NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

Princeton Forrestal Village, 116-390 Village Boulevard, Princeton, New Jersey 08540-5731

Coordinate Interchange Standard Drafting Team Meeting

Wednesday, June 2, 2004 — 1–5 p.m.

Omni Majestic Hotel
1019 Pine Street
St. Louis, Missouri
Phone: 314-436-2355

Agenda

1. Administrative **10 min.**

a. Welcome and Introductions – Chairman
b. Arrangements – Secretary
c. Antitrust Guidelines – Chairman **[Attachment 1]**
d. Approval of Agenda – Chairman

2. Overview of NERC Certification Standards – Al Boesch **10 minutes**

a. Standard 1400 – Certification of the Balancing Authority Function
b. Standard 1500 – Certification of the Interchange Authority Function
c. Standard 1600 – Certification of the Reliability Authority Function
d. Standard 1700 – Certification of the Transmission Operator Function
[https://www.nerc.net/standards/ReliabilityStandards.aspx?tabindex=2&tabid=14 **]**
e. Registration of Functions

3. Interchange Authority Task Force – John Simonelli **20 minutes**

a. Update on Interchange Authority Function Task Force – John Simonelli
b. Actions from the Version 0 Drafting Team's May 20–21, 2004 meeting – Gordon Scott **[Attachment 2]**

4. Transitional Issues – Version 0 to Version 1 – Mike Oatts **1 hour**

a. Moving forward with the Coordinate Interchange Standard, Version 1 **[Attachment 3]**
    i) Drafting and implementing Version 1
        (1) Timeline for developing Version 1
b. Input into the June 3–4, 2004 Coordinate Interchange and Business Standard Meeting

5. Update on the Version 0 Standard Documents – Al Boesch **30 minutes**

a. Review of Version 0 documents, including Coordinate Interchange Standard Version 0 **[Attachment 4]**
    i) Version 0 Standards Working Template **[Attachment 5]**

6. Responses and Assignments – Pete Harris, Joe Willson **Remainder of Day**

a. Review items discussed at May 4–5, 2004 meeting – Mike Oatts
b. Review Emails discussing BA-to-BA Communications – Mike Oatts **[Attachment 6 and 7]**

c. Timing issues, IA to BA communications – Pete Harris
d. Compliance requirements – Joe Willson

7. Future Meetings – Secretary **10 min.**

a. Calendar for 2004

Attachment 1

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NERC ANTITRUST COMPLIANCE GUIDELINES

I. GENERAL

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or which might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

II. PROHIBITED ACTIVITIES

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.
- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.

Approved by NERC Board of Trustees
June 14, 2002

III. ACTIVITIES THAT ARE PERMITTED

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation and Bylaws are followed in conducting NERC business. Other NERC procedures that may be applicable to a particular NERC activity include the following:

- Organization Standards Process Manual
- Transitional Process for Revising Existing NERC Operating Policies and Planning Standards
- Organization and Procedures Manual for the NERC Standing Committees
- System Operator Certification Program

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.

- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.

- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.

- Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.

Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

Attachment 2

Background – [Attachment 2]

Version 0 Drafting Team, May 20-21 excerpts from meeting minutes

Operating Policy 3 Conversion

Roman Carter presented ideas for the translation of Operating Policy 3 that are being considered by the Interchange Subcommittee and the Coordinate Interchange Drafting Teams of NERC and NAESB. The translation of Policy 3 presents conflicting objectives of adopting the functional model and not changing the reliability requirements from those in effect today. To adopt the functional model scheduling approach would require implementation of an Interchange Authority (IA) function that does not exist in practice today and would require changes to procedures, tools and training.

The drafting team agreed that Operating Policy 3 should be translated to Version 0 by retaining the existing method of interchange scheduling (control area to control area). The translation would change Control Area to Balancing Authority and adopt other changes to be as consistent as practical with the functional model, but without adopting the IA scheduling model. The proposed approach for translating Operating Policy 3 into Version 0 standards is described in **Exhibit A [Attachment 3 in this agenda]**. The Interchange Subcommittee and Coordinate Interchange Drafting Teams were encouraged to continue developing Version 1 standards that would implement the IA model and replace the applicable Version 0 standards.

Converting Operating Policies to Version 0 Standards

The drafting team is expecting inputs from the Operating Committee subcommittees regarding the translation of Operating Policies 1-9. Additionally, NAESB and the Market Committee are preparing recommendations on what parts of the operating policies should be business practice standards. The group completed its own review of the operating policies and associated appendices and made the following recommendations:

- Operating Policy 3 should proceed along the lines presented by the IS and interchange drafting teams. Portions of Operating Policy 3 would be allocated to NAESB as business practice standards.
- Proceed with all other policies and appendices under the assumption that they will be incorporated into Version 0 reliability standards. With the limited information available at this meeting, the group could not identify any operating policy requirements or appendices that should obviously become business practice standards (except as previously noted in Operating Policy 3).

NAESB Update on Version 0

WEQ Adoption of Version 0 Standards and Coordination with NERC

Michael Desselle, director of public policy for AEP, and NAESB Chairman, reported that NERC is seeking to have their Version 0 reliability standards completed by Feb. 2005, and that NAESB is on a similar track to complete its complementary Version 0 business practice standards. NAESB's goal is to have recommended standards before the Executive Committee at their Nov. 30 meeting. The Business Practices Subcommittee (BPS) met on May 13 and prepared a draft request that mirrors the NERC request. As NERC meets to address version 0 reliability standards, BPS will hold a follow up meeting shortly thereafter. Both NERC and NAESB will submit their respective requests for standards to the Joint Interface Committee (JIC), which will schedule a conference call in late June followed by a face to face meeting in Salt Lake City, Utah on July 12 in conjunction with the NARUC Summer Meeting.

Attachment 3

NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL

Princeton Forrestal Village, 116-390 Village Boulevard, Princeton, New Jersey 08540-5731

May 19, 2004

TO: VERSION 0 STANDARD DRAFTING TEAM

Coordinate Interchange Standard Version 0 from NERC Policy 3

The NERC Interchange Subcommittee, NERC Coordinate Interchange Standard Drafting Team and NAESB Coordinate Interchange Business Practices Task Force members have combined efforts to transition NERC Policy 3, "Interchange," to the draft NERC Coordinate Interchange Standard Version 0 and draft NAESB Coordinate Interchange Business Practice Version 0.

Certain assumptions have to be made to transition the current NERC Policy 3 to the Functional Model as certain systems and functional dependencies that exist today will not change when Version 0 is implemented. Some of those assumptions follow:

1) Interchange that is required to be E-Tagged under Policy 3 will be required to be E-Tagged under Version 0.
2) The Sink Balancing Authority will be required to have an E-Tag Authority Service that conforms to the current E-Tag Specification.
3) The NERC Interchange Subcommittee assumes that the NERC IDC will be the basis for Transmission Loading Relief procedures and will be included in Policy 9, Version 0.
4) All approved interchange E-Tags in the Eastern Interconnection will be forwarded to the NERC IDC.
5) The NERC Registry will be updated to accommodate the Functional Model as defined in Version 0 standards.
6) The NERC Registry will not allow registration for the Interchange Authority, as Interchange Authority responsibilities will be distributed in Version 0. The coordination of scheduled interchange along the scheduling path will be required in Version 0 and continue to be performed by the Balancing Authorities on the path.
7) The NERC waivers applicable to Policy 3 will be supported in Version 0.
8) Existing timing requirements for E-Tagging should be accommodated.

I have attached files that are drafts to address Version 0 of the NERC Coordinate Interchange Standard and the NAESB Coordinate Interchange Business Practice. Final documents will be provided to the Version 0 Standard Drafting Team after the Interchange Standard and Business Practice groups meet on June 3–4, 2004.

Sincerely,

Doug Hils
Chairman - Interchange Subcommittee

Attachments

Coordinate Interchange Standard Version 0 Flow Diagram, Draft 2

Open Issues in drafting Version 0 of the Coordinate Interchange Standard

Coordinate Interchange Standard Version 0 (Policy 3 – Interchange, Version 5.2)

NAESB Coordinate Interchange Business Practice, Version 0, Draft 2

Note from Al Boesch

Since the original color-coded version of Policy 3 we have made the current version of the Version 0 Standard quite a bit smaller by combining redundant information in separate sections of the Policy 3. I will update the original color-coded version to reflect these changes. Since our last phone conference I took the marked up version that was sent by John [Simonelli] and made some additional changes. I believe that this version is another step in identifying those requirements that are essential for reliability. I attempted to incorporate the Scheduling Agent waiver into this version.

Note from Roman Carter

I've attached a copy of the Version 0 Standard that includes most of your [Al Boesch] changes recommended along with some markups by me to help us duplicate Policy 3 as close as possible without changing the intent/meaning of Policy 3. My markups are in red and they represent my attempt to both include only the required reliability components as you stated and language, which matches the original Policy 3 language.

Also in bold **red (R#),** I've tentatively labeled which requirements may be appropriate for including in the Standard Template. We can discuss this on June 3-4 in more detail.

In the big scheme of things, our attempt is to take Policy 3 and:

1. Color-code it for reliability/business practices, etc. (thanks Alan for doing this!)
2. Take what is color coded as reliability and incorporate it into our Version 0 Policy 3 Standard.
3. Extract the most important components of the Version 0 Policy 3 Standard and place them into a Standard Template for the Version 0 SDT to review at their June 9-11th meeting.

Coordinate Interchange Standard Version 0
(Policy 3 – Interchange Version 5.2)

Version 0, Draft 1

This standard addresses the following issues:

- Responsibilities of all PURCHASING-SELLING ENTITIES involved in INTERCHANGE TRANSACTIONS.[1]
- Information requirements for INTERCHANGE TRANSACTIONS.
- Requirements of BALANCING AUTHORITY (BA), RELIABILITY AUTHORITY (RA), AND TRANSMISSION SERVICE PROVIDER (TSP) to assess and confirm INTERCHANGE TRANSACTIONS.
- Accountability of BALANCING AUTHORITY for implementing all INTERCHANGE SCHEDULES in a manner that ensures the reliability of the INTERCONNECTIONS.
- Standards for INTERCHANGE SCHEDULES between Balancing Authorities
- Requirements for INTERCHANGE TRANSACTION Cancellation, Termination, and Curtailment.

[1] See NAESB CI Business Practice Standard for PSE Submittal Requirements

A. Interchange Tagging

Introduction

This section specifies the PURCHASING-SELLING ENTITY'S requirements for tagging all INTERCHANGE TRANSACTIONS, as well as the BA, RA and TRANSMISSION SERVICE PROVIDERS' obligations for assessing the tags, and the BA'S obligation to implement approved Interchange TRANSACTIONS. The tag data is integral for providing the, BA, RA and TSP, and other operating entities the information they need to assess, confirm, approve or deny, implement, adjust and curtail INTERCHANGE TRANSACTIONS as necessary to accommodate the marketplace and ensure the operational security of the INTERCONNECTION.

Requirements

1. **R1: INTERCHANGE TRANSACTION tagging.** Each INTERCHANGE TRANSACTION shall be tagged before implementation as required by this standard. The INTERCHANGE TRANSACTION tag is the official request from the PURCHASING-SELLING ENTITY serving the load to the BA to implement the INTERCHANGE TRANSACTION and it provides all the necessary operating information. The load-serving PSE is responsible for ensuring that a single tag is provided. The operating information that must be provided on the tag is listed in **Appendix 3A4**.

   1.1. **R2: Application to TRANSACTIONS.** All INTERCHANGE TRANSACTIONS AND CERTAIN INTERCHANGE SCHEDULES shall be tagged. In addition, intra- BA transfers using Point-to-Point Transmission Service[2] shall be tagged. This includes:

   - INTERCHANGE TRANSACTIONS (those that are between BAS).
   - HVDC INTERCHANGE TRANSACTIONS (note: those that are between BAS on HVDC ties)
   - TRANSACTIONS that are entirely within a BA using Point-to-Point Transmission Service.
   - DYNAMIC SCHEDULES (tagged at the expected average MW profile for each hour). (Note: a change in the hourly energy profile of 25% or more requires a revised tag.)
   - INTERCHANGE TRANSACTIONS for bilateral INADVERTENT INTERCHANGE payback (tagged by the Sink BA)
   - INTERCHANGE TRANSACTIONS established to replace unexpected generation loss, such as through prearranged reserve sharing agreements or other arrangements, are exempt from tagging for 60 minutes from the time at which the INTERCHANGE TRANSACTION begins (tagged by the SINK BA). [See Reference Document Policy 1E2 and 2.1, "Disturbance Control Standard"]
   - INTERCHANGE TRANSACTIONS that cross INTERCONNECTION boundaries. (came from section A 2.3.1)

   1.2. **R3: Parties to whom the complete tag is provided** The tag, including all adjustments and curtailments shall be provided to the following entities:

   - BALANCING AUTHORITIES
   - Transmission Service Providers
   - Scheduling Entities (e.g., Scheduling Agent)

[2] This includes all "grandfathered" and other "non-888" Point-to-Point Transmission Service

- Reliability Authorities
- Interchange Distribution Calculator (i.e., Security Analysis Services)

1.3. **R4: INTERCHANGE TRANSACTION submission time.** To provide adequate time for INTERCHANGE SCHEDULE implementation, INTERCHANGE TRANSACTIONS AND INTERCHANGE TRANSACTION MODIFICATIONS shall be submitted and assessed as specified in **Appendix 3A1, "Tag Submission and Response Timetable"**

1.3.1. **Exception for security reasons**. Exception to the submission time requirements in Section 1.3 is allowed if immediate changes to the INTERCHANGE TRANSACTIONS are required to mitigate an OPERATING SECURITY LIMIT violation. The tag may be submitted after the emergency Transaction has been implemented but no later than 60 minutes.

3. **INTERCHANGE TRANSACTION assessment**. TRANSMISSION SERVICE PROVIDERS, and BAS on the SCHEDULING PATH, shall be responsible for assessing and "approving" or "denying" INTERCHANGE TRANSACTIONS as requested by PURCHASING-SELLING ENTITIES, based on established reliability criteria and adequacy of INTERCONNECTED OPERATIONS SERVICES and transmission rights as well as the reasonableness of the Interchange Transaction tag. This assessment shall include the following:

The BA assesses:

- TRANSACTION start and end time
- ASSESS ENERGY PROFILE (ability to support the magnitude of the transaction)
- ASSESS THE RAMP (ability of generation maneuverability to accommodate)
- SCHEDULING PATH (Ensure proper connectivity of ADJACENT BAS)

The TRANSMISSION SERVICE PROVIDER assesses:

- Valid OASIS reservation number or transmission contract identifier
- Transmission priority matches reservation
- Energy profile fits within OASIS reservation
- OASIS reservation accommodate multiple INTERCHANGE TRANSACTIONS

4. **R3: INTERCHANGE TRANSACTION approval or denial.** Each BA or TRANSMISSION SERVICE PROVIDER on the SCHEDULING PATH responsible for assessing and "approving" or "denying" the INTERCHANGE TRANSACTION shall notify the SINK BA. The SINK BA in turn notifies the PURCHASING-SELLING ENTITY who submitted the INTERCHANGE TRANSACTION tag, plus all other BAs and TRANSMISSION SERVICE PROVIDERS on the SCHEDULING PATH. Assessment timing requirements shall be in accordance with the timing requirements found in Appendix 3A1

5. **Responsibility for INTERCHANGE TRANSACTION implementation.** Each BA ON THE SCHEDULING PATH is responsible for implementing approved tagged Interchange Transactions. The Sink BA is responsible for initiating the implementation. The Interchange Transaction is incorporated into the Interchange Schedules(s) of all Balancing Authorities on the Scheduling Path.

5.1. **Tag requirements for INTERCHANGE TRANSACTION implementation.** The BA shall implement only those INTERCHANGE TRANSACTIONS that:

- Have been tagged in accordance with Requirement 1 above, or,
- Are exempt from tagging in accordance with Requirement 1.1 above

B. Interchange Schedule Implementation

Introduction

This section explains BA requirements for implementing the INTERCHANGE SCHEDULES that result from the INTERCHANGE TRANSACTIONS tagged by the PURCHASING-SELLING ENTITIES.

Requirements

1. R1: **BAs must be adjacent.** INTERCHANGE SCHEDULES shall only be implemented between ADJACENT BAs. (See waivers for non-adjacent BAs)

2. **Sharing Interchange Schedules details**. The Sending BA and Receiving BA must provide the details of their Interchange Schedules via the Interregional Security Network as specified in Policy 4.B.

3. R2: **Providing tags for approved TRANSACTIONS to the RELIABILITY AUTHORITY.** The SINK BA shall provide its RELIABILITY **AUTHORITY** the information from the INTERCHANGE TRANSACTION tag electronically for each Approved INTERCHANGE TRANSACTION.

4. **INTERCHANGE SCHEDULE confirmation and implementation.** The Receiving BA is responsible for initiating the confirmation and implementation of the INTERCHANGE SCHEDULE with the Sending BA.

   4.1. **INTERCHANGE SCHEDULE agreement**. The SENDING BA and RECEIVING BA shall agree on:

   - INTERCHANGE SCHEDULE start and end time
   - Ramp start time and rate
   - Energy profile

   This agreement shall be made before either the SOURCE BA or SINK BA makes any generation changes to implement the INTERCHANGE SCHEDULE.

   4.1.1. **DC tie operator.** SENDING BAS and RECEIVING BAS shall coordinate the Interchange Schedule with DC tie operators on the SCHEDULING PATH.

5. R3: **Ramp duration.** BALANCING AUTHORITIES shall use the default ramp duration established by their INTERCONNECTION unless they agree otherwise. The following is the industry accepted ramp durations: (taken from Section C.3)

   5.1. Default ramp rate for the Eastern Interconnection shall be 10 minutes equally across the Interchange Schedule start and end times.

   5.2. Default ramp rate for the Western Interconnection shall be 20 minutes equally across the Interchange Schedule start and end times.

   5.3. **Disturbance Control Standard and Line Load Relief Ramp.** 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, but must be identical for the SOURCE BA and SINK BA.

6. **Maximum scheduled interchange**. The maximum Net Interchange schedule between two BAs shall not exceed the lesser of the following:

6.1. **Total capacity of facilities.** The total capacity of both the owned and arranged-for-transmission facilities in service between the two BAs, or

6.2. **Total Transfer Capability.** The established network Total Transfer Capability (TTC) between the Balancing Authorities, which considers other transmission facilities available to them under specific arrangements, and the overall physical constraints of the transmission network. Total Transfer Capability is defined in Available Transfer Capability Definitions and Determination, NERC. June 1996.

C. Interchange Transaction Modifications

Introduction

This section specifies PURCHASING-SELLING ENTITY's, TRANSMISSION SERVCIE PROVIDER'S, RAs and BAs rights and requirements for modifying an INTERCHANGE TRANSACTION tag after it has been approved and implemented as described in the preceding sections.

Terms

SCHEDULING ENTITY- an entity responsible for approving and implementing Interchange Schedules. Scheduling Entity refers to a Balancing Authority or a third party authorized by NERC for this function, such as a Scheduling Agent.

Requirements

1. **R1:INTERCHANGE TRANSACTION modification for reliability-related issues.** A RELIABILITY AUTHORITY, TRANSMISSION PROVIDER, SCHEDULING ENTITY, SOURCE OR SINK BA may modify an INTERCHANGE TRANSACTION tag that is in progress or scheduled to be started**.** These modifications may be made *only* due to TLR events (or other regional congestion management practices), Loss of Generation, or Loss of Load.

a. **R2:Assignment of coordination responsibilities during TLR events.** At such times when TLR is required to ensure reliable operation of the electrical system, and the TLR requires holding or curtailing INTERCHANGE TRANSACTIONS, the SINK BA is responsible for coordinating the modifications to the appropriate INTERCHANGE TRANSACTION tags. See **Policy 9, Appendix 9C1 "Transmission Loading Relief Procedure – Eastern Interconnection."**

1.a.1 Reductions. When a RELIABILITY AUTHORITY must curtail or hold an INTERCHANGE TRANSACTION to respect TRANSMISSION SERVICE reservation priorities or to mitigate potential or actual OPERATING SECURITY LIMIT violations, the RELIABILITY AUTHORITY shall inform the SINK BA listed on the INTERCHANGE TRANSACTION tag of the greatest reliable level at which the affected INTERCHANGE TRANSACTION may flow.

b. **R3:Coordination when implementing other congestion management procedures**. As a part of some local and regional congestion management and transmission line overload procedures, the TRANSMISSION PROVIDER or SCHEDULING ENTITY is responsible for implementing curtailment of INTERCHANGE TRANSACTIONS. The TRANSMISSION PROVIDER or affected SCHEDULING ENTITY may adjust the INTERCHANGE TRANSACTION tags as required to implement those local and regional congestion management or transmission overload relief procedures that have been approved by the Region(s) or NERC.

1.b.1. **Reductions.** When a TRANSMISSION PROVIDER or SCHEDULING ENTITY experiences the need to invoke a congestion management or transmission line overload procedure, it may use the curtailment feature of E-Tag to inform the Source BA and the Sink BA listed on the INTERCHANGE TRANSACTION tag of the greatest reliability limit at which the affected INTERCHANGE TRANSACTION may flow.

c. **R4:Assignment of coordination responsibilities during a loss of generation.** At such times when a loss of generation necessitates curtailing INTERCHANGE TRANSACTIONS, the SOURCE BA is responsible for coordinating the modifications to the appropriate INTERCHANGE TRANSACTION tags.

1.c.1. **Reductions.** When a generation operator experiences a full or partial loss of generation, it shall notify the HOST BA (the SOURCE BA for the INTERCHANGE TRANSACTION). The HOST BA contacts the GENERATION PROVIDING ENTITY that is responsible for the generation. The GENERATION PROVIDING ENTITY determines what schedule modifications need to be made and may request those modifications as market-based reductions, increases, or extensions (either via the tag author, or directly if the entity is the tag author or a market operator). If the GENERATION PROVIDING ENTITY does not resolve the condition, the HOST BA may at its discretion curtail INTERCHANGE TRANSACTIONS associated with the generation.

d. **R5:Assignment of coordination responsibilities during a loss of load.** At such times when a loss of load necessitates curtailing INTERCHANGE TRANSACTIONS, the Sink BA is responsible for coordinating the modifications to the appropriate INTERCHANGE TRANSACTION tags.

1.d.1. **Reductions.** When a LOAD-SERVING ENTITY experiences a loss of load, it shall notify its HOST CONTROL AREA (the LOAD CONTROL AREA for the INTERCHANGE TRANSACTION) and determine what schedule modifications need to be made. The LOAD-SERVING ENTITY may request those modifications as market-based reductions, increases, or extensions (either via the tag author, or directly if the entity is the tag author or a market operator). If the LOAD-SERVING ENTITY does not notify the HOST BA , the HOST BA may at its discretion curtail INTERCHANGE TRANSACTIONS associated with the load.

e. **Coordination responsibilities for reliability-related issues.** The modification must be provided by the requesting BA, TRANSMISSION PROVIDER, or SCHEDULING ENTITY to the following INTERCHANGE TRANSACTION participants:

- Generation Providing Entity
- Source BA
- Transmission Customers
- TRANSMISSION PROVIDERS
- SCHEDULING ENTITIES
- Sink BA
- Security Analysis Services

f. **INTERCHANGE TRANSACTION modification and evaluation time.** To provide adequate time for INTERCHANGE SCHEDULE implementation, INTERCHANGE TRANSACTION modifications shall be requested and evaluated as specified in **Appendix 3A1, "Tag Submission and Evaluation Timetable**

Attachment 5

Version 0 Standards – Development and Tracking Template			
Draft Version 0 Standard		Source ID	Source Information
ID Number			
Title			
Purpose			
Effective Date			
Applicability			
Requirements			
Measures			
Regional Differences			
Compliance Monitoring Process			

Attachment 6

Email from Monroe Landrum

In preparation for the upcoming TISWG meeting, it would be helpful for you to review the following attachments that describe the transition from our current policies to the NERC Version 0 Standards. Also included is a data flow diagram for the "tag" to support implementation of both NAESB and NERC Version 0 standards.

Since our biggest issue to address will be the modifications to the e-tag spec in order to implement Version 0 of the NAESB and NERC standards, I am also including the most recent Version 0 document of the Coordinate Interchange Standard and the most recent Version 0 document of the Coordinate Interchange Business Practice Standard.

Our challenge will be ensure that we address all of the necessary changes needed to finish the transition to Version 0 of the NERC standards. As a starting point, I understand that Version 0 will not implement all of the IA. Instead there will be a few changes to e-tag to facilitate the transition. Initially, we will only be implementing portions of the IA, therefore the current tag authority will be performing this function until the full IA is implemented. With this being the case, the new registry will not require that an IA (or multiple IAs) be identified.

Some of the issues that we will need to address are things like: what approval rights does the new market operator (MO) or reliability authority (RA) have on the tag, do the same conditional approval actions apply to the MO and RA, and does the MO or RA have any ADJUST or CURTAIL rights.

Another process that we will need to implement is the "final verification" of the "approved balanced tag" submitted by the tag authority. In doing this, we need to have the timing of how long the reliability entities have to verify an approved balanced tag and what happens when a tag verification is not responded to by a reliability entity? In other words, we need to know the business practice issues surrounding the behavior of the "final verification" process.

Let me know if you have any additional questions or concerns as we prepare for the upcoming TISWG meeting.

Email from Mike Oatts

As you will notice, Monroe has sent the following note and attachments to the TISWG. When he sent me this he called and asked me some questions about the Version 0 CI Flow diagram we've been discussing in our Version 0 teleconferences (i.e. John and Roman's artwork).

You will see that he's concerned that the TISWG's "biggest issue to address will be the modifications to the e-tag spec in order to implement Version 0 of the NAESB and NERC Standards." In particular, Monroe is concerned that the diagram as shown in the draft 2 has a step 4 that is not currently supported by the current E-tagging process. It is in effect a new step in E-tagging process. It is discussed in his next to last paragraph in his note concerning the "final verification"

process. I told him that my understanding of our Version 0 discussions was that we did not intend to change what is happening today under Policy but instead are just trying to put Version 0 in terms of what we do today. That is why we used the Tag Authority "function" in the version 0 diagram rather than the Interchange Authority of the functional model.

He insists that his interpretation of the Version 0 Draft 2 drawing and associated text does not represent what is happening in E-Tagging today and is in fact adding the final verification step 4 to the current E-Tagging process the in effect finishes with the Step 3 shown in 0,Draft 2 when, in today's terminology, an "implemented tag" is created following approval of a "pending tag". Following my discussion with him I told him that I would attempt to capture his understanding of how the Version 0 flow diagram could be made to reflect the current E-Tagging process. I have tried to do this with the attached "Alternate CI Flow Diagram Version 0, Draft 3". When changing the diagram, I also changed the associated steps and showed the text that I changed in red. I've shown this diagram to Monroe and he believes this more correctly captures the current E-Tagging process.

I think there is still some confusion about the diagram a presented in V0,Draft 2 and this issue is along the same lines that I raised a week or so ago with my comments about using E-Tag terminology and the use of the "check-out" term.

Perhaps this alternative drawing **[Attachment 7]** will help us figure out where the disconnect is taking place.

Email from Roman Carter
I looked over the altered Version 0 Flow diagram and noticed a couple of things.

The Draft #3 diagram provided for review assumes only 1 "bite" of the apple during the Interchange process. This may be the case if the PSE submitted the RFI just prior to the deadline for an hour-ahead Transaction. There wouldn't be enough time for the BA to review in advance on the Market side and then again for "Final approval" on the Reliability side. It would have to suffice for both.

For most all other Transactions, Draft #2 of the Flow diagram is the better diagram to follow for the following reason: If the PSE submits the RFI hours or days in advance prior to start, the e-tag system would be used to get the Market approvals as in step #2 of Draft #2. Once all approvals are obtained by the Tag Authority, it is held until "final verification" is required just prior to physical implementation. At final verification, the Tag Authority checks with the RA, BA, and TSP one "last" time to verify that everything is still o.k. (meaning generator still Gens and the transmission system still delivers) as shown in Step #4. Finally, the Tag Authority delivers the Interchange transaction to the sink BA and IDC for physical implementation.

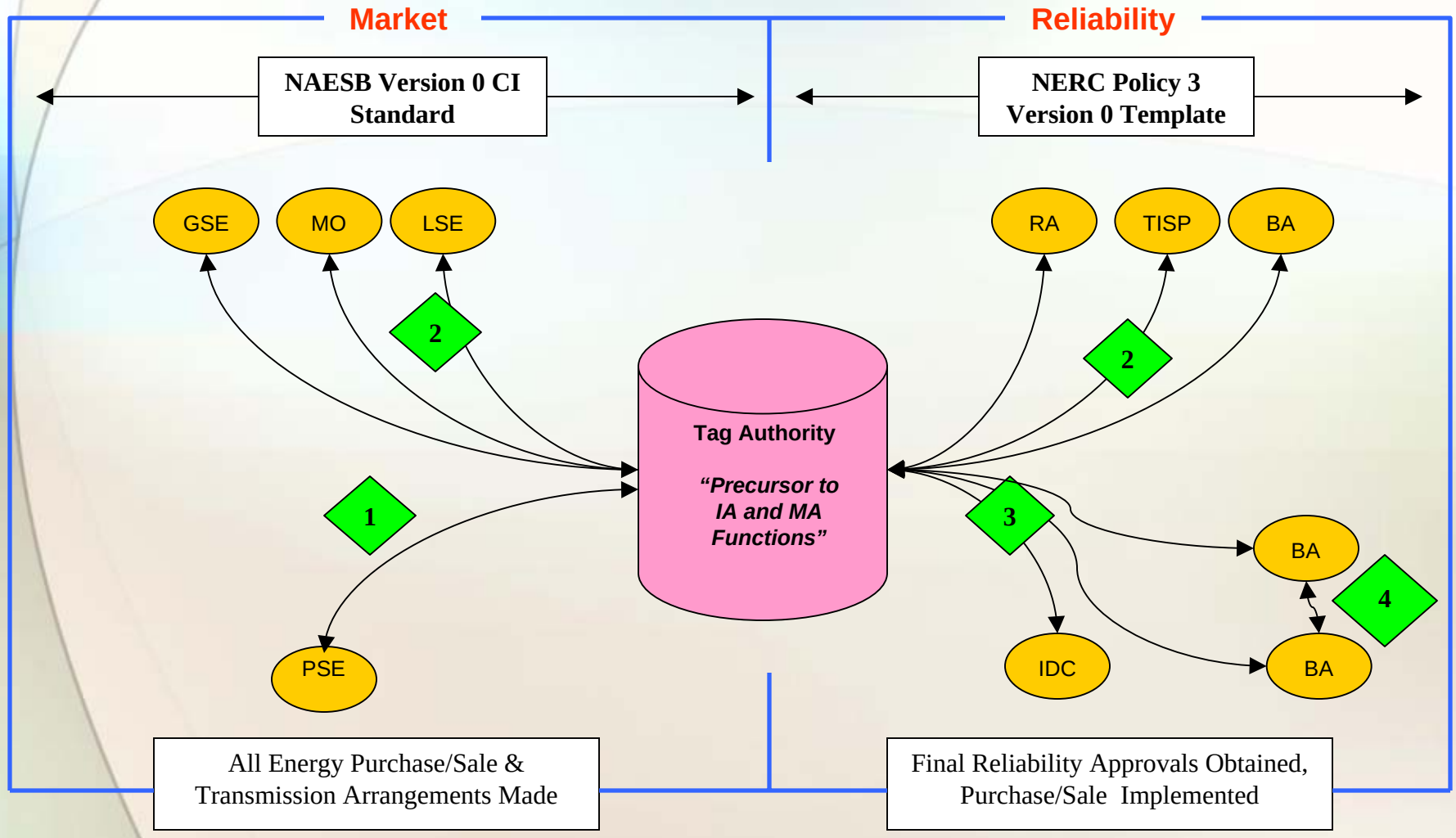
For Draft #2, I recommend we include a comment under step #5 to say the BA's also do their hourly checkout with one another.

I recommend we stay with Version 0 Draft #2 with the added comment under step #5.

Having said all this, does the final verification under Version 0 have to be incorporated into the e-tagging system? I understood today the IDC evaluates the next hour transactions, and if there was a problem, it would use the e-tagging system to curtail transactions.

Is the final verification in today's world considered a "passive approval"? Meaning unless you hear from me, we're ok with the transaction?
END

Coordinate Interchange Standard Version 0 Flow Diagram



Coordinate Interchange Standard Version 0 Flow Diagram

1. All energy purchase/sale & transmission service arrangements are requested prior to the Tag being submitted to the Tag Authority *(NAESB Version 0 RFI Standard 2.0, 3.0 & 4.0, 5.0).*

2. All energy purchase/sale & transmission service market arrangements are forwarded by the Tag Authority to the appropriate Market and Reliability Entities for approval of the "pending tag"*(NAESB Version 0 RFI Standard, 6.0, 7.0(?)).*

3. Upon approval of the "pending tag", the Tag Authority sends the "implemented tag" to the BA and IDC for implementation *(NERC Policy 3 Version 0 Template, NAESB Version 0 RFI Standard ??*).

4. The BA's will perform hourly check-out with each other to ensure coordination of schedules as provided by the Tag Authority *(NERC Policy 3,Section B, Version 0 Template)*.

Attachment 8

NERC Coordinate Interchange Standard (400)
Assessment and Proposal
Addition of Timing Requirements

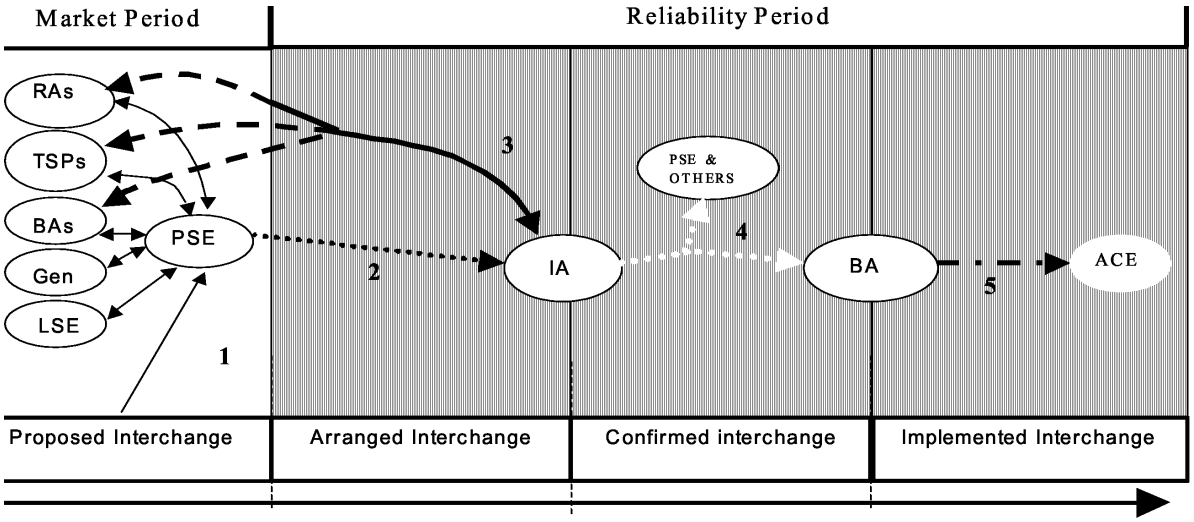


Figure 1 — Initial Creation of Interchange

Recently concern has come about regarding the need for timing requirements within the NERC Coordinate Interchange Standard. This is driven by the need of the industry (all parties, from the Marketer to the Reliability Entities) to clearly understand what can be expected in the submittal and administration of an Interchange Transaction. It would seem appropriate that some level of timing detail be considered in the NERC CI Standard.

The first step in considering this concept is to identify where the logical handoff occur and which of them are relevant to the NERC Standard. Referring to Figure 1 above, it would seem that there are potentially four different handoffs that could be considered, they are as follows:

- Link 2 – PSE communicates a Request for Interchange (RFI) to the IA
- Link 3a – IA delivers RFI to RAs, TSPs and BAs for reliability analysis
- Link 3b – IA receives confirmation for the RFI from the RAs, TSPs and BAs
- Link 4 – IA communicates confirmation to all involved entities and issues Net Interchange Schedules to the Source and Sink BAs and any intermediate BAs that have jurisdiction over a DC tie along the contract path.

The easiest way to think about the concept of timing requirements is to actually work backward in time. Considering first, the time required for a BA to actually implement an interchange schedule and continuing to work backward to consider the steps that lead up to the implementation.

Link 4 – IA communicates confirmation and issues net schedules to BAs

Consider what is a reasonable amount of time that a BA would need after the notification of their net schedule to allow proper input into the control equation (i.e. ACE). Consider that there could be any number of other events going on at the time the information is received and imputing the schedule for the next hour may not be the top priority for the Operator. Another aspect of this timing element is to consider what could a reliability entity expect if they did not receive confirmation regarding interchange they had previously approved. All parties to the transaction should assume passive failure if confirmation is not received from the IA within the specified time.

Possible timing requirement[1] - *No later than 5 minutes before the start of the scheduled ramp.*

Link 3b – IA receives confirmation from RAs, TSPs and BAs

Consideration for this requirement should be based on how quickly the IA can turn around an approved RFI into net schedules and disseminate them to the BAs prior to the Link 4 timing requirement. Worst-case consideration of the IA being a function that requires human intervention would dictate some appreciable time, on the other hand if the IA function is an automated system the turn around time could be immediate. The IA should assume passive failure if confirmation is not received from all Reliability Entities within the time specified.

Possible timing requirement - *No later than 10 minutes before the start of the scheduled ramp.*

Link 3a – IA disseminates the RFI to RAs, TSPs and BAs for reliability analysis

Consideration for this requirement should be based on how much time is needed for a reliability authority to conduct a reasonable reliability assessment. This could be as simple as acknowledging that a particular request fits within pre-established limits and that the proper transmission service has been obtained.

Possible timing requirement - *No later than 15 minutes before the start of the scheduled ramp.*

Link 2 – PSE communicates a Request for Interchange (RFI) to the IA

This timing requirement clearly falls outside the realm of the NERC Standard. The NAESB Coordinate Interchange Standard already addresses this.

Recommendation – *Do not include this timing requirement in the NERC Coordinate Interchange Standard.*

[1] Possible timing requirements are offered merely to spur discussion; they are only a suggestion to be considered.

Applying Timing to The Coordinate Interchange Standard 400

When considering the three handoffs (Links 4, 3a & 3b) that could be considered for the definition of timing requirements, two of them have a direct correlation to the standard as currently drafted.

- Link 4 correlates to Standard 404 (Interchange Authority Disseminates Confirmation). *Red text indicates proposed addition of language to address timing.*

404 Interchange Authority Disseminates Confirmation

(a) Requirement

The Interchange Authority shall communicate no later than five minutes prior to the start of the ramp whether the Arranged Interchange has transitioned to a Confirmed Interchange to all entities involved in the Interchange.

(b) Measures

For each Arranged Interchange, the Interchange Authority shall provide evidence that it has communicated no later than five minutes prior to the start of the ramp the appropriate final status to all entities involved in the transaction.

- Link 3b correlates to Standard 403 (Response to Interchange Authority)
Red text indicates proposed addition of language to address timing.

403 Response to Interchange Authority

(a) Requirement

The Reliability Authority, Balancing Authority and Transmission Service Provider shall respond to a request from an Interchange Authority to transition an Arranged Interchange to a Confirmed Interchange by acknowledging that the Arranged Interchange is acceptable and reliable with respect to their functional responsibilities, no later than ten minutes prior to the start of the ramp of the requested interchange.

(b) Measures

The Reliability Authority, Balancing Authority, and Transmission Service Provider shall provide evidence that they responded to each request from an Interchange Authority no later than ten minutes prior to the start of the ramp of the requested interchange.

- Link 3a (IA disseminates the RFI to RAs, TSPs and BAs for reliability analysis), does not have a direct correlation to the NERC CI Standard in its current draft form.

  This presents an issue, in that if this timing requirement is to be added to the NERC Standard, it will need to be addressed in a new section of the Standard such as,

  405 - Interchange Authority Disseminates Request For Interchange

  This would seem to be a logical measure to be considered for addition to the NERC Standard, one that would assure that the IA must disseminate the RFI to the Reliability Entities. Add the timing element and the assurance that the Reliability Entities have a reasonable amount of time to evaluate an RFI.

  Recommendation – T*he NERC CISDT should consider the addition of this measure, to include appropriate timing requirements.*