

### NYC Load Pocket Operation Initial Review

#### NYISO Operations Department 6/26/02

## Presentation Summary

- Background Info
- Load Pocket Descriptions
- Real-Time Load Pocket Operation
- Day-Ahead Load Pocket Operation
- Summary



# Background Info

- ISO Secured System
  - ISO to assume 'Operational Control' of NYC 345/138/69kV facilities
  - Facilities secured in DAM, HAM, and RT Markets
  - Consistent market evaluation of NYC transmission capability
  - LBMP Congestion reflects ISO Secured System constraints
- Load Pocket Operation
  - Load Pocket Generation Capability
    - ISO is responsible for dispatch of all NYC generating units
    - Need for OOM generation expected to be infrequent
  - Phase Angle Regulator (PAR) Capability
    - PAR control actions by TO used to mitigate constraints for NYC transmission facilities
  - TO Operating Exception for NYC Underground Cables
    - Allows post-contingency cable loadings in excess of LTE ratings
    - Op. Exception is considered in DAM, HAM, and RT Markets



## In-City Load Pockets

- **345kV IN-CITY**
- 138kV IN-CITY
- ASTORIA EAST/CORONA/JAMAICA
- ASTORIA WEST/QUEENSBRIDGE
- ASTORIA WEST/QUEENSBRIDGE/VERNON
- VERNON/GREENWOOD
- **GREENWOOD/STATEN ISLAND**
- **STATEN ISLAND**
- EAST RIVER
- NYC Load Pocket One-Line Diagrams available
  - Executed confidentiality agreement 3/27/02 AMP/ICM Meeting Materials
  - Send to: NYISO Legal Department c/o Liz Grisaru



## Real Time Market

- SCD Load Pocket Modeling Deployed June 3
  - Uses Load Pocket interface limits for NYC generation re-dispatch
  - Basis for Out-of-Merit generation 'fix'
  - Load Pockets have been operationally successful
  - Significant reduction in OOM generation although infrequent need will continue (NOx requirements, unexpected operating conditions)
  - Improved reporting/posting information for OOM generation
- BME Load Pocket Modeling Deployed June 3
  - Primarily based on individual transmission constraints associated with NYC load pockets
  - Revised Operating Procedure to use Load Pocket Interface Limits as needed from SCD
  - BME Load Forecasting critical to Greenwood-Staten Island where only 30-minute GTs can secure transmission constraints
  - Few remaining OOM generation for constraints are for Narrows and Gowanus 30-minute GTs

#### Real Time Constraining Facilities June 3 - June 24, 2002



## Day-Ahead Market

- SCUC Load Pocket Modeling Deployed June 18
  - Based on individual 345/138/69kV transmission facility constraints associated with NYC load pockets
  - SCUC and BME is more detailed power system model than SCD
    - Approximately 60 facilities are secured in SCUC/BME
    - 9 NYC load pockets are secured in SCD
  - NYC congestion patterns are more defined than with SCD
  - Potential for intra-load pocket congestion in SCUC
  - ISO will continue to review SCUC, BME, and SCD modeling assumptions to ensure a consistent market evaluation of NYC transmission capability



## Summary

- NYC Load Pockets are operationally successful to address NYC transmission constraints
- OOM generation in NYC is significantly reduced although infrequent need for OOM will continue for unusual/unexpected conditions
- Improved reporting information for OOM generation in place
- Operating Procedures will continue to be refined to further reduce OOM generation
- ISO will continue to review SCUC, BME, and SCD modeling assumptions to ensure a consistent market evaluation of NYC transmission capability

