

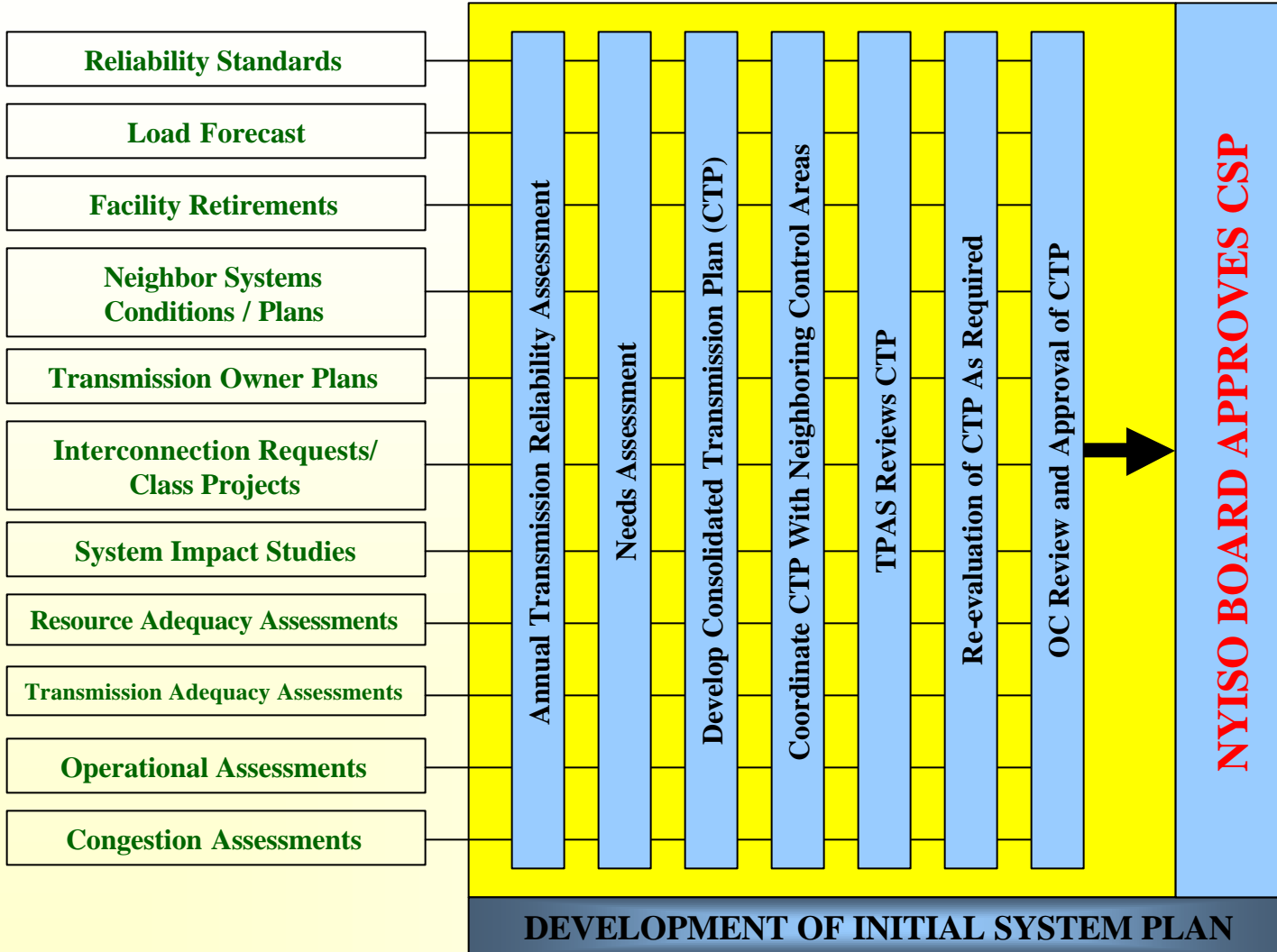
NYISO Electric System Planning Process

Two Phases

1. **Development of Consolidated System Plan**
 - **Approved by Operating Committee**
 - ♦ **Consolidate NERC, NPCC, NYSRC reliability assessments for overall view of system adequacy and security**
 - ♦ **10 year horizon**
 - ♦ **Examination of historical economic impact of congestion**
2. **Comprehensive: Economic as well as reliability considerations**

Draft – for discussion purposes only

DRIVERS

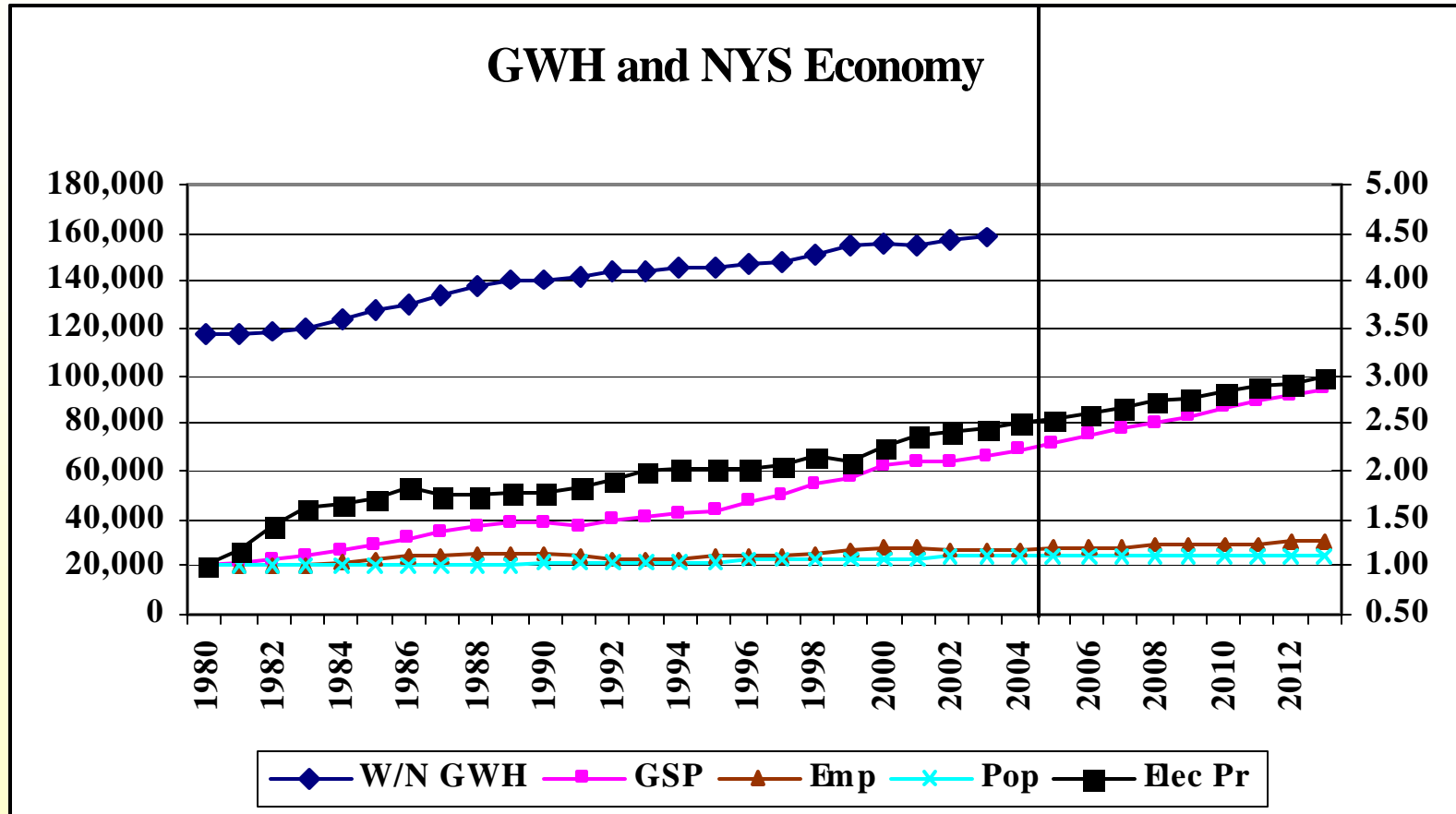


NYISO Electric System Planning Process

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)



NYISO Electric System Planning Process (1)

1 $R' = \text{GWH/GSP} = a\text{GSP}(b-1)\text{Pe}(b2)$ Estimated from historical information by NYISO staff

	<u>R</u>					Overall	04 - 13	<u>R'</u>
	Epoch 1	Epoch 2	Epoch 3	Epoch 4	Epoch 5	Average	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

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

2

Acceptance Range

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

3 Investigate Forecasted R's not in Acceptance Range

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

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.

4

<u>Final Energy Forecast</u>				
	<u>R</u>	<u>2004</u> <u>GSP</u>	<u>2005</u> <u>GSP</u>	<u>2013</u> <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
		<u>2004</u> <u>GWH</u>	<u>2005</u> <u>GWH</u>	<u>2013</u> <u>GWH</u>
TO 1		x	65,600	<u>73,427</u>
TO 2		x	57,400	<u>65,268</u>
TO 3		x	32,800	<u>33,305</u>
MES 1 (in TO 1 TD)		x	6,560	<u>7,433</u>
MES 2 (in TO 3 TD)		x	<u>1,640</u>	<u>1,867</u>
		x	164,000	<u>181,300</u>

5 Final Peak Forecast

TBD

NYISO Electric System Planning Process (3)

Still TBD

Converting Energy to Peak forecast

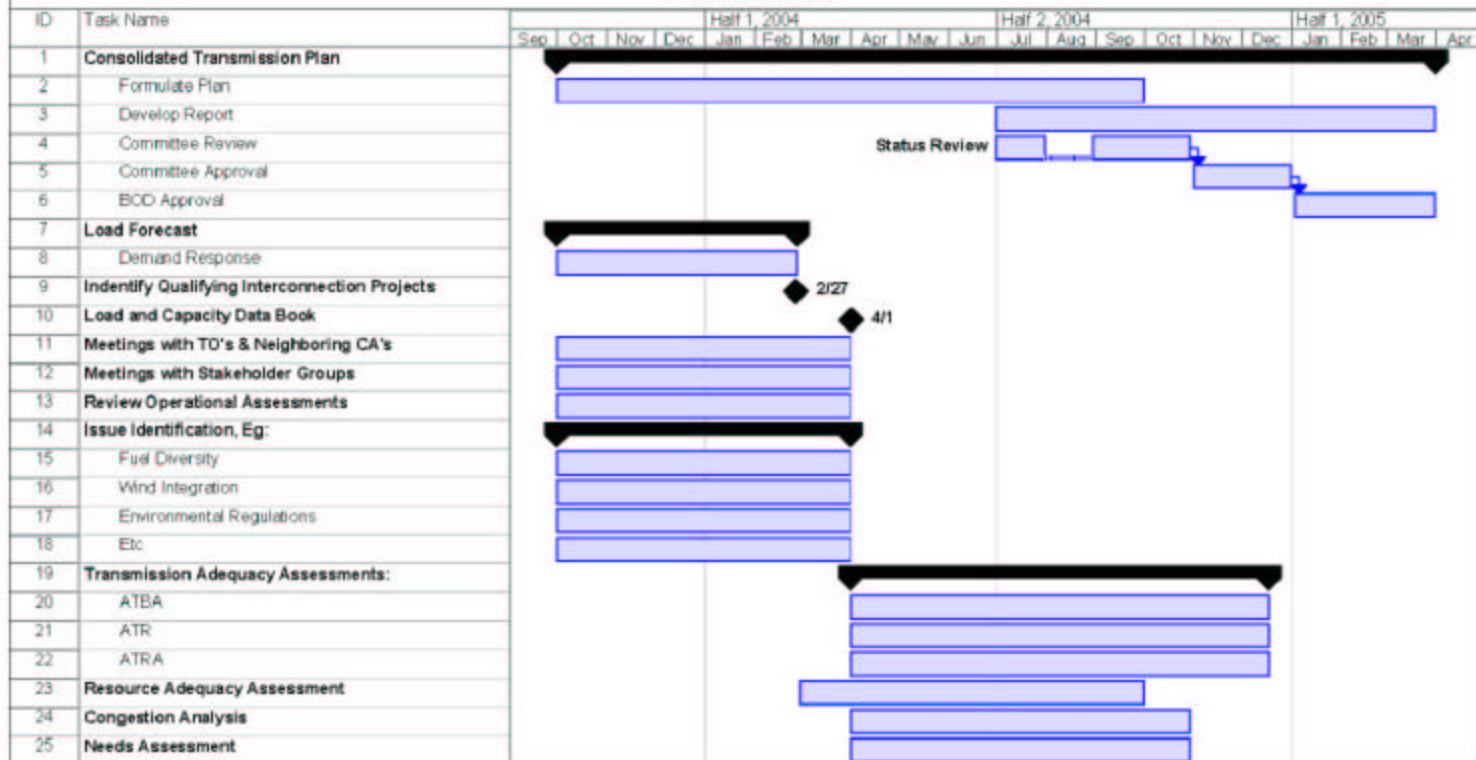
- ◆ Trend in Load Factors
- ◆ Trends in customer mix
- ◆ End-Use trends

Source of Electric Price Variable(s)

DSM/EDRP

MP Inputs

**Consolidated Planning Process
Proforma Timeline**



Project: consol_plan_process2 Date: Wed 6/4/03	Task		Milestone		External Tasks	
	Split		Summary		External Milestone	
	Progress		Project Summary		Deadline	