

Demand Curve Reset

Issues For Analysis

New York Transmission Owners

December 8, 2009

Agenda

- Deliverability costs
- Types of reference units
- Curve shapes and crossing points
- NYC property taxes

Deliverability Costs

- Current system is in surplus; new generators aren't needed to meet reliability requirements during 3-year reset period
- RNA shows that new capacity may not be needed for a long time and ample transfer exists to ensure reliability.
- Retirements will free up deliverability rights, which new generators can utilize after 3 years
- Conclusion: Including deliverability cost in CONE to cover payment for SDU is not justified

Reference Unit - Tariff Requirement

Services Tariff (Sheet 157) states:

The periodic review shall assess (i) the current localized levelized embedded cost of a peaking unit in each NYCA Locality and the Rest of State to meet minimum capacity requirements...”

(Emphasis Added)

FERC Order 12/15/2005

- Proposal to base CONE exclusively on cost of a gas turbine is rejected, since new technologies may be developed
- Required consideration of “peaking units,” which may or may not be gas turbines
- A peaking unit is defined as:
 - The technology that results in the lowest fixed costs and highest variable costs among all other units’ technology that are economically viable
 - Units that operate the fewest hours out of a given year in comparison with all other units

Sources of New Capacity (MW)

	Last 10 years (Gold Book)	Last 5 years (Gold Book)	Interconnection Queue
Gas Turbine	1,113	0	948
Combined Cycle	3,421	1,828	6,891
SCR	1,936	1,284	NA
Renewable	79	76	7,374 (non-coincident)
Other	228	41	12,168

2009 RNA Assumptions (MW)

	2009-2013
SCR	761 MW
New GT Units	0 MW
New Wind Units	791 MW
Other New Units	1,032 MW
Unit Uprates	345 MW
Total	2,169 MW

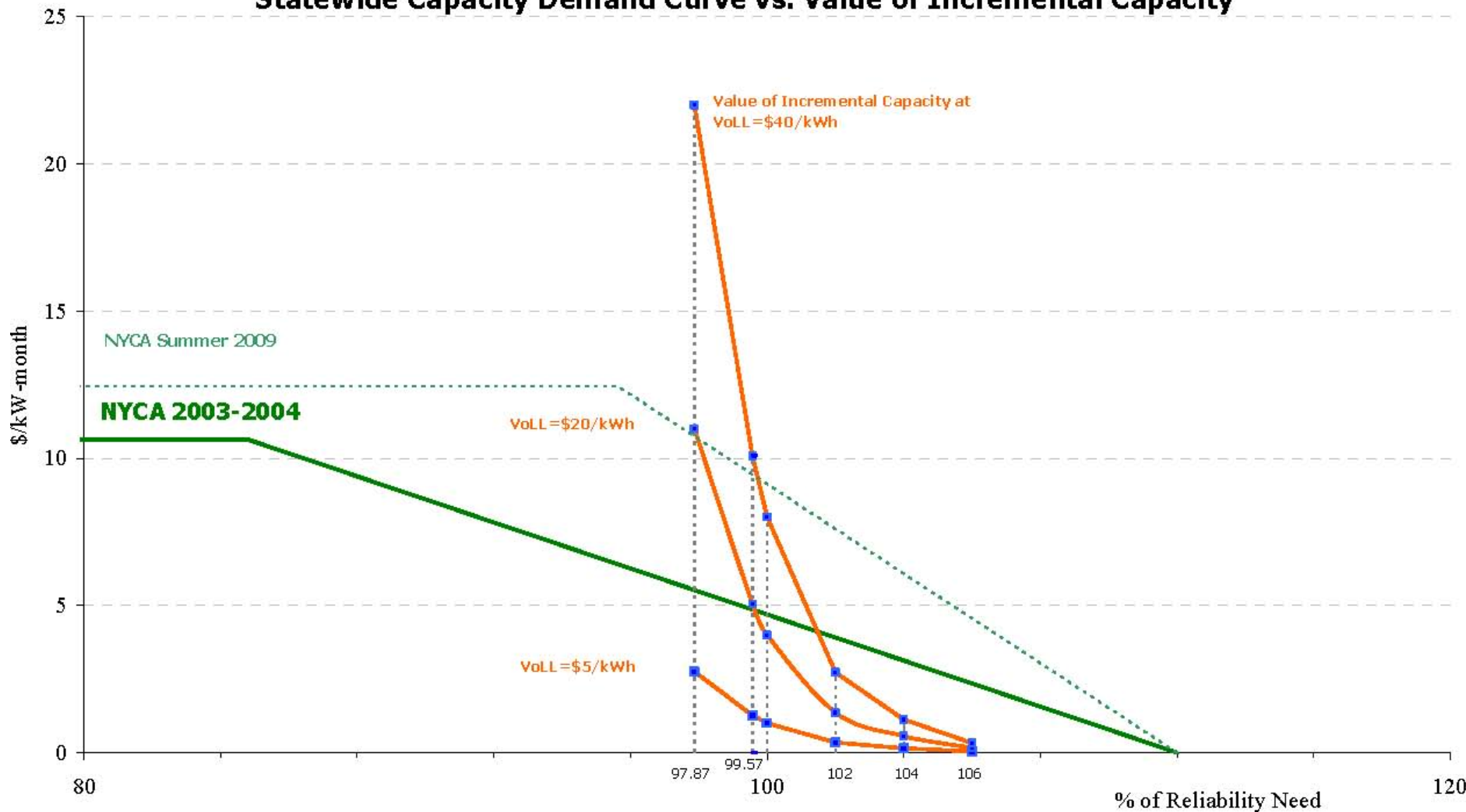
NYTO Proposal

- Evaluate cost of alternative reference unit types:
 - Demand response
 - Increases in capacity at existing units (including tail-end bids)
 - Interconnections to distribution
 - Energy efficiency
 - Innovative new technologies, such as flywheels
- For Demand Response, the consultant should examine:
 - Cost of interruptible load, and/or
 - Costs to activate back-up generation
- The Demand Response analysis should include:
 - Administrative and recruitment costs
 - Fuel costs, if applicable
 - Costs of advanced metering, if necessary

Tariff Requirement - Curves

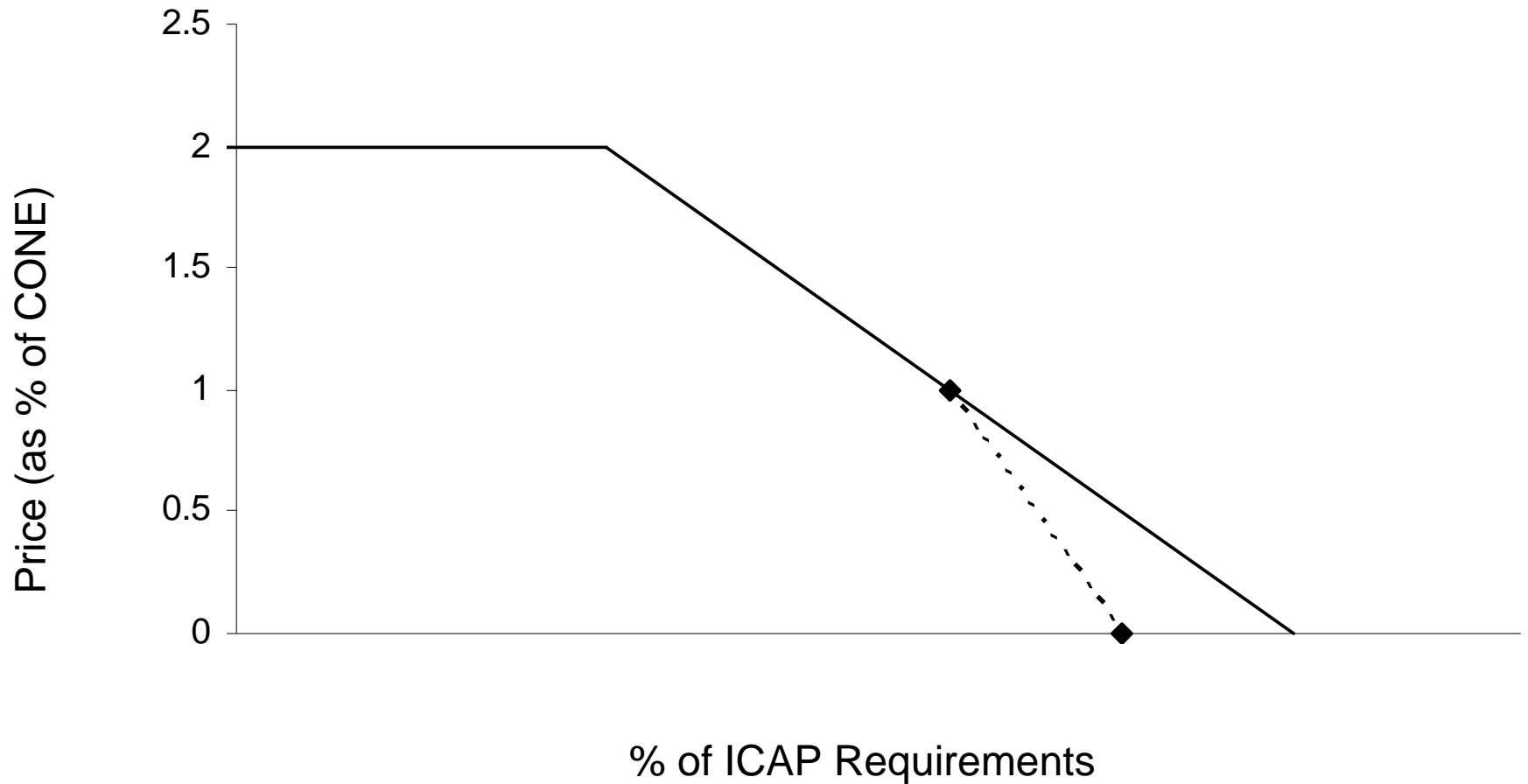
“The periodic review shall assess ... the appropriate shape and slope of the ICAP Demand Curves, and the associated point at which the dollar value of the ICAP Demand Curves should decline to zero”

Statewide Capacity Demand Curve vs. Value of Incremental Capacity

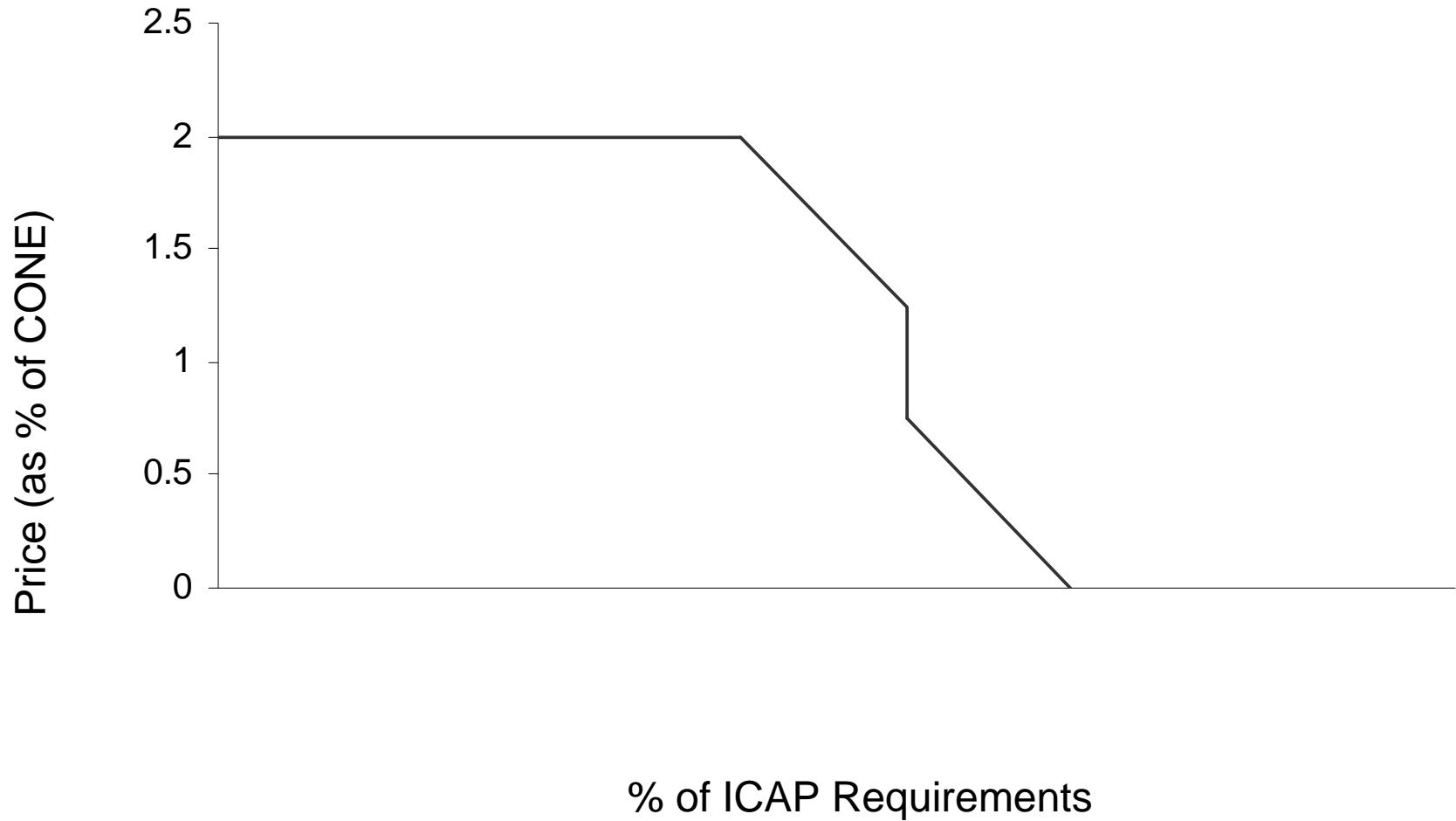


Source: Brattle Group, "Cost-benefit Analysis of Replacing the NYISO's Existing ICAP Market with a Forward Capacity Market," draft of 6/2/2009.

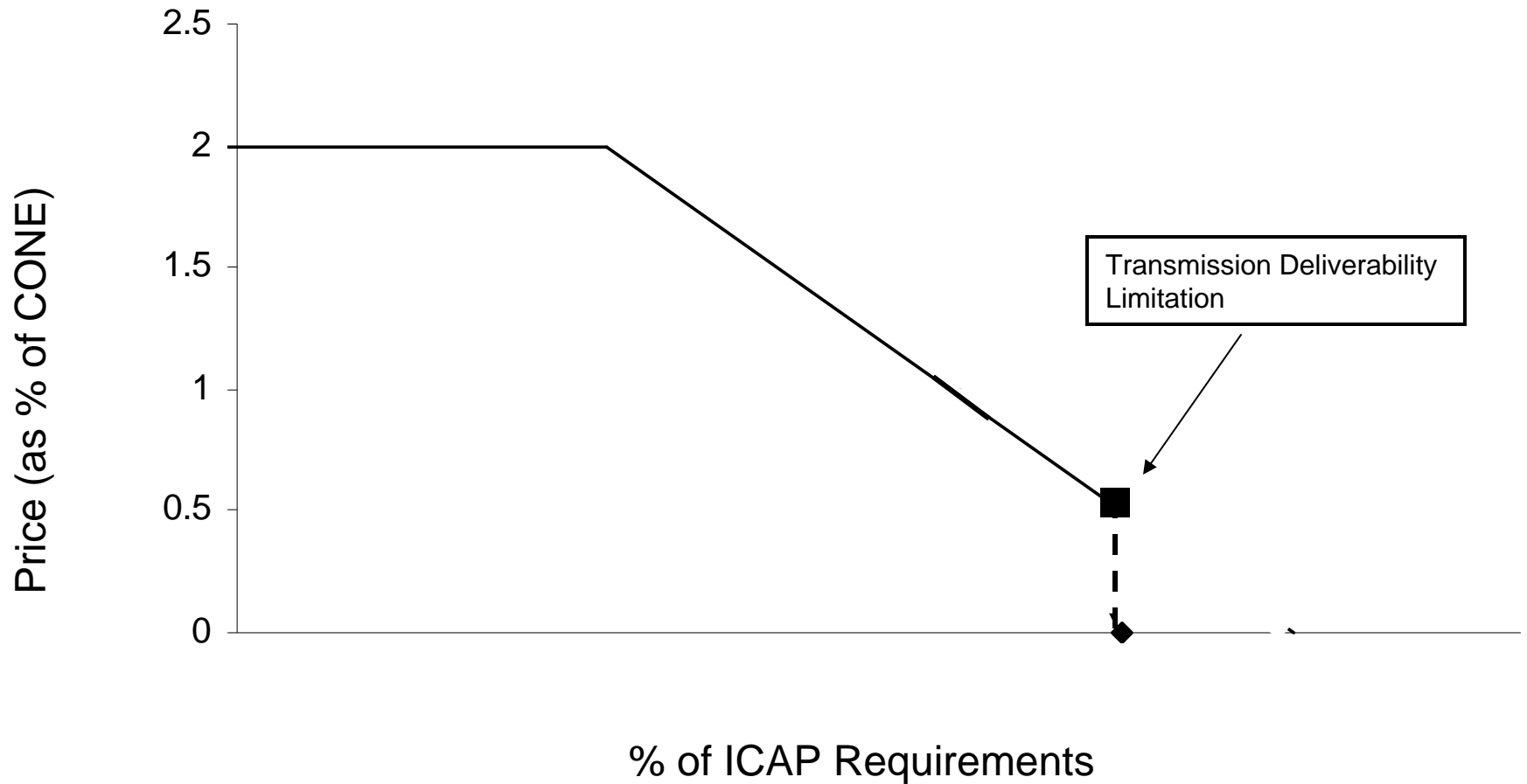
Illustrative Curve Proposal #1



Illustrative Curve Proposal #2



Illustrative Curve Proposal #3



NYC Property Taxes

- NYC and NYS can provide property tax discounts through various means, not just ICIP
- Generation projects often pay less than full Class IV property tax rates
- Some projects proposing to serve NYC would be physically located in New Jersey
- NYC property taxes would not apply to such plants