

MISO – PJM Joint and Common Market Cross Border Transmission Planning

August 23, 2016

Targeted Market Efficiency Project (TMEP) Proposed JOA Language

- Limited to M2M flowgates
- Projects must be in service by 3rd summer peak
- Projects over \$20 million not eligible (must go through MEP process)
- Benefits based on 3 years of historical congestion (DA + Balancing/ECF)
- Discount historical congestion by guaranteed congestion hedges (ARRs)
- Four years worth of benefits must completely cover project's installed capital cost
- Discount/inflation rate not necessary as all projects are near term
- Benefit determination between RTO's adjusted by M2M payments

DA = Day Ahead, ECF = Excess Congestion Fund

Targeted Market Efficiency Project Concept vs. Longer Term Market Efficiency Project

Targeted Market Efficiency Project (TMEP)

- Driver is historical M2M congestion (whether or not it drives settlement payments)
- Each TMEP upgrade project to relieve congestion must be flowgate specific and meet other criteria
- Upgrade suggestions for general areas, conditions or collection of constraints may require longer term studies
- Limited scope and cost capped TMEPs complement, not replace, MEPs

Longer Term Market Efficiency Project (MEP)

- MEPs require regional issues in both RTOs and are subject to regional process project approval
- Candidate JOA MEP upgrades must also be entered for evaluation in a regional PJM competitive window in response to PJM issues
- MEP analysis is a longer and more rigorous process involving a long model development and review timeline with subsequent analysis
- Recent FERC orders involve changes to the MEP process
- MEP JOA and regional processes are under review and likely require further changes

- JOA Section 9.3 and 9.4 redlines posted with July 29 IPSAC materials
- IPSAC stakeholders were requested to provide comments by August 13
- Final draft JOA language to be presented at August 29 IPSAC

Targeted Market Efficiency Project Study

- Facility specific information will be reviewed to ensure appropriate treatment of any CEII or confidential information
- List of facilities with potential upgrades has been developed
- RTOs have collaborated on all tie lines to ensure complete information
- RTOs working to evaluate effectiveness of upgrades

- Focus has been on finalizing proposed metrics – want clear metrics before making project recommendations

NERC FG ID(s)	Monitored Branch	Ownership	Total 2015 Congestion
2286/2205	Burnham - Munster 345kV	CE-NIPS	\$ 14,036,864
2647	Bayshore - Monroe 345kV	ATSI – ITC	\$ 9,170,850
2427/2540	Michigan City – Bosserman 138kV	NIPS-AEP	\$ 7,915,489
20729/2548/2685	Reynolds-Magnetation 138kV	NIPS	\$ 7,572,616
2577/2531	Roxana - Praxair 138kV	NIPS	\$ 6,253,543
20707/20737	Klondcin-Purdue 138kV	DEI	\$ 5,721,354
2207	Braidwood-East Frankfurt 345kV	CE	\$ 4,883,720
2395	Marysville-Tangy 345kV	AEP-ATSI	\$ 4,816,134
2578	Michigan City – Trail Creek 138kV	NIPS	\$ 3,346,401
20865	Munster 345/138	NIPS	\$ 3,208,684
20849/21139	Tippecanoe - Lafayette South 138kV	DEI	\$ 2,898,873
2445	Batesville - Hubble 138kV	DEI-HE	\$ 1,704,731
3654	Bush - Lafayette 138kV	DEI	\$ 1,680,640

FERC Order No. 1000 Interregional Compliance



Filed June 20 (see June 17 IPSAC materials):

- Restored the existing Cross-Border Baseline Reliability Project category and cost allocation
- Interregional transmission projects can displace both approved and planned regional upgrades
- Clarified that “reliability projects” in MISO include MVPs and BRPs
- Clarified that Interregional Public Policy Projects include MVPs in MISO and both economic and reliability projects in PJM
- Explained MISO’s use of different discount rates of displaced regional projects in benefits calculation for Interregional Reliability and Public Policy Projects
- MISO clarified that Interregional Market Efficiency Projects include MVP’s and MEPs

FERC Order EL13-88 ('NIPSCO')



Filed June 20 (see June 17 IPSAC materials):

- JOA changes
 - ¶ 57: Detail Coordinated System Plan study steps and timeline
 - ¶132: Remove interregional B/C
 - ¶133: Use regional benefits as interregional cost split
 - Rehearing and clarification requests pending at FERC
 - ¶185: Include generator interconnection coordination
- MISO Tariff changes
 - ¶131: Remove \$5M and lower 345 kV MEP thresholds
- Status report
 - ¶186: Status on generation retirement coordination language

FERC Directed Stakeholder Involvement

Deliverable		Due Dates (2016)				Stakeholder Forum
		20-Jun	19-Aug	18-Oct	15-Dec	
Directive P186	Include Generator Retirement Coordination Procedures in JOA	X	X	X	X	IPSAC, PSC, PC
Informational P186	Status Reports on Gen Retirement Coordination Language					
Informational P92	Joint Model in Regional Processes			X		IPSAC, PSC, PC

No FERC Directed Stakeholder Involvement

Deliverable		Due Dates (2016)		Stakeholder Forum (Informational Updates)
		20-Jun	19-Aug	
Directive P57	Formalize Steps and Deadlines in CSP Study	X		IPSAC, PAC, TEAC
Directive P131	Lower Interregional MEP Thresholds	X		IPSAC, RECB, TEAC
Directive P132	Remove Interregional B/C Ratio	X		IPSAC, RECB, TEAC
Directive P133	Revise Benefit Calculation of Interregional MEPs	X		IPSAC, RECB, TEAC
Directive P185	Include BPM GI Coordination Procedures in JOA	X		IPSAC, PSC, TEAC
Informational P58	Aligning Interregional, MTEP, and RTEP		X	IPSAC

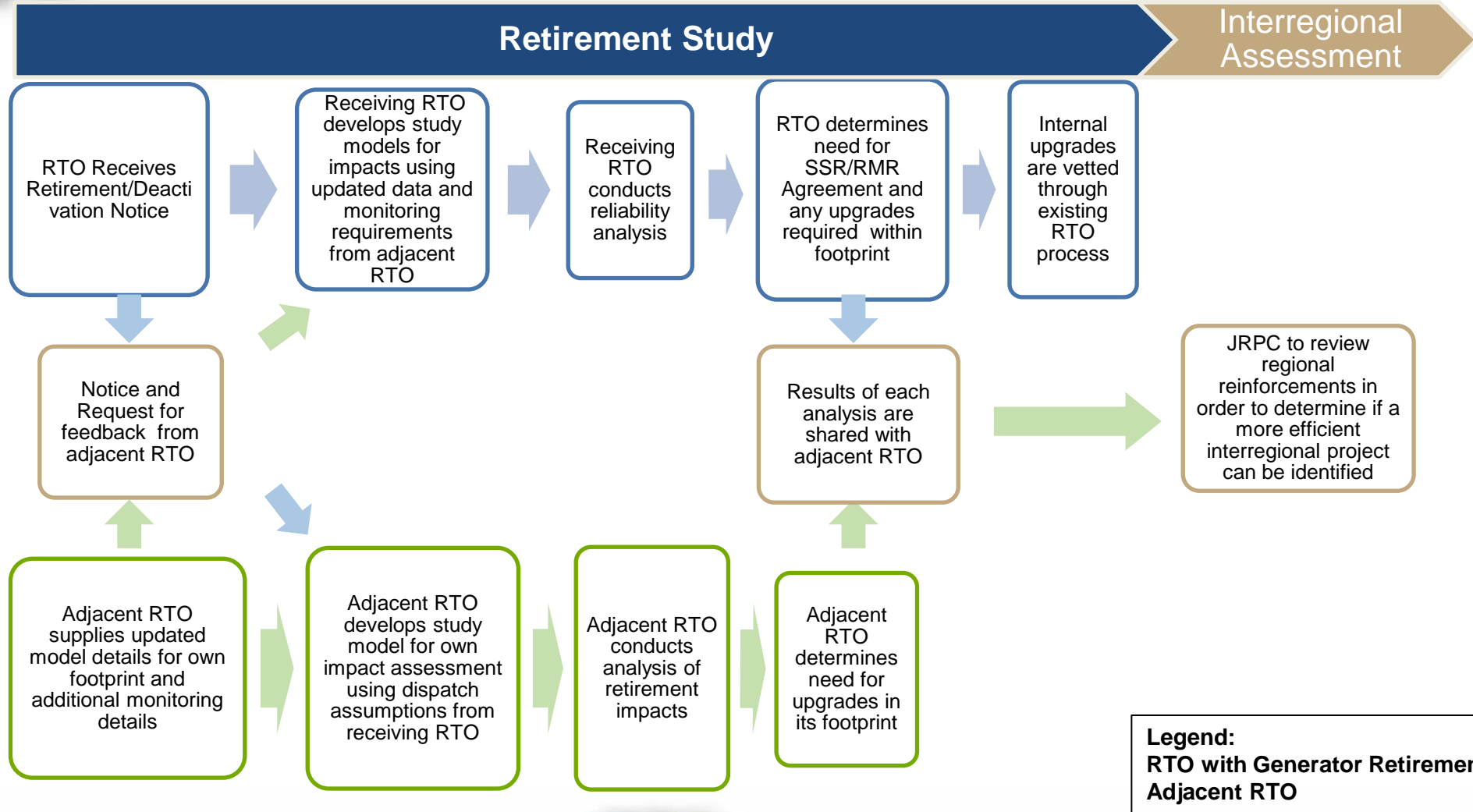
Coordination of Generator Retirement Studies

- MISO and PJM generator retirement processes are governed by distinct Tariff requirements
- Each RTO conducts assessment based on its own methodology
 - Methodology and criteria to keep generator available for reliability
 - Notification requirement
 - Timeline requirement
 - Confidentiality requirement
- Tariff differences present priority challenges to complete adjacent system study as per the timeline requirement in adjacent RTO

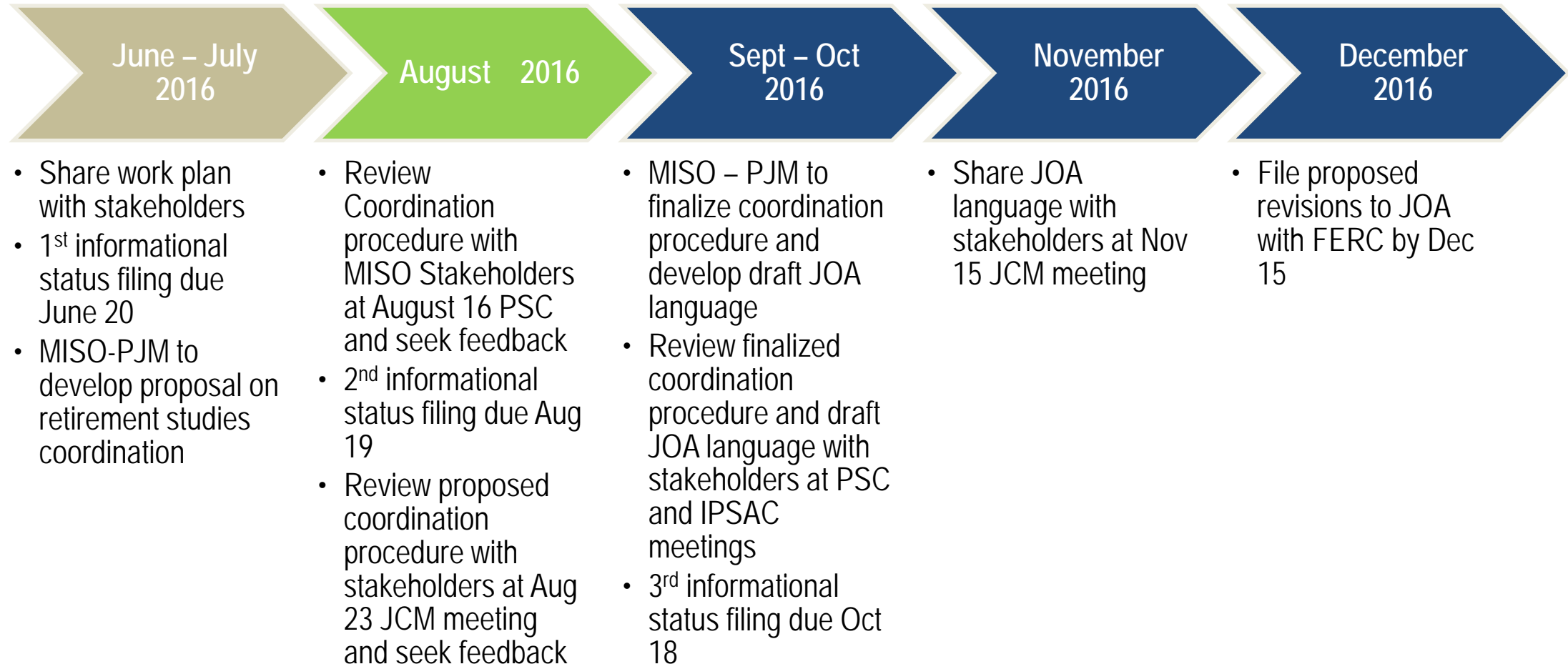
- Information Exchange
 - Continued notification to adjacent RTO of retirement notices received
 - Continued sharing of study findings related to impacts on adjacent system
- Study Requirements
 - Seek input from adjacent RTO on monitoring requirements prior to performing regional analysis
 - Exchange of updated study models to align study assumptions, to the maximum extent possible, which can be used by adjacent RTO in their own study
- Adjacent Impacts From Retirement
 - Any upgrades identified as a result of retirement in adjacent area are referred to JRPC for any further analysis, subject to confidentiality restrictions

- Regional Impacts
 - Impacts to regional facilities will be funded by the region in which the facilities reside unless the facilities qualify as an interregional project under the MISO/PJM JOA
 - Regional upgrade development will proceed on a schedule necessary to alleviate the regional reliability concerns without regards to discussion of interregional project development. If an interregional project is subsequently identified, and the regional project has not proceeded, then consideration can be given to altering the scope of the required reinforcements

Coordination proposal for Generator Retirement Studies



Next Steps on Coordination of Generator Retirement Studies



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