NYISO 2003 Summer Peak Load

30,333 MW June 26, Hour Ended 5 PM



DRIVERS



PERATOR

NYISO Electric System Planning Process

LFTF Role

- 1. Review NERC, NPCC, NYISO Load & Capacity Report forecasts
- 2. Develop Process for 10 Year Forecast
 - Input from all Market Participants
 - Solicit NYSERDA, other Agency inputs
 - Subject to evaluation by NYISO, similar to ICAP load forecast
- 3. Develop 10 Year Forecast
 - Based on common set of assumptions (e.g., Economy.com)
 - Linked with EDRP, other DSM programs
- 4. End of Feb. 2004 completion date

NYISO Electric System Planning Process (1)

ESP Load Forecasting Process Strawman

 $\underline{1} \qquad \mathbf{R'} = \mathbf{GWH}/\mathbf{GSP} = \mathbf{aGSP}^{(b-1)}\mathbf{P}_e^{(b2)}$

Estimated from historical information by NYISO staff

	R							
						Overall	04 - 13	
	Epoch 1	Epoch 2	Epoch 3	Epoch 4	Epoch 5	<u>Average</u>	Forecast	
TO 1	0.84	0.97	1.04	1.10	1.01	1.007	1.100	1.060
TO 2	1.10	1.02	1.06	1.15	1.02	1.052	1.050	1.030
TO 3	1.02	1.04	1.07	1.05	1.05	1.050	0.980	1.000
MES 1 (in TO 1 TD	1.12	1.13	1.09	1.11	1.06	1.096	1.100	1.110
MES 2 (in TO 3 TD)	1.02	1.04	1.07	1.05	1.05	1.050	1.040	1.070

E

or

Epochs correspond to more or less distinct economic periods (recession, oil embargoes, etc.)

<u>Acceptanc</u>				
	Low	<u>High</u>	Accept	Investigate
TO 1	0.97	1.04		х
TO 2	1.06	1.10	х	
TO 3	1.04	1.05		х
MES 1 (in TO 1 TD	1.09	1.12	х	
MES 2 (in TO 3 TD)	1.04	1.05		х
	Acceptance TO 1 TO 2 TO 3 MES 1 (in TO 1 TD MES 2 (in TO 3 TD)	Acceptance Range Low TO 1 0.97 TO 2 1.06 TO 3 1.04 MES 1 (in TO 1 TD 1.09 MES 2 (in TO 3 TD) 1.04	Low High TO 1 0.97 1.04 TO 2 1.06 1.10 TO 3 1.04 1.05 MES 1 (in TO 1 TD 1.09 1.12 MES 2 (in TO 3 TD) 1.04 1.05	Acceptance Range High Accept TO 1 0.97 1.04 TO 2 1.06 1.10 x TO 3 1.04 1.05 MES 1 (in TO 1 TD 1.09 1.12 x MES 2 (in TO 3 TD) 1.04 1.05

NYISO Electric System Planning Process (2)

3 Investigate Forecasted R's not in Acceptance Range

Changing composition of GSP (structural change) DSM/NYSERDA Programs Etc.

		Final	Energy Forecast	
		2004	2005	2013
	<u>R</u>	<u>GSP</u>	GSP	<u>GSP</u>
TO 1	1.060		61886.8	69270.3
TO 2	1.050		54666.7	62160.0
TO 3	0.980		33469.4	33984.5
MES 1 (in TO 1 TD	1.060		6188.7	7012.5
MES 2 (in TO 3 TD)	0.980		1673.5	1905.5
		2004	2005	2013
		<u>GWH</u>	<u>GWH</u>	<u>GWH</u>
TO 1		X	65,600	73,427
TO 2		Х	57,400	65,268
TO 3		Х	32,800	33,305
MES 1 (in TO 1 TD		Х	6,560	7,433
MES 2 (in TO 3 TD)		Х	<u>1,640</u>	<u>1,867</u>
		Х	164,000	181,300

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<u>5</u> Final Peak Forecast

<u>4</u>

TBD

NYISO Electric System Planning Process (3)

Still TBD

Converting Energy to Peak forecast Source of Electric Price Variable(s) DSM/EDRP MP Inputs ???





SYSTEM OPERATOR