



Joint and Common Market

I. MODELING OF ONT-MI PARS IN MARKET FLOW CALCULATIONS AND ENTITLEMENT CALCULATIONS



Overview

- Purpose
 - This presentation provides status update on the MISO and PJM discussions related to modeling of the ONT-MI PARs in the Market Flow and FFE calculations
- Key Takeaways
 - MISO and PJM agree on the approach to model ONT-MI PARs in the Firm Flow Entitlement (FFE) calculations
 - RTOs need to discuss and agree on implementation details for changes to the Market Flow calculations

Background

- ONT-MI PARs (5 PARs on 4 lines) began regulating ONT-MI interface flow in July 2012
 - Since July 2012, ONT-MI PARs have been modeled using the “Regulated” and “Unregulated” status in the Interchange Distribution Calculator (IDC)
- MISO, PJM and IESO have completed an analysis of the operation of the ONT-MI PARs through the first year of operation (Aug 2012 – Aug 2013)
 - Report available at: <http://www.miso-pjm.com/documents.aspx>
- At Mar 21, 2014 JCM meeting, MISO and PJM agreed to perform analysis for modeling of PARs in Market Flow and FFE calculations
- At May 28, 2014 JCM meeting, MISO and PJM provided status update on their discussions

Proposal for FFE calculations

- Both RTOs recommend using “Regulated” (Actual flow = Scheduled flow or Fixed Flow) or “Unregulated” (Free flowing or Fixed Tap) status (same as that in IDC) to calculate FFEs

PJM Proposal for Market Flow calculations

- Market Flows on pre-identified M2M Flowgates, which are impacted by Lake Erie Circulation (LEC), to be adjusted with the LEC impacted value. LEC is the uncontrolled loop flow across the PAR-controlled interface
 - As long as LEC is non-zero, PARs are not perfectly controlling and this LEC impacts M2M facilities
 - PJM and MISO need to establish a method in which LEC impacts are properly identified and settled in the M2M process
 - PJM and NYISO have implemented an equitable solution (in PJM's opinion) to address LEC impacts in the PJM-NYISO JOA and PJM proposes to adopt this solution for the PJM-MISO M2M process

PJM Proposal for Market Flow calculations (contd.)

- Since PJM does not have direct operational control over the PARs, PJM's Market Flow on MISO Flowgates should be adjusted for neighboring LEC impacts
 - PJM recognizes that PJM inadvertently contributes to LEC and it is therefore accurate for PJM to take responsibility over PJM's LEC contribution
 - It is not reasonable for PJM to re-dispatch generation to mitigate neighboring LEC impacts and not receive proper compensation, therefore M2M Market Flow process should recognize cost associated with such congestion
 - In summary PJM proposes to adjust PJM M2M Market Flows to account for neighboring entity LEC impacts that PJM did not contribute
- MISO has direct controlling actions to alleviate LEC across the PARs, this should be recognized in the Market Flow calculation, by adjusting 100% of LEC impact in MISO's Market Flows on PJM Flowgates
 - MISO has the ability to adjust 100% LEC and its impact on PJM transmission facilities
 - PJM provides re-dispatch for LEC impacts on PJM transmission facilities
 - Therefore it is appropriate for MISO's Market Flows on PJM Flowgates to be adjusted by 100% of LEC impacts
 - In summary PJM proposes that MISO adjust its M2M Market Flows for 100% of LEC impacts

MISO Proposal for Market Flow calculations

- MISO Approach: Use “Regulated” (Actual flow = Scheduled flow or Fixed Flow) or “Unregulated” (Free flowing or Fixed Tap) status (same as that in IDC)
- MISO is amenable to include LEC adjustment for MI-ONT PARs in the Market Flow calculations as long as adjustment is only for a portion of LEC (more details on the next slide)

MISO Proposal for Market Flow calculations (contd.)

- Options for LEC Adjustment to Market Flows:
 - RTO's contribution to LEC - LEC comprises of impacts from entities other than MISO and PJM, for e.g. NYISO, ONT, etc. And, it is not appropriate to make adjustment to RTO's Market Flows for any 3rd party's contribution to LEC.
- OR
- LEC amount above 200 MW bandwidth – 200 MW bandwidth was included in the filing for Presidential Permit from Department of Energy and LEC above the bandwidth could be included for adjustment to the RTO's Market Flows

Summary of the Proposed Approaches*

Calculation	Description
Market Flows	<ul style="list-style-type: none">In regulating status, calculate Market Flows by assuming ONT-MI Interface as Fixed Flow interface. PJM would like to apply adjustments for LEC impacts to pre-identified M2M flowgates (only those with >5% impacts from PARs) similar to market flow adjustments in PJM-NYISO M2M process.In unregulated status, calculate Market Flows by assuming ONT-MI Interface as Free Flowing interface.
Firm Flow Entitlements	<ul style="list-style-type: none">In regulating status, calculate FFEs by assuming ONT-MI Interface as Fixed Flow interface.In unregulated status, calculate FFEs by assuming ONT-MI Interface as Free Flowing interface.

***Note:**

Agreement on the text in black

Ongoing discussions on the text in blue



Next Steps

- MISO and PJM to discuss and agree on modeling of ONT-MI PARs in the Market Flow calculations
 - MISO and PJM will review if M2M Flowgate test process needs to be enhanced to respect LEC impacts
- RTOs to develop implementation plan and inform stakeholders about:
 - Potential changes to the MISO-PJM JOA
 - Software changes
 - Implementation date