What Price Reliability?

or

How To Intervene in a Market When It May Not Be Failing

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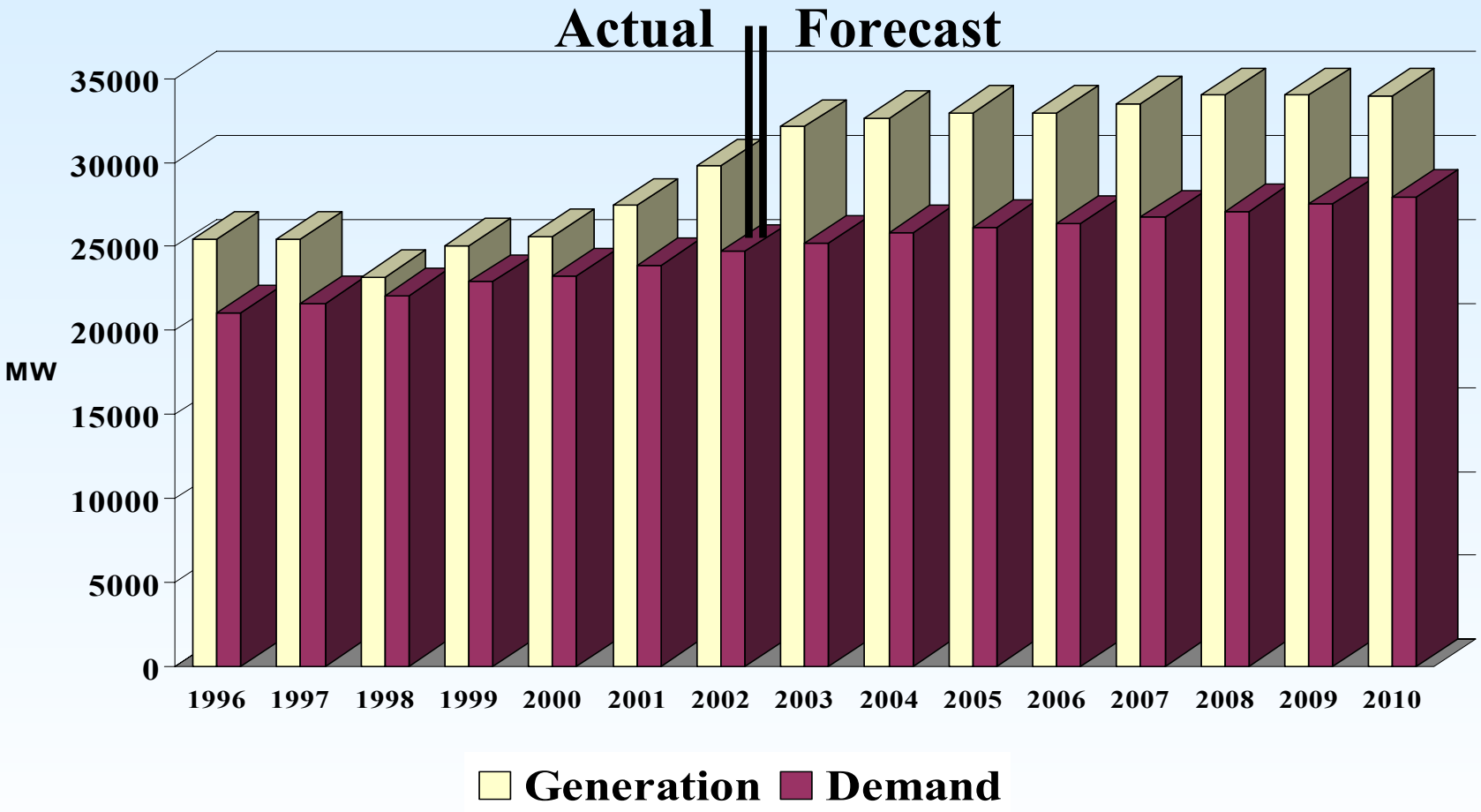
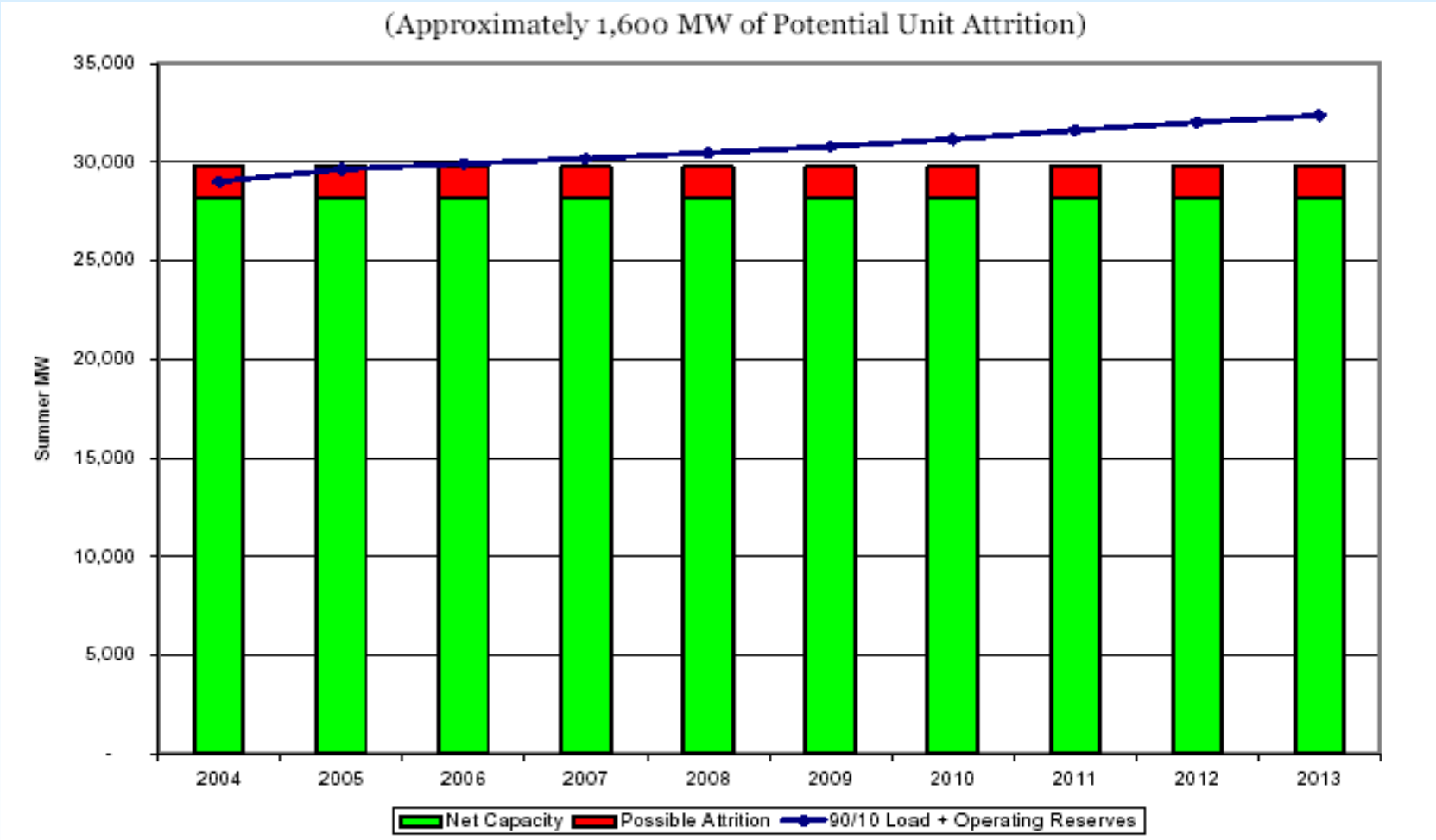
New Generation Has Increased Capacity Reserves



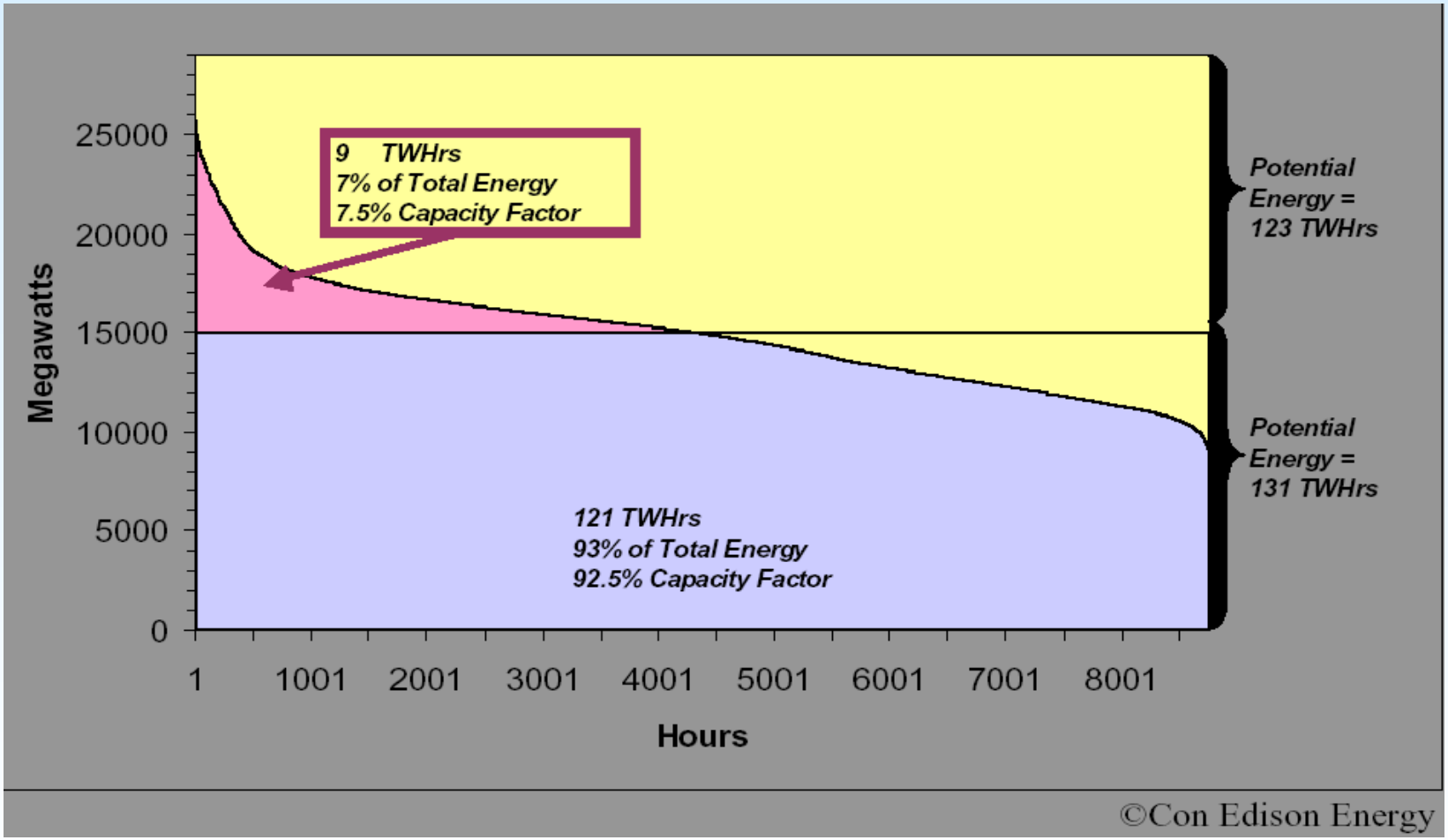
Source: CELT Report 2003

ISO-NE's View: Supply Surplus is Short-Lived

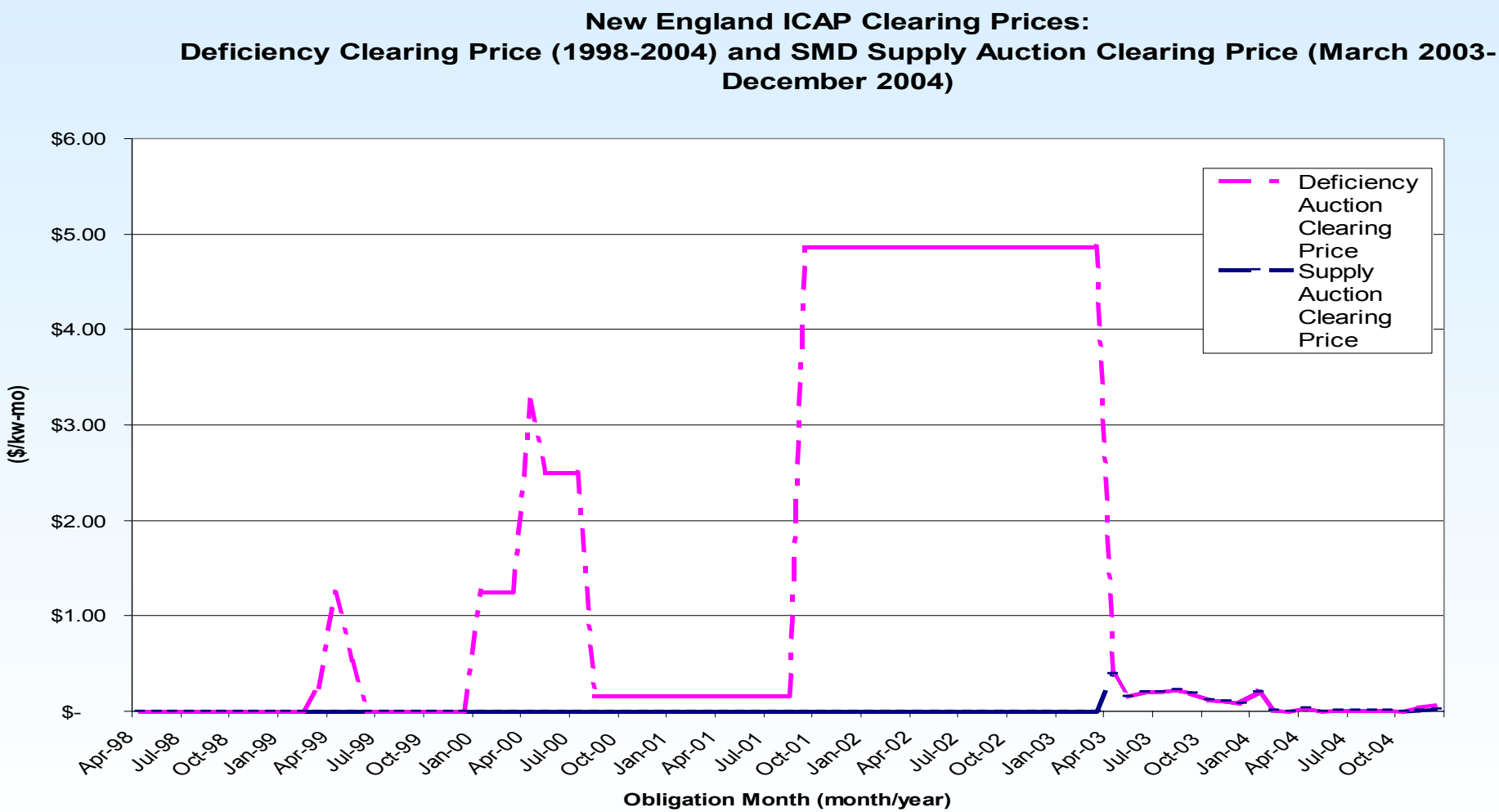


SOURCE: NECA Presentation by ISO-NE, 11/10/04

New England 2002
Load Duration Curve



Capacity Clearing Prices in NE



ISO-NE Capacity Proposal
March 2004

- ISO-NE filed its proposal at a time when
  - More than 40% of generation was financially "distressed" and
  - More than 5% was receiving "reliability must run" payments.
- ISO-NE proposed a "market" for capacity
  - Load Serving Entities must buy capacity to cover their obligations
  - Generators may sell their capacity at a "regulated" price
- "Administrative" Demand Curve
  - Similar to NY
- Reserve capacity calculated in each of 4 zones:
  - Greater Boston, CT, ME and Rest of NE
- LSE's may hedge with bi-lateral contracts

An Alternative Capacity Proposal March 2004

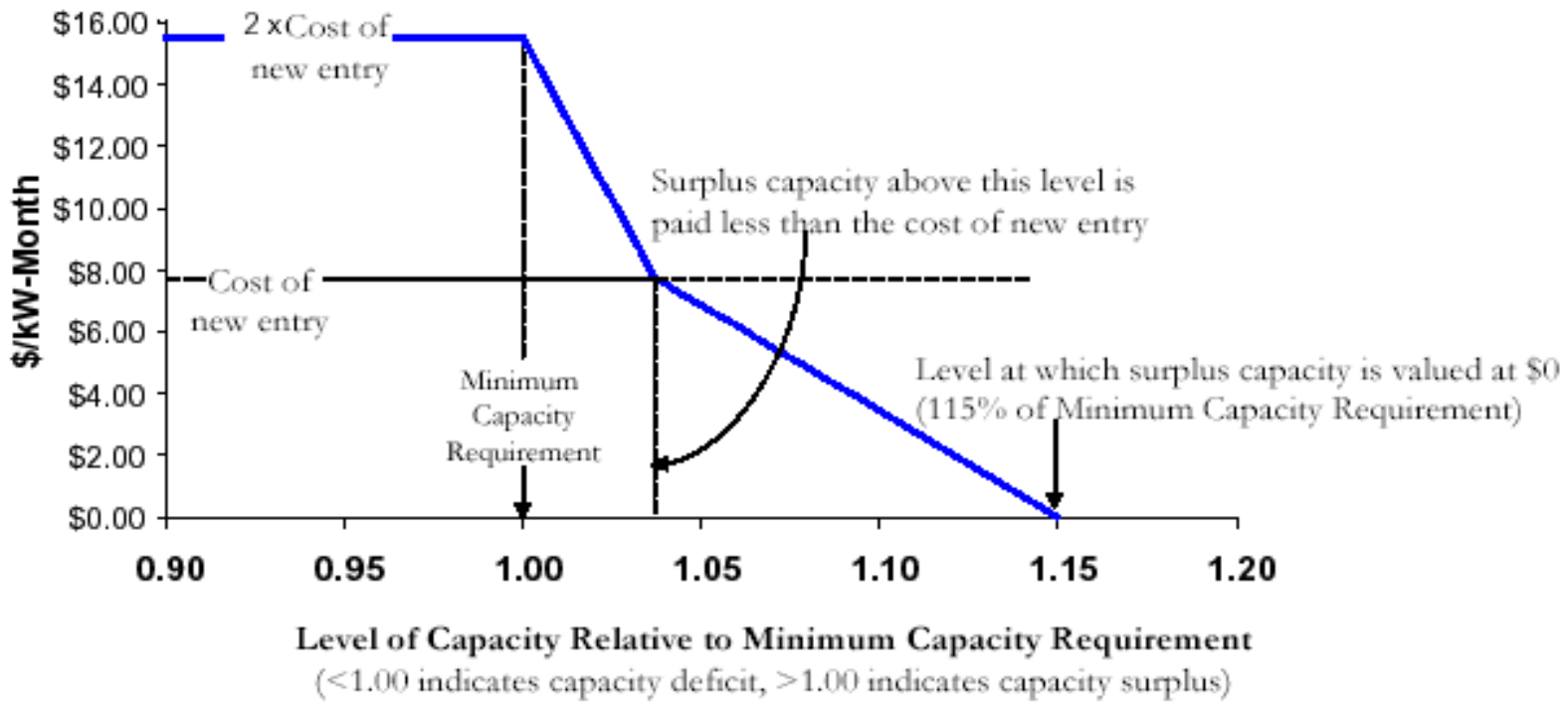
- A single, region-wide demand curve
  - based on NY's state-wide curve
- Generators must make minimum commitment to operate at least three years beyond the current capacity payment
- Capacity level should be calculated on then-current "objective capability" (OC)
  - Not on the historic level of excess capacity
- Payments halt at 12 percent above OC
  - Rather than 18 percent above
- Align rules with NY to eliminate market seams

Revised ISO-NE Proposal
August 2004

- In June, FERC accepted most of ISO's proposal
  - Endorsed "locational" capacity markets
  - Divided CT into two separate zones
- Maximum capacity value set at twice the cost of new entrant
- Generators must be available during "critical hours" to receive payments
- Capacity payments reduced by
  - revenue from infra-marginal rents
  - "reliability" revenues
- "Reliability" contracts end in 2006
- Market power mitigation measures to be worked out based on input from intervenors
- Clarified allocation of capacity among market participants and rights to transfer capacity

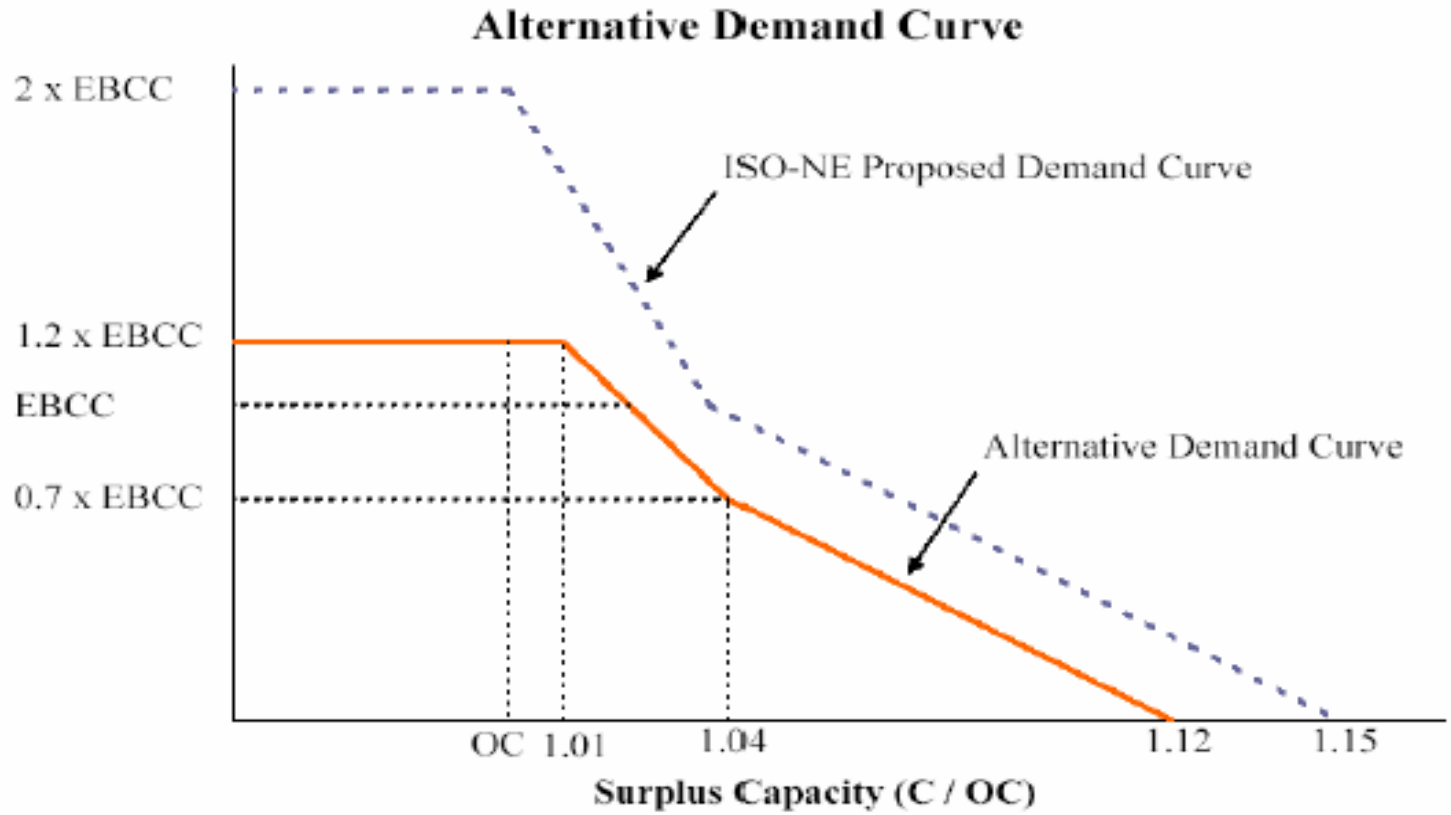
ISO's Most Recent Demand Curve

Have less...pay more. Have more...pay less.



Source: NECA Presentation by ISO-NE 11/10/04

Comparison of ISO-NE and National Grid Alternative Demand Curve Proposal



Source: NGRID - C. Hamel Answering Testimony, 11/4/04, Exhibit NG-1

Estimated Cost Impacts of ISO-NE and National Grid Capacity Proposals

NEMA Annual Cost Impact				
			ISO DC	NGRID DC
Capacity	Surplus above OC	Reserves Level	Supply Cost Increase (%)	Supply Cost Increase (%)
5,864	1%	13%	84%	53%
5,922	2%	14%	72%	48%
5,980	3%	15%	59%	44%
6,038	4%	16%	49%	39%
6,096	5%	17%	45%	34%
6,125	5.5%	18%	43%	31%
6,241	7.5%	20%	34%	21%
6,387	10%	22%	23%	10%
6,503	12%	24%	13%	0%

Source: NSTAR and DOER Analysis

Some Questions to Ask About a Market Intervention

- What exactly is the nature and size of the risk?
- What interventions are possible and which will be the least disruptive?
- Can the intervention be made to work like a market would work?
- Can the intervention be made to halt or fade away as the need for it decreases?
- Can the disruption be offset over time by changes in other parts of the market?