

# Multi-Regional Transfer Analysis – Level of Loop Flow

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# Multi-Regional Transfer Analysis

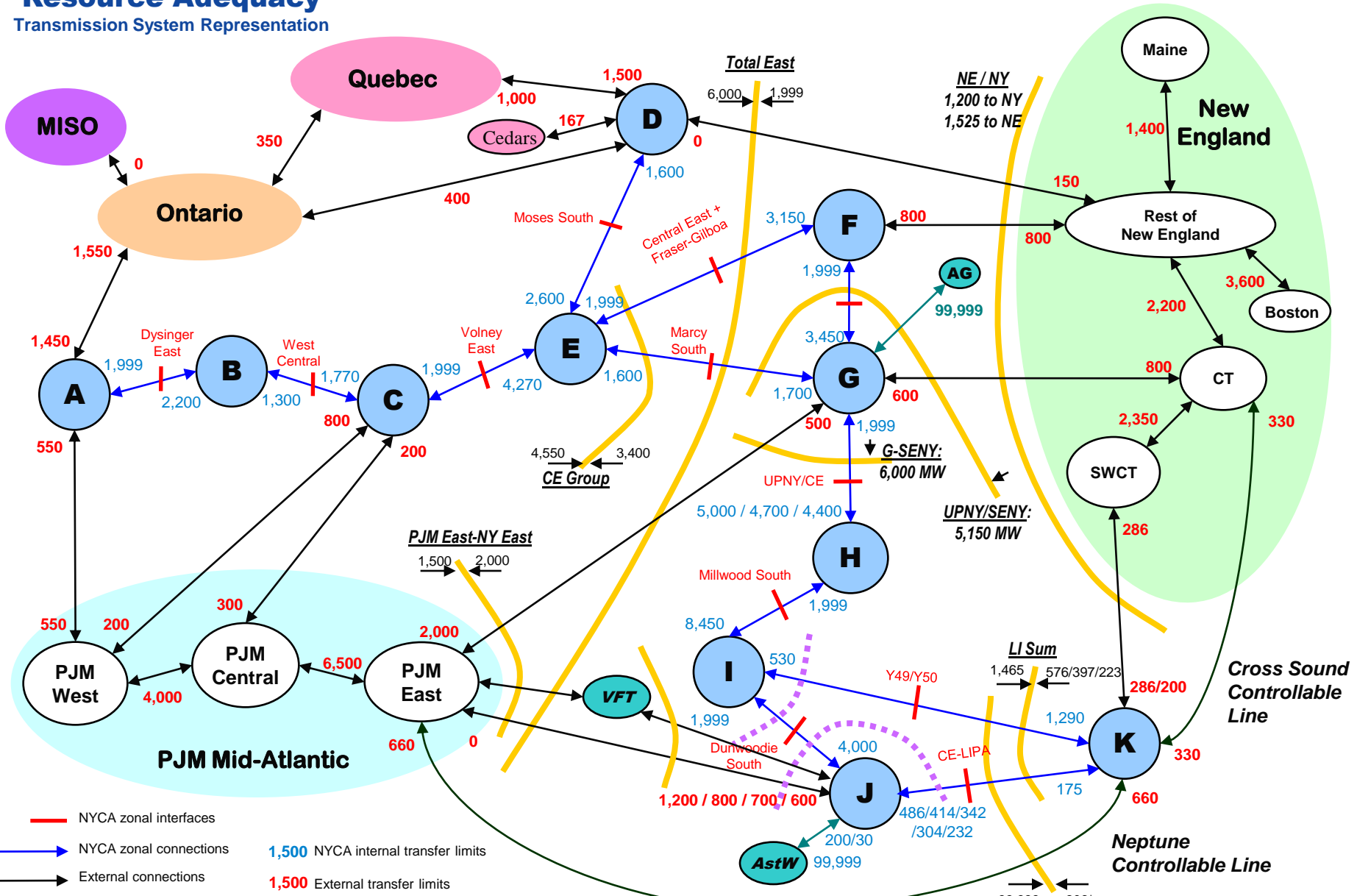
- Resource Adequacy Assessments require the development of transfer limits for use in the models employed
- These transfer limits are developed to limit the flow of capacity assistance from one zone to another
- The model does not employ a full network model but uses nomograms and interface groupings to more accurately represent the transmission limitations
- These all need to be updated to reflect system changes

# Multi-Regional Transfer Analysis (cont.)

- Internal interface limits are developed by each region in their own transfer limit studies and the models are updated accordingly
- Interregional interface limits are studied both individually and coordinated on an inter-regional basis
- This analysis focused on the assessment of the interface groupings and limits employed in the model that have been developed to account for the impact of loop flow on the ability to transfer capacity assistance
- Other aspects of the model will be examined in future study work

# Resource Adequacy

## Transmission System Representation



— NYCA zonal interfaces

↔ NYCA zonal connections

↔ External connections

1,500 NYCA internal transfer limits

1,500 External transfer limits

Standard Grouping

⊙ NYCA zone

⊙ "Dummy" zone for analysis

Grouping used for monitoring

ISO new england

# Multi-Regional Transfer Analysis – Loop Flow

- The predominant potential for border loop flow impact exists on the two free flowing interfaces between New York and New England
- These interfaces, as well as internal interfaces were analyzed for levels of border loop flow resulting from capacity assistance flowing from many combinations of zones in New York and New England to other zones in both
- The potential for border loop flow can be measured by the percentage of the total flow that appears on an individual interface, commonly referred to as a shift factor

# Multi-Regional Transfer Analysis – Loop Flow (cont.)

- The shift factors for these two interfaces are shown below for certain capacity shifts

Interface	ME-CT	CMA-CT	CMA-BOS	WMA-CT	Zone A Thru Zone C - Zone J	Zone F - Zone J	Zone A Thru Zone C - NEPOOL	ME-Zone J
NE-NY-N	17%	16%	1%	13%	-8%	-12%	-56%	51%
NE-NY-S	-17%	-16%	-1%	-13%	8%	12%	-43%	49%

- Comparing these shift factors to past studies indicated that the recent limits do not need to be modified