

# Manual 11 Revisions – Interface Pricing Points Review

Zhenyu Fan  
Real-Time Market Operations  
Market & Reliability Committee  
March 6, 2024

## Action Required

## Deadline

## Who May Be Affected

Review Manual 11 Updates

03/20/2024

All stakeholders



- OA Schedule 1, Sec 2.6A outlines the definitions and revision practices for Interface Pricing Points.
- The MMU has recommended that PJM monitor, and adjust as necessary, the weights applied to the components of the interfaces to ensure that the interface prices reflect ongoing changes in system conditions.
- In response, PJM is pursuing a quick fix process to memorialize in Manual 11 a formal annual process to review Interface Pricing Points.

References:

[PJM's OATT](#)

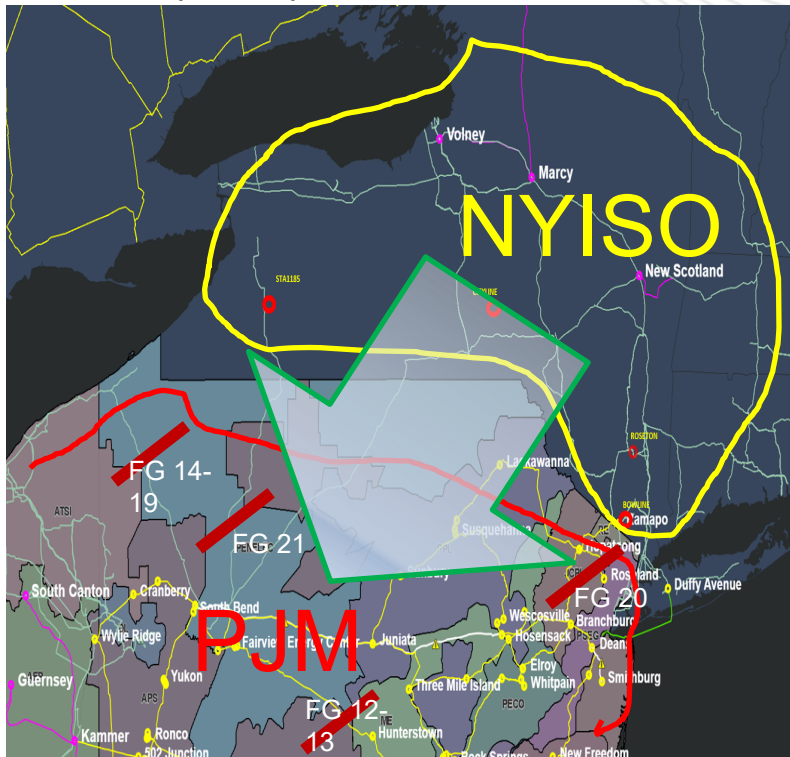
[Market Monitor's SOM Report](#)



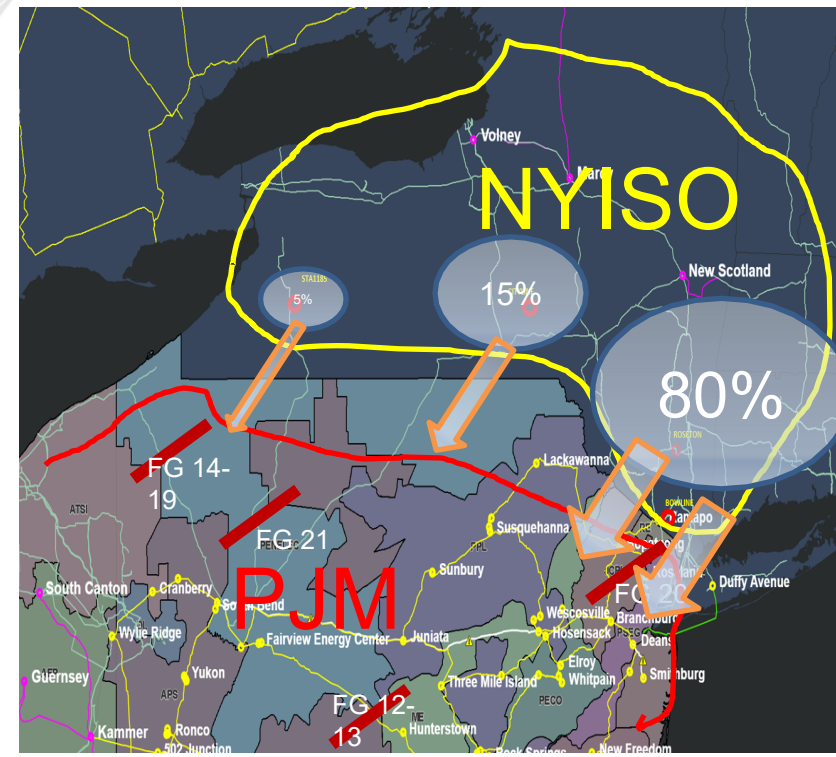
# Interface Definition

Interface	PnodeName	PnodeID	Weight
<b>MISO</b>	16 WAUKE138 KV MISOM2M0	2156109758	0.1
	18 WILL 20 KV MISOM2M1	2156109759	0.1
	3 POWERT24 KV MISOM2M2	2156109760	0.1
	SCHAHFER345 KV MISOM2M5	2156109807	0.1
	CAYUGA2 345 KV MISOM2M3	2156109778	0.1
	EBEND 20 KV MISOM2M9	2156109777	0.1
	MICHIGA2345 KV MISOM2M4	2156109779	0.1
	SCHAHFER345 KV MISOM2M5	2156109781	0.1
	ROCKPOR226 KV MISOM2M7	2156109763	0.1
	SCHAHFER345 KV MISOM2M5	2156109780	0.1
<b>NYIS</b>	BOWLINE 20 KV GEN 1	51088	0.45
	CTYLINE 115 KV GEN1	135389875	0.15
	STA1185 115 KV ALLGEN1	135389955	0.05
	ROSETON 345 KV GEN 1	51096	0.35
<b>SOUTH</b>	BROWN CT138 KV EBROWN10	1123180777	0.0103
	BULLRU 161 KV PRICEPT1	1084393457	0.1403
	GHENT_LG22 KV GHENT02	1123180796	0.0576
	GREENTO2138 KV DUMYGEN1	1268572878	0.15
	LEECPL 115 KV PRICEPT1	1084393140	0.0338
	MCGUIRE4230 KV PRICEPT1	1084393278	0.0537
	NOBLESVI230 KV PRICEPT1	1084392083	0.0069
	ROXBOROG230 KV PRICEPT1	1084393156	0.05
	WAKE4 500 KV PRICEPT1	1084393165	0.17
	WALTON 3230 KV GENDUMMY	57967673	0.2
	WHEATLND345 KV PRICEPT1	1084392109	0.1274

## Area to Area Transfer Distribution Factor (AtoA)



## Interface to Area Transfer Distribution Factor (ItoA)



Purpose: To review if the existing definition represents external area in terms of power flow impacts on the ties lines between the areas

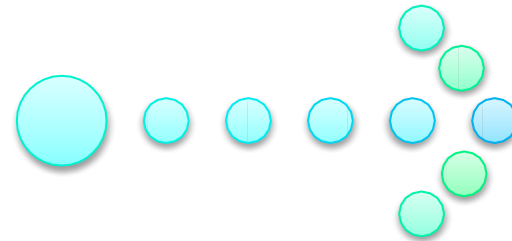
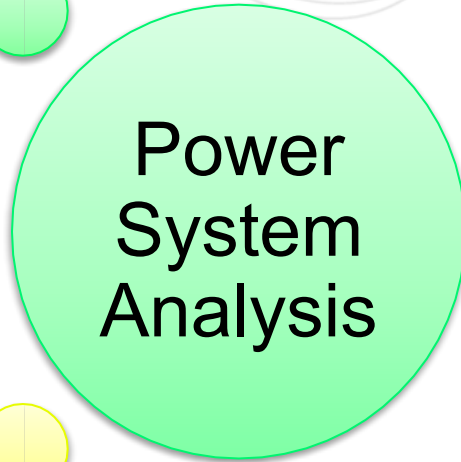
## 1. Base Power Flow Case



## 2. Sub Systems



## 3. Monitor/FlowGates



- **Dfax Analysis**
- **Sensitivity Study**
- **Trending Study (future)**
- **Scenarios based Study (future)**

- The current interface definitions (pricing points and their weights) are reasonable.
- Sensitivity study confirmed similar results.
- Distribution factor comparison for sub regional and flowgates were also screened.

FGate ID	FGate Name	Contingency	TDF (Area→PJM) <b>AtoA</b>	TDF (IntF→PJM) <b>ItoA</b>	Perctage Diff	ABS Diff
1	PJM-NYISO	Base Case	-1	-1	0.0%	0
2	PJM-MISO	Base Case	-0.7997	-0.8454	5.71%	0.0457
3	PJM-SOUTH	Base Case	-0.7595	-0.7860	3.49%	0.0265

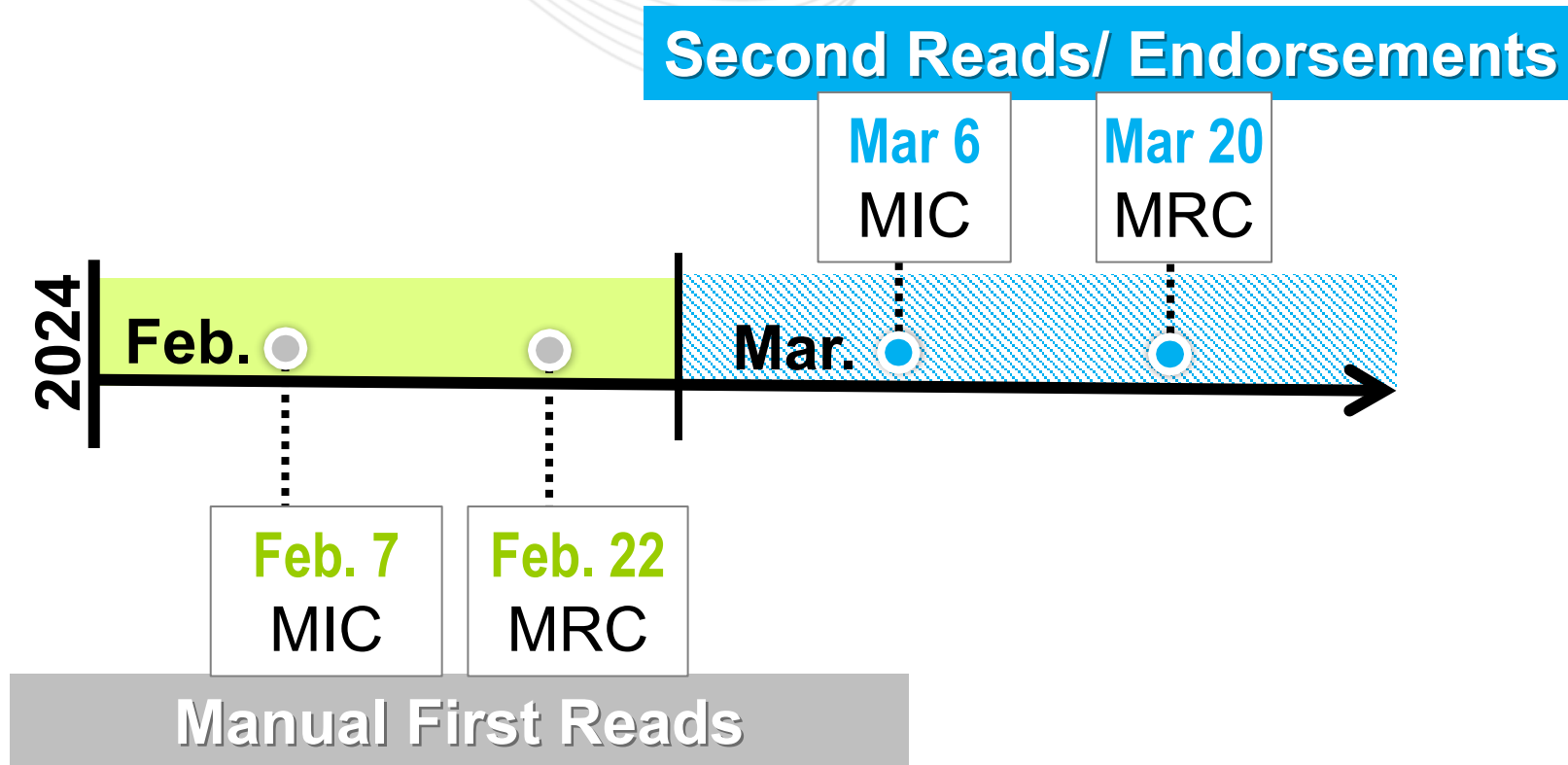
- New Section 2.20 – Interface Prices
  - Definition, Scope(NYIS, MISO and SOUTH), Timeline
  - Study Methodology
  - Transparent informational sharing



## 2.20 Interface Prices

Interface Pricing Points are a grouping of individual busses combined into a proxy-pricing node (pnode) utilized for purposes of calculating LMPs for energy exports to or energy imports from external balancing authority areas. Such Interface Pricing Points may represent external balancing authority areas, aggregates of external balancing authority areas, or portions of any external balancing authority area.

A review of Interface Pricing Point definitions for purposes of calculating LMPs for energy exports to or energy imports from external balancing authority areas is conducted on an annual basis. The review is based on a set of flow impact analyses utilizing power flow analysis tools for each Interface Pricing Point. The scope of the annual review of Interface Pricing Points includes the MISO, NYIS and SOUTH interfaces. Results of the annual review will be posted to the PJM website no later than February 28 of each calendar year.



Facilitator:  
Foluso Afelumo,  
[Foluso.Afelumo@pjm.com](mailto:Foluso.Afelumo@pjm.com)

Secretary:  
Amanda Martin,  
[Amanda.Martin@pjm.com](mailto:Amanda.Martin@pjm.com)

SME/Presenter:  
Zhenyu Fan, [Zhenyu.Fan@pjm.com](mailto:Zhenyu.Fan@pjm.com)

## M11 Revisions - Interface Pricing Points Review



Member Hotline  
(610) 666 – 8980  
(866) 400 – 8980  
[custsvc@pjm.com](mailto:custsvc@pjm.com)