

# *2010 Draft RNA*

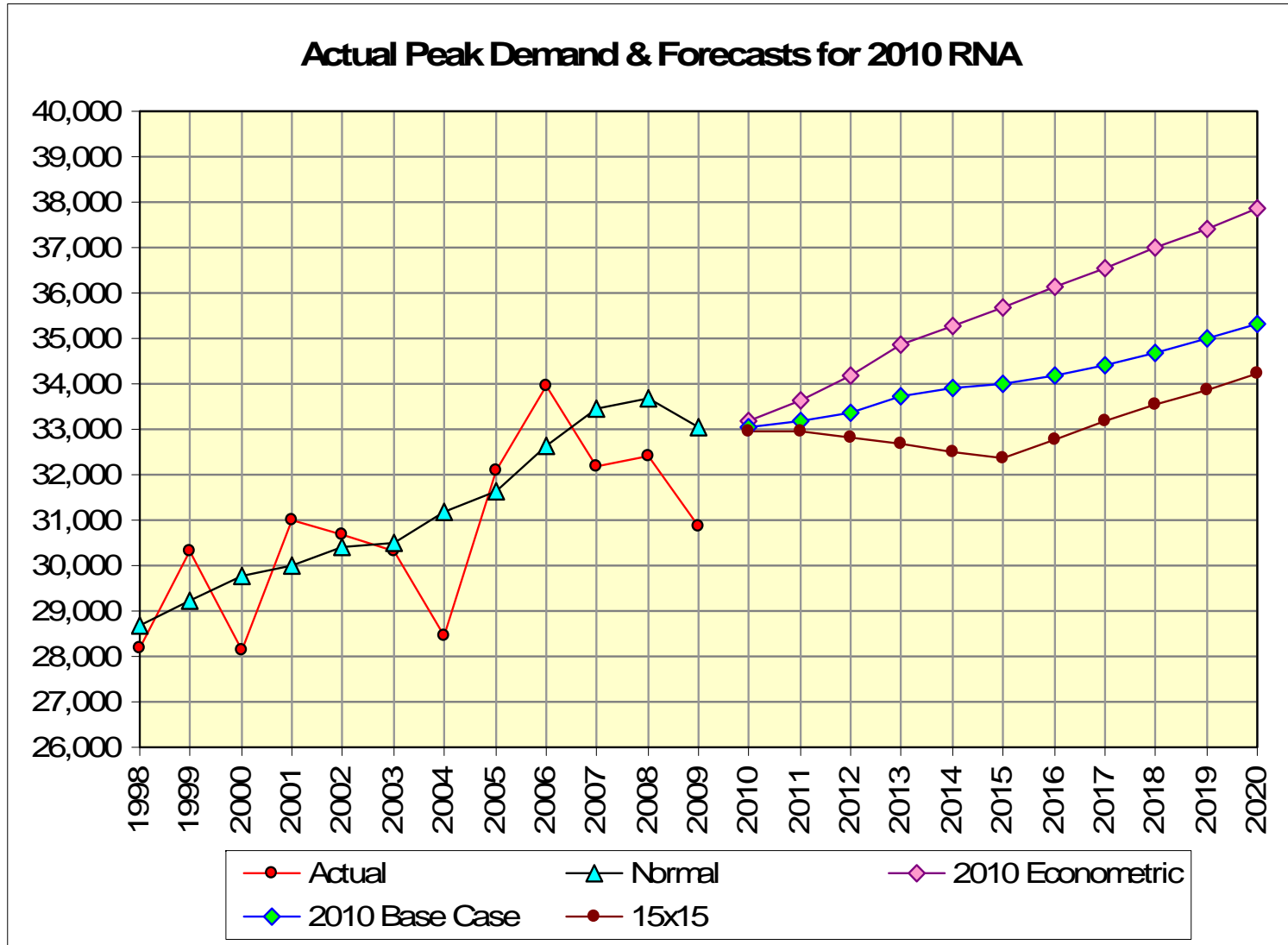
**Presented By  
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**Management Committee  
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NYISO – Krey Blvd  
*Draft – for discussion only***

## *Topics:*

- ◆ *Primary Factors Driving 2010 RNA Results*
  - 2010 RNA Load Forecast
  - Generation Additions
  - SCR Forecast and Reserve Margins
- ◆ *RNA Scenarios*
- ◆ *Resource adequacy (LOLE) and transmission capability analysis results*
- ◆ *RNA Summary*
- ◆ *Recommendations*

# 2010 RNA Load Forecasts



# *2009 RNA - 2010 RNA Load and Capacity Comparison*

	<b>2009 RNA Horizon Year 2018</b>	<b>2010 RNA Year 2018</b>	<b>Year 2018 Delta MW</b>	<b>2010 RNA Horizon Year 2020</b>
NYCA Load	35,658	34,672	-986	35,334
SCR	2084	2210	126	2251
Capacity without SCRs	40,452	41,239	787	41,239
Unit Retirements	1272	983	-289	983

## NYCA Load and Resource Margins 2010 to 2020

### Base Case Load Forecast

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Peak Load</b>										
<b>NYCA</b>	<b>33,160</b>	<b>33,367</b>	<b>33,737</b>	<b>33,897</b>	<b>34,021</b>	<b>34,193</b>	<b>34,414</b>	<b>34,672</b>	<b>34,986</b>	<b>35,334</b>
Zone J	11,775	11,815	11,925	11,995	12,065	12,120	12,218	12,298	12,404	12,510
Zone K	5384	5432	5455	5470	5489	5554	5586	5631	5685	5771
<b>Resources</b>										
<b>NYCA</b>										
Capacity	40,447	40,647	41,338	41,239	41,239	41,239	41,239	41,239	41,239	41,239
SCR	2065	2091	2151	2165	2171	2180	2193	2210	2230	2251
<b>Total</b>	<b>42,512</b>	<b>42,738</b>	<b>43,489</b>	<b>43,404</b>	<b>43,410</b>	<b>43,419</b>	<b>43,432</b>	<b>43,449</b>	<b>43,469</b>	<b>43,490</b>
Res./Load Ratio	128.2%	128.1%	128.9%	128.0%	127.6%	127.0%	126.2%	125.3%	124.2%	123.1%
<b>Zone J</b>										
Capacity	10,332	10,332	10,332	10,332	10,332	10,332	10,332	10,332	10,332	10,332
SCR	569	571	576	580	583	586	591	594	600	605
<b>Total</b>	<b>10,901</b>	<b>10,903</b>	<b>10,908</b>	<b>10,912</b>	<b>10,915</b>	<b>10,918</b>	<b>10,923</b>	<b>10,926</b>	<b>10,932</b>	<b>10,937</b>
Res./Load Ratio	92.6%	92.3%	91.5%	91.0%	90.5%	90.1%	89.4%	88.8%	88.1%	87.4%
<b>Zone K</b>										
Capacity	6311	6311	6311	6311	6311	6311	6311	6311	6311	6311
SCR	188	189	190	191	191	193	195	196	198	201
<b>Total</b>	<b>6499</b>	<b>6500</b>	<b>6501</b>	<b>6502</b>	<b>6502</b>	<b>6504</b>	<b>6506</b>	<b>6507</b>	<b>6509</b>	<b>6512</b>
Res./Load Ratio	120.7%	119.7%	119.2%	118.9%	118.5%	117.1%	116.5%	115.6%	114.5%	112.8%

# *RNA Scenarios*

## ***Load Forecast Scenarios:***

- ◆ *Base Case Load Forecast*
- ◆ *Econometric Load Forecast (Gold Book)*
- ◆ *45 x 15 RPS/EEPS*

## ***Other Scenarios:***

- ◆ *Indian Point Plant Retirement*
- ◆ *Zonal Capacity at Risk*
- ◆ *Existing Transmission Capacity for Native Load*
- ◆ *Wheel Throughs*
- ◆ *Environmental Policy Initiatives*
- ◆ *Wind Generation*

# 2010 RNA LOLE Results: Base Case

Area/Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AREA-A										
AREA-B										
AREA-C										
AREA-D										
AREA-E										
AREA-F										
AREA-G									<.01	<.01
AREA-H										
AREA-I									0.01	0.01
AREA-J									0.01	0.01
AREA-K										
NYCA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.01

## *RNA LOLE Results: Base Case & Scenarios*

	<u>Year of Need</u>	<u>LOLE 2015</u>	<u>LOLE 2020</u>
<b>RNA Base Case</b>	<b>None</b>	<b>0.0</b>	<b>0.0</b>
<b>1. Econometric w/o EEPS</b>	<b>2019</b>	<b>0.02</b>	<b>0.25</b>
<b>2. Indian Pt Plant Retirement</b>	<b>2016</b>	<b>NA</b>	<b>0.38</b>
<b>3. 45 x 15 RPS/EEPS</b>	<b>None</b>	<b>0.0</b>	<b>0.0</b>



# *Indian Point Plant Retirement Scenario Results*

- ◆ Reliability Violations Would Occur with Base Case Forecast
  - *LOLE Violations in 2016 and thereafter*
  - *Thermal Violations per Reliability Criteria*
- ◆ Voltage Performance Would Be Degraded
- ◆ Load Relief Measures Would Be Required
- ◆ Significantly Higher LOLEs Will Occur If Econometric Forecast Materializes

# *RNA Summary*

- ◆ RNA Base Case shows no Reliability Needs for the ten year period, with system as modeled, therefore, the NYISO will not request solutions in preparation for the 2010 CRP.
- ◆ 2010 CRP Report will be developed
  - *Scenarios show sensitivity of needs to input data*
  - *2010 CRP will be starting point for 2011 CARIS*
  - *Projects in the 2010 RNA Base Case and solutions included in prior CRPs will continue to be monitored*
- ◆ The NYISO will address any newly identified Reliability Need in the subsequent RNA or, if necessary, issue a request for a Gap solution.

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# *Recommendation*

- ◆ Draft RNA Report was reviewed at five joint ESPWG/TPAS meetings and stakeholder comments have been incorporated
- ◆ Some Board member comments have also been incorporated
- ◆ The MMU has reviewed the RNA Report (See MMU Memorandum)
- ◆ OC concurs with findings of the 2010 RNA Report
- ◆ Recommendation (See Motion):
  - *Recommend concurrence by the MC*
  - *Recommend approval by the NYISO Board*



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