Revised Case IIc
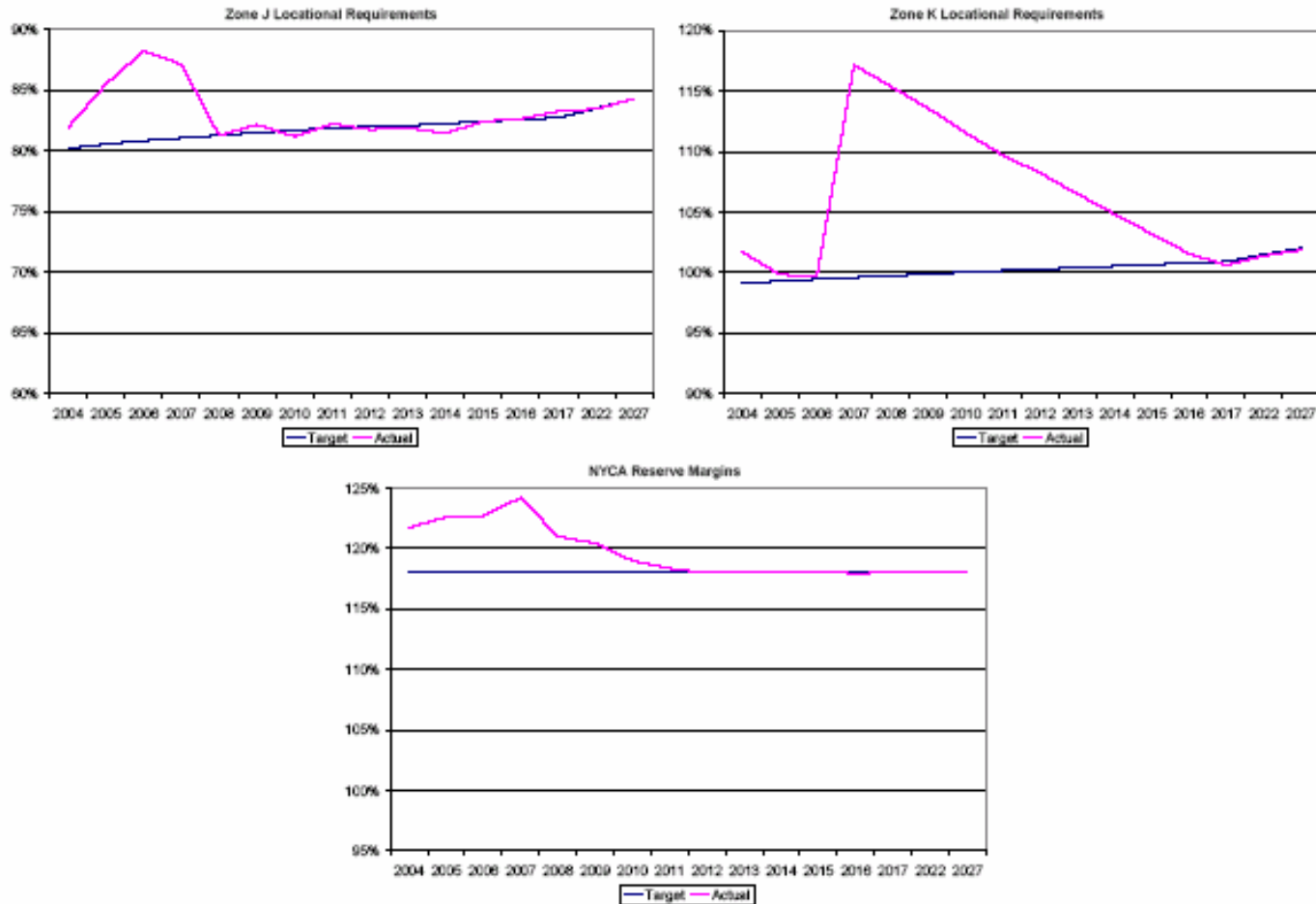## Adjustment of Net Revenues from Energy Used to Offset the NYC and RoS ICAP Demand Curve

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ICAPWG - 8/27/04

Problem

Net revenues calculated by Levitan are too small because capacity modeled in study is above equilibrium point

Proposal for NYC

Extrapolate Net Energy Revenues at 80% equilibrium point using historic excess capacity as reported in Locational Installed Capacity Requirement Study and Net Revenues from Patton State of the Market Study.

Extrapolated NYC Net Revenue

Extrapolation of NYC Net Energy Rev ($/kW-yr)
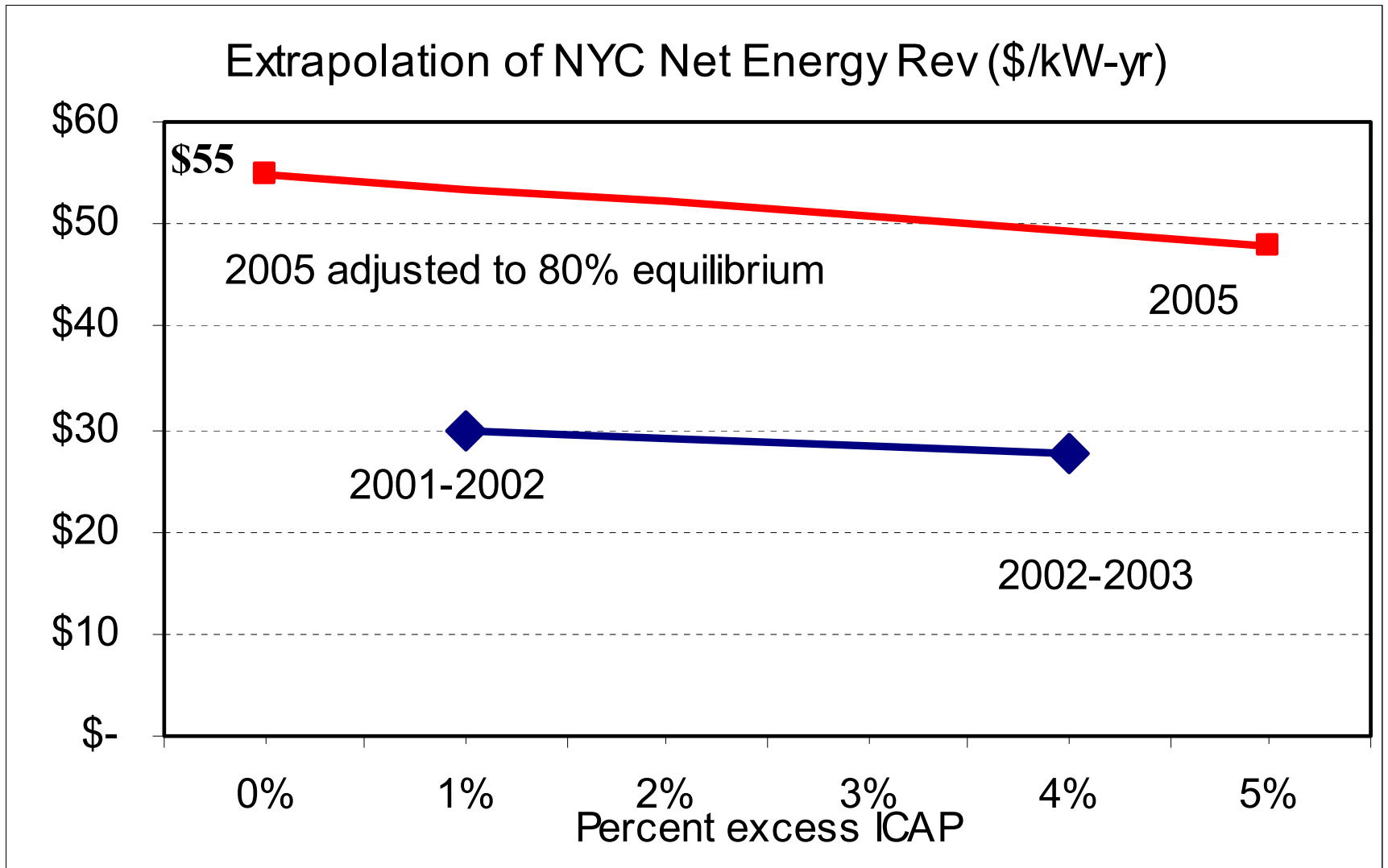
NYC – Case IIc Results

Extrapolated to 80%

Levelized capacity revenue requirement

$$= \$176 - \$55 = \boxed{\$121}$$

Proposal for RoS

Use Historic Ratio of RoS to NYC Net Revenues* from Energy as Adjustment Factor

Adjustment for Excess:

$$\left\{ \frac{\text{Avg RoS NR @ 125\%}}{\text{Avg NYC NR 81\%}} \right\} \textbf{X} \text{ LAI NYC NR @ 80\%} = $$
(LM6000)

$$ = \boxed{\textbf{Future RoS NR @ 125\%} \\ \text{(LM6000)}} $$

Convert LM6000 to 7FA:

$$\text{Future RoS NR } \textbf{X} \left\{ \frac{\text{LAI } \underline{\text{7FA}}}{\text{NR }_{\text{LM6000}}} \right\} = \boxed{\textbf{Future RoS NR} \\ \textbf{@ 125\%}^{\text{(7FA)}}}$$
(LM6000)

* Net Revenues from Energy are referred to herein as NR or Net Revenues

Calculations

Use Historic Net Revenues from Patton State of the Market Report

2002-2003 **$/MW-hr**

NYC – Vernon $39.85

NYC – 345kV $17.60

NYC – Avg $28.71

RoS – Capital * $8.65

Historic Ratio = 0.3

LAI NYC NR = $55
@ 80% (LM6000)

$$\text{LAI NR} \quad \frac{\text{7FA}}{\text{LM6000}} = \frac{6}{7}$$

* Excluded West region as a viable site for GT entry

RoS - Case IIc Results

Adjustment for Excess

Future RoS Net Revenues **(LM6000)** $= 0.3 \text{ X } \$55 = \boxed{\$16.50}$

Convert to 7FA @ 125%

Future RoS Net Revenues **(7FA)** $= \$25 \text{ X } 6/7 = \boxed{\$14.15}$

Given that @ 130% NR = \$7 and extrapolating to 118%

Future RoS NR $= \boxed{\textbf{\$22.76}}$

Case IIc for RoS (calculated at 118% reserve margin)

Levelized capacity revenue requirement $= \$116 - \$22 = \boxed{\textbf{\$94}}$