



MISO PJM IPSAC

June 17, 2016

- Targeted Market Efficiency Project Study
- TMEP Proposed JOA Language
- FERC Order on EL13-88
- FERC Order on Order No. 1000 Compliance
- IPSAC Work Schedule

Targeted Market Efficiency Project Study

TMEP Concept vs. Longer Term MEP




Targeted Market Efficiency Project

- 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

- 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

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- M2M flowgate congestion presented at March IPSAC
 - Complete list of M2M flowgates being evaluated was posted with April IPSAC
 - RTOs worked with TOs to identify:
 - Congestion caused by transmission outages and nature of outages
 - Planned or recent upgrades that may relieve congestion
 - All limiting element(s) and conductor ratings
 - Potential low cost, quick implementation upgrades
 - RTOs collaborating to ensure complete information for tie lines

- 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 working to evaluate effectiveness of upgrades

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
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
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

TMEP Proposed JOA Language


- Small, low cost, short lead time projects
- Targeted at specific, historical congestion issues
- Simple method for benefit determination
- Avoid complicated analysis which could delay implementation

- Limit scope to only M2M flowgates
 - Proposed benefit determination only works for M2M flowgates
 - Eliminates need for GLDF test currently in draft JOA language
- Expected costs of solution determines TMEP vs MEP
- Discount historical congestion based on hedged congestion

- Based on stakeholder feedback, RTOs have agreed to study M2M solutions less than \$20M (proposed) as TMEPs
 - Based on review of proposed TMEP upgrades
 - Unlikely larger projects could meet 3 year ISD
 - Larger proposals will be considered in MEP process

- Day Ahead
 - Hedged component
- Balancing/ECF
 - Difference between day ahead and real time congestion costs
 - Represents real costs paid by market participants
 - Unclear how costs should be included without knowing drivers of differences (each hour for each flowgate) between DA and RT
- M2M settlements
 - Nets out between RTOs (no impact on total congestion)
 - Adjusts allocation of congestion between PJM and MISO

- Project benefits based on historical congestion should be reduced based on congestion hedges
- RTOs are investigating the magnitude of hedging that exists on M2M flowgates
- Looking at congestion hedge for each of the past 3 years
- Variability from year to year and from flowgate to flowgate
- Options include:
 - Average hedge % applied to all flowgates based on guaranteed ARR allocation
 - Average hedge % applied to all flowgates, updated each year based on guaranteed or granted ARRs
 - Hedge % calculated annually for each flowgate

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- Average of 3 years of hedged historical congestion
 - Take present value of benefits starting from project in service date
 - 5 years of benefits (proposed)
 - Present value calculations may be simplified to a single B/C number
 - Consider long-term costs as appropriate (O&M, Administrative & General, income/property tax, etc.)
 - Proposed benefit determination between RTO's adjusted by M2M payments

FERC Order on Order No. 1000 Compliance

To be filed June 20 (see accompanying meeting material):

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

FERC Order on EL13-88

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



To be filed June 20 (see accompanying meeting material):

- 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
 - RTOs split on compliance without further clarification from FERC
 - PJM intends to leave out the directive's language
 - MISO intends to comply and additionally clarify the use of a joint model
 - ¶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

IPSAC Work Schedule



Q2 2016

- Conduct evaluations of potential Targeted upgrades
- Evaluate impact of FERC rulings on both targeted and long term MEP processes
- Make progress on both targeted and long term MEP Metric and Process discussions with stakeholders

Q3/Q4 2016

- Complete Targeted analysis and recommend projects as appropriate
- Conclude Targeted Metrics & Process review and implement changes
- Identify potential longer term interregional issues from regional processes; solicit projects from stakeholders

Open Discussion

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