



Joint and Common Market

INCREMENTAL AUCTION REVENUE RIGHTS

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Overview

■ Purpose

- Provide stakeholders with an update on the MISO-PJM plan for enhanced planning and markets coordination for the PJM customer funded IARR process

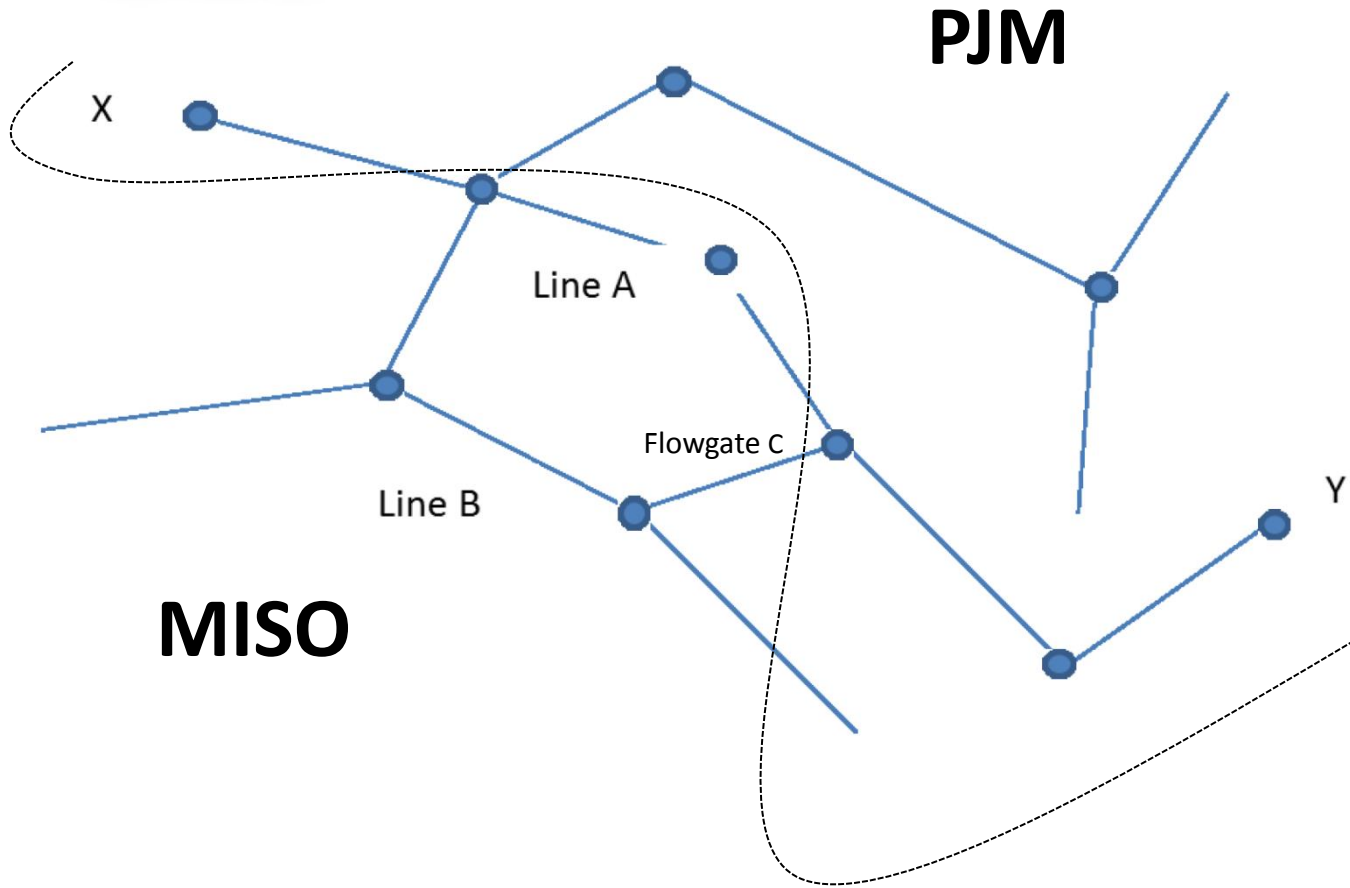
■ Key Takeaways

- Several discussions have taken place since November 2017
- Effort aims to clarify the current coordination process and to identify opportunities for process improvements
- MISO is unable to commit to FFE adjustments in support of the PJM 80% guarantee due to potential risk to value for MISO stakeholders

Background

- PJM and MISO offer an IARR product for transmission expansions that add incremental capability to the system
 - IARR MWs are awarded for the incremental capability created for the life of the facility or 30 years, whichever is less
 - Must be simultaneously feasible
 - Valued each year based on Annual FTR Auction clearing prices
- PJM offers an additional option allowing stakeholders to obtain an IARR by agreeing to fund transmission upgrades needed to support the request

Illustrative Example



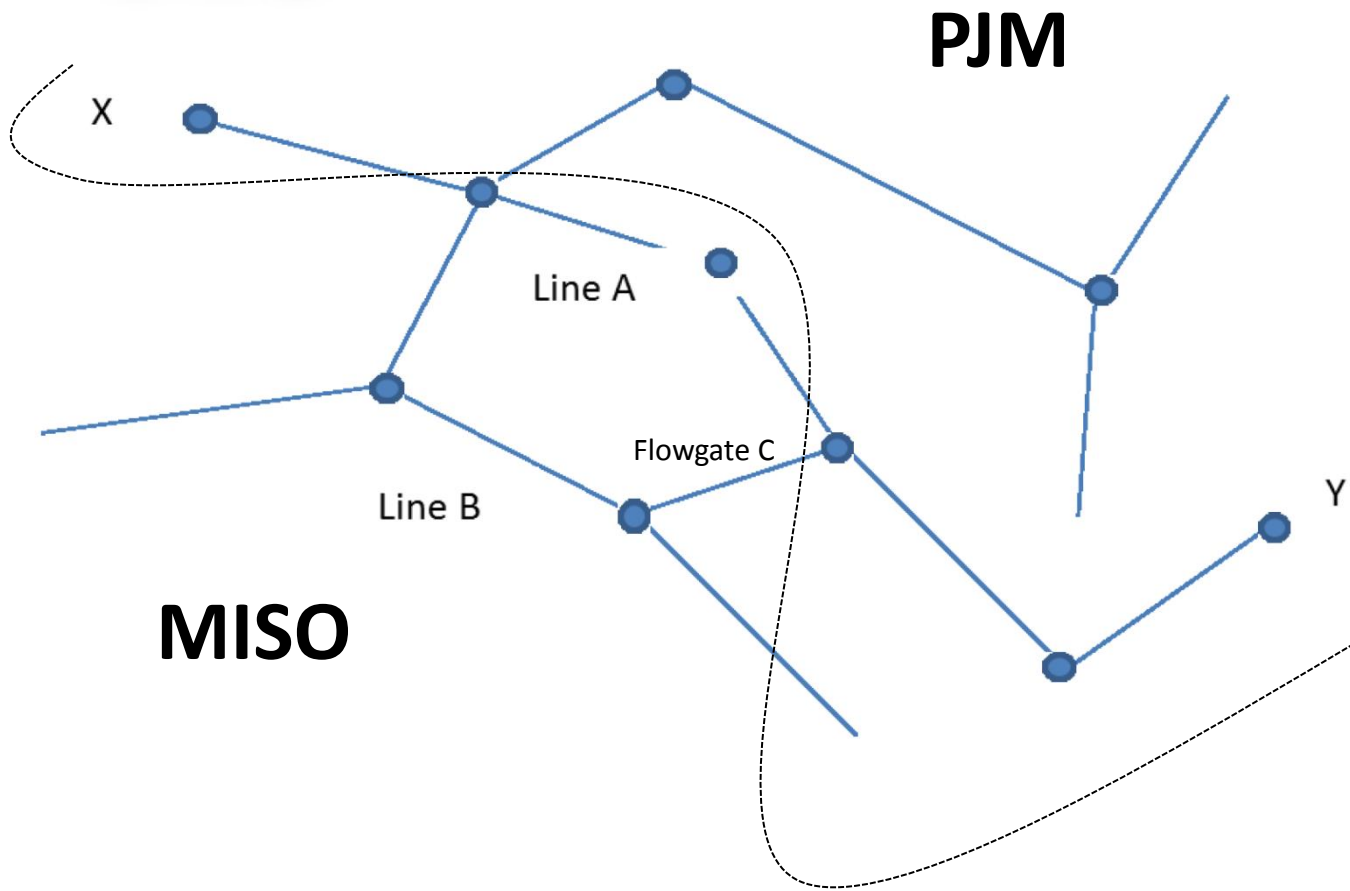
IARR Submission

- Source Location: X
- Sink Location: Y
- MW Requested: 200MW

Market Analysis Results

- FG C is limiting element in latest ARR Allocation
- Additional 50MW (25% of IARR impact) flow on Flowgate C as a result of IARR submission

Illustrative Example



PJM-MISO Planning Coordination

- MISO identifies transmission upgrades to address the FG C over-allocation
 - Upgrade designed to ensure PJM FFE increases by 50 MW
 - Final PJM FFE currently not guaranteed to 80% of IARR impact (**Current process Gap**)

New PJM proposed Procedure would identify and verify gap in FFE allocations and guarantee level associated with 80% of IARR request (40 MW)

Identified Gaps in Process

- Proper transfer of FFEs is needed on impacted flowgates to support IARR request to ensure FTR Revenue Adequacy
- Current PJM IARR process requires customer to upgrade only for incremental impact of IARR request
 - Upgrade capabilities may not get reflected in FFE allocation increases because of CMP over allocation rules
- PJM requirement to guarantee at least 80% of IARR MW
 - May require some guarantee from MISO on future FFE allocations, which MISO cannot guarantee given the potential risk to value for MISO stakeholders
- Non-active flowgates may impact feasibility of IARR if activated in future

PJM Proposed Coordination Improvements

- Proposed additional step for MISO-PJM IARR coordination is to perform a preliminary Transmission Upgrade Study (TUS)
- TUS purpose is to ensure that transmission allocations are granted to building entities to the extent they cause no harm to existing transmission allocations to CMP members
 - Preliminary TUS would use same topology assumptions as IARRs in the planning study
 - Verification tool to ensure upgrades identified by native entity are expected to produce requested FFEs

PJM proposed Option for JOA Revisions*

- **Modify section 9.3.5 (a) to add subsection (i):**
 - Coordination will include but not be limited to a preliminary Transmission Upgrade Study, as outlined in Appendix G of Section II of this agreement. In the event the final adjustment in Firm Flow Entitlements after the upgrade(s) is in-service is not enough to support at least 80% of Incremental ARR request, the impacted Parties will adjust their Firm Flow Entitlements enough to support at least 80% of the Incremental ARR request. All salient information will be communicated to the Incremental ARR customer in the System Impact Study.
- **MISO cannot agree to this change due to the potential risk to value for MISO stakeholders**

***Subject to change pending PJM legal review**

Next Steps and JCM updates

- PJM will engage stakeholders to discuss a path forward and potential options:
 - Option 1: Remove any reference of a requirement to guarantee at least 80% of the IARR MW request when coordinated flowgates are impacted
 - Option 2: PJM continue to guarantee 80% of the IARR MW request when coordinated flowgates are impacted (Revenue Adequacy Risk to PJM Stakeholders)
 - Option 3: PJM don't allow IARRs that impact coordinated flowgates
- Implementation for 2019/2020 planning period

Contacts

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