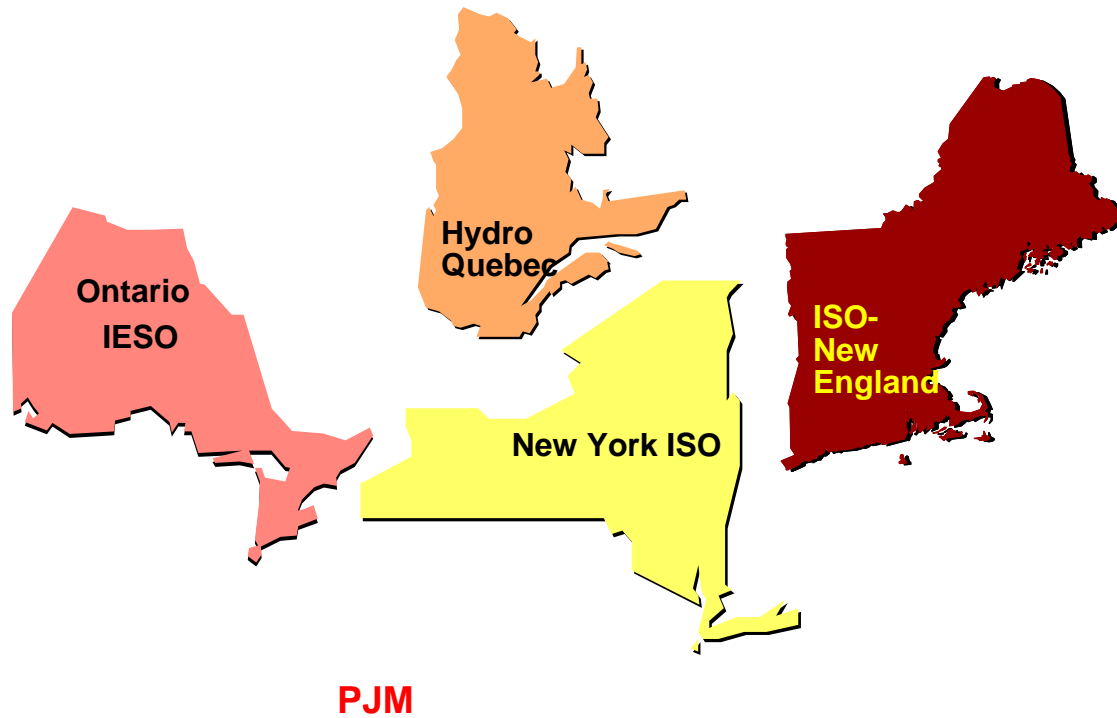


New York Imports from Canada and PJM

Northeast Coordinated System Plan
IPSAC05
December 14, 2007



Adjacent Control Areas Connected to NYISO



Background

- Imports Can be of Various Types
 - Participate as External Capacity in ICAP Market
 - Firm Contracts
 - Treated as Capacity in New York
 - Radial Interconnection
 - Through Controllable Lines/Firm Capacity
 - Emergency Assistance
- Treatment Influences Resource Adequacy Assessments

External ICAP Limits for Summer 2007

- New York is Interconnected to Four Neighboring Systems
- Maximum ICAP from external areas to the NYCA is 2,921 MW
 - 222 MW through grandfathered agreements
 - 2,699 MW through import rights allocation process
- Individual control area capacity import limits are
 - PJM: 1,300 MW (117 MW grandfathered)
 - ISO-NE: 925 MW (50 MW grandfathered)
 - HQ: 1,366 MW (0 MW grandfathered, 166 MW Cedars)
 - IESO: 405 MW – (55 MW grandfathered)

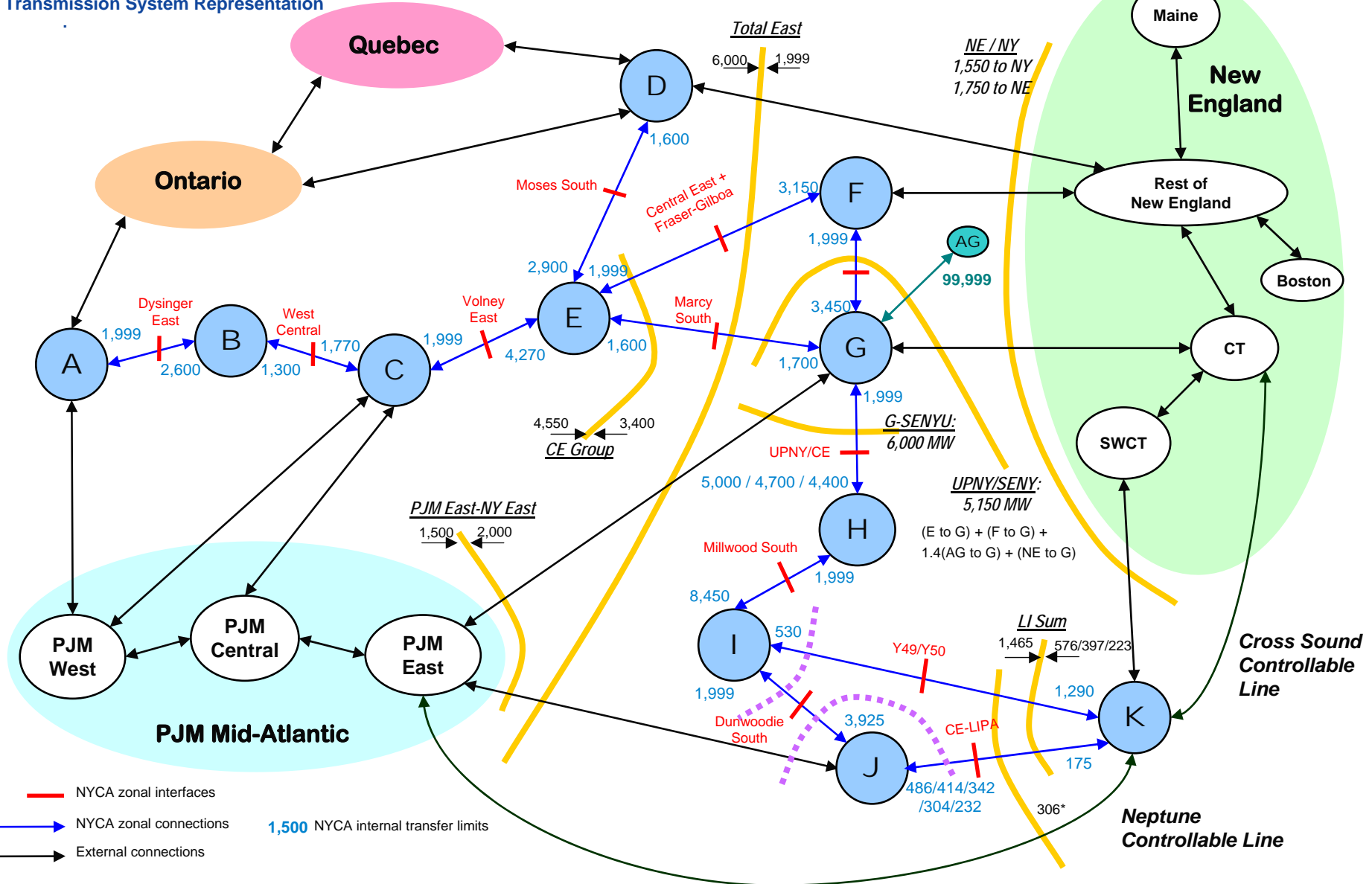
Other Imports

- Linden Cogen – NJ capacity Radial to NYC
- From NYISO 2007 Comprehensive Reliability Plan

Project Type	Submitted	Size of Resource(MW)	Zone	In-service Date	Status
Controllable AC Transmission –VFT Linden VFT	CRP 2007	300	PJM-J	4 th quarter 2009 PJM Queue G22	Completed NYISO class year 2006 process, IA in progress
Back-to-Back HVDC, AC Line HTS/FPL	CRP 2007 and was an alternative regulated proposal in CRP 2005	660 (500MW ICAP)	PJM-J	Late 2010 PJM Queue O66	NYISO interconnectio n queue project # 206 NYPA RFP
Back-to-Back HVDC, AC Line Harbor Cable - Brookfield	CRP 2007 and was an alternative regulated proposal in CRP 2005	550 (550MW ICAP)	PJM-J	6/2011	NYISO interconnectio n queue projects #195 and #253

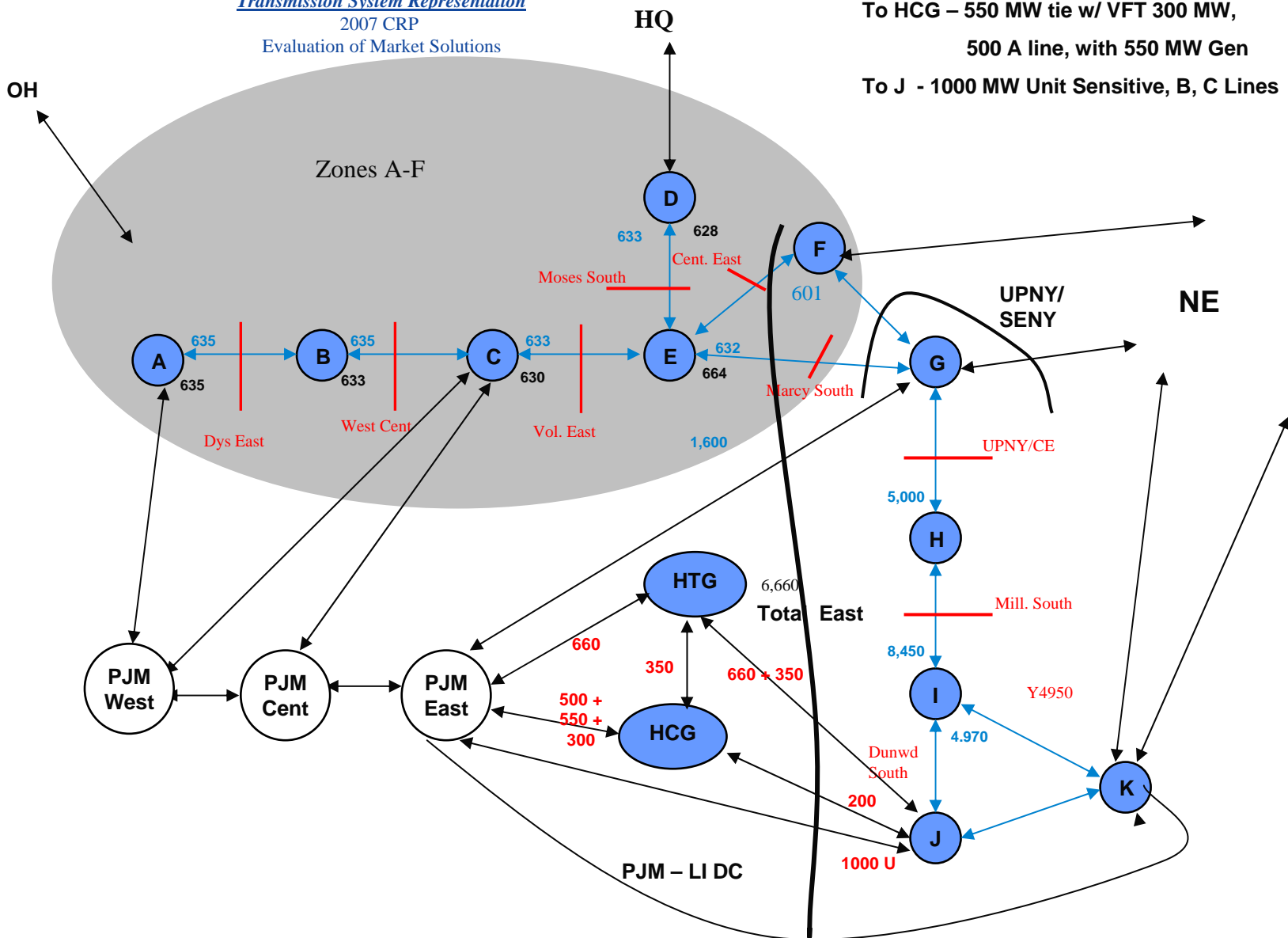
New York Control Area - for Illustrative Purposes

Transmission System Representation



New York Control Area – for Illustrative Purposes

Transmission System Representation
2007 CRP
Evaluation of Market Solutions



PJM East New Ties and Gen

- To HTG – 660 Mw BiDir Tie with 500 MW Gen
- To HCG – 550 MW tie w/ VFT 300 MW, 500 A line, with 550 MW Gen
- To J - 1000 MW Unit Sensitive, B, C Lines

Conclusions

- The Treatment of Imports Can Significantly Impact Resource Adequacy Assessments
- Need to Capture Internal System Limits to Imports
- Observations From NYISO's 2007 CRPP and 2008 RNA
 - Changing treatment of imports from emergency assistance to firm can change year of need and magnitude of need
 - Needs can decrease in one Area and increase in another
 - Representing internal system limits reduces the effectiveness of the imports