

Agenda Item #5

Regional Market Enhancements

Business Issues Committee
July 24, 2002

Major and Emerging Coordination Issues:

Transmission Service

Long-Term Transmission Service Availability to Support ICAP Transactions

Transaction Checkout Failure

Transaction Scheduling

Transaction Curtailment

Failure of Transactions due to Ramping of Control Area Interchange

ATC Differences

ATC Manipulation

Capacity Market

Transmission and Generation Interconnection Procedures

Export Charges (Pancaking)

Emerging Issues

| SEAMS Project KEY | | |
|-------------------|--------------------|--|
| BLUE | Completed projects | |
| Yellow | Projects under way | |

| Transmission Service | | |
|----------------------------------|--|----------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Market Participants require | 15 – NY Transactions Prescheduling | Complete (Feb. 2002) |
| consistent treatment of | 28 – NY Interconnection Agreement with HQ/TE | Sept. 2002 |
| transmission service products | 29 – PJM/NY Coordination of Controllable Lines | Dec. 2002 |
| across multiple control areas to | (Phase-Angle Regulators) | |
| reduce perceived market risk, | 30 – ISO-NE to Implement SMD 1.0 | 1Q 2003 |
| scheduling confusion and | 37 – NY TCC Options for External Interfaces | 2003 |
| uncertainty. | 40 – NYISO to Implement SMD 2.0 (automated | Dec. 2003 |
| | checkout and in-day prescheduling) | |

| Long-Term Transmission Service Availability to Support ICAP Transactions | | |
|--|---|------------------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Firm transmission reservation | 15 – NY Transactions Prescheduling | Complete (Feb. 2002) |
| requirements to establish | 23 – NYISO Filing for ICAP Deliverability to PJM | Tariff changes awaiting FERC |
| "Deliverability" as a requirement | | approval |
| to buy external ICAP results in an | 32 – NY RTS Implementation (In-Day Prescheduling) | 4Q 2003 |
| economic advantage for internal | 33 – Regional ICAP Working Group Activity (ICAP | Near-term (Dec. 2002) and |
| suppliers and a barrier to market | deliverability and hoarding issues) | long-term (2004) objectives |
| entry for external suppliers. | <u>, , , , , , , , , , , , , , , , , , , </u> | |

| Transaction Checkout Failure | | |
|--|--|----------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Operators curtail transactions due to mismatched tag data, different | 10 –NY Implementation of Transaction Scheduling Desk | Complete (June 2001) |
| MW volumes, etc. The curtailment of transactions due to | 20 – Interim Transaction Checkout Between NYISO and ISO-NE | Complete (May 2002) |
| data incompatibility is disruptive to both the marketplace and the reliable operation of the grid. | 38 – Open Scheduling System (OSS) | 4Q 2003 |

| Transaction Scheduling | | | |
|--|--|--------------------------------------|--|
| Issue: | Seams Issues Chronology Reference | Status | |
| Inconsistent information and market timing rules lead to uncertainty and risk that | 5 – PJM Schedule Change Timing Requirements from 30 to 20 minutes | Complete (Jan. 2001) | |
| discourage the scheduling of | 14 – PJM Modifies NYPP-E/NYPP-W LMP Definition | Complete (Jan. 2002) | |
| some inter-regional transactions | 10 –NY Implementation of Transaction Scheduling Desk | Complete (June 2001) | |
| | 11 – PJM Implementation of Collaborative Scheduling System (CSS) | Complete (June 2001) | |
| | 17 – ISO-NE Rule Changes to Permit Short-Notice Transactions to NYISO | Complete (May 2002) | |
| | 19 – NY Hour-Ahead Closing Time Changed from 90 to 75 Minutes | Complete (May 2002) | |
| | 21 – IMO Scheduling Procedures | Complete (May 2002) – | |
| | | additional work in progress for 2002 | |
| | 32 – NY RTS Implementation | 4Q 2003 | |

| Transaction Curtailment | | |
|---|--|----------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Transaction curtailments for security may extend beyond the | 1 – NY Emergency Transfer Agreement with PJM | Complete (May 2000) |
| reliability need due to differences | 3 – NY Emergency Transfer Agreement with ISO-NE | Complete (Aug. 2000) |
| in market timing. Extended | 6 – NY Reserve Sharing with ISO-NE | Complete (Feb. 2001) |
| curtailments are disruptive to both | 7 – NY Transaction Curtailment | Complete (Mar. 2001) |
| the marketplace and the reliable | 9 – NY Emergency Transfer Agreement with Hydro Quebec | Complete (May 2001) |
| operation of the grid. | 18 – NY Transactions Reinstatement | Complete (May 2002) |
| operation of the grid. | 22 – NY Emergency Transfer Agreement with IMO | Complete (May 2002) |
| | 25 – NY/PJM Implement Plan to Enhance Congestion | Complete (June 2002) |
| | Management | • |
| | 26 - Area Control Error (ACE) Diversity Exchange between | Complete (June 2002) |
| | NY and ISO-NE | |
| | 35 – NY Lake Erie Emergency Redispatch (LEER) | June 2003 |
| | Implementation | |
| | 39 – External 30-Minute Reserves Participation in NYISO | 2003 |

| Failure of Transactions due to Ramping of Control Area Interchange | | |
|--|---|----------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Desirable transactions between | 12 – PJM Coordinates Schedule Approval Process with NY to | Complete (June 2001) |
| control areas may be "blocked" | Help Control Ramping Issues | |
| from access to the grid due to | 13 – NY Multi-Hour Block Transactions | Complete (Dec. 2001) |
| insufficient dispatch capacity to | | |
| absorb large schedule changes | 15 – NY Transactions Prescheduling | Complete (Feb. 2002) |
| while maintaining energy/load | | |
| balance within the control area. | 32 – NY RTS Implementation | Q4 2003 |
| | | |

| ATC Differences | | |
|--|--|---|
| Issue: | Seams Issues Chronology Reference | Status |
| Individual control areas determine ATC for jointly-operated transmission interfaces. | 24 – Post TTC/ATC for All Interfaces on NPCC Website | Complete (NY, NE, IMO - June 2002) PJM (Aug. 2002) |
| Differences in ATC calculations can confuse the marketplace | (new) – Improved TTC/ATC Posting with monthly and yearly ATC values to support prescheduling | Complete |
| which may react by avoiding transactions that would otherwise be economic due to the uncertainty and perceived risk. | (new) – ISOs to Define Basis of ATC Calculations and clarify how the values calculated by each ISO should be used to ascertain the ability of the interface to support transactions. | Complete (ISO-MOU presentations, March/May 2001) |
| | (new) – Review frequency and currency of TTC/ATC postings – identify as in-day or day-ahead values | ISO staffs to assess scope and deliverables, review with stakeholders |
| | (new) – Review calculation accuracy and consistency of base assumptions used by individual ISO/RTOs, and provide clarifications to stakeholders. | ISO staffs to assess scope and deliverables, review with stakeholders |

| ATC Manipulation | | |
|------------------------------------|---|----------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Market Participants schedule | 4 – NY Eliminates Gaming of Transaction Bid Production | Complete (Sep. 2000) |
| transactions day-ahead and | Cost Guarantees | |
| beyond with no intent to deliver | 21 – NY/IMO Seams Initiatives (financial incentives and | Complete (May 2002) |
| energy. Cancellation in real-time | Market Monitoring procedures) | |
| by a Market Participant results in | | |
| unused ATC, ramp capability that | | |
| cannot be used by other Market | | |
| Participants. Valuable | | |
| transmission capability is left | | |
| unused. | | |

| Capacity Market | | |
|-----------------------------------|--|-----------------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Differences in ICAP definitions, | 16 – ISO-NE Changes to ICAP Rules | Complete (May 2002) |
| requirements, deliverability, and | 23 – NYISO Filing for ICAP Deliverability to PJM | Tariff changes awaiting |
| recall procedures have hampered | | FERC approval |
| the ability of suppliers to sell | 31 – ISO-NE ICAP Implementation | 1Q 2003 |
| ICAP between Northeast ISOs. | 33 – Regional ICAP Working Group Activity | Near-term (Dec 2002) and |
| | | long-term (2004) objectives |
| | | |

| Transmission and Generation Interconnection Procedures | | |
|--|---|---------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Different and inconsistent | (new) – Standardize transmission and generation | ASAP following FERC |
| transmission and generation | interconnection procedures consistent with FERC SMD | SMD NOPR |
| interconnection procedures | NOPR. | |
| among control areas create | | |
| barriers to market entry and may | | |
| bias generation investment in an | | |
| inconsistent manner with regard | | |
| to the long-term market signals. | | |

| Export Charges (Pancaking) | | |
|----------------------------------|--|----------------------------|
| Issue: | Seams Issues Chronology Reference | Status |
| Control-area specific export | (new) - ISO-NE and NYISO announce plan in January 2002 | 2003/2004 |
| charges remove incentives to | to develop common markets – NERTO filing calls for | |
| transact business when | elimination of pancaking on Day 1. | |
| transaction margins are of the | PJM – MISO announce plan in January 2002 to develop a | 2005 |
| same magnitude or less than the | joint common market. | |
| prevailing export charges. Such | PJM and Allegheny System form PJM West | Complete (April 2002) |
| charges include transmission and | ISO-NE, NYISO, IMO enter agreement in June 2002 to | Recommendations on |
| ancillary service components. | harmonize market rules and develop larger markets. | export-charge eliminations |
| | | due March 2004 |
| | Address transmission tariff "through and out" service | Awaiting FERC and State |
| | requirements | PUC direction |

| Emerging Issues | | |
|-----------------------------------|--|---------------------------|
| Issue: | Seams Issue Chronology Reference | Status |
| Consistent scheduling practices | (new) – Controllable Tie line scheduling | ISO Staff to assess scope |
| must be coordinated among | | and deliverables, review |
| adjacent control areas connected | | with stakeholders. |
| by controllable tie lines (HVDC, | | |
| Phase Angle Regulators). | | |
| Coordinated Management of | (new) – Inter-control area congestion management/parallel flow | ISO Staff to assess scope |
| inter-control area congestion and | management | and deliverables, review |
| unscheduled parallel flows will | | with stakeholders. |
| lead to more efficient use of | | |
| control area ties while avoiding | | |
| un-intended cost shifting. | | |