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

ISO NE:
Overall the draft is a good start. The one underline weakness is the standard is very E-tag centric and will in all likelihood work extremely well in “physical” markets. How well the standard will work in areas where financial markets exist or where financial markets abut physical markets needs further exploration.

Background:
In light of the continuing restructuring of the Electric industry, and FERC’s rulemakings 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. Furthermore, NERC Operating Policies do not reflect the new organizations or merchant functions that are forming.

With regards to Policy 3, NERC currently is developing the Coordinate Interchange Standard to address the reliability issues associated with a bilateral interchange Transaction. 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:
A request for the development of a NAESB complementary Business Practice Standard to NERC’s Coordinate Interchange Standard was submitted in June, 2003. This Standard was approved by the Joint Interface Committee (JIC) representatives from NERC, NAESB, and RTO/ISO and assigned to NAESB for development.

This Standard is being developed to identify market-supported processes to facilitate fair & “equitable” competitive interchange practices. This standard will provide the necessary data and arrangements to the Interchange Authority and all involved parties of the Request for Interchange (RFI) for an Interchange Transaction to take place between Sink and Source Balancing Authorities (BA). This standard is designed to implement the flow of data and approval mechanisms to facilitate Interchange. It is not intended to be the “Tagging Standard”. NAESB’s ESS is aware of the Industry desire to maintain a “Tagging” mechanism for the dissemination of data. The ESS will be the entity that will go forward with Tagging rules and procedures. The RFI shall contain at a minimum the required market and reliability information from the NAESB RFI Datasheet (attached). It should be understood this Standard covers the front-end business arrangements and requirements for an Interchange Transaction to take place. Upon receiving all approvals from the Approval Entities, the IA will utilize NERC’s Coordinate Interchange Standard to transition the Arranged Interchange to a Confirmed Interchange and finally the implementation of the Confirmed Interchange.
The Standard is being developed using Functional Model definitions to provide consistency with NERC’s Reliability Standards.

**Definitions**

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

**RFI Standard 1.1** Balancing Authority (BA) – The entity which performs the Balancing Function. Some of the duties of the Balancing Function include integrating resource plans ahead of time, maintaining load-interchange-generation balance within a Balancing Authority Area, and supporting Interconnection frequency in real time. In today’s operating environment with respect to Interchange, this entity closely resembles a Control Area. Until such time as the Balancing Authority becomes a certified Function under the NERC Functional Model, these duties shall be performed by the respective Control Area.

**RFI Standard 1.2** Interchange Authority (IA) – The entity which performs the Interchange Function. Some of the duties of the Interchange Function include authorizing implementation of valid and balanced Interchange schedules between Balancing Authority areas, and ensuring Interchange Transactions are properly identified for reliability assessment purposes. Until such time as the Interchange Authority becomes a certified Function under the NERC Functional Model, these duties shall be performed by the respective Tagging Authority for the sink Control Area for the requested Interchange.

**RFI Standard 1.3** Interchange Transaction – A transaction representing the delivery of energy from a generator located within a Point of Resource (POR) BA to a load located within a Point of Delivery (POD) BA.

**ISO NE:**
**Should change Resource to Receipt**

**RFI Standard 1.4** Point of Resource BA – The Balancing Authority responsible for monitoring and/or controlling the generation identified as the source of an Interchange Transaction.

**ISO NE:**
**Should change Resource to Receipt**
RFI Standard 1.5 Point of Delivery BA – The Balancing Authority responsible for monitoring and/or controlling the load identified as the sink of an Interchange Transaction.

RFI Standard 1.6 Requesting PSE – The PSE submitting the Request For Interchange (RFI). Under current policy this entity would be called the “Tag Author”.

RFI Standard 1.7 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 1.8 Arranged Interchange – The state where completed and required information from the business arrangements are provided to and received by the Interchange Authority.

ISO NE:
Isn’t this the Arranged Interchange Period?

RFI Standard 1.9 Confirmed Interchange - The state where the Interchange Authority has verified the Arranged Interchange and is ready to submit it to the Balancing Authorities.

RFI Standard 1.10 Implemented Interchange- The state where the Balancing Authority enters the Confirmed Interchange into its area control error (ACE) equation.

RFI Standard 1.11 Approval Entities – Those entities responsible for providing active approvals to an Arranged Interchange.

RFI Standard 1.12 Implemented 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 1.13 Market Adjustment – A desired modification to the energy and/or transmission profile during the Confirmed Interchange period.

RFI Standard 1.14 Transaction Correction – Modifications to non-reliability data of a Request For Interchange (RFI) while in the Arranged Interchange period. This non-reliability data is located in the NAESB RFI Datasheet and is labeled as “correctable”.

RFI Standard 1.15 Reliability Period – The segment of time from when the IA has received the RFI from the requesting PSE to physical implementation (beginning of ramp time).

RFI Standard 1.16 Request For Interchange, RFI- Process of providing required data as defined in the NAESB RFI Datasheet to the IA for the purpose of implementing a bilateral Interchange Transaction.
**RFI Standard 1.17** Transmission Service Provider - Approves or denies transmission service requests from PSEs, Generator Owners, and LSEs. This entity also administers the transmission tariff and provides transmission service agreements.

**RFI Standard 1.18** Reliability Authority - Ensures the real-time operating reliability of the interconnected bulk electric transmission systems within a Reliability Authority area. Provides Interchange Transaction approvals to Interchange Authorities based on reliability analysis. Until such time as the Reliability Authority becomes a certified Function under the NERC Functional Model, these duties shall be performed by the respective Reliability Coordinator.

**Business Practices**

**RFI Standard 2.0** All requests to implement an Interchange Transaction shall be accomplished by the submission of a completed “Request For Interchange”, RFI, to the Interchange Authority (IA). Upon receipt of the RFI, the IA shall immediately forward the RFI to all involved parties of the RFI.

**ISO NE:**
There are two perceived submittals that need to occur. The first is during the Market Period where the PSE is handling the “commercial arrangements” necessary to attain a balanced schedule. This involves the submittal of a request to schedule to all affected parties (RA, BA TSP, etc). The second is the actual submission of the balanced schedule to the IA for confirmation and implementation during the Arranged Interchange Period. It doesn’t seem clear in this section if the RFI can/will be used for both submissions or only for the submission of the balanced schedule to the IA. Some clarification is required.

**RFI Standard 2.1** All energy purchase, energy sale, and Transmission service arrangements necessary to implement the completed RFI shall be performed during the Market Period.

**RFI Standard 2.2** Until such time as other protocols are established by NERC and/or NAESB, submission of the completed RFI shall be in accordance with NERC Policy 3 Appendix 3A4.

**RFI Standard 3.0** While any Purchasing Selling Entity (PSE) may act as the “Requesting PSE”, it shall be the responsibility of the load serving Purchasing-Selling-Entity (PSE), or their designee, to ensure that the completed RFI has been submitted to the IA.

**ISO NE:**
This may not be adequate where Financial Markets are involved. A Marketer can “dump” energy into the spot market without any specific load serving commitment,
they are simply offering energy in at a desired price. Consideration should be given to decoupling submitting the RFI from the obligation to serve load.

**RFI Standard 4.0** A completed RFI shall contain, at a minimum, the required information specified in the most current version of the NAESB RFI Datasheet (attached).

**ISO NE:**
The information submitted to the IA needs to be determined by the minimum data set that the BA’s need to implement the transaction in their ACE. This is not commercial information. Since the IA is obligated to supply the necessary information a BA needs to take the transactions physical, the information should be determined under the NERC standard for IA to BA communication during the Confirmed Interchange Period. See diagram below.

**RFI Standard 5.0** On behalf of the Requesting PSE, the IA shall verify approvals from all involved Approval Entities (e.g. TSP-for transmission reservations, BA-for ramping start/end times and rate, RA-reliability analysis, Generator/Load PSE) prior to being confirmed and implemented in accordance with the NERC Coordinate Interchange Standard.

**ISO NE:**
The words “verify approvals” should be changed to “confirm approvals”. Since the PSE is required to submit a balanced scheduled to the IA, the PSE has already obtained a set of preliminary approvals from all parties to the transaction. The IA function is simply to confirm all “reliability” parties (RA, TSP & BA) have in fact agreed to schedule the energy as specified and once confirmed, pass the schedule to the BA for implementation.

Also per the diagram there is no obligation for the IA to communicate with the Generator/Load PSE. Is there a necessity for this layer of communication to occur? See diagram below.
RFI Standard 5.1 The Requesting PSE shall submit required RFI information and data in accordance with the timing requirements of the most current version of the NAESB RFI Submission and Response Timetable (attached).

RFI Standard 5.2 Until such time as other protocols are established by NERC and/or NAESB, timing requirements for the submission and approval of the completed RFI shall be in accordance with NERC Policy 3 Appendix 3A1.

RFI Standard 6.0 All requests for approval/validation of the completed RFI by the IA during the Arranged Interchange Period shall be assessed in accordance with the timing requirements of the most current version of the NAESB RFI Submission and Response Timetable. The results of that assessment shall be promptly communicated by the IA back to all involved parties.

ISO NE:
Arranged Interchange Period not defined in RFI Standard 1.0, only Market Period and Reliability Period are defined. Should include the definition in glossary.

RFI Standard 6.1 Any denial of a RFI request by any Approval Entity shall be communicated to the IA and Requesting PSE and accompanied by the reason for such denial.

RFI Standard 7.0 The IA shall be responsible for communicating changes on the status of the RFI to all involved parties of the RFI, including BAs, IAs, RAs, counterparty PSE (Generator or Load Serving), and the TSPs, and the PSEs holding the associated transmission rights necessary to support the transaction.

ISO NE:
See previous comments about IA to Generator/Load PSE communication.

**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** The PSE who created the RFI shall be allowed to submit a Transaction correction to the RFI during the Arranged Interchange Period in accordance with the [NAESB RFI Submission and Response Timetable](#).

**ISO NE:**
This section is defining “corrections” not modifications. The PSE should only be able to correct information on an RAI when it is in the Arranged or Confirmed state. Once it is implemented and has gone physical, the only two options are; a curtailment for reliability or a market adjust, no “corrections” per se should be allowed once implemented. Some clarification to this section to clearly delineate what can happen and when may be appropriate.

**RFI Standard 9.1** Market adjustments made during the Confirmed Interchange Period by the PSE must be submitted to the IA who immediately communicates the revised request to all involved parties of the RFI. Timing of the approval assessment on the market adjustment by the Approval Entities shall be in accordance with the [NAESB RFI Submission and Response Timetable](#). If denied by any Approval Entity, the original request remains valid.

**ISO NE:**
This section implies the PSE is the only entity that can perform a market adjust. If you look at some of the financial markets, a PSE has the option of offering price sensitive transactions, e.g., if the price is above the strike price provided, make the transaction happen. In theory the market operator/BA may adjust this transaction every hour (or less than one hour in some areas) based on their system economics. The section is too restrictive and should allow for other entities to issue market adjusts where appropriate.
Clarification is required for the statement “If denied by any Approval Entity, the original request remains valid”. Is this meant to imply that any other hours of the request are still in effect and the denial would only apply to the hour in question?

**RFI Standard 10.0** Each PSE submitting a RFI for an Interchange Transaction shall have, or arrange to have, personnel on site and immediately available 24 x 7 for notification of Interchange Transaction changes.

**RFI Standard 10.1** These personnel shall be available from the beginning of the Market Period until the end of the Implementation Period.

**RFI Standard 11.0** Energy accounting for all RFIs shall be accomplished via Implemented Interchange Block Accounting.

**ISO NE:**
Make sure this is flexible enough to handle 15 and 30 minutes interchange scheduling changes, the markets are pushing the industry to get off the old one hour block loading and look for 15 and/or 30 minute block loading.

**RFI Standard 12.0** Settlement of losses shall be either handled as financial or as payment in-kind.

**RFI Standard 12.1** For losses handled as payment in-kind, the PSE shall communicate to the IA the mw losses and the entity the losses are with for each TSP along the transaction path.

**ISO NE:**
Is the “communication” regarding losses in-kind to be handled through a separate RFI with each in-kind area?

**RFI Standard 12.2** All bilateral transactions are equal and opposite in direction for a source and sink BA.

**RFI Standard 13.0** Ramp rates shall be standard across the North American Interconnections.

**ISO NE:**
At a high level regarding this section, ramp rate is a function of the responsiveness of the BA’s system, some units just don’t move as fast as others plus the interaction of generators with loads where large MW delta’s can occur as load comes in or goes out, sounds more like a reliability standard that NERC should develop for the BA’s not NASEB.

Regarding the details in this section, is it really a ramp standard or merely the default ramp rate? In principle we have allowed entities to go to “off nominal”
ramp rates when mutually agreeable. Standards 13.1 and 13.2 are the current defaults but the way the section reads there is no flexibility to deviate.

Also the industry has traditionally referred to the ramp as a straddle ramp, i.e., 10 minutes over the start time. There is no mention of that in this section.

**RFI Standard 13.1** Ramp rate for the Eastern Interconnection shall be 10 minutes equally across the start and end times of the Transaction unless otherwise agreed to by all parties involved in the Transaction.

**RFI Standard 13.2** Ramp rate for the Western Interconnection shall be 20 minutes equally across the start and end times of the Transaction unless otherwise agreed to by all parties involved in the Transaction.

**RFI Standard 14.0** For Dynamic Transfer Transactions, the requirements shall be established by NERC.

**RFI Standard 14.1** Until such time as NERC establishes formal standards for Dynamic Schedule, requirements shall be governed by the most recent version of NERC’s “Dynamic Transfer White Paper” shall be followed.

**ISO NE:**
This section may need language regarding Pseudo ties as well.