NERC
Electronic Tagging Overview

NYISO S&P Working Group
August 3, 2004

presented by
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Agenda

- Purpose of E-Tagging
- History & Evolution of E-Tagging
- August 14, 2003 Blackout Impacts
- NYISO E-Tagging Integration Objectives
- Questions & Feedback

Purpose of NERC E-Tagging

- ➔ E-Tagging is an integral part of interconnected system operations in North America
- ➔ As the wholesale energy marketplace develops, transmission system information needs increase.
- ➔ E-Tags help Reliability Coordinators and control areas assess reliability impacts and curtail transactions when necessary
- ➔ In agreement with NERC Policy 3
  - ➔ Requires CAs, TPs and PSEs to have "<u>full-time E-Tag monitoring"</u>
  - ➔ Policy 3A1 paragraph 1.3

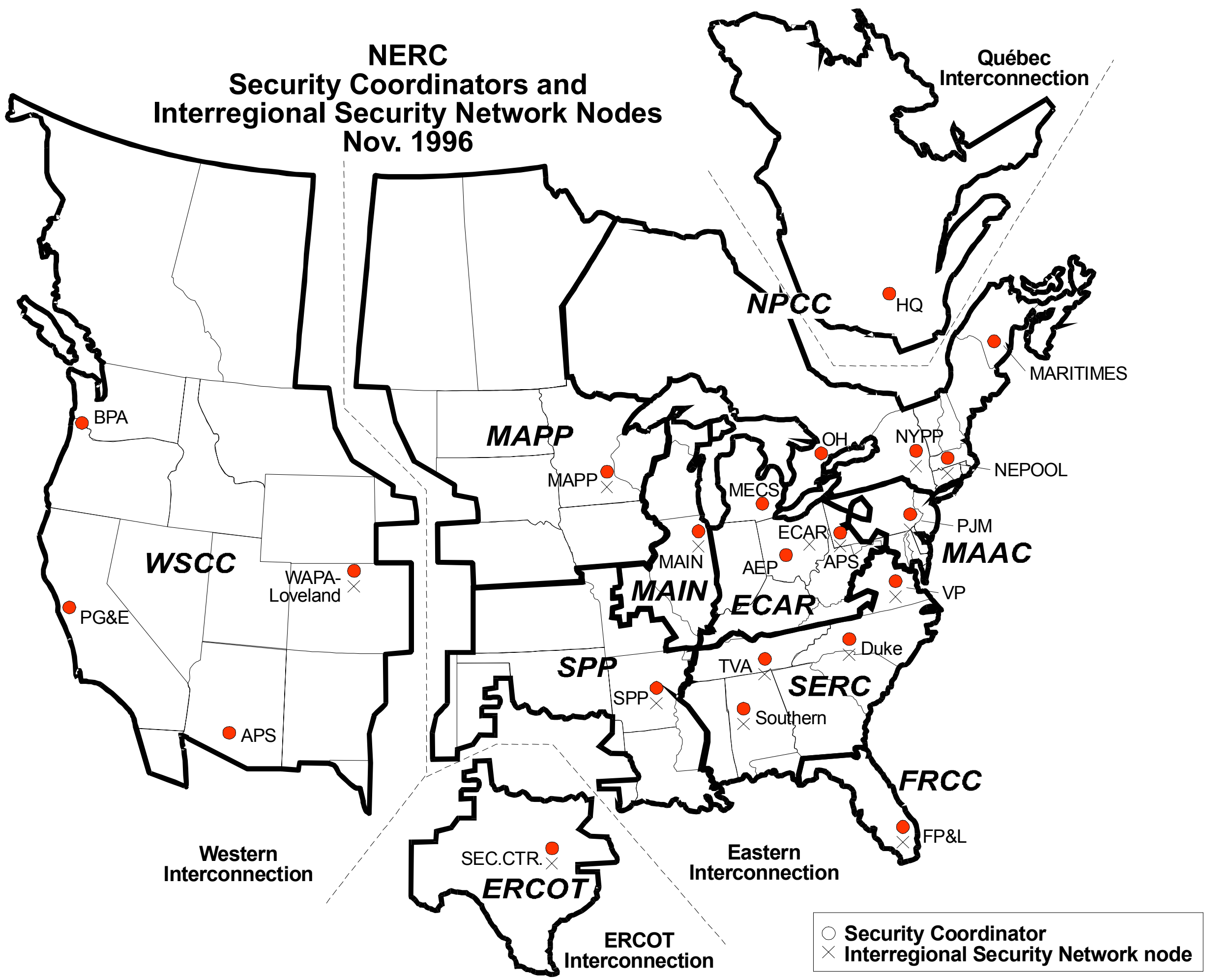
  "The Purchasing-Selling Entity serving the load shall be responsible for providing the Interchange Transaction tag"

History

- ➔ 1992 Energy Policy Act ➡ Open Access
- ➔ 1996 Security Process TF
  - ➔ Information exchange
  - ➔ Security [Reliability] Coordinators
  - ➔ Regional Plans
  - ➔ Common Terminology
- ➔ 1997 Interim Tools for Transaction Management
  - ➔ Information: Tagging
  - ➔ Transmission Loading Relief (TLR) Procedures
  - ➔ [interim] Interchange Distribution Calculator (iIDC)
- ➔ 1999 E-Tagging Version 1 and IDC
- ➔ 2002 E-TaggingVersion 1.7

1992 -1998
GAPP Experiment

Security Coordinators



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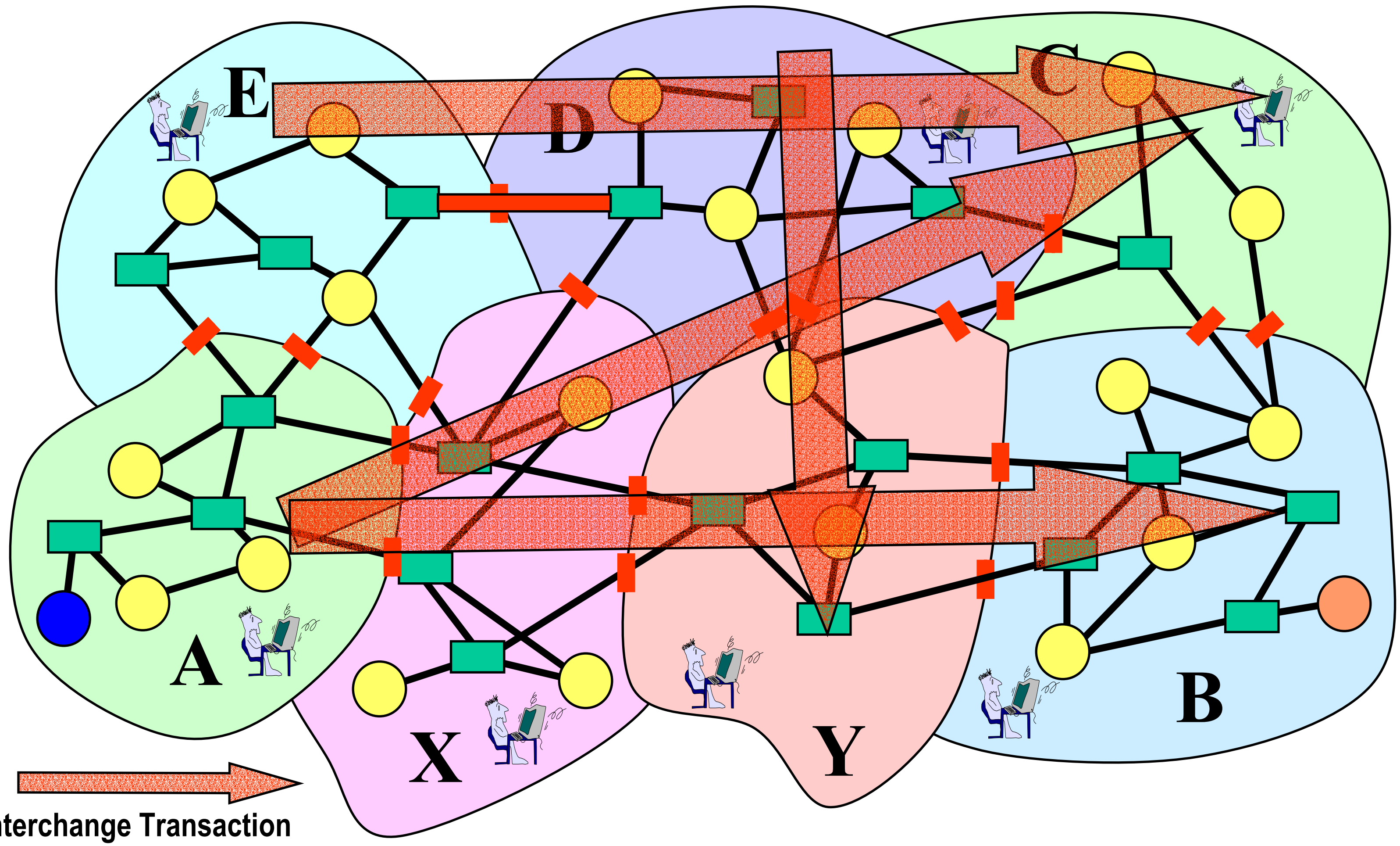
Dealing with Parallel Flows
Share the Responsibility (TLR)



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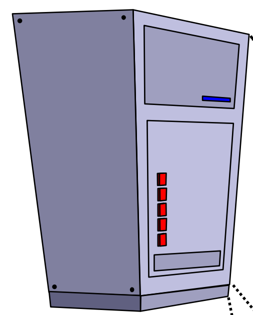
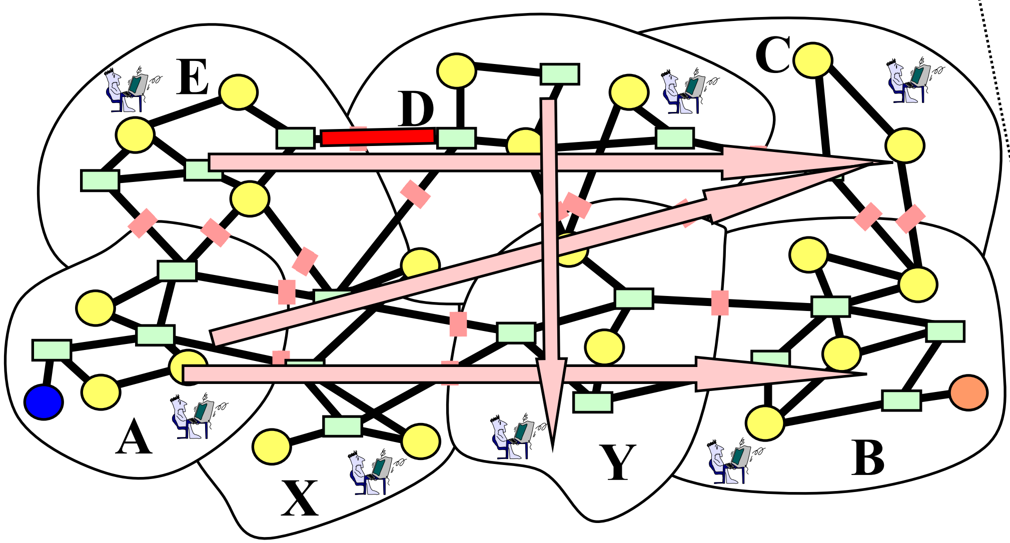
Interchange Distribution Calculator

Reliability Coordinator



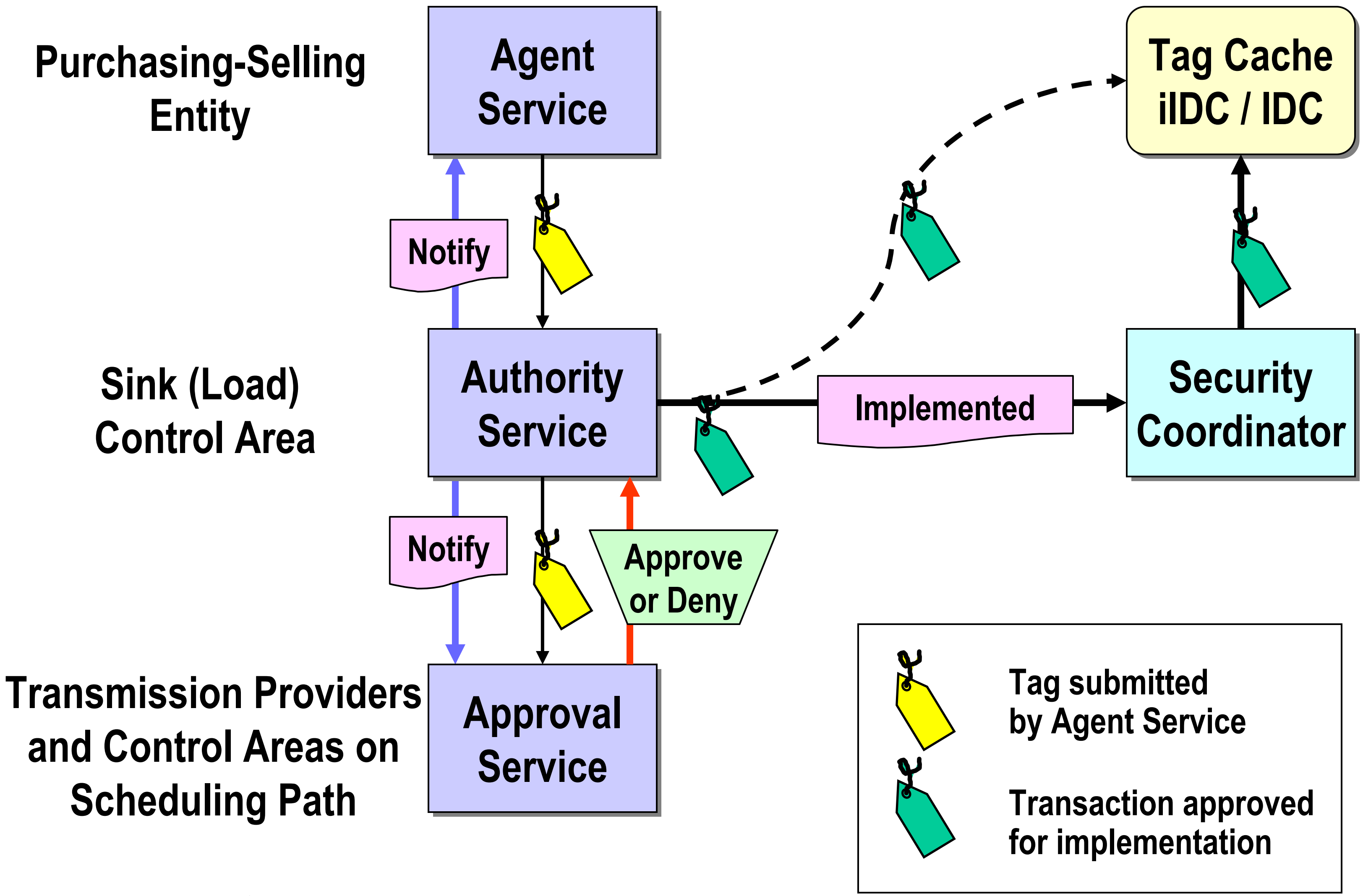
Transactions

X	A to C	100	NH
X	A to B	150	ND
X	E to C	250	NH
	D to Y	400	NH



Transaction	AX	AE	ED	YB
A to B	0.85	0.15	0.30	0.60
A to C	0.70	0.30	0.45	0.30
A to D	0.35	0.65	0.55	0.02
A to E	0.05	0.95	0.04	0.01
B to C	0.01	0.02	0.01	0.05
D to Y	0.02	0.05	0.03	0.03
E to C	0.02	0.03	0.60	0.10

Electronic Tagging Process



E-Tagging Requirements

- The functional requirements for all-electronic Tagging must address the basic information and data exchange needs of:
  - Initial creation of an electronic “Tag” representing the transaction,
  - dissemination of the E-Tag to all parties directly involved in the transaction,
  - collection of approval states from all parties,
  - forwarding of the E-Tag to appropriate security entities, and
  - modifications to the E-Tag throughout its lifetime.

SOME OBSERVATIONS

- Overall Performance of CA's in the EI, as indicated in the August 14th Etag and AIE Audit, is Unacceptable.
- AIE / Etag Audit shows 2000+ MWs of error across many hours, several CA's.
- The continuing of errors and inconsistencies across multiple hours suggest that this is a wide spread problem, and not isolated to August 14th.
- It appears that (consciously or unconsciously) several CA's are not keeping their EMS and E-Tag system in sync.
- Information in the IDC is not getting into the CA's EMS system and vice versa.
- Analysis using IDC data is probably not accurate.

SOME RECOMMENDATIONS

1. Audits to compare IDC schedules & EMS schedules for each CA.
2. Review/Make changes to Policy 3 and Policy 9 to ensure that each CA must keep their EMS system and the IDC in sync.
3. Require Regional Compliance program and Audits to look carefully at how each CA ensures the IDC and EMS are in sync.
4. Conduct Monthly Audits until this problem is brought under control.
5. Each month, include an AIE survey along with the E-Tag Survey. Do multiple hours.
6. Keep E-Tag – the tool is not the problem.

E-Tagging Business Drivers

- **Synchronize MIS with OATI**
- **Comply with NERC regulations (Policy 3)**
- Improve coordination with neighboring CA's in resolving seams issues
  - Timely communication
  - More insight into NYISO data
- Provide greater confidence that E-Tag data accurately reflects NYISO bids and schedules
  - For Market Participants
  - For other Control Areas
- Facilitate MP's in scheduling transactions across seams

NYISO E-Tagging Scope

- **Why are we doing this project?**
  - Provide greater confidence that E-Tag data accurately reflects NYISO bids and schedules
  - Improve coordination with neighboring Control Areas
  - Ensure full compliance with NERC policy / regulations
  - Reduce administrative burden on Market Participants scheduling transactions across seams
- **Initial focus on Operations process enhancements Two main components:**
  - Approve E-Tag
  - Adjust E-Tag

High-level Functionality – Current Release

- **Approve Tag**
  - Validate all E-Tag requests created in OATI's central authority and actively respond (consistent with ISO-NE and PJM implementations)
  - Resolves current "Passive Approval" issues
    - Time delay
    - No indication of existence/accuracy of NYISO data

- **Adjust Tag**
  - NYISO will update E-Tags when scheduling transactions or updating transaction schedules (NERC Policy 3)

Questions

and

Feedback.