

**Request for Initiation of a NAESB Standard for Business Transactions or  
Request for Enhancement of a NAESB Standard for Business Transactions  
June 15, 2003**

**R03013**

**North American Energy Standards Board**

**Request for Initiation of a NAESB Standard for Business Transactions  
or  
Enhancement of an Existing NAESB Standard for Business Transactions**

**Instructions:**

- 1. Please fill out as much of the requested information as possible. It is mandatory to provide a contact name, phone number and fax number to which questions can be directed. If you have an electronic mailing address, please make that available as well.**
  
- 2. Attach any information you believe is related to the request. The more complete your request is, the less time is required to review it.**
  
- 3. Once completed, send your request to:  
Rae McQuade  
NAESB, Executive Director  
1301 Fannin, Suite 2350  
Houston, TX 77002  
  
Phone: 713-356-0060  
Fax: 713-356-0067**

**by either mail, fax, or to NAESB's email address, [naesb@aol.com](mailto:naesb@aol.com).**

**Once received, the request will be routed to the appropriate subcommittees for review.**

**Request for Initiation of a NAESB Standard for Business Transactions or  
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**Coordinate Interchange Business Practices**

**North American Energy Standards Board**

**Request for Initiation of a NAESB Standard for Business Transactions  
or  
Enhancement of an Existing NAESB Standard for Business Transactions**

Date of Request: June 15, 2003

**1. Submitting Entity & Address:**

NAESB Members of the Joint Interface Committee

**2. Contact Person, Phone #, Fax #, Electronic Mailing Address:**

Charles Yeung	Director, Business Standards, Reliant Energy Services, Inc. NAESB WEQ Executive Committee Member and Co-Chair of the WEQ Standards Review Subcommittee
Work:	713-497-2935
Fax:	713-207-9172
E-Mail:	cyeung@reliant.com
Address:	P.O. Box 286 Houston, TX 77001-0286

**3. Description of Proposed Standard or Enhancement:**

Provide complementary business practice standards to support the Coordinate Interchange Standards Authorization Request assigned to the North American Electric Reliability Council. Business practices may be needed for market participants to provide any necessary data for the analysis of 'interchange' as defined by NERC for reliability purposes. Business practices may also be needed for the format and timing of the data submittals.

**4. Use of Proposed Standard or Enhancement (include how the standard will be used, documentation on the description of the proposed standard, any existing documentation of the proposed standard, and required communication protocols):**

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There exist known market impacts to the development of the reliability standards to support the Coordinate Interchange function. Standard markets are not assumed. Business practices may be needed for the format and timing of the data submittals. As a corollary, business practices may be needed for market participants to provide any necessary data for the analysis of 'interchange' as defined by NERC for reliability purposes. The NERC effort notes that the data format and timing for commercial transactions is at the discretion of the market participant, in concert with the balancing authority (BA), reliability authority (RA), transmission service provider (TSP) and PSEs. If the RA, BA and TSP can all perform the necessary reliability analysis in time to implement a transaction request, then the reliability standard would allow the transaction to be implemented.

**5. Description of Any Tangible or Intangible Benefits to the Use of the Proposed Standard or Enhancement:**

Clearly it is important to coordinate reliability standards development with the accompanying business practice standards. Specific market based proposed standards were not included in the scope of the Coordinate Interchange SAR.

**6. Estimate of Incremental Specific Costs to Implement Proposed Standard or Enhancement:**

Reliability systems used to provide data for reliability analysis and to implement transactions may be impacted.

**7. Description of Any Specific Legal or Other Considerations:**

FERC or other regulatory requirements must be considered.

**8. If This Proposed Standard or Enhancement Is Not Tested Yet, List Trading Partners Willing to Test Standard or Enhancement (Corporations and contacts):**

N/A

**9. If This Proposed Standard or Enhancement Is In Use, Who are the Trading Partners:**

N/A

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**10. Attachments (such as : further detailed proposals, transaction data descriptions, information flows, implementation guides, business process descriptions, examples of ASC ANSI X12 mapped transactions):**

See NERC SAR "Coordinate Interchange" attached as Attachment A along with comments forwarded by Mr. Yeung regarding the SAR. Also the minutes from the Joint Interface Committee on June 2 ,2003 and the May 8 SRS discussion paper on the SAR can be referenced for discussion on the request.

Title of Proposed Standard:	Coordinate Interchange Transactions
Request Date:	March 7, 2002
Authorized for Posting:	March 20, 2002
SAR ID# :	COORD_INTERCHNG_01_04

<b>SAR Requestor Information</b>		<b>SAR Type</b> (Put an 'x' in front of one of these selections)	
Name:	Jim Byrd (Albert DiCaprio as substitute)	X	New Standard
Primary Contact:	(Al DiCaprio)		Revision to existing Standard
Telephone:	610 666-8854		Withdrawal of existing Standard
Fax:			
e-mail:	dicapram@pjm.com		Emergency Action

Notes:

1. The NERC Functional Model has not been finalized. Modifications to the Functional Model may require some conforming changes to this SAR.
2. There is much industry disagreement on the terms used to describe the various stages of coordinating interchange. The SAR DT assembled a series of charts that shows the steps in coordinating interchange. These charts are attached to this SAR and highlight the application of the following terms:
  - Interchange Transaction
  - Interchange Schedule

## **SAR: Coordinate Interchange Transactions**

### **Purpose/Industry Need (Please see diagram attached)**

To ensure that the implementation of Interchange Transactions between Sink and Source Balancing Authorities is coordinated by the Interchange Authority such that the following reliability objectives are met:

- Each Interchange Schedule is checked for reliability before it is implemented
- The Balancing Authorities implement the Interchange Schedule exactly as agreed upon in the Interchange Confirmation process
- Interchange Schedule information is available for reliability assessments

### **For the purpose of this SAR, the following definitions have been adopted:**

- **INTERCHANGE TRANSACTION.** An agreement arranged by a Purchasing-Selling Entity to transfer energy from a seller to a buyer.
- **INTERCHANGE SCHEDULE.** An authorized interchange transaction, approved by all entities, that is implemented (goes physical) between a BA and IA.
- **INTERCHANGE IMPLEMENTATION** - The physical initiation of an approved interchange schedule

### **Brief Description**

To ensure reliability related data pertaining to interchange transactions is verified and communicated to functional authorities. Reliability related data to be verified should include megawatt magnitude, ramp start and stop times, and the interchange transaction's duration. Reliability related data should be communicated by and between the Interchange Authority, Balancing Authority, Reliability Authority, Transmission Service Provider, and Purchasing-Selling Entity functions.

Verification of data should indicate that a mutual agreement exists between parties that intend to implement a proposed interchange transaction as well as approval by the appropriate functional authorities.

To provide a mechanism for interchange transaction identification that could be used for congestion management and/or relieving operating limit violations.

**SAR: Coordinate Interchange Transactions**

***Reliability Functions***

<b>The Standard will Apply to the Following Functions</b> <i>(Put an 'X' in front of each one that applies)</i>		
X	Reliability Authority	Ensures the reliability of the bulk transmission system within its Security Authority Area. This is the highest reliability authority.
X	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within its metered boundary and supports system frequency in real time
X	Interchange Authority	Authorizes valid and balanced Interchange Schedules
	Planning Authority	Plans the bulk electric system
X	Transmission Service Provider	Provides transmission services to qualified market participants under applicable transmission service agreements
	Transmission Owner	Owns transmission facilities
	Transmission Operator	Operates and maintains the transmission facilities, and executes switching orders
	Distribution Provider	Provides and operates the "wires" between the transmission system and the customer
	Generator	Owns and operates generation unit(s) or runs a market for generation products that performs the functions of supplying energy and Interconnected Operations Services
X	Purchasing-Selling Entity	The function of purchasing or selling energy, capacity and all necessary Interconnected Operations Services as required.
	Load-Serving Entity	Secures energy and transmission (and related generation services) to serve the end user

**SAR: Coordinate Interchange Transactions**

**Reliability and Market Interface Principles**

<b>Applicable Reliability Principles (Put an 'x' in front of all that apply)</b>	
X	1. Interconnected bulk electric systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions
X	2. The frequency of interconnected bulk electric systems shall be controlled within defined limits through the balancing of electric supply and demand
X	3. Information necessary for planning and operation of interconnected bulk electric systems shall be made available to those entities responsible for planning and operating the systems reliably
	4. Plans for emergency operation and system restoration of interconnected bulk electric systems shall be developed, coordinated, maintained and implemented
X	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk electric systems
	6. Personnel responsible for planning and operating interconnected bulk electric systems shall be trained, qualified and have the responsibility and authority to implement actions
X	7. The security of the interconnected bulk electric systems shall be assessed, monitored and maintained on a wide area basis
<b>Does the proposed Standard comply with all of the following Market Interface Principles?</b>	
<i>(Enter 'yes' or 'no')</i>	
Yes	
1.	Interconnected The planning and operation of bulk electric systems shall recognize that reliability is an essential requirement of a robust North American economy
2.	An Organization Standard shall not give any market participant an unfair competitive advantage
3.	An Organization Standard shall neither mandate nor prohibit any specific market structure
4.	An Organization Standard shall not preclude market solutions to achieving compliance with that Standard
5.	An Organization Standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards

## **SAR: Coordinate Interchange Transactions**

**Detailed Description: This standard will include requirements for the exchange of reliability-related data pertaining to Interchange Transactions.**

**The standard shall contain the following requirements for the BA:**

- BA shall confirm (with the IA) its approval or denial of the requested Interchange Schedule
- BAs shall implement Interchange Schedules exactly as agreed upon in the interchange confirmation process

**The standard shall contain the following requirements for the IA:**

- The IA shall confirm the approvals from all involved parties (RAs, BAs, TSPs) and shall authorize, upon confirming approvals, the implementation of Interchange Schedules
- The IA shall confirm that Interchange Transactions are balanced and valid prior to physical delivery
- The IA shall communicate implementation status to all parties (with which the Interchange Transaction must be coordinated)

**The standard shall contain the following requirements for the RA:**

- The RA shall receive and confirm Interchange Transaction information with the IA
- The RA shall approve or deny the request from the IA based on reliability perspectives.

**The standard shall contain the following requirements for the TSP:**

- TSP shall receive and confirm Interchange Transaction information with the IA
- The TSP shall approve or deny the request from the IA

**The standard shall contain the following requirements for the PSE:**

- When an entity desires to transfer energy, the entity initiating the transaction shall submit, as a minimum, the following reliability-related transaction data to its IA:
  - Desire to transfer energy
    - Megawatt magnitude
    - Ramp start and stop times
    - Interchange transaction's duration
    - Sufficient information for all approval entities
- The PSE shall request approval for interchange transactions from the IA
- The PSE shall confirm interchange transaction requirements with the IA

## **SAR: Coordinate Interchange Transactions**

### **Related Standards**

<b>Standard No.</b>	<b>Explanation</b>

### **Related SARs**

<b>SAR ID</b>	<b>Explanation</b>
BAL_RES_&_DEMND_01_03	The “Balance Resources and Demand” SAR identifies requirements matching resources with demand. Some of the data required to ensure “balance” comes from transactions and is referenced in this Coordinate Interchange SAR.
OPER_WITHN_LMTS_01_02	The “Operate Within Transmission Limits – Monitor and Assess Short Term Reliability” SAR includes requirements that the RA monitor the overall reliability of the RA Area. This includes the requirement that data be collected and analyzed to ensure security. Some of the data collected for security analyses is included in this Coordinate Interchange SAR.
COORD_OPERATONS_01_01	The “Coordinate Operations” SAR may include requirements such as entering data into the IDC. The data for this comes from Interchange.
ABNML_&_EM_COND_01_01	The “Prepare for and Respond to Abnormal or Emergency Conditions” SAR identifies requirements for recognizing and responding to emergency conditions. Some emergencies may involve curtailment of interchange schedules.

### **Regional/Interconnection Differences**

<b>Region</b>	<b>Explanation</b>
ECAR	none
ERCOT	<b>ERCOT:</b> As a single Control Area (Balancing Authority) interconnection there are no true Interchange Schedules in ERCOT. The only Interchange is over DC ties, which will have unique requirements. <b>Oncor:</b> ERCOT has an Interconnection Difference by Legislative direction for retail choice. There are no transmission reservations requirements and generation/load schedules are part of the real-time competitive market.
FRCC	none
MAAC	none
MAIN	none
MAPP	none
NPCC	none
SERC	none
SPP	none
WECC	none

## **SAR: Coordinate Interchange Transactions**

### **Implementation Plan**

#### **Description** *(Preliminary.)*

Portions of Policy 3 will be deleted when this SAR is implemented. Policy 3 contains some procedures that may need to be transformed from Policies into commercial practices or supporting documents in concert with the implementation of this new standard.

### **Team Assignments**

“Coordinate Interchange” SAR Drafting Team

Chairman: Doug Hils

Secretary/Facilitator: Gordon Scott

Requestor: Jim Byrd (Albert DiCaprio as substitute)

Industry Representatives:

Diane Barney

Linda Clarke

Jim Cyrulewski

Nick Henery

Carolyn Ingersoll

Adrian Malo

Dave McGinnis

David McRee

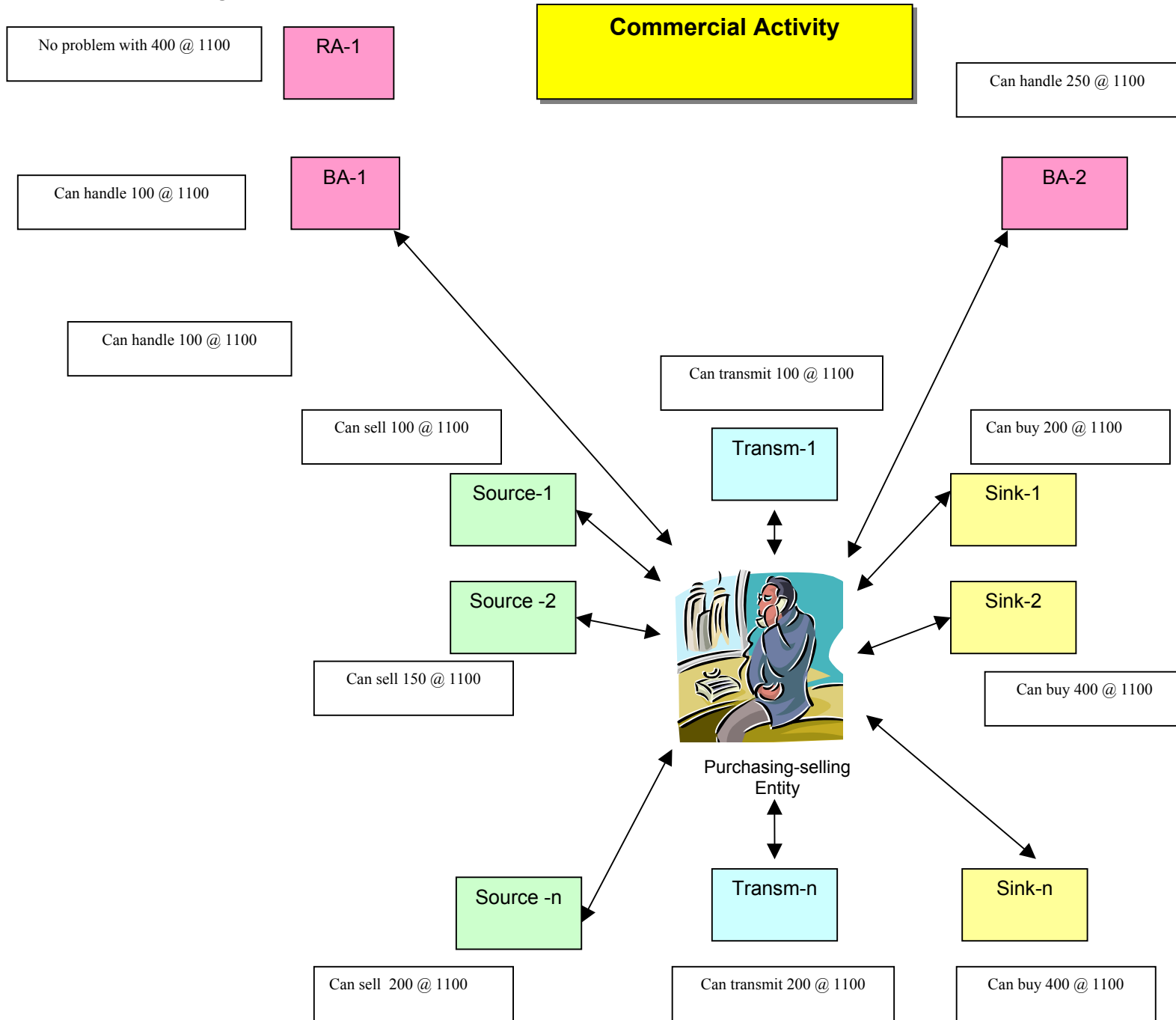
Jim McIntosh

Joel Mickey

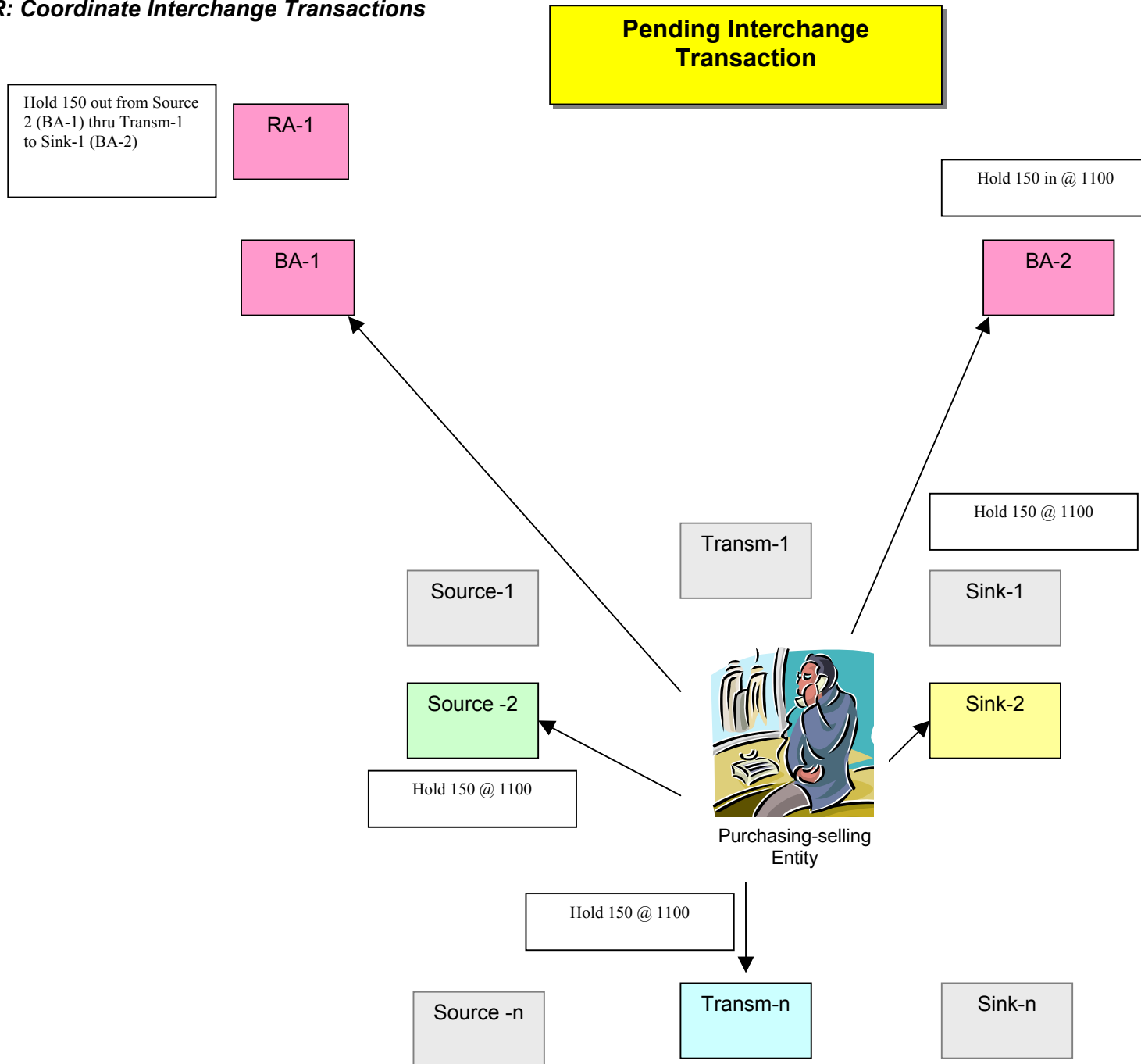
Monroe Landrum

Charles Yeung

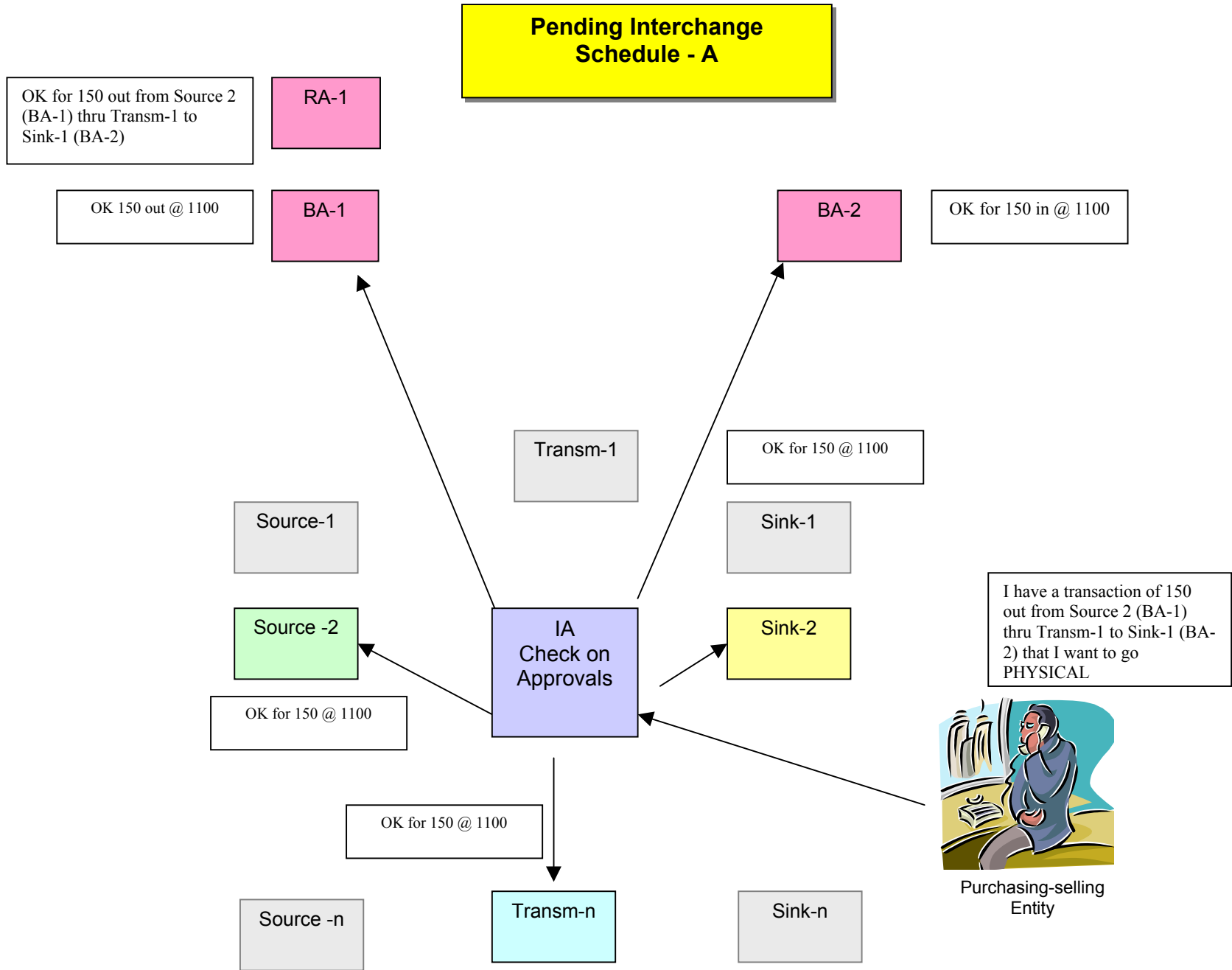
**SAR: Coordinate Interchange Transactions**



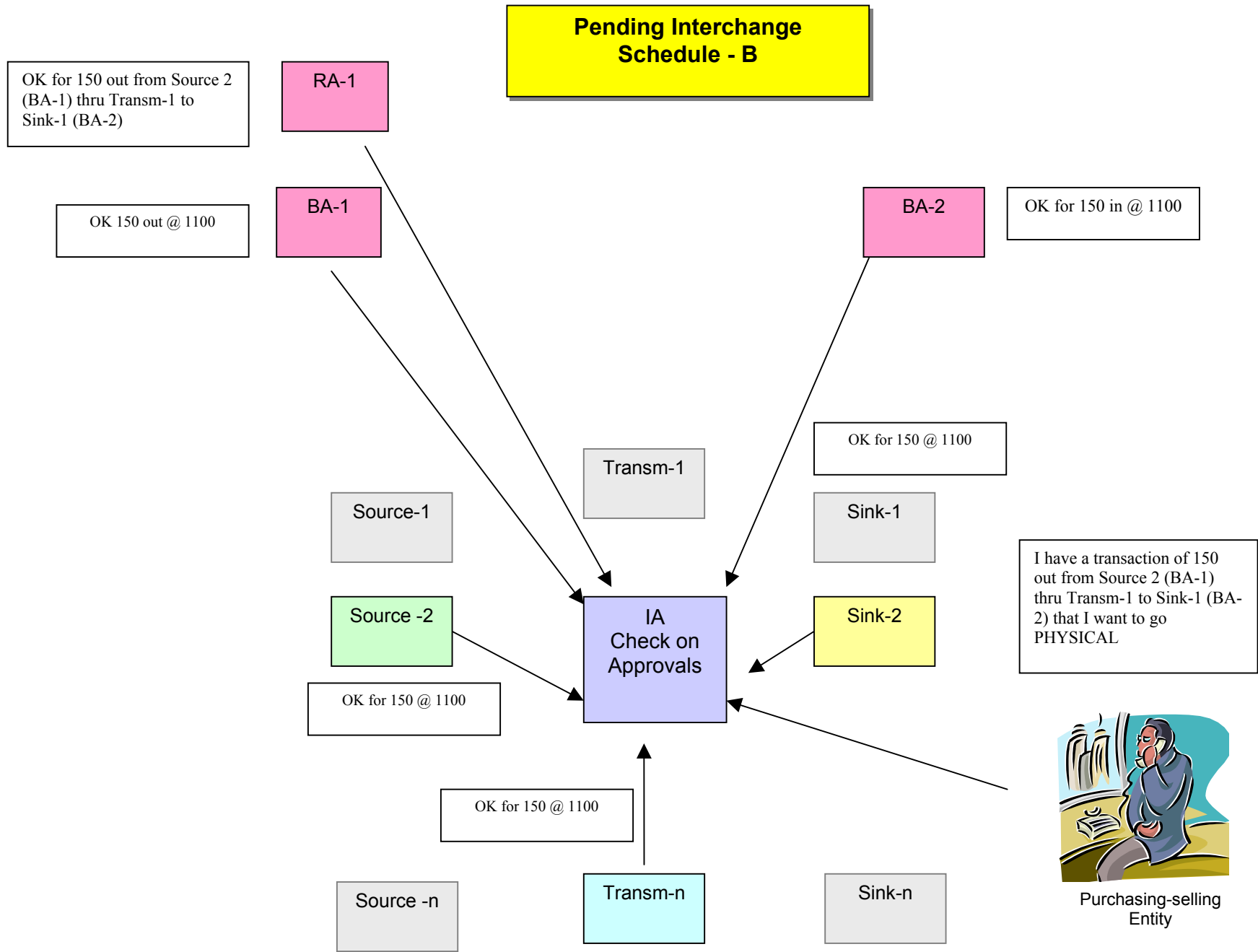
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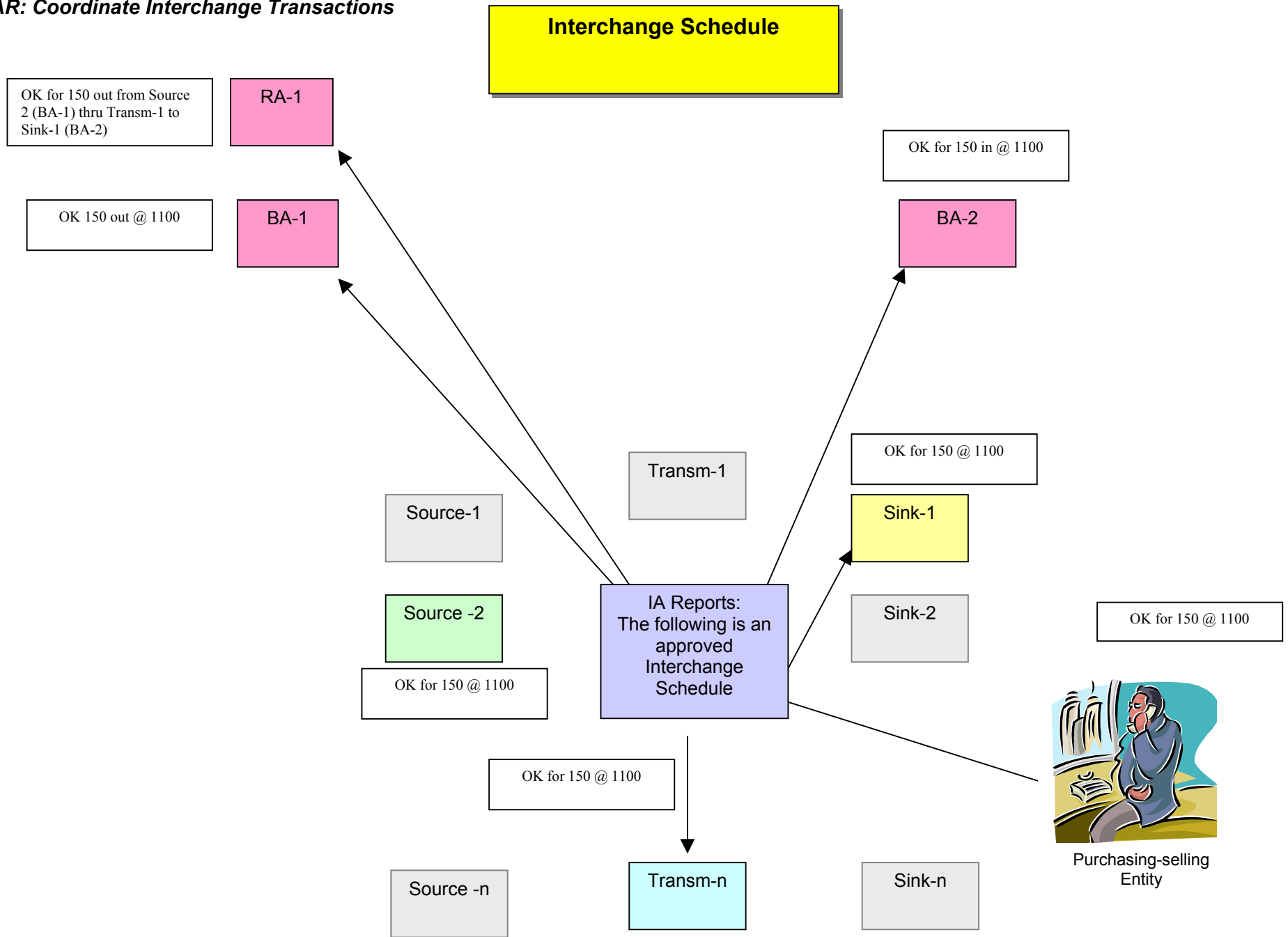
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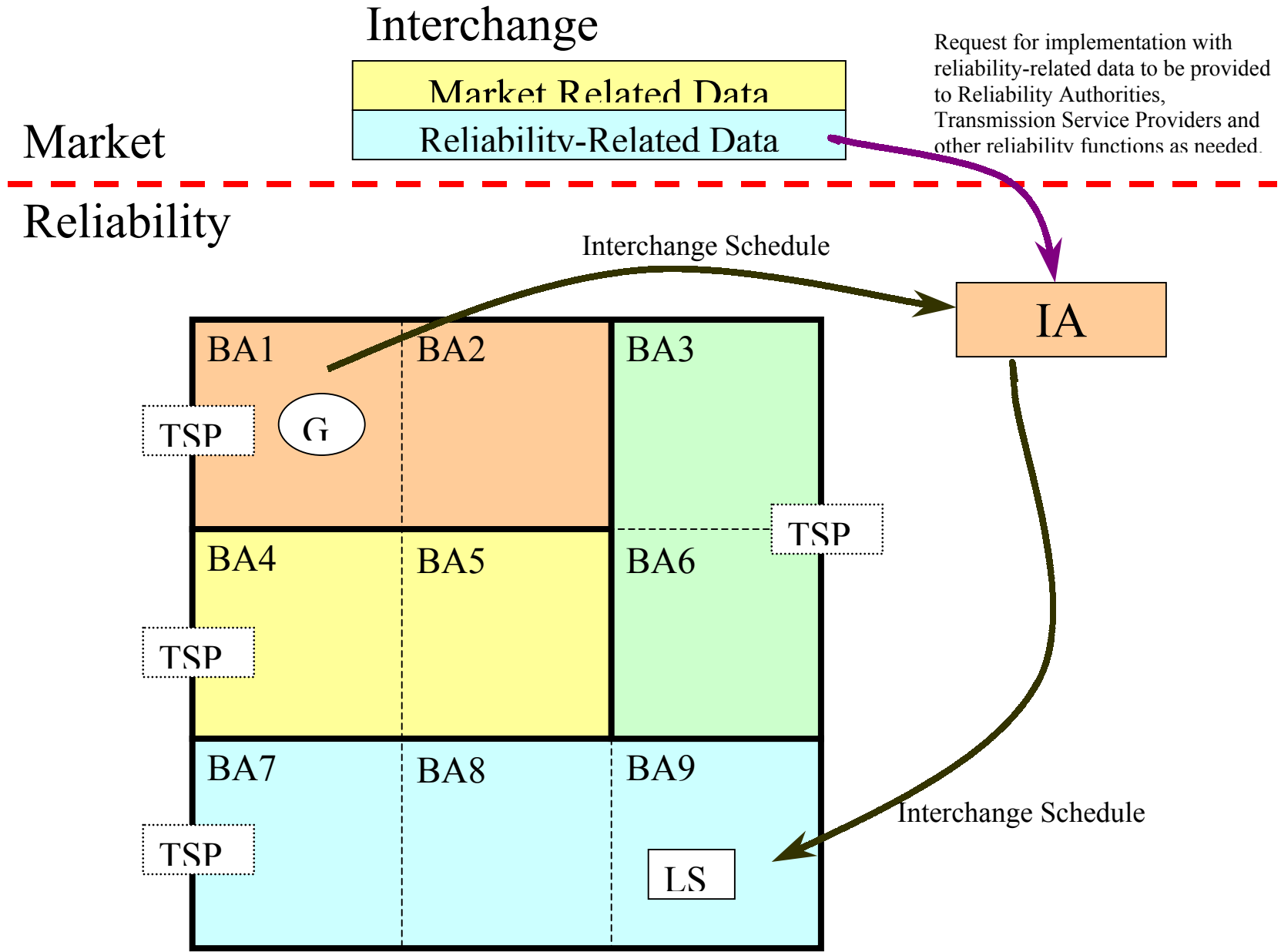


**SAR: Coordinate Interchange Transactions**



**SAR: Coordinate Interchange Transactions**





**Charles Yeung, Reliant Energy Comments on Coordinate Interchange SAR**  
**5-9-2003**

The Coordinate Interchange SAR is on its way to set criteria for the standards drafting team to develop a NERC Reliability Standard that meets NERC's mission and its adopted Reliability and Market Interface Principles. The separation of the market issues from the Reliability Standard is of key importance because it allows for other organizations to develop the appropriate market requirements. However, in doing so, a level of consistency and standardization for the Interconnections may be lost. It is not in NERC's purview to develop or influence market standards, but the industry must be made aware that the CI Reliability Standard will leave it up to others to address the issue of scheduling requirements for seamless markets.

**Excerpt from the CI SAR:**

***The standard shall contain the following requirements for the BA:***

- BA shall confirm (with the IA) its approval or denial of the requested Interchange Schedule
- BAs shall implement Interchange Schedules exactly as agreed upon in the interchange confirmation process

The standard shall contain the following requirements for the PSE:

- *When an entity desires to transfer energy to another BA's area, the entity initiating the transaction shall submit as a minimum the following reliability-related transaction data to its IA:*
  - *Desire to transfer energy to another BA's area*
    - *Megawatt magnitude*
    - *Ramp start and stop times*
    - *interchange transaction's duration*
    - *Sufficient information for all approval entities*
- The PSE shall request approval for interchange transactions from the IA
- The PSE shall confirm interchange transaction requirements with the IA

**What is NOT a part of this Standard?**

The "Implementation" part of the SAR refers to the exclusion of certain requirements of Policy 3 from the Standard. Inadvertent Energy Payback was identified early in the process as not a NERC standard and allocated to NAESB for development. Are there other elements of interchange that should also be allocated to NAESB or RTOs for definition?

Market procedures for requesting/submitting transaction information – ala PJM, MISO are believed to be NOT a part of the CI Standard. Is the SAR language clear that these markets will not be subject to requirements in the CI Standard that "mandates or prohibits

any given market structure?” - one of the Market Interface Principles referred to in the SAR form that is assumed to be complied with.

The future standard on Coordinate Interchange should differ from the current Policy 3 Standard which describes interchange transaction request submission, revision, modification procedures (embodied in the various Policy 3 Appendixes). The new standard seems to delegate those procedures and data requirements to regional markets to develop.

This raises an important issue regarding standardization of practices to enable inter-Regional markets. By divorcing NERC from developing market standards, the ability for a NERC Standard to enable a seamless market is lost. The present NERC Policy 3 tagging requirements has established a level of market consistency for the Eastern Interconnection and recently, the Western Interconnection. This level of consistency may be lost with the new CI Standard.

A diversity of market procedures for the request for inter-regional energy transfers may result due to the emergence of RTOs and the differences in market rules. Without a centralized standard procedure for the handling of bi-lateral transaction requests and implementation, the PSEs conducting business across regional boundaries may be faced with a plethora of data and timing requirements. This would disrupt the market’s ability to seamlessly transact business between transmission providers that do not operate under a single market.

### **The Answer is Coordination**

With the assumption that the CI Standard will not specify the market processes to request energy transfers, NERC must define and standardize the core and fundamental required technical information for reliability in such a manner that all markets, regardless of structure, will be able to comply. Since NERC is divorced from developing market standards, it cannot play a direct role in market standards development. Instead, NERC must inform the industry that this need exists. Organizations chartered to develop market rules should carry on the burden of developing market requirements that can enable seamless transactions.