

Unofficial Comment Form for Project 2008-12 — Coordinate Interchange

Please **DO NOT** use this form. Please use the [electronic comment form](#) at the link below to submit comments on the current drafts of INT-004-3, INT-006-4, INT-009-2, INT-010-2, and INT-011-1. Comments must be submitted by **December 11, 2009**. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-452-8060.

http://www.nerc.com/filez/standards/Project2008-12_Coordinate_Interchange_Std Modifications.html

Background Information

The Coordinate Interchange Standards Drafting Team has been charged with reviewing and modifying the INT family of standards. At this time, the CI SDT believes that the best strategy for addressing these standards is one based on two phases. The first phase will address issues related to the Interchange Authority function and the relationship with Electronic Tagging (E-Tag), as well as FERC's directives from Order 693. The second phase will address issues related to dynamic transfers in detail, as well as backup plans. The documents posted with this comment form are the first draft of the phase one standards.

This approach differs from that originally described in the SAR. The language on the SAR states:

"The first phase is needed as soon as possible and should focus on the revisions needed to ensure that each requirement is assigned to a user, owner or operator of the bulk power system. All other proposed revisions should be addressed in the second or subsequent phase(s) of the project."

As the CI SDT began to work to develop the Phase I changes, the team quickly found that simply identifying clearly the entity to which a particular requirement applied would be insufficient to address the underlying concerns regarding the assignment of responsibilities. The debate regarding whether or not the Interchange Authority was a registered entity or a software tool (which the CI SDT believes was the primary driver for the proposal for Phase I) could not be resolved without reconsidering the details of the requirements. Instead, the CI SDT felt it was necessary to more clearly identify not only the correct entities, but the associated responsibilities of those entities. Accordingly, the CI SDT developed this more comprehensive proposal.

The CI SDT recognizes that these standards are in many cases a significant departure from the current set of standards. Accordingly, the following overview is intended to describe the standards and how they have been changed:

- **INT-001-3 — Interchange Information** — To be retired. R1 and R1.1 were moved to INT-004-3, where they were further modified. R2, R2.1, and R2.2 were moved to INT-009-2, where they were subsequently removed as unnecessary.
- **INT-003-2 — Interchange Transaction Implementation** — To be retired. R1, R1.1, R1.1.1, R1.1.2, and R1.2 were moved to INT-009-2, where they were further modified.
- **INT-004-3 — Dynamic Schedules** — This standard was clarified, but largely retained from INT-004-2. The requirement to tag Dynamic Schedules

- (R1 and R1.1) from INT-001-3 was moved to this standard and replaces the requirement related to transaction reloading that was erroneously included in INT-004-2.
- **INT-005-3 — Interchange Authority Distributes Arranged Interchange** — To be retired. R1 and R1.1 were moved to INT-006-3, where they further modified.
 - **INT-006-4 — Evaluation of Interchange Transactions** — This standard incorporates and expands upon the requirements specified in INT-005-3 (R1 and R1.1), INT-006-2, INT-007-1 (R1, R1.1, R1.2, R1.3, R1.3.1, R1.3.2, R1.3.3, R1.3.4, and R1.4), and INT-008-2 (R1, R1.1, R1.1.1, and R1.1.2). Requirements R8 and R9 regarding the role of the Transmission Operator and the Reliability Coordinator were added to address directives in FERC Order 693.
 - **INT-007-1 — Interchange Confirmation** — To be retired. R1, R1.1, R1.2, R1.3, R1.3.1, R1.3.2, R1.3.3, R1.3.4, and R1.4 were moved to INT-006-3, where they were further modified.
 - **INT-008-3 — Interchange Authority Distributes Status** — To be retired. R1, R1.1, R1.1.1, and R1.1.2 were moved to INT-006-3, where they were further modified.
 - **INT-009-2 — Implementation of Interchange** — This standard was clarified and expanded, but largely retained from INT-009-1 and INT-003-2 (R1, R1.1, R1.1.1, R1.1.2, and R1.2).
 - **INT-010-2 — Interchange Initiation and Modification for Reliability** — This standard was clarified and expanded, but largely retained from INT-010-1. A new requirement R4 was added to limit when entities may use Reliability Adjustment Requests for Interchange.
 - **INT-011-1 — Interchange Coordination Support** — This is a new standard that attempts to address the relationship between the INT standards and E-Tag. It specifies, at a high level, that during normal operations, entities must have systems capable of meeting basic tagging requirements.

With specific regard to the Interchange Authority (IA), the CI SDT believes that the IA is not an actual entity, but a function that is performed by the Sink Balancing Authority. This approach has been reviewed with the leadership of the Functional Model Working Group, which has agreed that the INT standards assigning those functions to the Sink Balancing Authority directly would not conflict with the functional model. Accordingly, the team is proposing to remove the IA from these standards. Since the current INT standards are the only ones that specify the role of the IA, the team believes that if the IA is removed from the INT standards, there will no longer be a need for entities to register as an IA. Although other standards (such as CIP-001 through -009) refer to the IA, they do so by including the IA in a class of entities that are subject to a requirement based on that class; they do not mandate any IA-specific tasks in those requirements. As such, the team proposes to remove the IA as a functional entity from CIP-001 through -009, as well as from any other standards that refer to the IA in a generic way (i.e., not specifying Interchange tasks to be performed by an Interchange Authority), and to modify any standards or definitions that refer to the IA more specifically.

The Coordinate Interchange Standards Drafting Team is seeking comments on these draft standards.

1. Do you agree that the “two phase” approach (in which the IA issues, 693 directives, and E-Tag relationship are addressed in a first phase, followed by a second phase to address dynamic transfers and backup plans) is appropriate?

Yes
 No

If no, what do you believe the correct approach should be?

Comments:

2. As discussed above, the CI SDT believes that the IA is not an actual entity, but a function that is performed by the Sink Balancing Authority. This approach has been reviewed with the leadership of the Functional Model Working Group, which has agreed that the INT standards assigning those functions to the Sink Balancing Authority directly would not conflict with the functional model. Accordingly, the team is proposing to remove the IA from these standards.

Do you agree with the IA being removed from these standards?

Yes
 No

If no, please explain why you believe the IA should be retained.

Comments:

3. As a part of removing the IA from these standards, the CI SDT defined a new term that is used in the purpose statement of INT-011-1:

Interchange Coordination – The act of using commonly available tools to ensure that the transfer of energy from one Balancing Authority to another is undertaken with full disclosure to all the parties involved

Given the term’s use in the INT-011-1 purpose, do you agree with this definition?

Yes
 No

If no, please explain your answer.

Comments:

4. As a part of removing the IA from these standards, the CI SDT identified several key tasks that Balancing Authorities, Purchasing Selling Entities, and Transmission Service Providers must be able to accomplish as part of Interchange Coordination. These tasks have been specified in INT-011-1 (due to its length, the list of tasks is not reproduced here).

Do you agree that these tasks must be specified in a standard as requirements?

Yes

No

If no, please explain you answer.

Comments:

5. **In the past, the industry has expressed concerns regarding how to manage Interchange transactions in the event of cyber attack or other incident. In response, the CI SDT has proposed that several requirements in INT-004-3, INT-006-3 and INT-011-1 be footnoted with the following "In cases where Interchange Coordination is non-functional or has been degraded due to coincidental, accidental, or malicious causes, the Compliance Monitor may exercise discretion in determining whether or not a violation of this requirement has occurred."**

In other cases, such as INT-009-2, this language was not included, indicating that at all times, regardless of tool availability, entities are expected to ensure that Interchange is coordinated, agreed to, and implemented as agreed.

Do you agree that this phrase and its selective use appropriately addresses concerns with managing Interchange transactions in the event of cyber attack or other incident?

Yes

No

If no, please propose alternate language or a different approach.

Comments:

6. **INT-001-2 R2 requires:**

R2. The Sink Balancing Authority shall ensure that Arranged Interchange is submitted to the Interchange Authority:

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

R2.2. For each bilateral Inadvertent Interchange payback.

The CI SDT believes that this is no longer required. Since the proposed INT-009-2 R2 makes is clear that the Net Scheduled Interchange term in the control equation can only include Confirmed Interchange as agreed to between Balancing Authorities and metered values for Dynamic Schedules, this by definition requires that an Arranged Interchange be created in order to implement the schedules listed in R2.1 and R2.2. From a reliability perspective, it is unimportant who creates these Arranged interchanges – only that they be created and confirmed prior to being entered into the control equation.

Do you agree that INT-001-2 R2 is no longer required, and does not need to be retained?

Yes

No

If no, please explain why you believe the requirement is still needed.

Comments:

7. INT—004-2 R1 requires:

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.

The CI SDT believes that at a minimum, this requirement does not belong in the “Dynamic Schedules” standard. However, for several reasons, the CI SDT further believes that this specific requirement is no longer required:

- It mandates a practice (releasing of E-Tag limits) that is more process related
- The practice is already addressed in related NAESB standards (WEQ-004 Appendix B - E-Tag Actions¹)
- Use of a limit (and the associated release of that limit) is only one particular way to address curtailments. Other ways exist that could be used in lieu of this approach. The reliability standard should not mandate a single approach when others may suffice.

Do you agree INT-004-2 R1 can be eliminated?

- Yes
 No

If no, please explain why the requirement is still needed.

Comments:

8. Requirements R1 and R7 in INT-006-4 have been created to address earlier requirements related to the distribution of Interchange information within one minute of a specific action. This one minute limit seemed in most cases to have little or no impact on reliability. The CI SDT discussed this issue at length, and attempted to determine a way in which the one minute requirement only would apply only if its exceedence resulted in a case where the ability to schedule the transaction reliably could have been hindered by the delay. To do this, the CI SDT created several criteria which must be met to constitute a violation:

R1. Each Sink Balancing Authority shall distribute all Arranged Interchange to the Source Balancing Authority, each Intermediate Balancing Authority, each Reliability Coordinator, and each Transmission Service Provider included in the Arranged Interchange less than one minute after receipt of any associated Request for Interchange or requested modifications to Confirmed or Implemented Interchange that meets all of the following criteria:

- 1.1.** The Request for Interchange or requested modification to Confirmed or Implemented Interchange was received by the Sink Balancing Authority on-time, and

¹ Commenters that wish to gain access to review NAESB WEQ-004 should contact NAESB at www.naesb.org and request information regarding the options available for acquiring access to NAESB standards.

1.2. The Arranged Interchange was not transitioned to Confirmed Interchange, and

1.3. Notification of the Arranged Interchange being transitioned to Confirmed Interchange was distributed less than three minutes prior to the requested ramp start, and

1.4. The Arranged Interchange was not denied by any approval entity.

R7. Each Sink Balancing Authority shall distribute all notifications of whether or not Arranged Interchange was transitioned to Confirmed Interchange to the Source Balancing Authority, each Intermediate Balancing Authority, each Reliability Coordinator, and each Transmission Service Provider included in the Arranged Interchange less than one minute after making the decision to transition or not for any Arranged Interchange that meets all of the following criteria:

7.1. The Request for Interchange or requested modification to Confirmed or Implemented Interchange was received by the Sink Balancing Authority on-time, and

7.2. Notification of whether or not the Arranged Interchange was transitioned to Confirmed Interchange was not distributed three or more minutes prior to the requested ramp start, and

7.3. Not all entities actively responded during the reliability assessment period defined in the timing requirements in Attachment 1, column B, and

7.4. The Arranged Interchange was not denied by any approval entity.

Do you agree with this approach?

- Yes
 No

If no, what do you believe the correct approach should be?

Comments:

9. Requirements R2.1 and R3.1 in INT-006-4 now list specific reasons for which a Balancing Authority or Transmission Provider, respectively, must deny an arranged Interchange:

2.1. Each Source and Sink Balancing Authority shall deny the Arranged Interchange if 1.) it does not expect to be capable of supporting the magnitude of the Interchange, including ramping, throughout the duration of the Arranged Interchange, and/or 2.) the scheduling path (proper connectivity of Adjacent Balancing Authorities) is invalid.

3.1. Transmission Service Providers shall deny the Arranged Interchange if 1.) the unscheduled capacity remaining for the Transmission Service Request (or other contractual/tariff arrangement) on the Transmission Providers system will not accommodate the Arranged Interchange, 2.) the Transmission system does not have the capability to accommodate the Arranged Interchange based on projected system conditions, or 3.) the transmission path (proper connectivity of adjacent Transmission Service Providers) is invalid.

Do you agree that these reasons should be specified and that the reasons listed are appropriate?

- Yes
 No

If no, please explain your answer.

Comments: Language should be added to specify that the BA's only responsibility is to validate connectivity of the adjacent scheduled path (in 2.1) to a BA's own interconnection. Similarly, each TSP (in 3.1) will only be responsible to validate connectivity of the adjacent transmission path only to the extent of its interconnecting TSPs.

10. Requirement R4 in INT-006-4 now requires that Reliability Adjustment Requests for Interchange (i.e., curtailments) must be approved by each of the appropriate Balancing Authorities "if (the BA) can support the magnitude of the Interchange, including ramping, throughout the duration of the Reliability Adjustment Request for Interchange."

Do you agree that in the case of curtailment, a Balancing Authority must approve the curtailment unless the magnitude of Interchange, including ramping, cannot be supported?

- Yes
 No

If no, what do you believe are valid reasons for denying a curtailment?

Comments: Language should be changed to On-Time Reliability Adjustment Requests. "Late" (and even past) requests MAY still be approved, but should not be a NERC defined "Must". E-Tag specifications may be changed to passively-APPROVE reliability adjustment requests to accommodate this standard, but that should only be automatic if the request is On-Time.

11. Requirements R5 and R6 of INT-006-4 list the criteria which a Sink Balancing Authority must use to determine whether an Arranged Interchange should be transitioned to a Confirmed Interchange or not:

R5. Each Sink Balancing Authority shall transition Arranged Interchange to Confirmed Interchange if any of the following conditions are met:

5.1 All entities associated with the Arranged Interchange have communicated their approval of the transition

5.2 The Arranged Interchange represents a Reliability Adjustment and the Source Balancing Authority, direct-current tie Operating Balancing Authority, and the Sink Balancing Authority associated with the Arranged Interchange have communicated their approval of the transition

5.3 The time period specified in Attachment 1, column B, has elapsed, all Balancing Authorities and Transmission Service Providers associated with the Arranged Interchange have communicated their approval of the transitions, and no other entities associated with the Arranged Interchange have communicated their denial of the transition.

R6. Each Sink Balancing Authority shall not transition an Arranged Interchange to Confirmed Interchange if any of the following conditions are met:

6.1 The Arranged Interchange represents a Reliability Adjustment; the time period specified in Attachment 1, column B, has elapsed; and one or more of the following entities associated with the Arranged Interchange have not communicated their approval of the transition: the Source Balancing Authority, the direct-current tie Operating Balancing Authority, or the Sink Balancing Authority.

6.2 The Arranged Interchange does not represent a Reliability Adjustment; the time period specified in Attachment 1, column B, has elapsed; and not all Balancing Authorities and Transmission Service Providers associated with the Arranged Interchange have communicated their approval of the transition

6.3 The Arranged Interchange does not represent a Reliability Adjustment, the time period specified in Attachment 1, column B, has elapsed, and any entity associated with the Arranged Interchange has communicated their denial of the transition

Do you agree that these criteria are correct?

Yes

No

If no, what do you believe the correct criteria should be?

Comments: Language is needed to more accurately define direct-current tie Operating Balancing Authority, and its communication role, as that role may not be otherwise designated in the e-Tag's approval path. As well, a DC portion of the transmission path may not be designated on an e-Tag, and may be completely unknown to the Sink Balancing Authority.

12. In Order 693, FERC issued directives that with regard to the INT standards, NERC include Reliability Coordinators and Transmission Operators as applicable entities, as well as require Reliability Coordinators and Transmission Operators to review energy interchange transactions from the wide-area and local area reliability viewpoints respectively and, where their review indicates a potential detrimental reliability impact, communicate to the Sink Balancing Authorities' necessary transaction modifications before implementation. In response, the CI SDT proposes to add Requirements R8 and R9 of INT-006-3:

R8. On a day-ahead basis, each Transmission Operator shall notify the associated Sink Balancing Authority(ies) of any Interchange modifications potentially required to mitigate any previously identified expected SOL or IROL exceedances.

R9. On a day-ahead basis, each Reliability Coordinator shall notify the associated Sink Balancing Authority(ies) of any Interchange modifications potentially required to mitigate any previously identified expected IROL exceedances.

Do you believe that these new requirements will adequately address the FERC directive?

- Yes
 No

If no, how do you think the directive should be addressed?

Comments: These requirements are not needed and will only duplicate existing requirements that adequately address the need to assess interchange transactions on a day-ahead basis. IRO-004-1 R1 already requires Reliability Coordinators to perform next day studies for “anticipated” conditions “to identify potential interface and other SOL and IROL violations. Day ahead energy schedules would clearly fall into anticipated conditions. IRO-004-1 R2 requires each Reliability Coordinator to “pay particular attention to parallel flows”. Again day ahead energy schedules fall into this parallel flows. IRO-004-1 R3 requires each Reliability Coordinator to develop action plans that may be required to alleviate IROL and SOL violations. One option for the action plans explicitly states curtailment of Interchange Transactions as an option. IRO-004-1 R6 requires the Reliability Coordinator to direct action to alleviation these IROL and SOL violations identified in the next day studies and IRO-004-1 R7 requires the Transmission Operator, Balancing Authority and Transmission Service Provider to comply with the directives based on the results of these next day studies.

TOP-002-2 R5 requires Transmission Operators to plan to meet “scheduled system configuration, generation dispatch, interchange scheduling and demand patterns”. TOP-002-2 R11 requires the Transmission Operator to perform a next day study. Thus, a Transmission Operator would have to include day-ahead interchange schedules in its next day study in order to plan to meet them. Then TOP-002-2 R10 requires the Transmission Operator to plan to operate within IROLs and SOLs.

13. In INT-010-2, the CI SDT has added Requirement R4 to specify when it is appropriate to use Reliability Adjustment Requests for Interchange (i.e., curtailment):

R4. Balancing Authorities, Transmission Service Providers, and Reliability Coordinators shall only utilize a Reliability Adjustment Request for Interchange in response to the following

- 4.1** Loss or non-performance of Generation supplying the Interchange
- 4.2** Loss of Load being served by the Interchange
- 4.3** Loss of one or more Transmission Facilities
- 4.4** An actual or potential SOL or IROL exceedance
- 4.5** Any real-time reliability concern related to a specific Confirmed Interchange, provided that concern is supported by evidence.

Do you believe these limitations are appropriate?

- Yes
 No

If not, what other reasons should be included?

Comments:

14. In INT-009-2 R1, the CI SDT has proposed that:

No more than one hour prior to each operating hour, each Balancing Authority shall ensure that for that operating hour, the composite of its Confirmed

Interchange energy profiles (and any associated modifications to Confirmed Interchange), excluding Dynamic Schedules, with each Adjacent Balancing Authority is:

- Agreed to by that Adjacent Balancing Authority,
- Identical in magnitude to that of the Adjacent Balancing Authority, and
- Opposite in sign to that of the Adjacent Balancing Authority.

The CI SDT chose not to specify a method to reach agreement when conflicts arise, instead assuming that entities will develop their own procedures to resolve conflicts. Should this requirement be modified to include a default procedure that must be used if one does not already exist?

- Yes
 No

If yes, please offer proposals for such a procedure.

Comments: The NSRS "agrees" to the intent of the requirement and that no default procedure is necessary. The requirement language should remove the words "No more than one hour". Scheduled interchange may be agreed to prior to that first operating hour along with other hours of static MW flow, for example. If this previously agreed-upon interchange schedule has not changed, no further communication should be needed.

15. The CI SDT has made significant attempts to consolidate, clarify, and organize the standards such that they accurately reflect the manner in which the industry currently operates and mandate appropriate levels of performance. Are there any requirements that you think are missing from these standards?

- Yes
 No

If yes, please elaborate.

Comments:

16. Are you aware of any conflicts between the proposed standards and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement?

- Yes
 No

If yes, please explain your answer.

Comments:

17. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the proposed standards.

Comments: