

Joint Stakeholder Meeting

ISO-NE and NYISO Inter-Regional Interchange Scheduling (IRIS)

June 1, 2011 / Albany, NY

Agenda

Today:

- Voting to identify stakeholder preference among Inter-Regional Interchange Scheduling (IRIS) options for further development of market design and supporting tariff language

IRIS Project Overview

- In July 2010, NYISO and ISO-NE commenced a joint project to:
 - Evaluate the economic and operational performance of energy interchange on their interconnected transmission systems
 - Review current interface scheduling protocols, and
 - Develop alternative procedures to improve system performance and market efficiency

Process Review

- Issued a joint ISO white paper on concerns with the existing scheduling protocol, potential lost efficiencies and improvement options.
 - [http://www.nyiso.com/public/webdocs/committees/bic_miwg/meeting_materials/2011-01-21/Agenda_05 - IRIS White Paper.pdf](http://www.nyiso.com/public/webdocs/committees/bic_miwg/meeting_materials/2011-01-21/Agenda_05_-_IRIS_White_Paper.pdf)
- Developed a Design Basis Document (DBD) maintaining a summary of the key features of the alternative solution options.
- Conducted series of six joint stakeholder meetings (1/21, 2/14, 3/7, 3/28, 4/28, 5/20). Meeting material is located in the ISO's meeting folders for these dates.
 - http://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=bic_miwg
 - http://www.iso-ne.com/committees/comm_wkgrps/mrks_comm/mrks/mtrls/index.html

Joint Stakeholder Meetings (Background)

Purpose:

- **Discuss** white paper's options, pros/cons, how they work, rationale, & likely impact on the markets
- **Gather stakeholder input** on merits, concerns, questions
- **Forge consensus** on a design option the ISOs can implement

Joint ISO white paper:

- **Presents** in-depth analysis of problems, solution options, rationales, and joint ISO recommendations for reforms.

Alternatives Options

- Joint Stakeholder Process produced three options for consideration today:
 - ISO Supported Options:
 - Option A: Tie Optimization
 - Option B: Coordinated Transaction Scheduling
 - Selected Suppliers' Option:
 - Option C: Suppliers Incremental Improvements
- Summaries of the options are provided in the Design Basis Document distributed with today's material.
- A comparison of the ISOs' options is provided in Appendix 1, with cross references to the presentation materials for those elements.



Upcoming Schedule and Logistics

Next Steps: 2011+ Schedule

- **June-Oct:** Stakeholder processes to develop necessary tariff language. Development of software requirements.
- **Sept-Nov:** Stakeholder approvals of proposed tariff language.
- **Dec 2011:** FERC filings (ISO-NE & NYISO)
- **Spring 2013 (est):** Implementation complete

Questions?



Contact:

Robert Pike

Director, Market Design, NYISO

rpike@nyiso.com

(518) 356-6156

Contact:

Matthew White

Senior Economist, ISO-NE

mwhite@iso-ne.com

(413) 535-4072



Appendix 1:

Summary Comparison of Tie Optimization and Coordinated Transaction Scheduling

IRIS Design Comparison – Day-Ahead Market

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: date, (pages)
Scheduling	Same as today, separate clearing	Same as today, separate clearing	➤2-14-2011, (p 32-43)
Congestion pricing at the interface	Yes, separate congestion pricing	Yes, separate congestion pricing	➤3-7-2011, (p 8-23)
FTR products at the interface	Yes	Yes	➤3-7-2011 (p 24-32)

IRIS Design Comparison – Real-Time Market

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: <i>date, (pages)</i>
Bidding	<ul style="list-style-type: none"> •No role for RT ETs in setting tie schedule. RT ET financial option included 	<ul style="list-style-type: none"> •RT Transactions provide Interface Bids 	<ul style="list-style-type: none"> ➤TO: 4-28-2011, (p 21-32) ➤CTS: 2-14-2011, (p12-15)
Scheduling	<ul style="list-style-type: none"> •Coordinated scheduling, integrated with economic dispatch 	<ul style="list-style-type: none"> •Coordinated scheduling, integrated with economic dispatch, inclusive of interface bids 	<ul style="list-style-type: none"> ➤TO: 1-21-2011, (p 20-41) ➤TO: 2-14-2011, (p 8-11) ➤CTS: 1-21-2011, (p 42-53) ➤CTS: 2-14-2011, (p12-31)

IRIS Design Comparison – Real-Time Market -continued

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: <i>date, (pages)</i>
Congestion pricing at the interface	Yes, coordinated congestion pricing, equal allocation of RT congestion rents	Yes, coordinated congestion pricing, equal allocation of RT congestion rents less interface bids	<ul style="list-style-type: none"> ➤ 3-7-2011, (p 33-38) ➤ TO: 3-7-2011, (p39-54) ➤ CTS: 3-7-2011, (p 55-64)
Interchange schedule adjustment frequency	15 minutes	15 minutes	➤ 1-21-2011, (p 32-40)

IRIS Design Comparison – Real-Time Market -continued

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: <i>date, (pages)</i>
Schedule duration	15 minutes	15 minutes	➤ 1-21-2011, (p 32-40)
Scheduling integrated with Economic Dispatch	Yes	Yes	➤ TO: 1-21-2011, (p 20-30) ➤ TO: 2-14-2011, (p 8-11) ➤ CTS: 2-14-2011, (p12-31)

IRIS Design Comparison – Settlement

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: <i>date, (pages)</i>
Day ahead transactions flow into real time	Transaction clearing both ISOs' DAM automatically deemed to flow in real time	Must clear interface bid to flow in real time	<ul style="list-style-type: none"> ➤ TO: 2-14-2011, (p 54-59) ➤ CTS: 2-14-2011, (p 44-53) ➤ 2-14-2011, (p 60-73)
Elimination of fees and uplift allocation to RT ET	Yes	Yes	➤ 3-7-2011 presentation, p 65-88

IRIS Design Comparison – Latency

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: <i>date, (pages)</i>
Latency delay	Same - approx 15 minutes	Same - approx 15 minutes	➤ 1-21-2011, (p 32-40)
Latency Risk Management	Uplift/Downlift allocated to consumers	By Transactions via Interface Bids	➤ 2-14-2001, (p 74-84) ➤ 4-28-2011, (p 8-19)

IRIS Design Comparison – Implementation

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: <i>date, (pages)</i>
Implementation cost and timeline	Similar - scheduling protocols, interchange tagging, settlement procedures	Similar - common bidding platform, scheduling protocols, settlement procedures	

IRIS Design Comparison – Benefits

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: date, (pages)
Annual Production Cost Savings (\$M/yr)	\$11.8	\$8.9 - \$11.2	➤ 1-21-2011 [Potomac Economics,] (p 8)
Annual Consumer Savings (\$M/yr)	\$145.8	\$128.9 - \$139.2	➤ 1-21-2011 [Potomac Economics,] (p 8)

IRIS Design Comparison – System Utilization

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: <i>date, (pages)</i>
Transmission Utilization	Improved	Improved	<ul style="list-style-type: none"> ➤ 1-21-2011, (p 41, 53) ➤ 1-21-2011 [Potomac Economics,] (p 10)
Counter Intuitive Flows	Improved	Improved	<ul style="list-style-type: none"> ➤ 1-21-2011, (p 41, 53)
Average Flow adjustments	~230 MWs	~95 MWs	<ul style="list-style-type: none"> ➤ 1-21-2011 [Potomac Economics,] (p 10)

IRIS Design Comparison – Capacity Market

Category	TO	CTS	For Additional details - see joint stakeholder meeting materials: <i>date, (pages)</i>
Impact on external capacity supplier obligations	Similar	Similar	<ul style="list-style-type: none"> ➤ 3-7-2011, (p 89-95) ➤ 4-28-2011, (p 33-57)