

# Market Operations under SMD2 Operation

ISO Market Structures WG August 13, 2004



## **Market Operations Update**

- > NYC Load Pocket Operation
- Phase Angle Regulator Scheduling
- > Transmission Loss Treatment
- Zonal Resource Scheduling & Pricing



## NYC Load Pocket Operation

#### > DAM:

- ▶ No change in treatment
- Individual transmission facilities will continue to be secured
- ▶ Cable normal ratings = normal facility ratings
- ▶ Cable contingency ratings = midpoint (LTE, STE) facility ratings

#### > **RTM**:

- ▶ Day 1 SMD2 operation will use nine (9) load pockets as done today
- ▶ Future SMD2 operation will move to securing individual transmission facilities as in the DAM cutover dates to be announced

#### Benefits:

More efficient NYC load pocket constraint management; improved load pocket DAM and RTM price convergence



## Phase Angle Regulator (PAR) Operation

#### > DAM:

- ▶ No change in treatment
- ▶ PAR Optimization for NYC and Long Island internal PARs
- ▶ DAM schedules based on previous like days actual flows for those PARs not under unilateral ISO control or subject to contractual conditions

#### > **RTM**:

- ▶ New capability in treatment
- ▶ PAR Optimization for NYC and Long Island internal PARs
  - Limited by PAR response rate for future RTS periods

#### Benefits:

More flexible PAR modeling treatment; improved representation of Transmission Owner operations



## **Transmission Loss Treatment**

#### > DAM:

- Marginal losses (unit/zone/proxy bus penalty factors) based on each of 24 hourly SCUC powerflow solutions as done today
- ▶ Legacy SCUC Forecast Load Passes uses aggregate load and loss forecast
- ▶ SMD2 Forecast Load Passes will use load forecast less losses with separately determined transmission losses
- ▶ SMD2 SCUC Bid Load Passes will include transmission loss determination
- ▶ Transmission loss determination based on SCUC powerflow solutions

#### > RTM:

- Marginal losses (penalty factors) based on each of the powerflow solutions corresponding to RTS intervals
- ▶ RTS loss treatment includes NYCA loss determination (similar to SCD)
- ▶ Transmission loss determination based on RTS powerflow solutions

#### **Benefits:**

Improved DAM and RTM load forecast modeling, improved DAM and RTM operation results by having consistent treatment of losses



# Zonal Pricing and Scheduling

#### > DAM:

- ▶ Scheduling of zonal resources will be based on SCUC load-weighted average price of zonal load bus prices as is done today
- ▶ Settlement of zonal resources will be based on SCUC load-weighted average price of zonal load bus prices (not based on static generator-load weighting factors described in TB 28)

#### > RTM:

▶ Settlement of zonal resources will be based on RTS load-weighted average price of zonal load bus prices (not based on static generator-load weighting factors described in TB 28)

#### **Benefits:**

- ▶ Will eliminate potential for inconsistent zonal resource scheduling/settlement
- ▶ Will continue to post "legacy" calculation for zonal price reference (TB28)