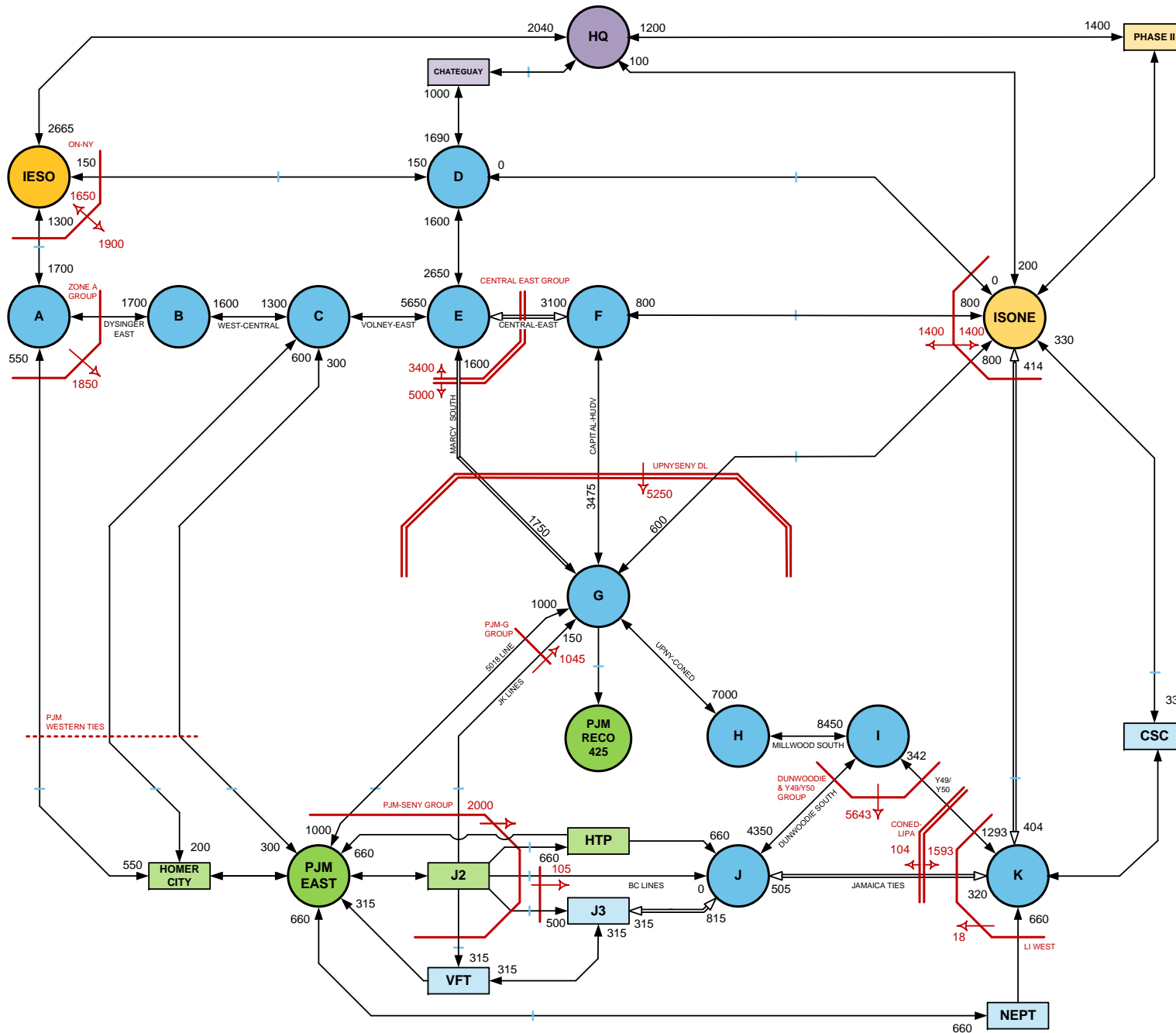


Draft Topology for 2020 RNA: Study Year 2021



Notes

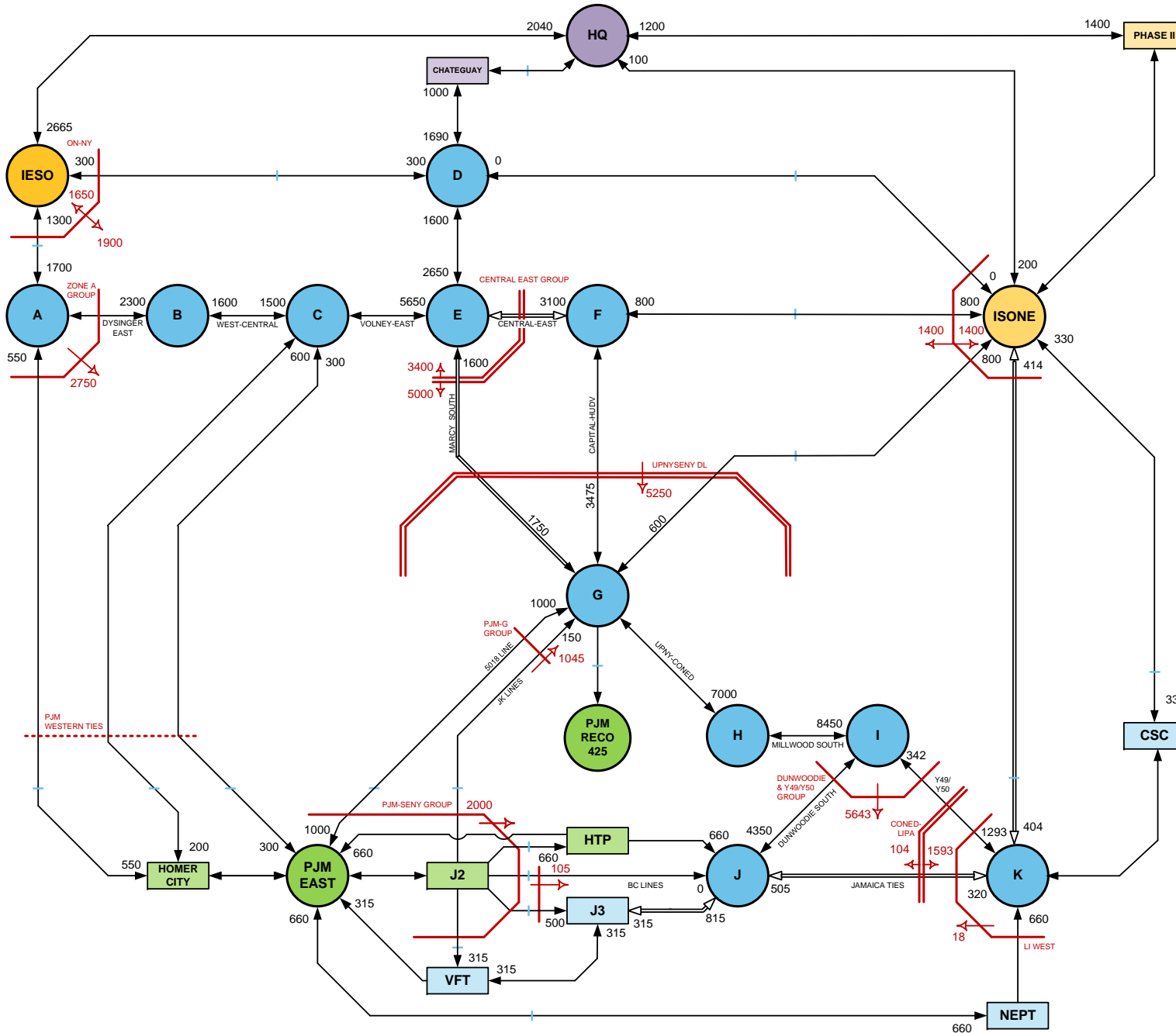
1. PJM to NY emergency assistance (EA) assumption for calculating the PJM-NY Western ties, PJM-G Group, and ABC Line Group flow distribution limit: 1500MW
2. NYCA EA simultaneous import limit: 3,500 MW
3. External areas representation based upon information received from the NPCC CP-8 WG

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

For March 16, 2020 ESPWG/TPAS Discussions Only

Draft Topology for 2020 RNA: Study Years 2022-2023



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

For March 16, 2020 ESPWG/TPAS Discussions Only

Draft 2020 RNA Topology Additional Info: Y2021- Y2023

Interface Group	Limit	Flow Equation
UPNYSENY	DL	(F_to_G) + (E_to_G) - (HUDV_NE)
LI_WEST	18	(K to I&J) - 0.13*(K_NEPT)

Central East Voltage Limits, Oswego Complex Units

Depends On: 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: BARS01, BARS02				
Units Available	Jamaica Ties		ConEd-LIPA	
	J to K	K to J	IJ to K	K to IJ
2	320	505	1593	104
1	320	390	1593	74
0	320	236	1593	0

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 Tie	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

MARS Topology - Dynamic Limits and Grouping Info – 2020 RNA: Study Years 2021-2023

For March 16, 2020 ESPWG/TPAS Discussions Only

Draft 2020 RNA Topology Dynamic Limits and Groupings Info: Y2024 – Y2030

Interface Group	Limit	Flow Equation
UPNYSENY	7150	$(F_to_G) + (E_to_G) - (HUDV_NE)$
LI_WEST	18	$(K\ to\ I\&J) - 0.13*(K_NEPT)$

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	3925	1999	5650	3400
5	3875	1999	5575	3400
4	3815	1999	5490	3400
3	3710	1999	5335	3400
2	3595	1999	5160	3400
Otherwise:	3470	1999	4960	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: BARS01, BARS02				
Units Available	Jamaica Ties		ConEd-LIPA	
	J to K	K to J	IJ to K	K to IJ
2	320	505	1593	104
1	320	390	1593	74
0	320	236	1593	0

PJM-NY JOA Flow Distribution (Jan 31, 2017 filing)	RECO Load Deliveries	PJM-NY Emergency Assistance
PJM-NY Western Ties	20%	46%
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Voltage Limited Interfaces

Central East MARS
 Central East Group
 UPNY-ConEd