Market Operations under SMD2 Operation

ISO Market Structures WG

August 31, 2004

(As originally presented- 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

Draft - For Discussion Only

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)