Wholesale and Retail Market Models:
Will they mesh well or cancel each other out?

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at
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Bottom Line

• Properly designed wholesale and retail markets working together are the desired state

• We can sustain wholesale competition without wide-scale retail competition.

• Rumors of the demise of the retail markets are greatly exaggerated.
New York: Wholesale Competition

- NY utilities divestiture
- Robust wholesale spot market, operated by NYISO.
  - load pockets
  - mitigation measures
  - Investment has occurred where needed
- NYISO market design.
New York: Retail Competition

• 40% of load supplied by ESCO’s
• Over 70% of large C&I customer load, over 40% of other business customer load
• Policies to facilitate retail competition in place
  – Uniform business practices, EDI, consumer protections, and best practices such as purchase of ESCO accounts receivables by utilities.
Retail Migration

Customer migration has been increasing, particularly in 2005, for both electricity and natural gas customers.

Statewide Retail Market Migration
Wholesale vs Retail Prices

- On a statewide basis, residential and industrial real prices decreased between 1996 and 2005.
- Wholesale and Retail prices have not been divorced from each other in the state.
  - Retail prices have not been capped artificially using utility deferrals.
  - Wholesale fluctuations are visible in the retail market.
Total Load Weighted Average % Change in Customer Electric Rates
Statewide from 1996 - 2005 in Real (Inflation-Adjusted) Dollars
(Data Source: EIA Form 826 Data and DPS 5 Year Book)
Total Average % Change in Customer Electric Rates
by Utility from 1996 - 2005 in Real (Inflation-Adjusted) Dollars
(Data Source: EIA Form 826 Data and DPS 5 Year Book)
2006 Capacity by Fuel Type

- Gas 6508
- Oil 3659
- Gas & Oil 13831
- Coal 3505
- Hydro 5700
- Nuclear 5169
- Other 341
- Wind 245
Statewide Average Wholesale Prices

Actual NYISO Average Cost
Normalized to Year 2000 Fuel Price Level

$/MW

$0 $10 $20 $30 $40 $50 $60 $70 $80 $90 $100

2000 2001 2002 2003 2004 2005 (Through October)

Actual Annual Average Cost (Energy + Ancillary Services)
Annual Average Cost Normalized to Year 2000 Fuel Price Levels
Demand Side Response

• Energy Efficiency and Demand Response continue to play a major role in New York
  – As part of the electric industry restructuring, a Systems Benefit Charge program, funded by utility customers and managed by NYSERDA was created and the program continues to make tremendous progress
  – Wholesale and retail programs for DSR have been harmonized
  – DSR programs in the wholesale markets are well established
  – Mandatory hourly pricing for largest electric customers; about 5000MW + will be on default hourly pricing tariff (about 16% of peak load);
Demand Response

Wholesale Competition: Role of Demand Side Response
(MW Enrollment as of October, 2005)

- 1,420 MW
- 597 MW
- 394 MW

Demand Side Response Program:
- Special Case Resources
- Emergency Demand Response
- Day Ahead Demand Response Program
New Infrastructure

• The first preference is for merchant facilities
• Regulated backstop solutions. Generation, Transmission and Demand Response solutions
• Utilities may sign LT contracts to facilitate new generation entry
• Public Policy contributions to fuel diversity RPS and Clean Coal
• As ESCOs gain load they should be facilitating new entry
New York Regulatory Policy
Utility Default Service Pricing

• NYPSC issued in August 2004 a Policy Statement regarding utility default service customer pricing:
  – Large customers - utility prices should reflect market prices. No new “hedges” for this customer group. MHP
  – Mass market customers - stable pricing is still needed until risk mitigation products are available in the competitive market place. Utilities are given flexibility in structuring their supply portfolios to secure stable prices.
New York Regulatory Policy
Use of Long-Term Contracts

- No pre-approval of utility supply contracts
- Long term supply contracts for public policy reasons.
- If utilities enter into long term contracts to retain market share or to impede the development of a competitive market, costs may not be recoverable from ratepayers.
New York Regulatory Policy
Utility Supply Portfolios

• Most electric utilities use a portfolio approach to procure supplies for default customers

• Supply portfolios typically consist of “legacy” contracts, short term physical and financial contracts, and spot NYISO market purchases. The resulting portfolio cost is passed onto customers of the utility.

• The value of legacy contracts is spread to all utility customers.
Competition Impact on Price Signals

- Improved price signals for consumers improve wholesale market efficiency
  - Hourly price signals = Demand Response = Wholesale efficiency
  - If a utility is the dominant commodity provider, regulators can implement specific price mechanisms to help facilitate DSR. Regulators are generally risk averse and reluctant to promote proper pricing signals.
  - Under retail competition, ESCOs are expected to provide more value added services behind the meter, particularly to large customers, to help improve the efficiency in customer usage and contribute to Demand Response that would help the wholesale markets.
Competition Impact on New Supply

• If the utility retains a majority of the customer load …

• If customer load is distributed among many players…

• If generators require certainty through long-term contracts with credit worthy entities, then retail competition adds complexity to the issue.
New York Regulatory Policy
Issues under consideration

• Where do new hedges go?
• What products should utilities offer?
• What should default service look like?
• Establishment of a volatility metric in structuring portfolios?