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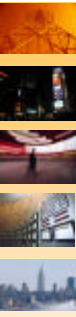
## Comprehensive Mitigation Filing

Presented to  
**Management Committee**  
February 7, 2002



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## Comprehensive Mitigation Plan Compliance Filing



- Two FERC orders issued November 27, 2001.
- Compliance filing due March 1, 2002.
- AMP order: Implement “AMP II.”
- Local Mitigation Measures order: NYISO to be responsible for In-City grid and mitigation measures.
- Both orders: consider PJM and ISO-NE approaches to mitigation issues; address other policy issues.
- Together, these Orders contemplate a comprehensive NYISO-administered approach to mitigation, based on the existing Market Mitigation Measures.

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Management Committee Meeting – 2/7/02

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## FERC Orders: Key Elements

- **AMP Order:**
  - ◆ *Implement specific enhancements to AMP (selectivity, 50 MW exemption).*
  - ◆ *Review role of AMP, including effects on new generation.*
- **LMM Order:**
  - ◆ *NYISO to assume “ultimate responsibility” for all In-City transmission and dispatch.*
  - ◆ *All In-City mitigation to be in NYISO tariff.*
  - ◆ *Develop approach to In-City mitigation that is consistent with state-wide plan.*
  - ◆ *Address In-City reference prices.*

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## Development of the Filing

- **The NYISO has conducted an intensive stakeholder process: 7 work group meetings to date, and will continue.**
- **The NYISO met with ISO-NE and PJM to discuss respective mitigation approaches.**
- **The Market Advisor presented overview to BIC on 1/23/02.**
- **Management Committee review 2/7/02.**
- **FERC working-level staff meeting 2/11/02.**
- **Board review on 2/19/02.**

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## Purposes and Objectives

- Respond to FERC request for a comprehensive, consistent state-wide approach to mitigation.
- Implement AMP enhancements.
- Implement refinements to existing MMM.
- Continue, refine, and extend to In-City the conduct-and-impact approach to mitigation; Implement interim In-City DAM improvements.
- Address measures to be effective 5/1/02, as well as thereafter.
- Address other policy issues.
- Collaborate with ISO-NE, PJM.


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## Summary of Changes

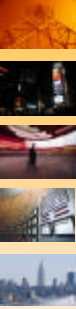
- Enhanced operation of the AMP (state-wide DAM mitigation).
- Implement NYISO control of In-City grid and dispatch, through SCD modeling of 138 kV system.
- Integrate In-City mitigation into NYISO Market Mitigation Measures.
- Specify thresholds for non-price bid elements, and make other improvements in the existing market mitigation measures.
- The filing will reflect consideration of approaches used by other northeast ISOs.

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## NYISO Mitigation Structure



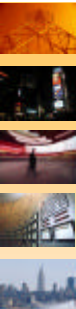
- **The two-part conduct-and-impact test is the central feature of the NYISO mitigation measures.**
- **The combination of conduct and impact seeks to mitigate the effects any significant abuse of market power while minimizing unwarranted intervention in markets.**
- **The changes and enhancements proposed in the filing continue this approach on a comprehensive, state-wide basis.**

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## Changes to AMP



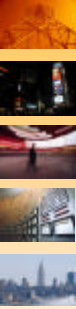
- **The mitigation filing will propose significant enhancements to the AMP:**
  - ♦ *50 MW portfolio exclusion – to be reduced or eliminated if a NYISO bidder is using it to exercise market power.*
  - ♦ *Additional SCUC pass to limit mitigation to those hours and zones demonstrating impact.*
  - ♦ *Inclusion of start-up and minimum generation bids with min-gen exemption for late-day starts.*
  - ♦ *More detailed representation of reference prices within the MIS system.*
- **The AMP is an automated process for implementing mitigation – does not limit or expand NYISO's mitigation authority.**

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## New York City Mitigation: *Summary*




- **Automated, real-time conduct-and-impact mitigation for New York City.**
- **Replace existing ConEd measures.**
- **Use of lower, location-specific thresholds for evaluating conduct and impact.**
- **Use of same reference prices as elsewhere in State.**
- **Locational thresholds will apply when constraints are binding.**
- **The general mitigation measures will apply when constraints are not binding.**

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## New York City Mitigation: *Conduct & Impact Tests*



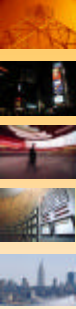
- **Conduct test**
  - ◆ *As now, bids exceeding reference levels by more than the applicable threshold will fail the conduct test.*
  - ◆ *Sustained congestion will result in lower thresholds, to avoid sustained exercise of low-level market power.*
- **Impact Test**
  - ◆ *Ideally, impact would be determined by two passes of the dispatch model (with and without mitigation).*
  - ◆ *Since multiple SCD passes are not possible at present, proxy impact tests are proposed.*

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## New York City Mitigation: *Declining Locational Thresholds*



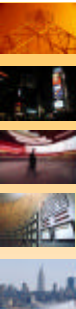
- The market power associated with transmission constraints into and in the City warrant location-specific thresholds that decline as constraint frequency increases.
- Decline in thresholds addresses the potential for sustained exercises of “low-level” market power by raising prices by the threshold amount.
- Frequency of congestion to be measured by the number of hours of congestion, on a rolling 12 month period.

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## New York City Mitigation: *Proxy Impact Test; Duration*



- Resource exceeding the conduct test would be mitigated if it is:
  - ♦ *Scheduled in the prior SCD interval (likely to have increased the marginal price).*
  - ♦ *Not scheduled, but reference level is below the marginal resource by more than the conduct threshold (economic withholding likely to have caused a more expensive resource to the marginal price).*
- **Duration**
  - ♦ *Mitigation will continue at least for the balance of the hour in which the conduct and impact test is met.*

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## New York City Mitigation: Day-Ahead

- Over the long term, the AMP would be adjusted to incorporate locational mitigation thresholds for the In-City DAM, but with SCUC passes determining impact (no need for proxy impact tests).
- In the short-run, ConEd In-City mitigation measures would be continued with the following changes:
  - Use of the NYISO reference prices.
  - Adjust the 105% IP2 threshold to account for losses.
  - Include all In-City units.

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## Modifications to the General Mitigation Measures

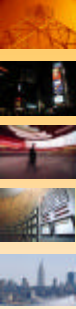
- Reference prices: specification of default formula as starting point for determination of cost-based reference levels in consultation with Market Party:**  
 $((\text{heat rate} * \text{fuel costs}) + (\text{emissions level} * \text{emissions allowance price}) + \text{other variable operating and maintenance costs})$
- Specify thresholds for non-price bid parameters.**
- Specify minimum bid level for application of mitigation tests (\$25 for energy and \$5 for reserves).**

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## Other Modifications to Mitigation Plan



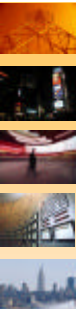
- **Reference Level Floor for New Generation (including net new capacity by existing owners)**
  - ◆ *Accounts for the short-run competitive benefits of new generation and minimizes potential disincentive to enter.*
  - ◆ *Limited Reference Level Floor at average peak LBMP at unit's location for a period preceding its entry.*
- **Data Requirements**
  - ◆ *MMP Addendum B to include any contract or agreement conferring a right to specify bids or otherwise control the output of a unit owned by another entity.*
- **Other Threshold Changes:**
  - ◆ *Remove quantity thresholds for physical withholding In-City (impact test still applies).*

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## Regional Consistency



- **Reliance on unit-specific bid caps is consistent throughout region, although mitigation triggers are different:**
  - ◆ *PJM employs its bid cap of variable cost + 10% when transmission constraints are binding (other than the major interfaces) – no conduct or impact tests.*
  - ◆ *New England utilizes conduct and impact thresholds that match NYISO model for non-congested areas*
- **NYISO and NE approaches are evolving towards greater commonality.**

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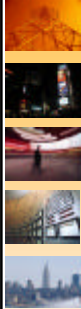


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## Regional Consistency on Mitigation *(continued)*



- New England's mitigation measure for congested areas to be revised with implementation of the Standard Market Design ("SMD")
- New England is considering New York's proposed structure for mitigation in constrained areas.
- Some of the proposed changes for NY are intended to implement elements of the New England measures (e.g., \$25 exclusion, non-price bid thresholds)
- The similarity in the underlying measures should avoid any barriers (software or otherwise) to future FERC standardization.
- Prospective mitigation by means of a unit-specific bid cap would not be a barrier to efficient trading throughout the Northeast market.