

Seams Issues Matrix
(Limited to potential business practice issues)

Orig #	1ST Sub-Category		2ND Sub-Category		Description of Seam Issue		Comments		Resp Org		Issue Type	Resp Org JIC	Priority	Currently Being Addressed	Submitter
	Category	Sub-Category	Sub-Category	Sub-Category	Sub-Category	Sub-Category	WEQ	EC	WEQ	EC					
36	Congestion Management	Congestion Management Market Coordination	Coordinate Hedging Instruments at Market Interfaces	Coordinate Hedging Instruments at Market Interfaces	Coordination of market based congestion hedging instruments, such as FTRs, between adjacent RTOs with markets, especially for out and thru' transactions	NAESB	National	Undecided	1		National	Undecided			Raj Rana - AEP
35	Congestion Management	Congestion Management Market Coordination	Standardize Prices at Market Interfaces	Standardize Prices at Market Interfaces	Locational Marginal Prices (LMP) at borders of RTOs with markets (Price cap included)	NAESB	National	Undecided	1		National	Undecided			Raj Rana - AEP
138	Congestion Management	Congestion Management Market Coordination			Coordination of congestion	NAESB	National	NAESB	1	Yes	National	NAESB	Yes		Karl Tammar - ISORTO Council
9	Congestion Management	Standardize and Coordinate ATC Calculations and Postings			Transmission Calculations	NAESB	National	Undecided	2	Yes - SSG - WI	National	Undecided	Yes - SSG - WI		Steven Cobb - SRP
113	Market Design	Green Power Market			Green power attributes trading	NAESB	National	Undecided	2		National	Undecided	In Northeast Power Markets Seams Action Plan		Jeff Mueller (PSEG), and Andy Rodriguez (PJM)
16	Market Design	Transmission Ancillary Service Market Design and Coordination	Reactive Power Compensation	Reactive Power Compensation	Compensation for Reactive Power	NAESB	National	Undecided	2		National	Undecided	Yes / IIP/TF		Mark Lively - Lively Utility
13	Market Design	Unscheduled/Parallel Path Flow Management	Compensation for Unscheduled/Parallel Path Flow	Compensation for Unscheduled/Parallel Path Flow	Compensation for Unscheduled Flows of Electricity	NAESB	National	Undecided	2		National	Undecided	Yes / IIP/TF		Mark Lively - Lively Utility
15	Market Design	Unscheduled/Parallel Path Flow Management	Compensation for Unscheduled/Parallel Path Flow	Compensation for Unscheduled/Parallel Path Flow	Compensation for Loop Flow	NAESB	National	Undecided	2		National	Undecided	Yes / IIP/TF		Mark Lively - Lively Utility
29	Market Design	Unscheduled/Parallel Path Flow Management	Compensation for Unscheduled/Parallel Path Flow	Compensation for Unscheduled/Parallel Path Flow	Allocation of transmission capacity on reciprocal flow gates amounts to transmission service without compensation. Legitimizes "parallel loop flow".	NAESB	National	Undecided	2		National	Undecided			Dave Nick - DTE Energy
134	Market Design	Unscheduled/Parallel Path Flow Management	Compensation for Unscheduled/Parallel Path Flow	Compensation for Unscheduled/Parallel Path Flow	Compensation for parallel flows	NAESB	National	NAESB	2		National	NAESB	In PJM/MISO Congestion Management Proposal Whitepaper		Jeff Mueller (PSEG), and Andy Rodriguez (PJM)
142	Market Design	Unscheduled/Parallel Path Flow Management	Compensation for Unscheduled/Parallel Path Flow	Compensation for Unscheduled/Parallel Path Flow	Pricing for native load loop flow impacts	Multiple	Regional	Multiple	2	No	Regional	Multiple	No		Ed Davis - Entergy

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	Category	Sub-Category	Category	Sub-Category	Market Oversight	Market Monitoring/Requirements	Energy Market Standard Product Definitions	Energy Market Standard Product Definitions	Energy Market Standard Product Definitions	Energy Market Standard Product Definitions							Energy Market Standard Product Definitions	Energy Market Standard Product Definitions
11	Market Monitoring/Compliance	Market Monitoring/Requirements			Market Oversight						Multiple	Regional	Multiple	2	Yes - SSG - WI	Steven Cobb - SRP		
3	Market Standards	Energy Market Standard Product Definitions			Definition & treatment of Firm/nonfirm Power						NAESB	National	Undecided	2	No	Lou Oberski - Dominion Energy		
10	Market Standards	Energy Market Standard Product Definitions			Energy Products						NAESB	National	NAESB	2	Yes - WECC	Steven Cobb - SRP		
25	Market Standards	Energy Market Standard Product Definitions			Need for common physical market and products - regional variations permitted						NAESB	National	NAESB	2	No	Linda Horn - WE Energies		
34	Market Standards	Energy Market Standard Product Definitions			Clarification of Product Definitions						NAESB	National	NAESB	2	No	Tony Reed - Southern		
139	Market Standards	Energy Market Standard Product Definitions			Standard definition of energy products						NAESB	National	NAESB	2	Yes	Karl Tammar - ISO/RTO Council		
42	Market Standards	Market Standard Communication Protocols and Transparency			Data Visibility						NAESB	National	NAESB	2	Yes	Marjorie Perleman - Energy East		
52	Market Standards	Market Standard Communication Protocols and Transparency			Confidentiality of Data and Information Shared						NAESB	National	NAESB	1	Limited	Carl Monroe, Southwest Power Pool		
140	Market Standards	Market Standard Communication Protocols and Transparency			Standard messaging protocols for market notifications						NAESB	National	NAESB	2	No	Karl Tammar - ISO/RTO Council		
1	Market Standards	Market Standard Operating Time			Non Standard Time Zone						NAESB	National	NAESB	1	No	Phil Cox - AEP		
14	Market Standards	Physical and/or Financial Resolution of Inadvertent Interchange			Compensation for Inadvertent Interchange						NAESB	National	NAESB	1	Yes / IIPTF	Mark Lively - Lively Utility		
46	Planning	Transmission Expansion and Generator Interconnection Coordination			Generator Interconnection - Affected Systems						NAESB	National	Undecided	1	Limited	Carl Monroe, Southwest Power Pool		
57	Planning	Transmission Expansion and Generator Interconnection Coordination			Transmission interconnection procedures						Multiple	Regional	Multiple	2	Northeast ISO	Joe Rosignoli National Grid		
114	Planning	Transmission Expansion and Generator Interconnection Coordination			Coordination of interregional planning including transmission facilities and generator interconnection procedures						Multiple	Regional	Undecided	2	In Northeast Power Markets Seams Action Plan	Jeff Mueller (PSEG), and Andy Rodriguez (PJM)		

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26	Planning	Transmission Expansion and Generator Interconnection Coordination	Transmission Expansion Cost and Construction Responsibilities	Transmission expansion planning - coordination between systems and determine who is obligated to build and pay for improvements	Multiple	Multiple	Regional	Multiple	Being reviewed by PJM/MISO.	1	Yes	Linda Horn - WE Energies				
50	System Reliability	Generation-Load Balance	Interchange Schedule Ramping Requirements	Schedule Ramp Management	NAESB	NAESB	National	Undecided	Ramping standard differences across the seams hinder business	1	Limited	Carl Monroe, Southwest Power Pool				
12	Transaction Scheduling	Interchange Scheduling Standardized Protocols	Develop Electronic Scheduling	Interchange/Intrachange Scheduling Data Exchange	NAESB	NAESB	National	NAESB	Current E-Tagging process is inadequate for exchanging reliability and market data within the Western Interconnection. Solution: Electronic Scheduling	1	Yes - WECC	Steven Cobb - SRP				
41	Transaction Scheduling	Interchange Scheduling Standardized Protocols	Inter-Market Ramping Requirements Standardization	Scheduling Coordination (including Ramp Rates)	NAESB	NAESB	National	Undecided	RTOs have different ramp rates and scheduling requirements that require Market Participants to complete multiple submissions for the same transaction.	1	Yes	Marjorie Peifman - Energy East				
79	Transaction Scheduling	Interchange Scheduling Standardized Protocols	Standardize Inter-Market Scheduling Timelines	Market Design - Day Ahead. Other Scheduling Requirements	NAESB	NAESB	National	NAESB	Should the time intervals and submission times be synchronized to mitigate obstacles to inter-RTO trade? (Issue I.b.12)	1	SSG-WI, CMA Work Group	Syd Berwager - Bonneville PA				
78	Transaction Scheduling	Interchange Scheduling Standardized Protocols	Tools and Procedures to Accommodate Inter-Market Interchange Scheduling Requirements	Market Design - Day Ahead. Schedule Components	NAESB	NAESB	National	Undecided	Can tools be developed for scheduling submission that assist the user in meeting any differences in protocols between RTOs? (Issue I.b.11)	2	SSG-WI, CMA Work Group	Syd Berwager - Bonneville PA				
8	Transaction Scheduling	Interchange Scheduling Standardized Protocols		Scheduling	Multiple	Multiple	Regional	Multiple	Inconsistent procedures among entities. Solution: Western Interconnection Standardized Interchange Scheduling Protocols.	2	Yes - SSG - WI	Steven Cobb - SRP				
104	Transaction Scheduling	Interchange Scheduling Standardized Protocols		Transmission Checkout Failure - Operators curtail transactions due to mismatched tag data, different MW volumes, etc. The curtailment of transactions due to data incompatibility is disruptive to both the marketplace and the reliable operation of the grid.	NAESB	NAESB	National	NAESB		2	In Northeast Power Markets Seams Action Plan	Jeff Mueller (PSEG), and Andy Rodriguez (PJM)				
106	Transaction Scheduling	Interchange Scheduling Standardized Protocols		Transaction Scheduling - Inconsistent information and market timing rules lead to uncertainty and risk that discourage the scheduling of some inter-regional transactions.	NAESB	NAESB	National	NAESB		2	In Northeast Power Markets Seams Action Plan	Jeff Mueller (PSEG), and Andy Rodriguez (PJM)				
4	Transmission Service	Transmission Market Standard Product Definitions and Priorities		Definition & treatment of Firm/nonfirm Transmission	NAESB	NAESB	National	Undecided	Annual Plan item 4cii moved from MOS	2	No	Lou Oberski - Dominion Energy				
103	Transmission Service	Transmission Market Standard Product Definitions and Priorities		Transmission Service - Market participants require consistent treatment of transmission products across multiple control areas to reduce perceived market risk, scheduling confusion and uncertainty.	NAESB	NAESB	National	NAESB		1	In Northeast Power Markets Seams Action Plan	Jeff Mueller (PSEG), and Andy Rodriguez (PJM)				
141	Transmission Service	Transmission Market Standard Product Definitions and Priorities		Replacement of contract path with flow-based transmission service	Multiple	Multiple	Regional	Multiple		2	No	Ed Davis - Energy				
117	Transmission Service	Transmission Service Procurement	Common Reservation System for Market Interface Transmission ATC	Contract Tie Capacity - One Stop Shopping	NAESB	NAESB	Regional	NAESB		2	No	Jeff Mueller (PSEG), and Andy Rodriguez (PJM)				

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		Transmission Service Procurement	Transmission Service Procurement	Common Western Interconnection Wide OASIS	Intra-Hour Transmission Service Procurement	Transmission Access	No transmission market one stop shopping available for the Western Interconnection - entities can't find needed information to efficiently conduct business on a preschedule or real-time basis. Solution: Common OASIS Site needed.	Multiple	Regional						
33	Transmission Service	Transmission Service Procurement	Transmission Service Procurement	Intra-Hour Transmission Service Procurement	Standard for Purchasing of Intra-Hour Transmission	Transmission Access	The ability to purchase transmission after the top of the hour when the transmission service is predetermined as available in prior hour.	NAESB	National	NAESB	National	NAESB	3	No	Tony Reed - Southern
67	Transmission Service	Transmission Service Procurement	Transmission Service Procurement	Secondary Transmission Service Market Standardization	Market Design - Prior to Day Ahead, Primary Release Mechanism	Market Design - Prior to Day Ahead, Primary Release Mechanism	There seems to be agreement here that a secondary market would be outside the RTO. If the resulting secondary market is not westwide, will coordination be needed? (Issue I.a.8)	Multiple	Regional	Multiple	Regional	Multiple	3	SSG-WI, CMA Work Group	Syd Berwager - Bonneville PA
28	Transmission Service	Transmission Service Settlement	Transmission Service Settlement	Consolidate Multiple Market Transmission Service Settlement Statements	Multiple transmission service charge invoicing	Multiple transmission service charge invoicing	Being reviewed by PJM/MISO.	NAESB	National	NAESB	National	NAESB	1	Yes	Linda Horn - WE Energies