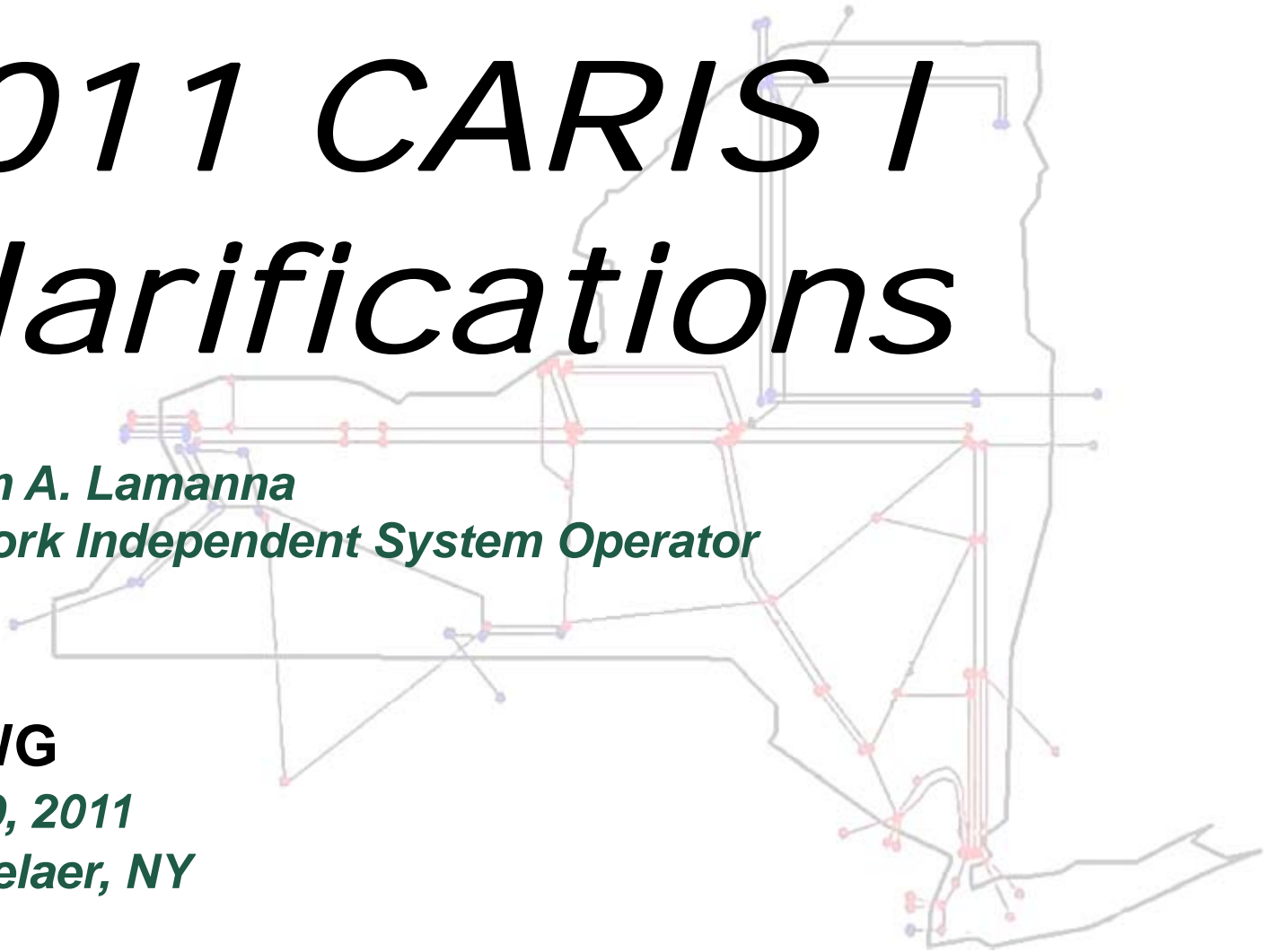


# *2011 CARIS I Clarifications*

*William A. Lamanna  
New York Independent System Operator*

**ESPWG**  
*May 19, 2011  
Rensselaer, NY*



## *Additional Modeling Clarifications*

- ◆ Why West Central was chosen in 2009  
CARIS
- ◆ Central – East Transfer Limits

# West Central – 2009 CARIS

## ◆ From the 2009 CARIS 1 Report

Ranked Elements Based on the Highest Present Value of Congestion over the Fifteen Years Aggregate

Constraints	Present Value of Congestion in 2009 \$ m		
	Historic	Future	Aggregate
LEEDS-PLEASANT VALLEY 345	\$2,063	\$1,307	\$3,370
CENTRAL EAST	\$2,442	\$567	\$3,009
WEST CENTRAL-OP	(\$120)	(\$230)	(\$350)
DUNWOODIE-SHORE ROAD 345	\$1,770	\$59	\$1,829
MOTT HAVEN-RAINEY 345	\$341	\$66	\$407
ASTORIA W 138-HELLGATE5-138	\$50	(\$78)	(\$28)

Note: Allowance for diminishing congestion in the future years in the approved ranking procedure directs the selection of West Central as the third ranked element.

# Central – East Transfer Limit

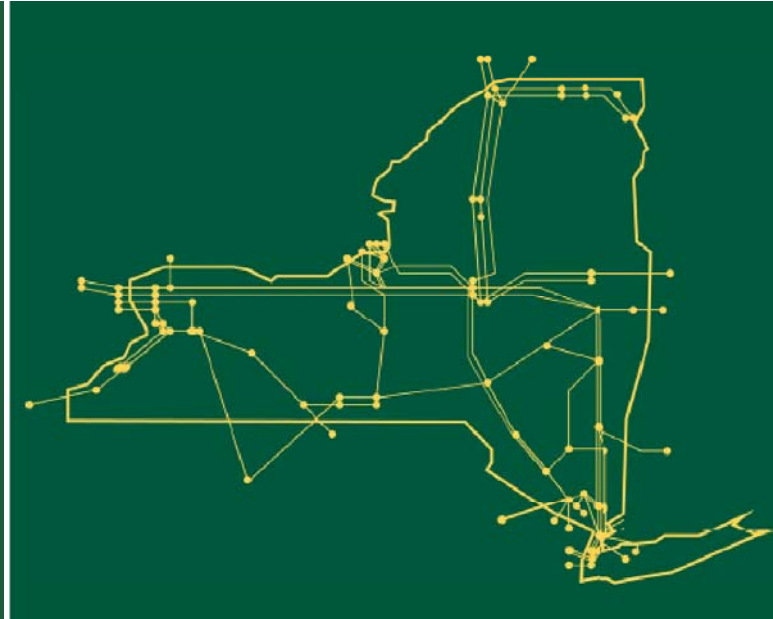
- ◆ Apply 100 MW operating margin – see attached links for all interfaces
- ◆ [http://www.nyiso.com/public/webdocs/market\\_data/power\\_grid\\_info/margin\\_with\\_external\\_trm.pdf](http://www.nyiso.com/public/webdocs/market_data/power_grid_info/margin_with_external_trm.pdf)
  
- ◆ Also, from the Transmission Services document:
  - ◆ **7.3.3. Transmission Reliability Margin**
  - ◆ **Transmission Reliability Margin (TRM) is defined as the amount of transmission transfer capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.**
  - ◆ **Transmission Reliability Margin provides a reserve transfer capability that ensures the reliability of the interconnected transmission network under a broad range of potential system conditions. Transmission Reliability Margin accounts for the inherent uncertainty in system conditions and their associated affects on TTC and ATC calculations, and the need for operating flexibility to ensure reliable system operation as system conditions change.**
  - ◆ **The TRM may be applied to the ATC calculation to address unanticipated system conditions such as normal operating margin, parallel flows, load forecast uncertainty and other external system conditions. The TRM may be used to insure the transmission system is not over scheduled thus causing or aggravating real time operational problems.**

# Gold Book Updates – Transmission – highlighted not included

TABLE VII - 1  
PROPOSED TRANSMISSION FACILITIES (10)

Queue Pos.	Transmission Owner	Terminals	Line Length miles (1)	Expected Service Date/Yr		Nominal Voltage in kV		
				Prior to (2)	Year	Operating	Design	
<b>Merchant</b>								
206	Hudson Transmission Pa	Bergen 230 kV (New Jers	West 49th Street	345kV		2013	345	345
<b>Firm Plans (included in 2011 Base Cases)</b>								
	NYPA	Niagara	Rochester	-70.20	W	2013	345	345
	NYPA (5)	Niagara	BPS Station	66.40	W	2013	345	345
	NYPA	Dysinger Tap	Rochester	-44.00	W	2013	345	345
	NYPA (5)	Dysinger Tap	BPS Station	40.20	W	2013	345	345
	NYPA (5)	BPS Station	Rochester	3.80	W	2013	345	345
	NYPA (11)	Pannell	Clay	-61.60	W	2016	345	345
	NYPA (5) (11)	Pannell	uburn New 345/115 kV Sut	21.00	W	2016	345	345
	NYPA (5) (11)	uburn New 345/115 kV Su	Clay	40.60	W	2016	345	345
	NYSEG	uburn New 345/115 kV Su	uburn New 345/115 kV Sut	xfrmr	W	2016	345/115	345/115
	NYSEG	uburn New 345/115 kV Su	State Street	15.00	W	2016	115	115
	O & R	ConEd's Line Y94	Lovett	xfrmr	S	2017	345/138	345/138
	RGE	k Power System (BPS) Sta	Rochester, NY	ow Station	W	2013	345/115	345/115
	RGE	NYPA SR1-39 345kV Line	Rochester, NY	xfrmr	W	2013	345/115	345/115
	RGE	NYPA NR-2 345kV Line	Rochester, NY	xfrmr	W	2013	345/115	345/115

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



[www.nyiso.com](http://www.nyiso.com)