



2021 - 2022 IRM Proposed MARS Topology Updates

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Capacity Market Operations – Resource Adequacy

NYSRC- Installed Capacity Subcommittee

April 28, 2020

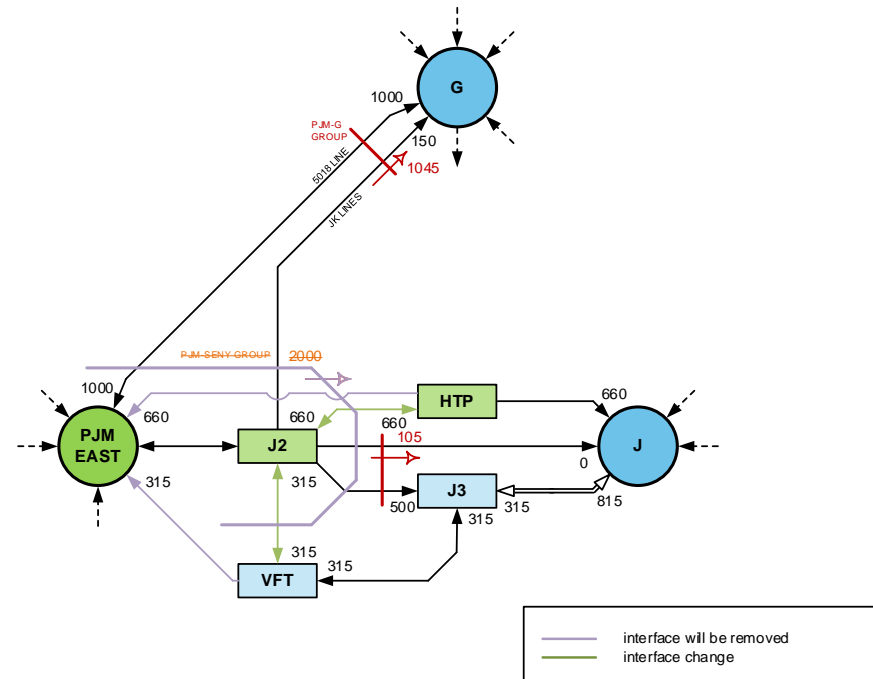
Objective

- **Review RNA Updates as presented to joint TPAS/ESPGWG on 4/6 2020**
 - Removal of PJM-SENY Group Interface
 - PSEG-LI updates to Increase Zone K Imports/Exports

https://www.nyiso.com/documents/20142/11738080/12c_2020RNA_PreliminaryMARSTopoUpdates-Apr6TPAS-ESPGWG.pdf/6f5e37d9-c46c-45a8-61b3-5d7c3f23d44e

PJM-SENY Group Interface Removal

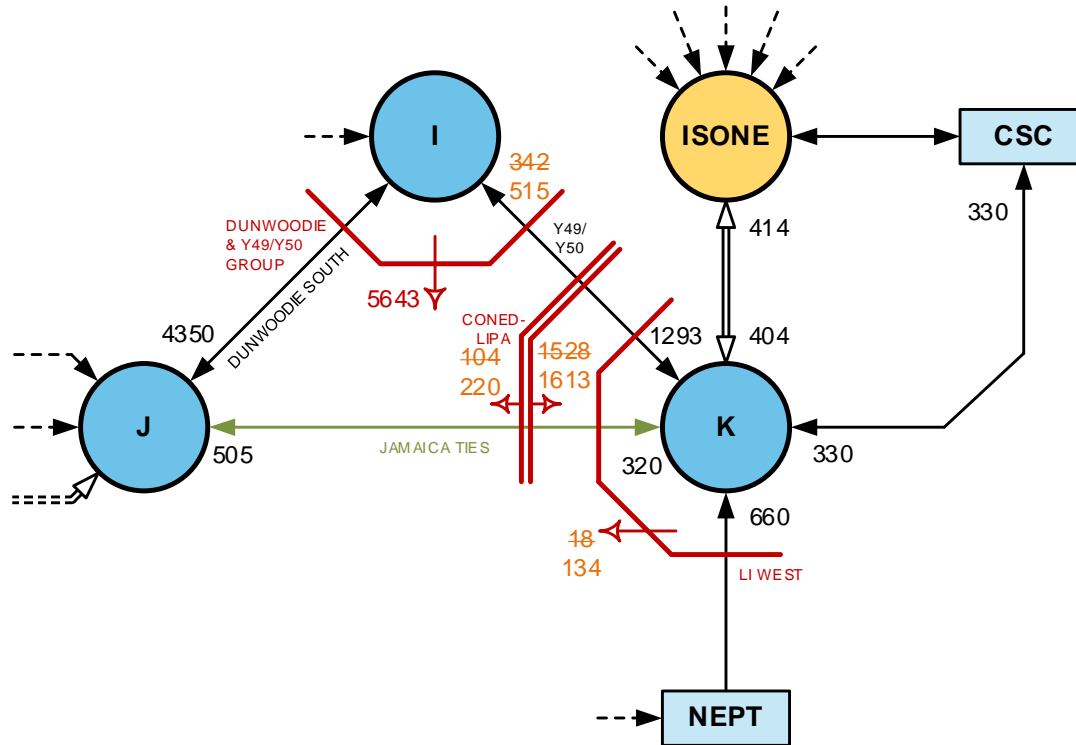
- This interface group was used to limit total imports from PJM into Zones G & J
 - Due to changes in the system and MARS topology, this interface group is no longer limiting in a majority of situations
- Removal of this interface group has no impact on the observed LOLE



Updates to Zone K Topology

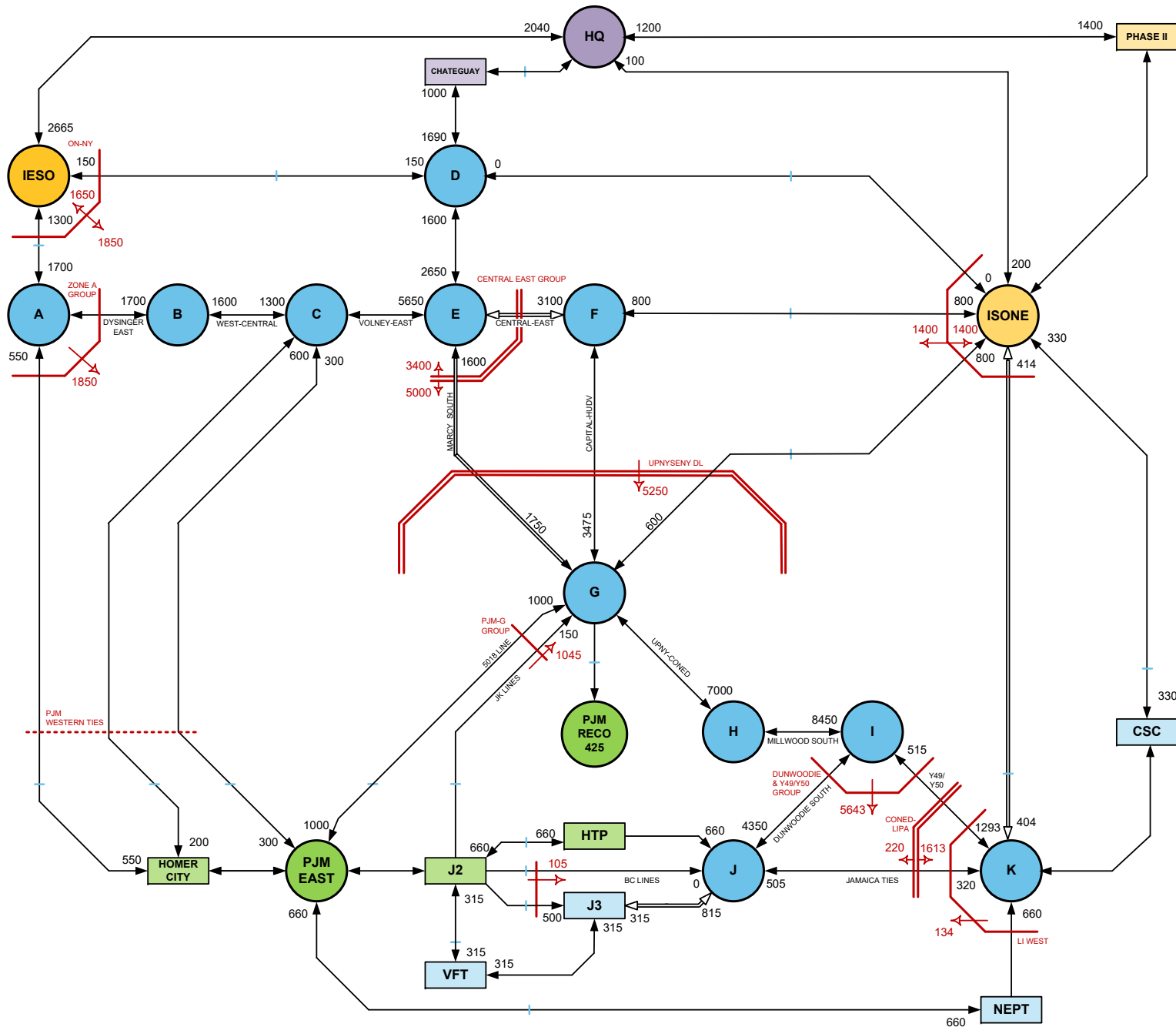
- **The NYISO received updates from PSEG-LI**
 - These values are considered preliminary pending final application of the inclusion rules
- **System Changes**
 - Reduced load forecast for western Long Island
 - Additional East Garden City – Valley Stream 138 kV circuit
- **Topology limit changes**
 - Increased ability to export power from Long Island
 - The J_TO_K (Jamaica ties) limit is no longer dependent on Barrett availability

Updates to Zone K Topology



— interface change
— interface will be removed

Draft IRM 2021 Topology For New York Control Area



For Internal Discussions Only

Notes

1. PJM to NY emergency assistance (EA) assumption for calculating the PJM-NY Western ties, PJM-G Group, and ABC Line Group flow distribution limit: 1500MW
2. NYCA EA simultaneous import limit: 3,500 MW
3. External areas representation based upon information received from the NPCC CP-8 WG

Legend

- ↔ Interface
- Unidirectional Interface
- ↔ Interface w/ Dynamic Ratings
- Interface Group
- == Interface Group w/ Dynamic Ratings
- Monitoring Interface Group
- - - NYCA EA Interface Group Marker
- xx "Dummy Bubble" i.e. no load

NOTE: An interface is considered to not have a MW limitation if no number is specified

Draft Topology for 2020 RNA: Study Years 2021-2023

Dynamic Limits and Groupings Information

Interface Group	Limit	Flow Equation
LI_WEST	134	$(K \text{ to } I\&J) - 0.13*(K_NEPT)$

Central East Voltage Limits, Oswego Complex Units

Depends On:	9MILP1, 9MILP2, FPNUC1, STHIND, OS05, OS06			
Units Available	E_to_F		E_to_FG	
	Fwd	Rev	Fwd	Rev
6	3100	1999	5000	3400
5	3050	1999	4925	3400
4	2990	1999	4840	3400
3	2885	1999	4685	3400
2	2770	1999	4510	3400
Otherwise	2645	1999	4310	3400

Staten Island Import Limits, AK and Linden CoGen Units

Unit Availability				J_to_J3	
AK02	AK03	LINCOG1	LINCOG2	Fwd	Rev
A	A	A	A	315	200
U	A	A	A	315	500
A	U	A	A	315	700
A	A	U	A	315	500
A	A	A	U	315	500
Otherwise				315	815

Depends On:	NPRTS1-4	
Units Available	LI_NE	
	Norwalk to K	K to Norwalk
4	260	414
Otherwise	404	414

Depends On:	Barrett1 and 2	
Units Available	ConEd-LIPA	
	IJ to K	K to IJ
2	1613	220
1	1613	200
0	1613	130

Voltage Limited Interfaces

Central East MARS
Central East Group
UPNY-ConEd

PJM-NY JOA Flow Distribution (Jan 31, 2017 filing)	RECO Load Deliveries	PJM-NY Emergency Assistance
PJM-NY Western Ties	20%	46%
5018 Line	80%	32%
JK Lines	0%	15%
A Line	0%	7%
BC Lines	0%	0%

US DL Limit (MW)	Units Available		
	CPV	Cricket	Athens
5250	2	3	3
5100	2	3	2
5350	1	3	3
5200	2	2	3
5150	2	1	3
5250	1	1	3
5100	2	0	3
5350	All Other Conditions		

E_TO_G DL Limit (MW)	Units Available
	CPV
1750	2
2000	1
2250	0

For Internal Discussions Only

Questions?

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- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system

