



MISO PJM IPSAC

May 11, 2018

- Coordinated System Plan Study
- JOA Updates
- IPSAC Work Schedule

Coordinated System Plan

- In the 4th quarter, RTOs exchange (completed in December 2017):
 - Regional issues and newly approved projects near the seam
 - New regional issues
 - Interconnection requests under coordination
 - M2M historical congestion
- RTOs jointly review above in January
- Receive Third Party issues in first quarter, but no less than 30 days before Issues Review IPSAC
- Issues Review IPSAC –
 - Held in the first quarter of each year
 - Must provide 60 calendar day notice of scheduled date
 - Stakeholder feedback due 30 days prior to IPSAC
- Within 45 calendar days after the Issues Review IPSAC the JRPC shall determine the need for a Coordinated System Plan study
- JRPC notifies the IPSAC of its decision within 5 business days

- Stakeholder Input Due: February 28th
- Issues Review IPSAC: March 30th
- JRPC notifies IPSAC of CSP study decision: May 18th (at latest)

- ~\$500 million congestion on M2M flowgates in 2016 & 2017
- Significant portion outage driven or addressed by planned upgrades
 - \$200 million of congestion tagged to upgrades identified during last TMEP study
 - \$300 million of congestion needs to be investigated
 - Were there outages when the congestion occurred?
 - Is the congestion expected to continue?
 - Are there planned upgrades?
 - Is there a viable TMEP type solution?
- PJM and MISO have committed to a TMEP study in 2018

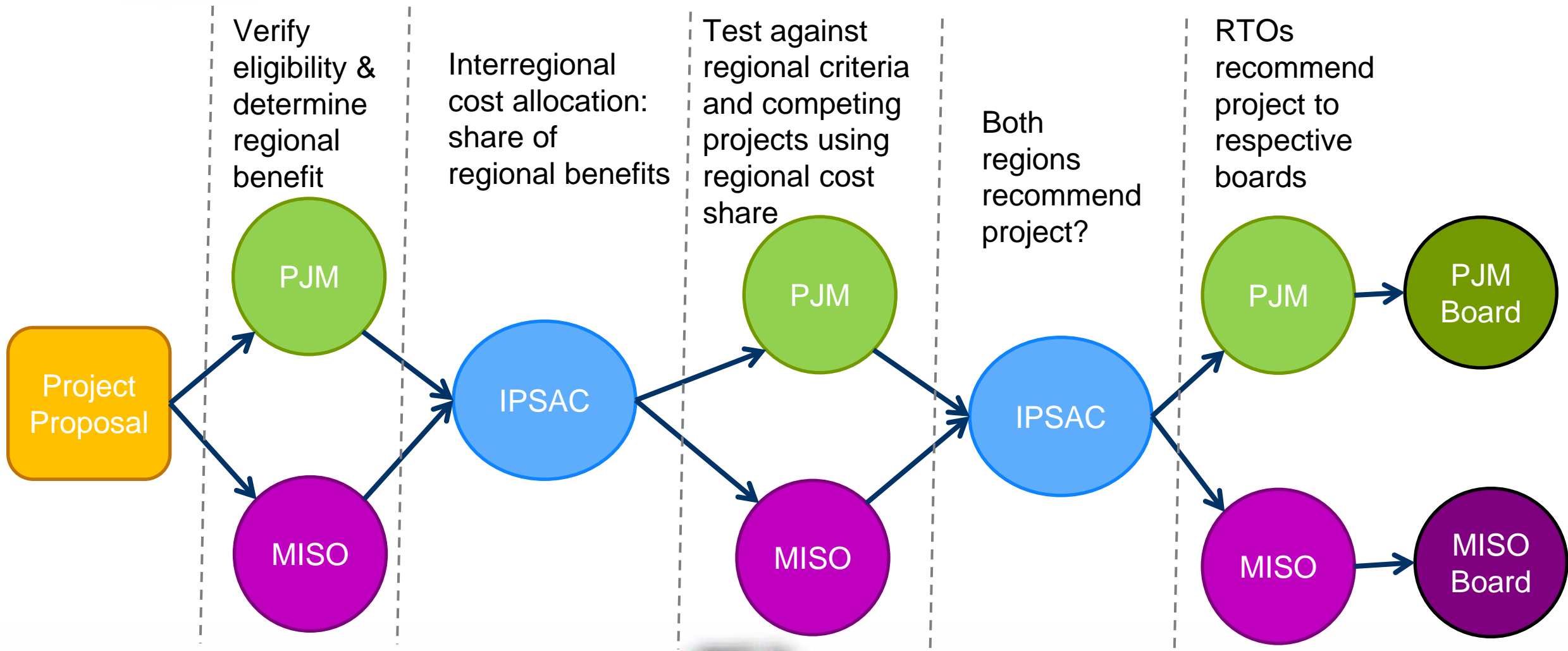
- Historically binding (2016 + 2017) Market-to-Market flowgates
 - Focus on constraints with >\$1million congestion
- Historical congestion list posted with meeting materials (still a work in progress)
 - Merged by monitored branch
 - Added known transmission upgrades
- Study steps:
 - Look for outages when the congestion occurred (if so, determine congestion benefit discount)
 - Determine whether the congestion is expected to continue
 - Identify planned upgrades and their effectiveness in alleviating the congestion
 - Work with asset owners to determine if any TMEP type solutions exist
 - Evaluate the effectiveness of TMEP solutions
 - Ensure TMEP solutions meet all JOA criteria

- Limited to historically binding 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 relieving average of past 2 years of historical congestion (Day Ahead + Balancing)
- Four years worth of benefits must completely cover project's installed capital cost
- Discount/inflation rate not necessary as all projects are near term
- Interregional cost allocation based on congestion relief in each RTO
 - Adjusted by M2M payments

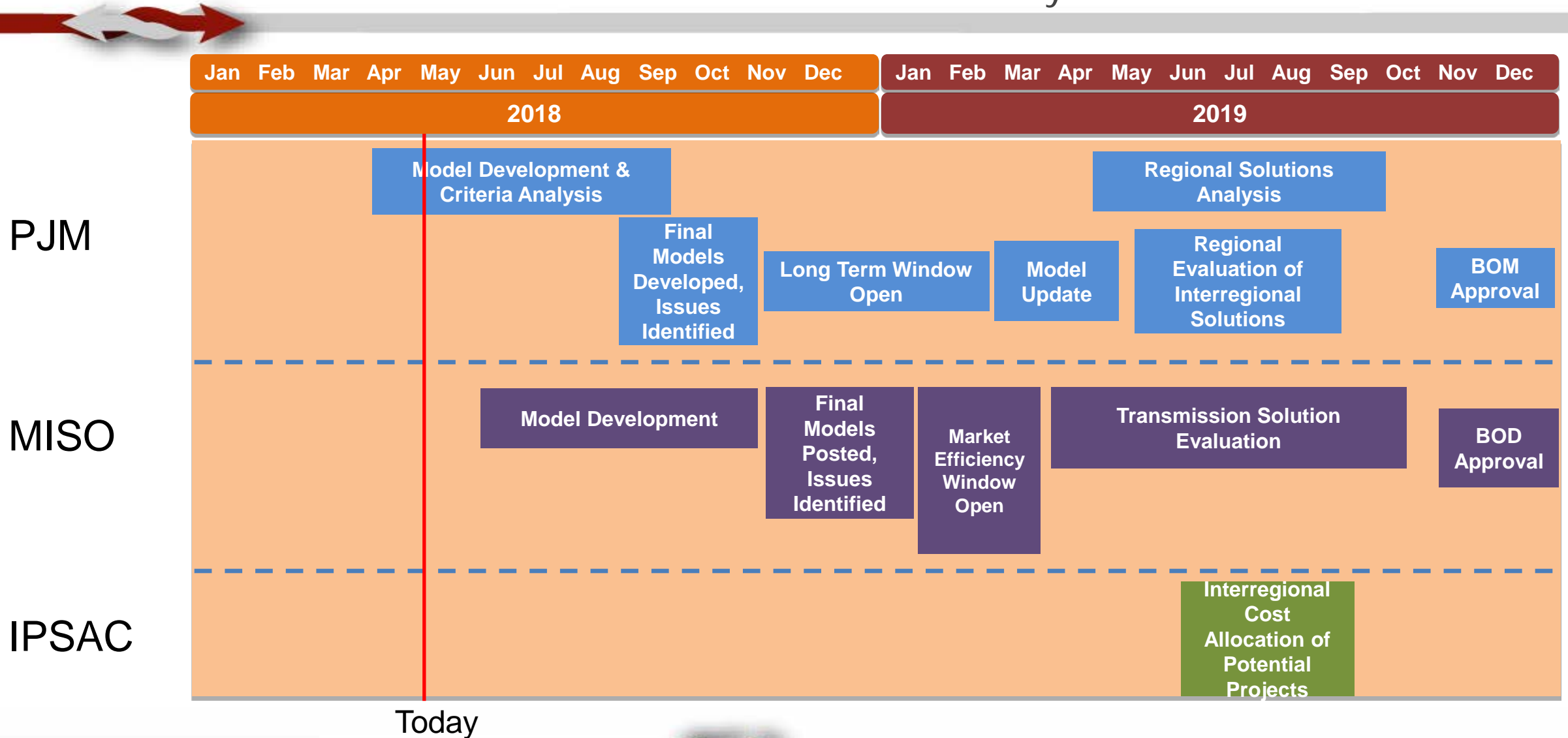
- JOA Deadline:
 - Study (analysis) must be completed by December 31, 2018
- Target Timeline
 - June – complete review of historical congestion
 - Identify outage impacts
 - Identify planned upgrades
 - July – Work with equipment owners to identify limiting equipment and potential upgrades
 - September – Complete evaluation of potential upgrades
 - October – Joint review of results and JRPC recommendation to Boards

- PJM and MISO will conduct a two year Interregional Market Efficiency Project (IMEP) study in 2018/2019
- Issues identification and benefit determination conducted in each regional process consistent with current effective JOA

- Study progresses in parallel through PJM and MISO regional processes
- Each RTO will develop an economic model and identify issues for which upgrades are being solicited
 - Model and issues identification consistent with region process and practice
- Interregional proposals must:
 - Address at least one identified issue in each region (could be same issue if identified by both RTOs)
 - Be submitted to both regional processes



Market Efficiency - Estimated Time-line



- PJM proposal window: November 1, 2018 – February 28, 2019
- Board approval of IMEPs: December 31, 2019

- August 2018 – Draft market efficiency base case posted
- September – October, 2018 – Accept stakeholder feedback, iterate on base case as needed
- November 1, 2018 – Final issues and model posted, window opens
- February 28, 2019 – Window closes
- March – May, 2019 – Model Update
- May - September, 2019 – Benefit determination, interregional cost allocation, project evaluation, and joint selection if applicable
- October/November 2019 – TEAC review of recommended solution(s)
- December 2019 – Board approval

- November 2018 – January 2019 – Case finalization and flowgate identification
- January – February, 2019 – MEP project solicitation
- March – August, 2019 – Regional solution analyses
- September/October, 2019 – Regional cost allocation
- November/December 2019 – MTEP19 recommendation and Board approval

JOA Updates

- Feedback received from 7 entities & discussed last meeting
- Redline changes to the JOA have been drafted by PJM & MISO
 - Posted with meeting materials


- Remove 5% GLDF criteria; materiality determined by regional processes
- Clean up as required to reflect no joint model for IMEP study
- Clarify obligation to construct (project in one region benefiting the other)
- Eliminate Cross Border Baseline Reliability Project (CBBRP) type
- Remove Section 9.4.4.3 (allocation outside of CSP)
 - Relies on joint model
 - Annual issues review still allows RTOs opportunity to find projects outside of joint study and include in the CSP

- Target having all changes effective for next IMEP process
 - Window opens around November 1, 2018
- To ensure time for FERC action, filing should be made no later than July

IPSAC Work Schedule

- Finalize JOA updates and file at FERC
- Interregional MEP proposal window around November 1

Open Discussion

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