provided for under a FERC approved market mechanism, energy accounting for all RFIs shall be accomplished via Interchange Block Accounting.

RFI Standard 13.0 Settlement of losses shall be either handled as financial or as payment in-kind.

RFI Standard 13.1 For losses handled as payment in-kind, the PSE, or its designee, shall communicate to the IA, via a RFI (either the original RFI or separate RFIs), the MW losses and the entity the losses are with for each TSP/BA along the Interchange path.

RFI Standard 14.0 Default ramp rates for the North American Interconnection shall be as follows:

RFI Standard 14.1 Default ramp rate for the Eastern Interconnection shall be 10 minutes equally across the start and end times of the RFI unless otherwise agreed to by all parties involved in the RFI .

RFI Standard 14.2 Default ramp rate for the Western Interconnection shall be 20 minutes equally across the start and end times of the RFI unless otherwise agreed to by all parties involved in the RFI.

NAESB RFI Datasheet

(Request For Interchange)

Required and Correctable Data

Version 1

- A. New Requests For Interchange
 - B. Market Related Profile Modifications (Market Adjustment)
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A. New Requests For Interchange

A **new RFI** is an RFI that has not yet been implemented or confirmed for implementation. Such RFI must be presented to those entities that are responsible for the implementation of the RFI in order that they may **evaluate** the Request and determine whether or not it can be implemented. The following information is to be used to describe such a RFI.

1. Market Information

1.1. Financial Path (Required) – the description of financially responsible parties for the Interchange in order. This will typically start with a GPE and finish with a LSE, with optionally Intermediate PSE'S between the two.

1.1.1. Energy Title Holder(s) (Required) – the identity of the entities financially responsible to take and/or deliver the energy as described in the physical path. This will typically start with a GPE and finish with a LSE, with optionally Intermediate PSE'S between the two.

1.1.1.1. Energy Product Type (Correctable) – the type of energy delivered by the Energy Title Holder.

1.1.1.2. Contract Number(s) (Correctable) – reference to a INTERCHANGE entered into by the Energy Title Holder with one or more other participants in the RFI.

1.1.1.3. Miscellaneous Information (Correctable) – information provided at the author's option regarding the RFI.

2. Physical Information

2.1. Physical Path (Required) – the description of physically scheduling parties for the Interchange in order and related to the financially responsible parties described above. This will always contain a Generation segment, at least one Transmission segment, and a LOAD segment.

2.1.1. Generation (Required) – set of data describing the physical and contractual characteristics of the energy source.

2.1.2.9.3 Transmission Reservation Profile (Required) - information describing the transmission reservation commitment associated with the TRANSMISSION PROVIDER.

2.1.3. Load (Required) – set of data describing the physical and contractual characteristics of the energy sink.

2.1.3.1. Resource Service Point (Required) – the physical point at which the energy is being consumed. This may vary in granularity, dependent on local business practices.

2.1.3.2. Contract Number(s) (Correctable) – reference to a schedule or agreement entered into by the Load Serving Entity and the Load and/or Distributor.

2.1.3.3. Miscellaneous Information (Correctable) – information provided at the author’s option regarding the RFI.

2.1.3.4. Energy Profile (Required) – energy to be consumed by the load for this RFI.

Using Multiple Transmission Reservations to Support a Single Leg of an Interchange

The use of multiple transmission reservations to support a single leg of an RFI is known as transmission **stacking**. There are two types of transmission stacking:

- Vertical stacking, in which a Transmission Customer combines multiple reservations to achieve a certain net level of transmission capacity, and
- Horizontal stacking, in which a Transmission Customer combines multiple reservations to achieve a certain transmission capacity coverage over time.

The following diagrams illustrate these concepts more fully. In both cases, the assumed need is 100 MW of transmission capacity for hours 06:00 through 22:00.

B. Market-Related Profile Modifications (Market Adjustment)

Profile Modifications are changes to a RFI's energy profile based on market desires. Such modifications must be presented to those entities that are responsible for the implementation of the modification in order that they may **evaluate** the RFI and determine whether or not the modification can be implemented. The following information must be used to describe such a modification.

- The RFI being modified
- All necessary profile changes to set the transmission capacity or energy flow to the desired levels during the appropriate hours (including the specification of new reservations to support the request, if necessary), and
- Contact information for the person that initiated the modification.

NAESB RFI Submission and Response Timetables

Document Subsections

- C. Eastern Interconnection – New Interchanges
- D. Western Interconnection – New Interchanges
- E. Interchange Corrections
- F. Interchange Modifications

A. Eastern Interconnection – New Interchanges

The table below represents the recommended business practices for RFI submission deadline to the Reliability Entities+ 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.

Table 1: Eastern Interconnection – Timing Requirements

Interchange Duration	Submit Deadline to Reliability Entities * +	Actual RFI Submission Time	Approval Entity Assessment Time	Time to Start of Interchange
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 INTERCHANGE not the start of the ramp.				
+ Includes BA, RA, TSP				

RFI submission timing requirements are based on the duration of the INTERCHANGE. RFIs representing INTERCHANGES that run for less than one day (24 hours) must be submitted at least 20 minutes prior to the start of the INTERCHANGE (excluding ramp time). RFIs representing INTERCHANGES running for one day or more (24 hours or more) must be submitted at least four hours prior to the start. RFIs submitted that meet these requirements shall be considered “on-time” by the E-Tag system and may be granted conditional approval. RFIs submitted that do not meet these requirements shall be

considered “late” by the E-Tag system, and consequently will be denied if not explicitly approved by all parties.

The E-Tag system accepts tags with a start time up to one hour prior to the current time. Tags with a start time older than one hour will be rejected as invalid. This one-hour window shall be used to submit tags to document emergency actions taken to mitigate an OPERATING SECURITY LIMIT violation (Policy 3, Section A 2.4.1). This provision shall not be used to schedule INTERCHANGES without the proper tag (Policy 3, Section A 6.1). RFI assessment timing requirements are based on the submission time of the RFI, as well as the duration. Hourly RFIs submitted one hour or less prior to start must be evaluated in ten minutes. Hourly RFIs submitted more than one hour but less than four hours prior to start must be evaluated in 20 minutes. RFIs with duration of less than 24 hours that are submitted four hours or more prior to start must be evaluated in two hours. RFIs with duration of 24 hours or more must be evaluated in two hours.

Timing Requirements for Reallocation when in a TLR Event

During a NERC TLR event, INTERCHANGES may be submitted to replace existing INTERCHANGES with a lower transmission priority. The new INTERCHANGE RFI must be received by the Interchange Distribution Calculator no later than 35 minutes prior to the top of the hour to allow time for RELIABILITY COORDINATOR to assess the impact of reallocation.

B. Western Interconnection – New Interchanges

The tables below represent the recommended business practices for RFI submission deadlines to the Reliability Entities 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

Interchange Start/Submittal Time	Submit Deadline to Reliability Entities * +	Actual RFI Submission Time*	Approval Entity Assessment Time	Approval/Denial Notes	Time to Start of Interchange*
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 RFI receipt	Passive Approval Deferred denial	≥ 2 Hours
		<4 Hours to ≥1 Hour prior to start	20 minutes from RFI receipt	Passive Approval Deferred denial	≥ 40 Min
		<1 hour to ≥30 minutes prior to start	10 minutes from RFI receipt	Passive Approval Deferred denial	≥ 20 Min
		<30 minutes to ≥20 minutes prior to start	10 minutes from RFI receipt	Passive Approval Deferred denial	≥ 10 Min
	20 minutes prior to start	<20 minutes prior to start	5 minutes from RFI receipt	Passive Denial. Deferred denial	Submission time minus maximum time of 5 minutes

Notes/Clarification:

1. All clock times are in PPT.
2. RFI falling under the criteria in yellow are deemed pre-schedule requests.
3. RFI falling under the criteria in green are deemed real-time requests.
4. Pre-schedule requests submitted between 15:00 and 18:00 will be assigned LATE composite status.
5. Real-time requests submitted after 20 minutes prior to the start of the Interchange will be assigned LATE composite status.

*Start-time references are for start of the Interchange, not the start of the ramp.

+ Includes BA, RA, TSP

RFI submission timing requirements are based on the type and duration of the INTERCHANGE. RFIs representing INTERCHANGES that run for less than one day (24 hours) within the current day must be submitted at least 30 minutes prior to the start of the INTERCHANGE (excluding ramp time). RFIs representing INTERCHANGES that are pre-scheduled to start the next day must be submitted by 1500 PST the day prior to the day the INTERCHANGE is to start. RFIs submitted that meet these requirements shall be considered “on-time” by the E-Tag system and may be granted conditional approval. RFIs submitted that do not meet these requirements shall be considered “late” by the E-Tag system, and consequently will be denied if not explicitly approved by all parties. The E-Tag system accepts tags with a start time up to one hour prior to the current time. RFIs with a start time older than one hour will be rejected as invalid. This one-hour window shall be used to submit RFIs to document emergency actions taken to mitigate an

OPERATING SECURITY LIMIT violation (Policy 3, Section A 2.4.1). This provision shall not be used to schedule INTERCHANGES without the proper RFI (Policy 3, Section A 6.1). RFI assessment timing requirements are based on the submission time of the RFI, as well as the duration. Hourly RFIs submitted one hour or less prior to start must be evaluated in ten minutes. Hourly RFIs submitted more than one hour but less than four hours prior to start must be evaluated in 20 minutes. RFIs with a duration of less than 24 hours that are submitted four hours or more prior to start must be evaluated in two hours. RFIs submitted for pre-scheduled service starting the next day or a future day must be evaluated in three hours.

C. Interchange Corrections

INTERCHANGE Corrections may be provided by the PSE to the IA to replace non-reliability data listed in a RFI. As each correction is received, the Evaluation Time of the INTERCHANGE will extend, based on the following rules:

- Each correction shall extend the evaluation time by ten minutes
- At no time can the evaluation time be extended past the start time of the INTERCHANGE.
- Each correction shall reset the approval status of those entities affected by the correction
- The segment or segments corrected will be eligible for passive approval if the correction is received within the timelines specified below, except in the case where the INTERCHANGE has already been set for passive denial. The segment or segments corrected will be subject to passive denial if the correction is not received within the timelines specified below. At no point may a INTERCHANGE segment already under Passive Denial constraints be returned to Passive Approval eligibility.

Table 3: Correction Submission Requirements*

Eastern Interconnection	Western Interconnection
20 minutes prior to start	30 minutes prior to start
*Start time references are for start of the Interchange not the start of the ramp.	

D. Interchange Modifications

Market-initiated modifications and other INTERCHANGE 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 active Approval. Modification requests received past the deadlines shall be considered “late,” and are considered denied unless explicitly approved by all parties.

Table 4: 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 Interchange not the start of the ramp.			

Table 5: 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
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 Interchange not the start of the ramp.			

*See Special Exception for Cancellations below

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

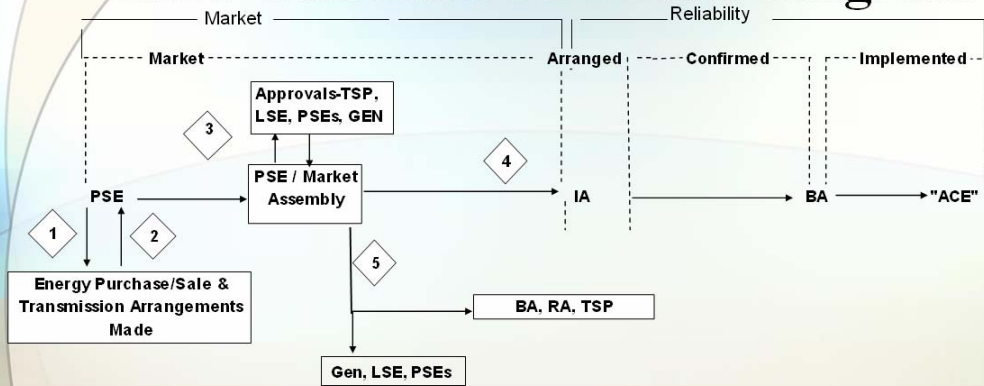
Special Exception for Cancellations

A cancellation is defined as setting both committed transmission reservation(s) and energy flow to zero for the duration of the INTERCHANGE **prior** to the start of a INTERCHANGE but **following** that INTERCHANGES approval. In the event that a PSE elects to cancel a INTERCHANGE, the following timelines should be utilized:

Table 6: Special Exception for Cancellations Submission and Evaluation Timing

Region	Submission Deadline*	Evaluation Time
Eastern Interconnection	15 minutes prior to Interchange 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 Interchange 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 Interchange not the start of the ramp.		

CIBP Standard RFI Flow Diagram



- **1 & 2** - All energy purchase/sale & transmission service arrangements are performed.
- **3** - Market approvals requested/received by PSE/Market Assembly Function.
- **4** - Submission of RFI by PSE/Market Assembly Function to IA. RFI includes reliability data (required) and business information.
- **5** - Concurrent with Step 4, PSE/Market Assembly Function sends RFI request to market and reliability Approval Entities.