

Con Ed Min Oil Burn

2006 Market Implications

Market Structures Working Group – June 29, 2006



Agenda

- Overview
- Market Participant Concerns
- Guiding Principles
- Analysis
 - Actual Load Distribution, Statewide Price Impacts, Reference Prices
- Draft Proposal for Comment
 - Considerations subject to further technical review and finalization of reliability rule implementation procedures
- Next Steps



Overview

- Con Ed Minimum Oil Burn reliability rules require assessment to determine potential market impacts
- Software limitations, restrictions on system changes during peak periods, and current tariff provisions limit options for addressing market concerns this summer
- The NYISO wants to provide proper market mechanisms to support necessary reliability rules
 - Recognize need to respond, even without changes to the reliability rules



Market Participant Concerns

- Generator reference prices are indexed to fuel prices; current oil prices are significantly higher than gas prices
- Units ordered to burn oil might not be correctly compensated if reference prices don't reflect the higher fuel price (gas or oil)
- Costs consequences of implementing this rule may be seen state-wide
- Generators ordered to burn more expensive fuel have expressed concern about the potential for lost opportunities based on reduced level of commitment

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Guiding Principles

- To the extent possible:
 - Prices should reflect actual costs
 - Generator compensation should be based on LBMP as opposed to uplift
- In instances when generator revenue does not cover out-of-pocket expenses, additional payments should be made to cover them
- Any additional payments should be allocated to the loads who benefit from the local reliability rule



Generator Compensation

- Reference prices should reflect actual operating costs and should be updated timely to produce most accurate LBMPs, to the extent possible
- Services Tariff 4.1.7 allows NYISO to make a BPCG payment to cover the incremental expense in minimum generation, start up and energy costs, not reflected in LBMP and ancillary service revenue for the day
 - Payment for lost opportunities under this condition is not supported under existing tariffs



Cost Allocation

- Services Tariff Section 4.1.7 and OATT RS-1 allow the NYISO to assign any uplift to the subzone(s) for which local reliability rule is written
- Increased LBMPs produced when NYC units go into minimum oil burn cannot be limited to the Con Edison transmission district if transmission constraints disappear



Peak Load Distribution

- Minimum Oil Burn threshold was reached about half the days in 2005; almost every day during the Summer.
- Higher thresholds identified in new proposed rule were reached on 39 days in 2005.



Peak Load Distribution (Cont.)

| Peak Load | Hours (H,I,J) Days (H,I,J | | |
|----------------|---------------------------|-----|--|
| 8000–8999 MW | 943 | 95 | |
| 9000–10799 MW | 836 | 57 | |
| 10800–12199 MW | 298 | 30 | |
| 12200–12699 MW | 36 | 7 | |
| > 12700 MW | 9 | 2 | |
| Total | 2122 | 191 | |

January 1, 2005 – December 31, 2005



Statewide Pricing Impacts

- During 2005, there were 247 hours in the DAM where Con Ed load was forecast above 8000 MW and there were no in-city constraints.
 - Approximately 12% of Min Oil Burn hours
 - Approximately 3% of all hours
- When prices were greater than \$100 in Real-time, NYC and Hudson Valley prices were within \$7 of each other approximately 2% of the time.
- Minimum Oil Burn units may, or may not, have been the marginal unit during these intervals.



Statewide Pricing Impacts (Cont.)

- Percentage of real-time intervals when NYC and Hudson Valley LBMPs are within \$7.
- Load is sum of zones H,I, and J.
- Price setting unit may be in NYC or upstate.

| Load \ LBMP | < \$100 | \$100-\$199 | \$ 200-\$299 | >\$300 | All LBMP |
|--------------|---------|-------------|--------------|--------|----------|
| 8000–8999 MW | 2.0% | 1.3% | 0.2% | 0.1% | 3.5% |
| 9000–9999 MW | 0.4% | 0.2% | 0.0% | 0.0% | 0.6% |
| > 10000 MW | 0.1% | 0.1% | 0.1% | 0.0% | 0.4% |
| Total | 2.6% | 1.6% | 0.2% | 0.1% | 4.5% |

January 1, 2005 - December 31, 2005



Reference Prices

- Generator reference prices are updated regularly to reflect a number of characteristics
- Separate reference prices exist for Day-Ahead and Real-Time markets
- Software and process limitations impact cycle time for updating reference prices and flexibility to account for fuel mixes
- Process controls are necessary to provide acceptable level of accuracy and certainty



Summer 2006 Proposal

- Use existing reference price process to reflect minimum oil burn requirements in Day-Ahead and Real-Time reference prices:
 - Identify appropriate fuel mix levels for units
 - Obtain sufficient notice / confirmation that a minimum oil burn has been ordered
 - Currently not feasible to make in-day changes to Real-Time reference prices for in-day Min Oil Burn calls
- Continue cost recovery to costs allowed under tariff
- Allocate uplift to appropriate Con Ed district loads
- Explore longer term alternative solutions with stakeholders



Market Participant Comments

- NYISO will finalize this preliminary proposal as quickly as possible
- Please provide comments to Frank Francis at ffrancis@nyiso.com