

2014 Summer Capacity Assessment

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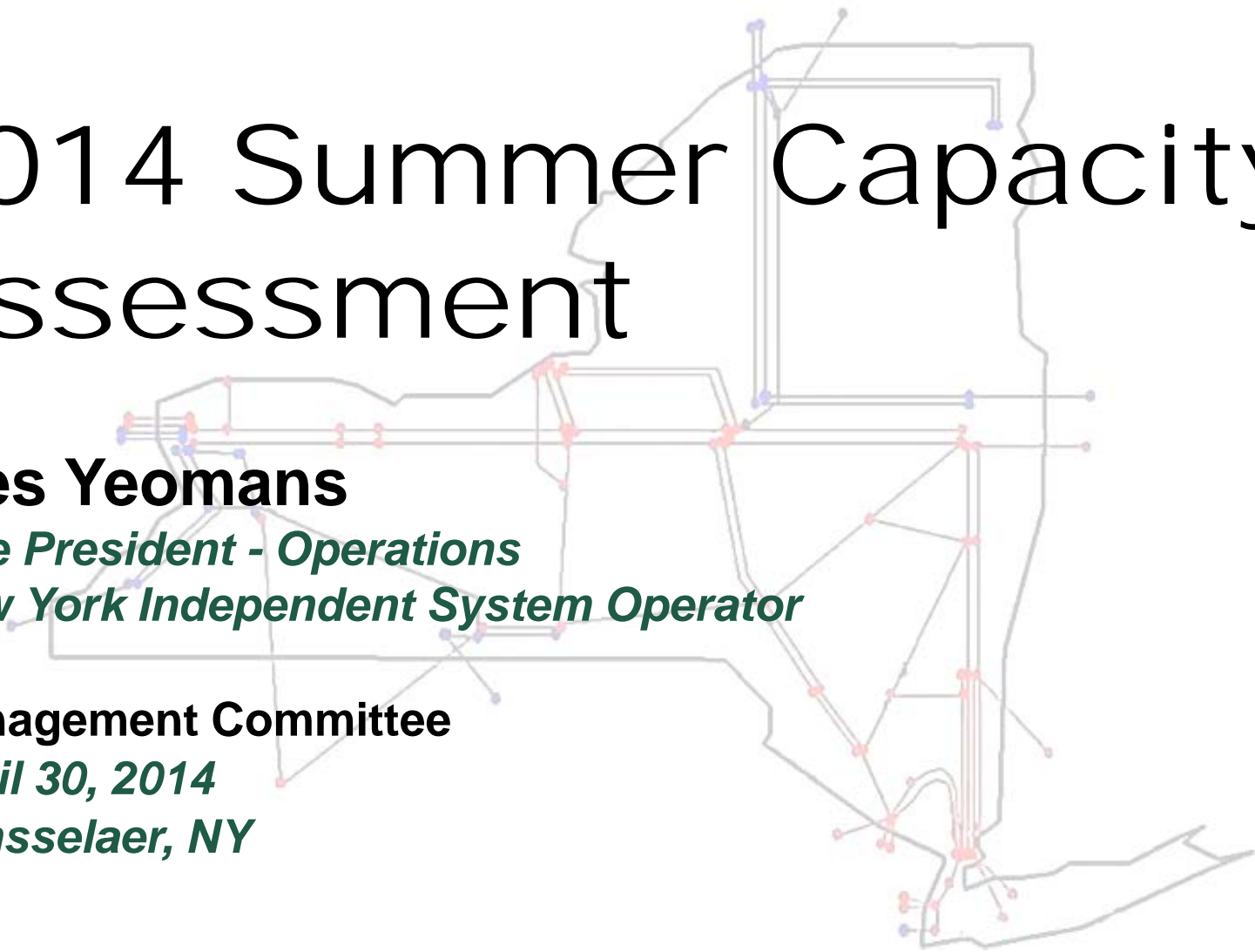
Vice President - Operations

New York Independent System Operator

Management Committee

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Rensselaer, NY



Highlights

- ◆ **This summer capacity assessment utilizes a “deterministic approach” for the purposes of forecasting excess capacity margins for baseline and extreme weather conditions peak load and reserve requirements**
 - *NERC Standard TOP-002-2.1b — Normal Operations Planning, Requirement 7: Each Balancing Authority shall plan and secure sufficient day ahead capacity to secure for the single largest Contingency*
 - *The assessment utilizes one set of projected derates based on five year EFoRd averages*
- ◆ **At baseline peak weather conditions:**
 - *+879 MW of operating margin*
- ◆ **At extreme weather (90th percentile forecast):**
 - *-1,431 MW shortage of operating margin*

2014 Summer Installed Capacity, Preliminary Assessment - April 9, 2014

						Updated for 2014 GB	
Line	Item	2012 Baseline Forecast	2013 Baseline Forecast	2013 90th Percentile Forecast	2014 Baseline Forecast	2014 90th Percentile Forecast	
1a	Installed Capacity Resources - Deliverable	38,405	37,779	37,779	37,797	37,797	
1c	SCR - ICAP Values	2,165	1,484	1,484	1,189	1,189	
1d	Net ICAP Imports	1,901	1,969	1,969	2,130	2,130	
1	Total Capacity Resources	42,471	41,232	41,232	41,116	41,116	
2	Assumed Unavailable Capacity (Gen & SCR) ¹	-4,329	-4,800	-4,800	-4,606	-4,606	
3 = 1 + 2	Net Capacity Resources	38,142	36,432	36,432	36,510	36,510	
4	Peak Load Forecast	33,295	33,279	35,767	33,666	35,976	
5	Operating Reserve Requirement	1,965	1,965	1,965	1,965	1,965	
6 = 4+5	Total Operating Requirement	35,260	35,244	37,732	35,631	37,941	
7 = 3 - 6	Operating Margin	2,882	1,188	-1,300	879	-1,431	

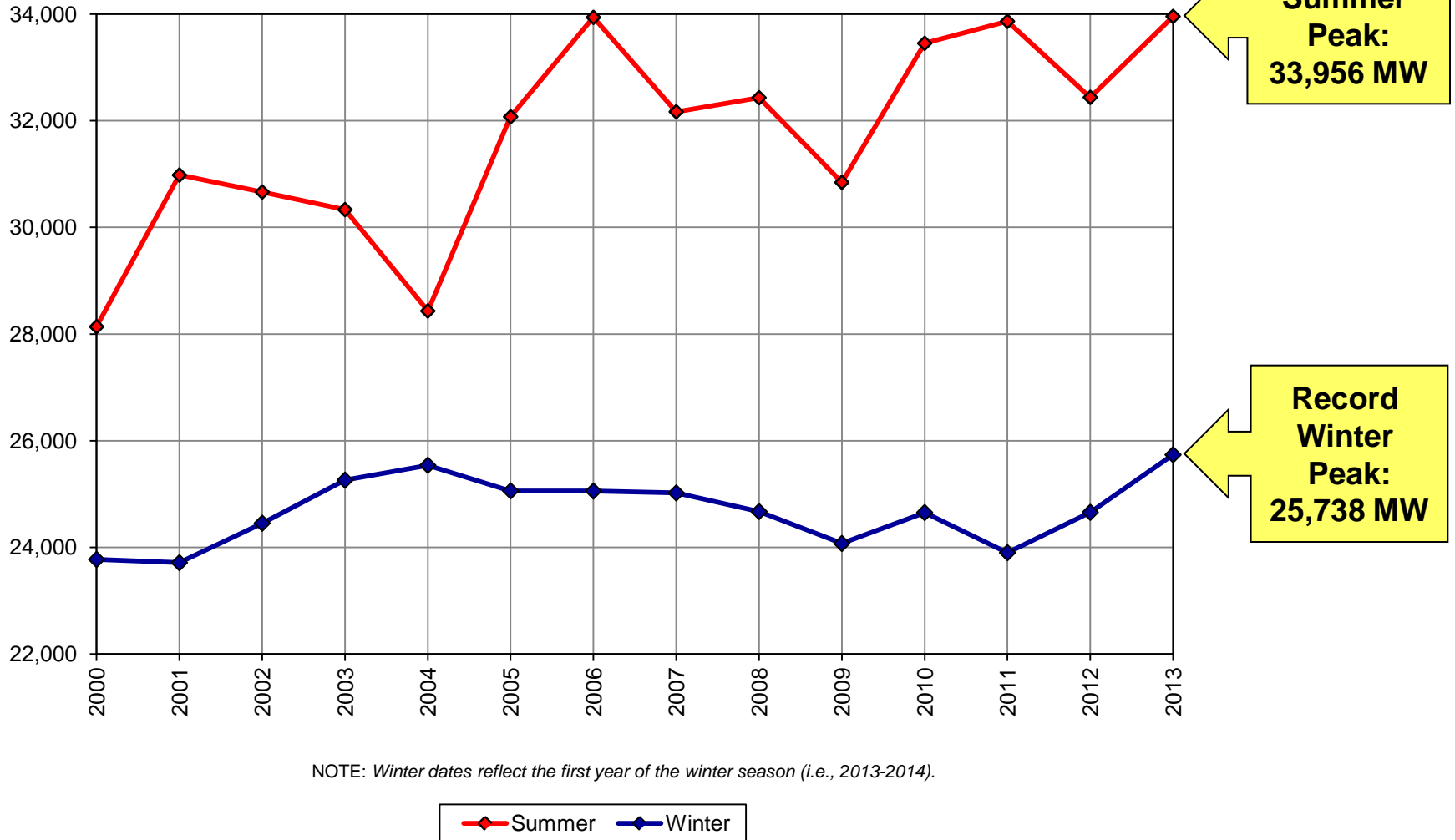
1. For 2014, this includes 1245 MW for wind, 519 MW for Run-of-River Hydro, 94 MW for Large Hydro, 2578 MW for thermal units, 47 MW for other renewables, and 123 MW for SCR.

2014 Emergency Operating Procedures

Emergency Operating Procedures		
Procedure	Effect	2014 MW Value
Emergency Demand Response Programs	Load Impact	13
Voltage Reductions	Load Impact	517
Voluntary Industrial Curtailment	Load Impact	116
General Public Appeals	Load Impact	88
Emergency Purchases (Estimate)	No Load Impact	500
Thirty Minute Reserves to Zero	No Load Impact, but allow Operating Reserve to decrease	655
Total Emergency Operating Procedures		1,889

New York Control Area Seasonal Peaks: 2000-2013

Peaks Shown are Actual MW, Without Demand Response

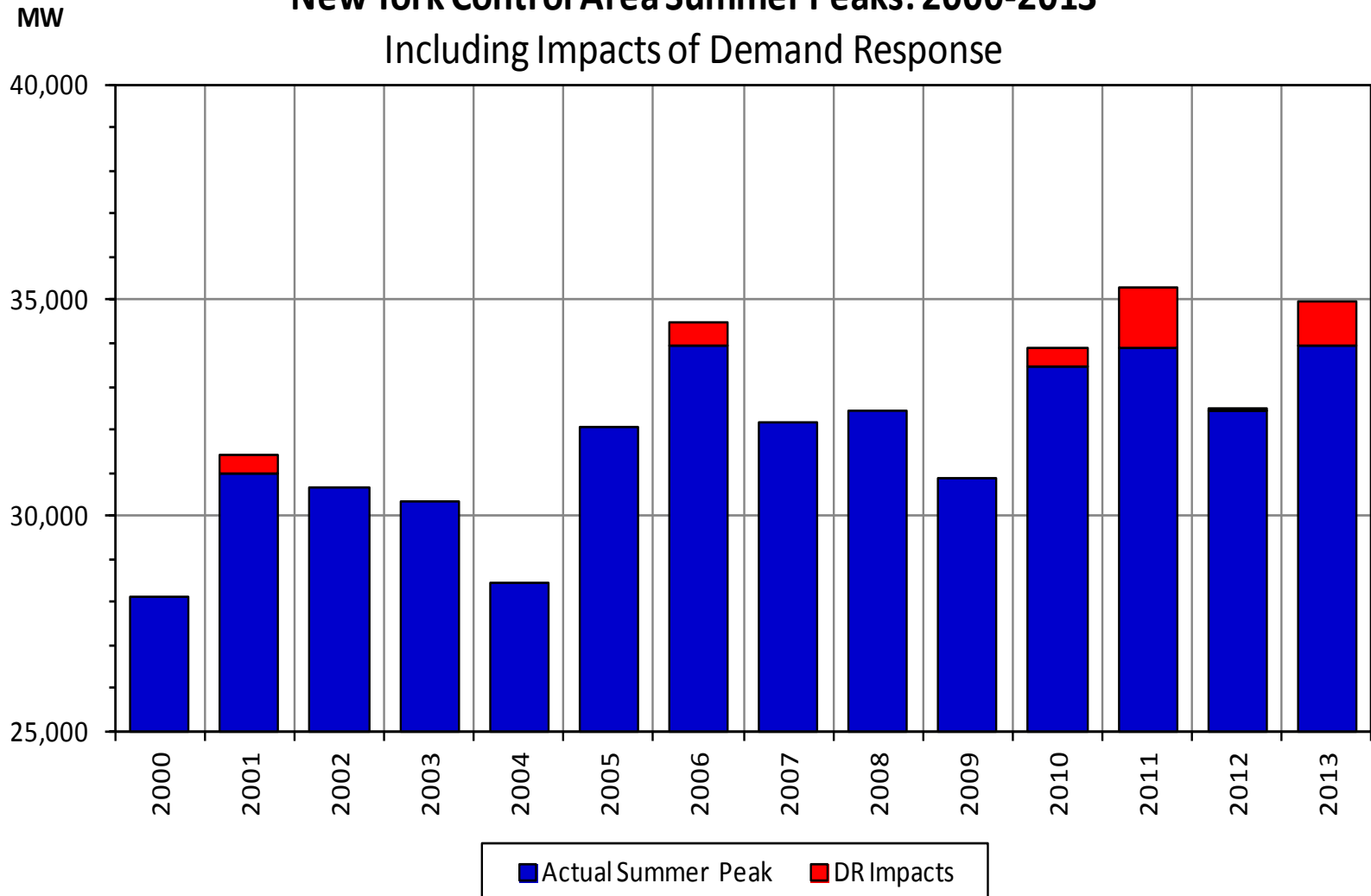


Record Summer Peak: 33,956 MW

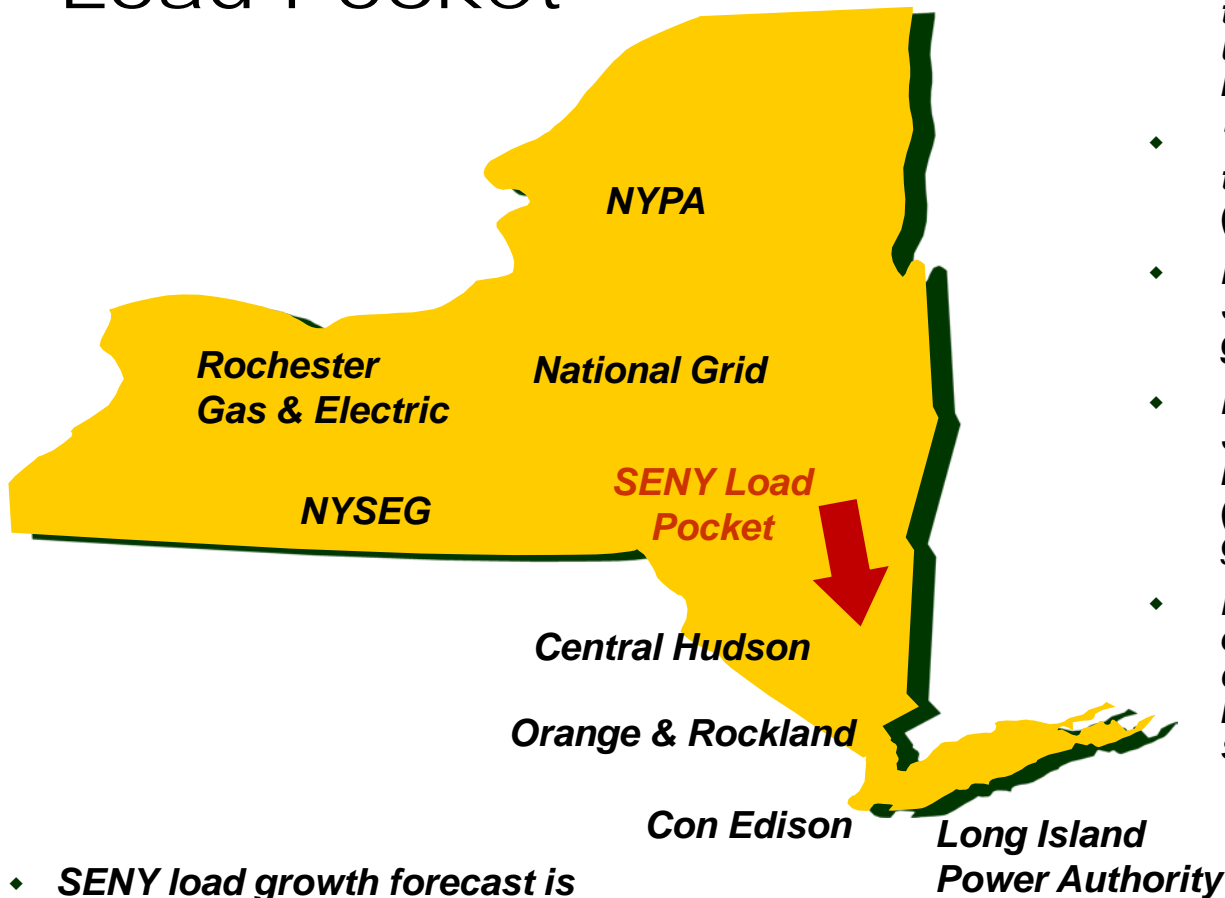
Record Winter Peak: 25,738 MW

New York Control Area Summer Peaks: 2000-2013

Including Impacts of Demand Response



Summer 2014 Southeast NY (SENY) Capacity Procurement for Load Pocket

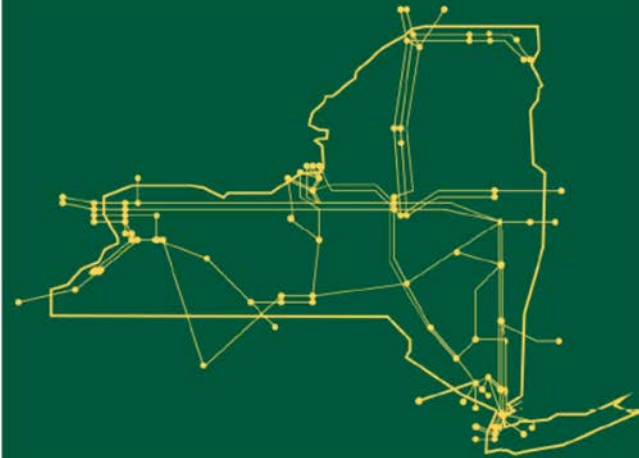


- ◆ **64% of the state's load is in Southeast New York**
- ◆ **There is insufficient local SENY generation and external ICAP to meet peak demand needs so upstate generation is needed to meet load**
- ◆ **The transmission system into the SENY load pocket is limited (approximately 3,000 MW)**
- ◆ **For normal weather – 10.2% of SENY load is met from upstate generation (2,191 MW)***
- ◆ **For extreme weather – 13.6% of SENY load would need to be met from upstate generation (3,121 MW)*** Note: this is greater than the transmission limit
- ◆ **For Summer 2014, under extreme weather conditions, demand response will be required for transmission security**

*Assumes all external ICAP (UDRs) at elected 2014 levels

- ◆ **SENY load growth forecast is 200-350MW/year**

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.



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