

2022 - 2023 IRM Proposed MARS Topology Updates

Kevin Osse

Capacity Market Operations – Resource Adequacy

NYSRC- Installed Capacity Subcommittee

May 5, 2021

Objective

- **Review RNA Updates**

- Western New York Public Policy Transmission Project impacts
- Status of IESO/NYISO PARS in Zone D
- Cedar Rapids Transmission Upgrade

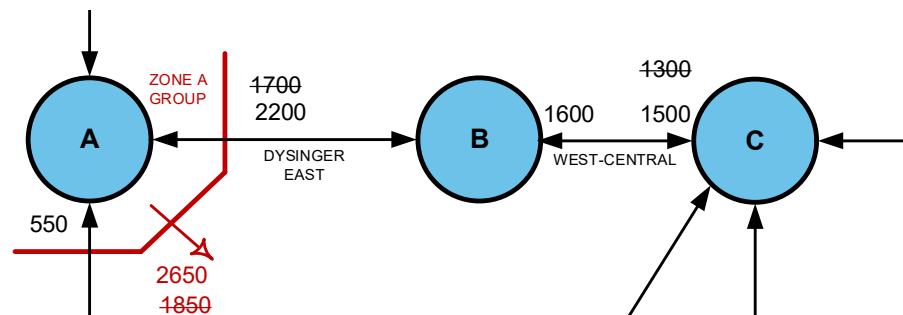
Western New York Public Policy Transmission Project impacts

- **System changes**

- Changes to load patterns and congestions in Western NY

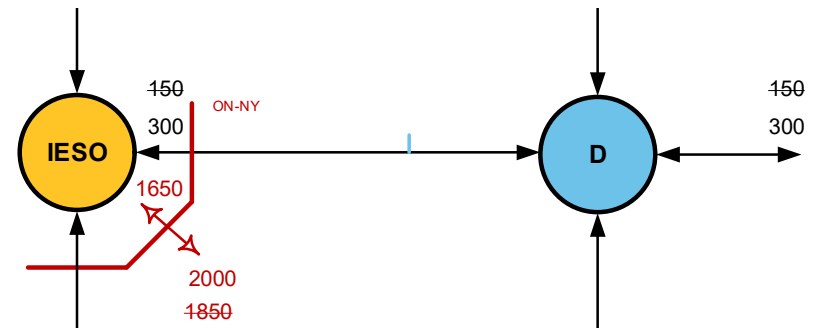
- **Topology limit changes**

- Increased transfer capability between Zones A and B, and between Zones B and C



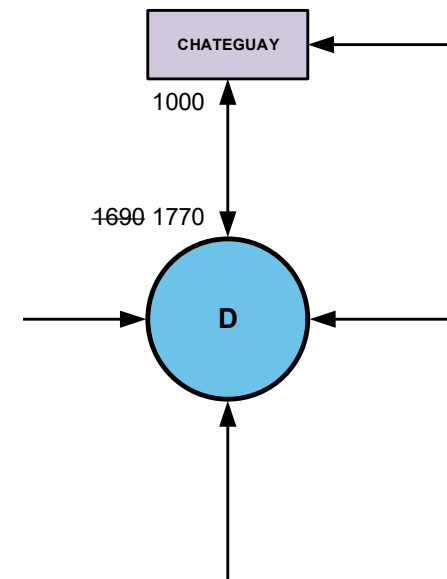
IESO/NYISO PARS in Zone D

- The NYISO received updates from IESO
 - These values are considered preliminary pending final application of the reliability base case inclusion rules
- With 2 PARS in service next year, the transfer limit between IESO and Zone D increases by 150 MW
- IESO group interface limit also increases by 150 MW

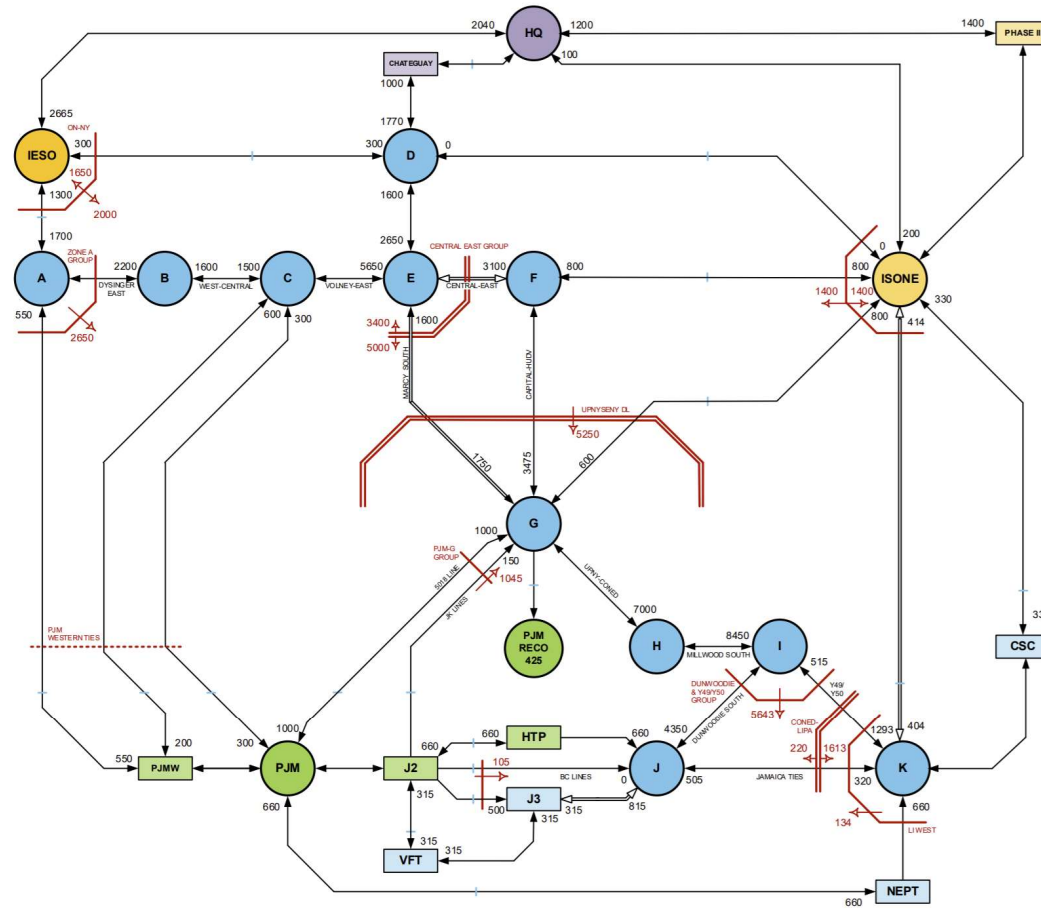


Update to Cedars

- **The NYISO received updates from the developer**
 - These values are considered preliminary pending final application of the reliability base case inclusion rules
- **Topology limit changes**
 - Increased transfer capability between Zones D and Chateaguay bubble



Draft IRM 2022 Topology For New York Control Area



- 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	U_NE		
	Norwalk to K	K to Norwalk	
4	260	414	
Otherwise	404	414	

Depends On:		Barrett1 and 2	
Units Available	ConEd-LIPA		
	U to K	K to U	
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%
501B 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

Questions?

Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- 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

