# EDRP/SCR Scarcity Pricing Rules and their Impact on August 1-3

**Scheduling & Pricing Working Group**

**October 18, 2006**

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# August 1

- ✓ Sprain Brook / Dunwoodie Interface Series Reactors Bypassed throughout Aug 1-3 period
- ✓ M51 345 KV cable out of service throughout Aug 1-3 period
- ✓ EDRP and SCR resources were activated in Zones J&K between 2 pm and 7 pm.
  - *Zone J activated for local reliability, K for forecast reserve deficiency*
  - *Record Summer Peak Load: 33,879MW*
  - *NYISO-PJM TTC reduced from normal 2500MW limit from HB13 to HB22 for Western NY area voltages*
  - *Fraser SVC taken out of normal for Oakdale voltage*
  - *Estimated performance by Zone:*
    - **J – 426 MW (331 MW SCR, 95 MW EDRP)**
    - **K – 227 MW  (175 MW SCR, 52 MW EDRP)**
    - **Total – 653 MW**

# August 2

✓ EDRP and SCR resources were activated in Zones J&K from 1 pm to 7 pm, and Zones A, B &C from 2 pm to 7 pm.

- *Zones J&K activated for the same reasons as 8/1; A,B &C for Western NY area voltages*
- *Record Peak Load: 33,939MW*
- *Fraser SVC and Leeds SVC taken out of normal for Oakdale and Ramapo voltage*
- *1,300MW of Emergency Energy to ISO-NE in HB13, ISO-NE in 5% voltage reduction*
- *Emergency Transfer Criteria on the 91 & 92 lines (Leeds-Pleasant Valley) to support SENY & PJM Transfers*
- *Estimated performance by Zone:*
  - **A – 328 MW (300 MW SCR, 28 MW EDRP)**
  - **B – 60  MW (59 MW SCR, 1 MW EDRP)**
  - **C – 94 MW (80 MW SCR, 14 MW EDRP)**
  - **J – 429 MW (334 MW SCR, 95 MW EDRP)**
  - **K – 261 MW (174 MW SCR, 87 MW EDRP)**
  - **Total – 1172 MW**

# August 3

✓ EDRP and SCR resources were activated in Zones J&K from 1 pm to 7 pm.

- *Zones J&K activated for same reasons as 8/1*

- *Peak Load: 32,492MW*

- *Fraser SVC and Leeds SVC taken out of normal for Oakdale and Ramapo voltage*

- *Emergency Transfer Criteria on the 91 & 92 lines (Leeds-Pleasant Valley) to support SENY & PJM Transfers*

- *Estimated performance by Zone:*
  - ↘ **J – 439 MW (334 MW SCR, 105 MW EDRP)**
  - ↘ **K – 224 MW (172 MW SCR, 52 MW EDRP)**
  - ↘ **Total – 663 MW**

# Scarcity Pricing Curves
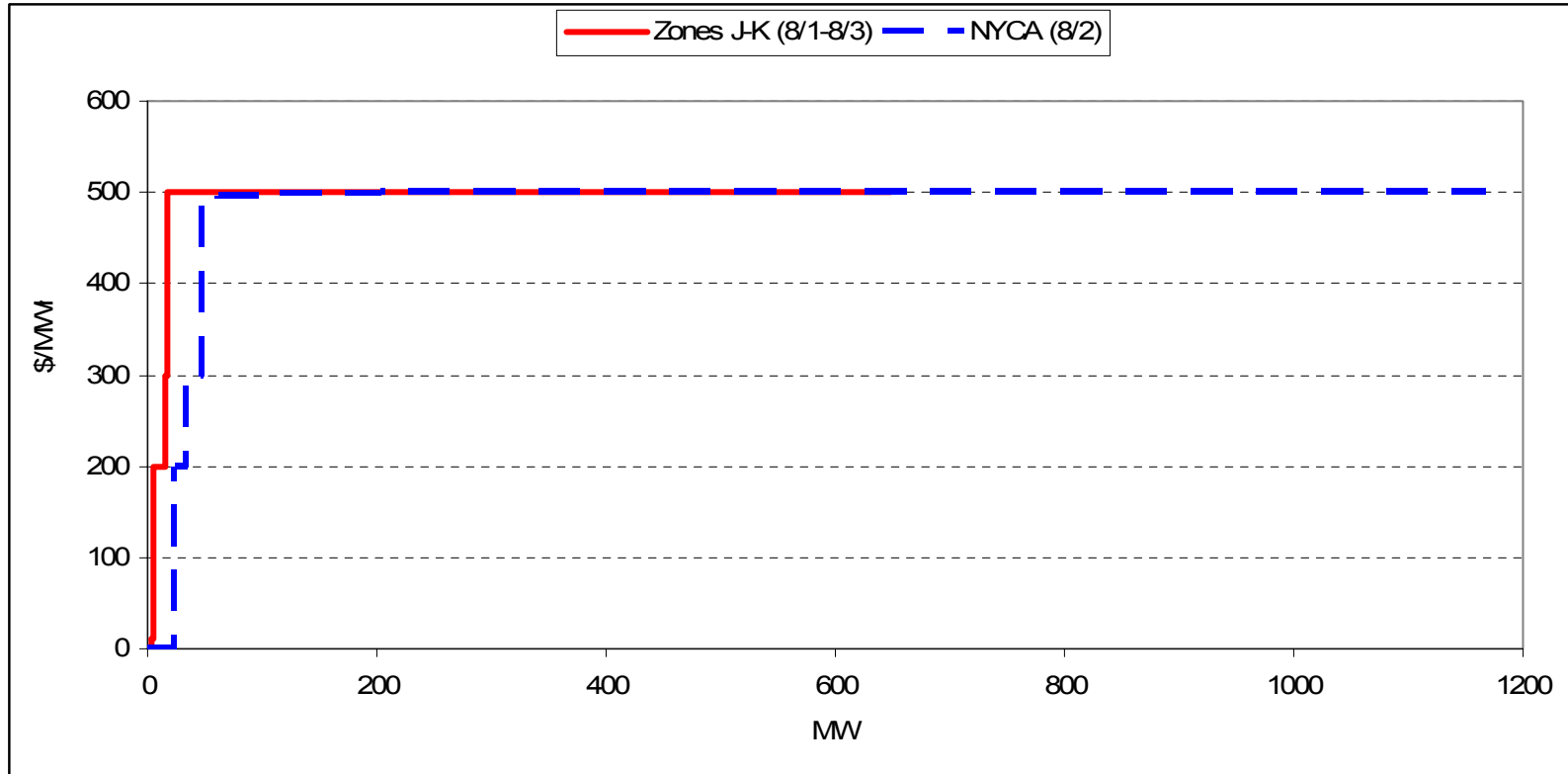


Note: Zones J&K curve length varies each day (8/1- 653 MW; 8/2 – 690 MW; 8/3 – 663 MW)

# Available Reserves vs. Reserve Requirement

Under all conditions:

- ✓ [Σgen + Σrecallable energy] – Σload >= reserve requirement

When EDRP/SCR called:

- ✓ [Σgen + Σrecallable energy] – [Σload + EDRP/SCR] = reserve requirement

- ✓ [Σgen + Σrecallable energy – Σload] – EDRP/SCR – reserve requirement = 0

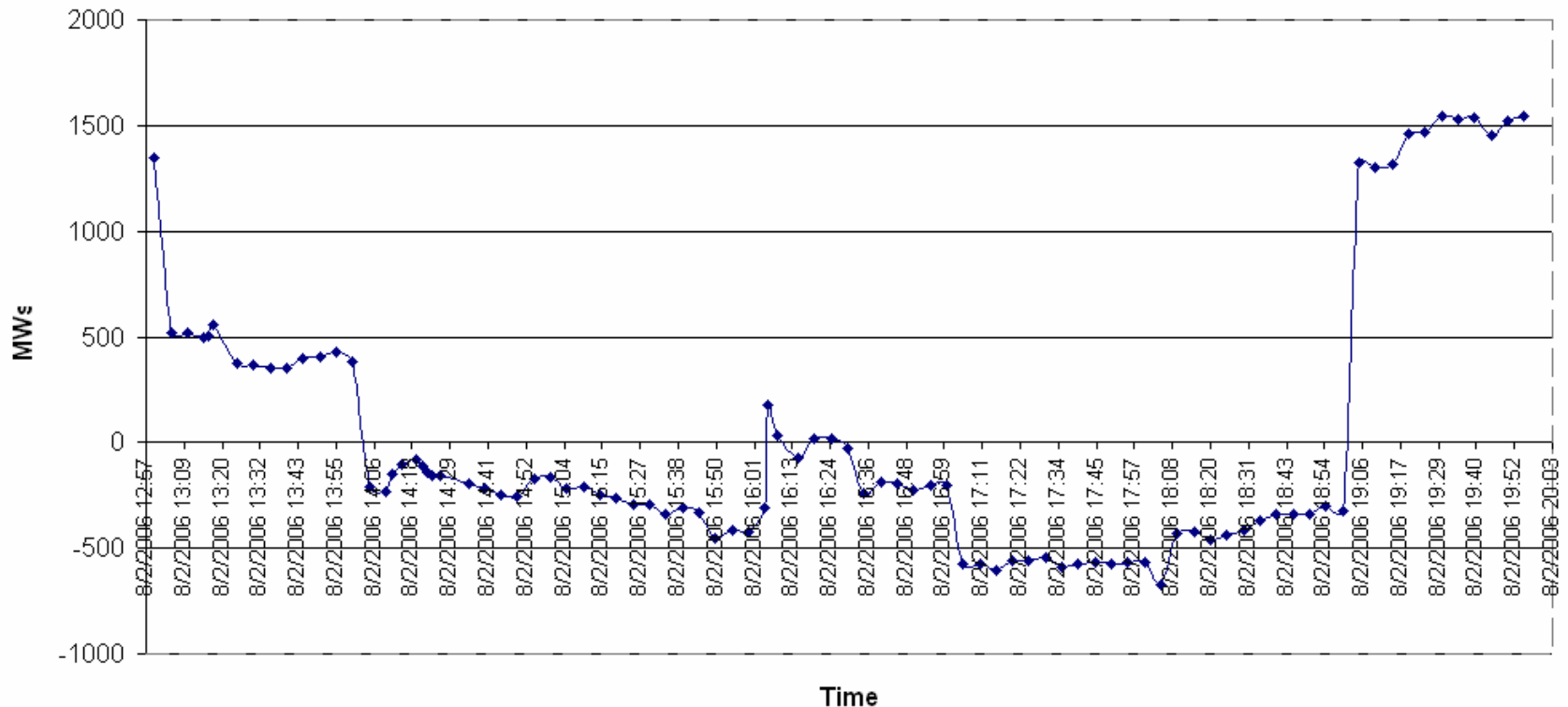- ✓ Available reserves – [EDRP/SCR + reserve requirement] = 0
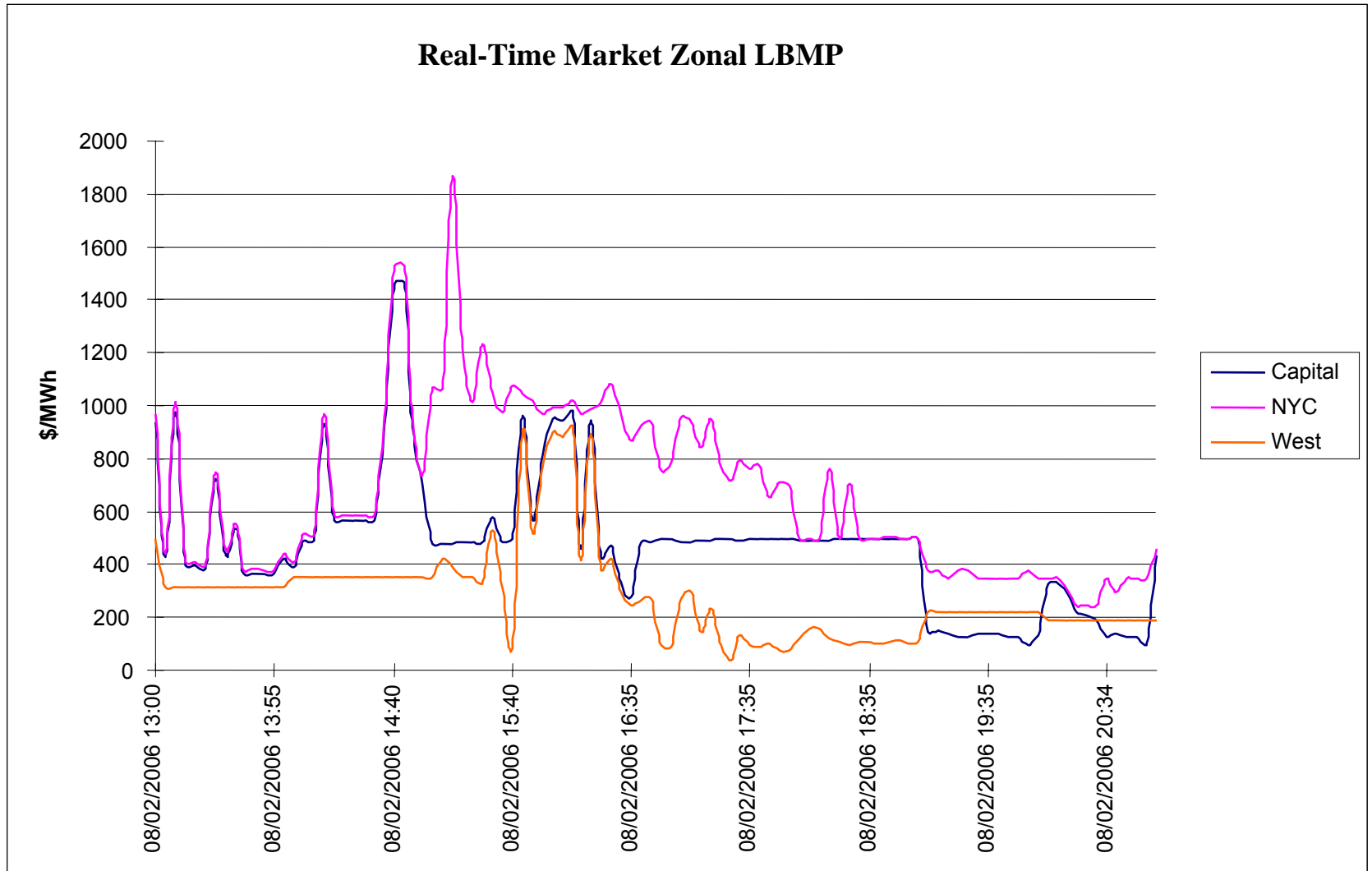
# 8/2 Scarcity Pricing Analysis

✓ ## August 2:

- *RTD prices were subject to EDRP/SCR scarcity pricing rules*
  - ↘ RTD intervals; 14:00-19:00

**[Available Reserves] less [East reserve Requirement + EDRP/SCR Load Reduction]**
**08/02/2006**

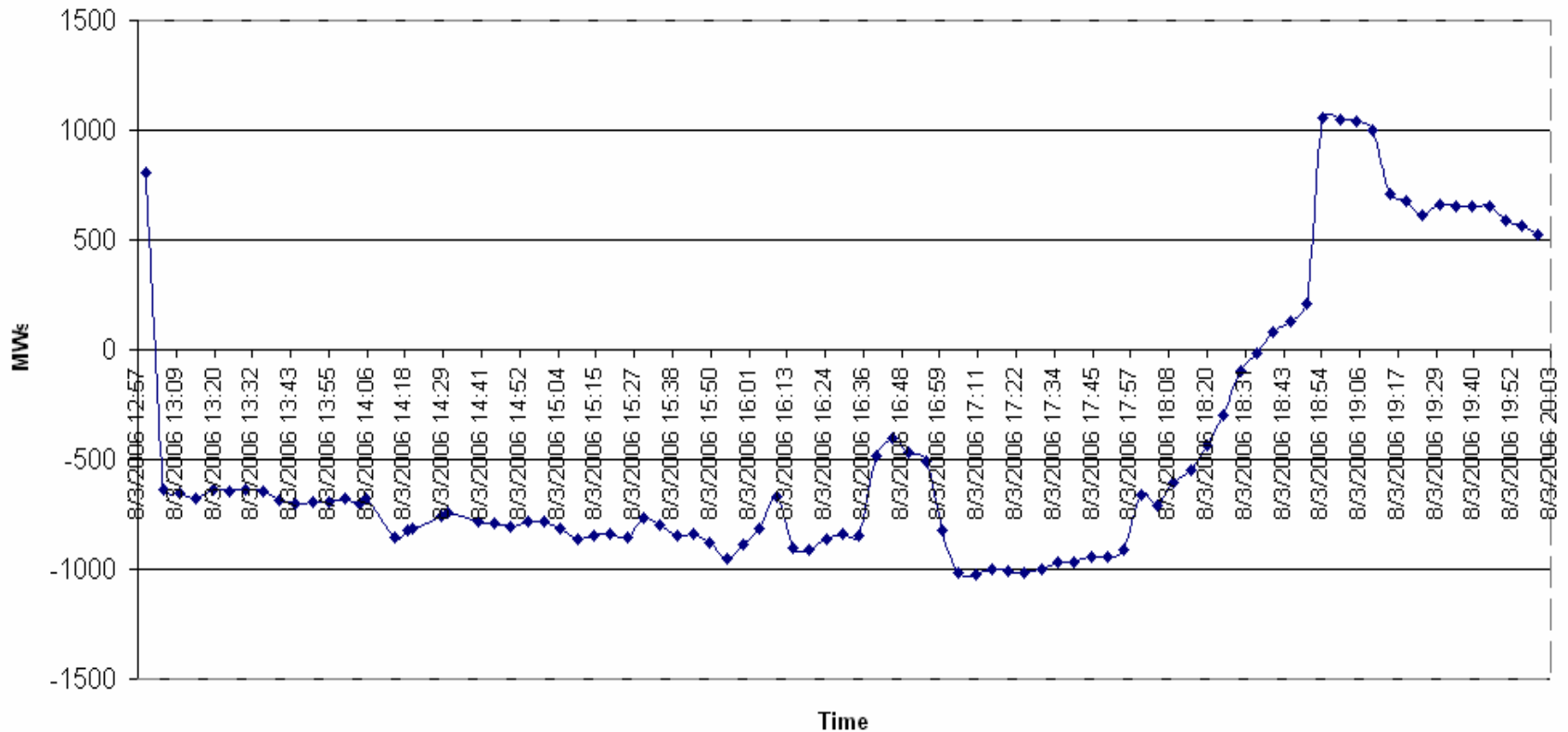# Real-Time Market Zonal Pricing – August 2



**Real-Time Market Zonal LBMP**
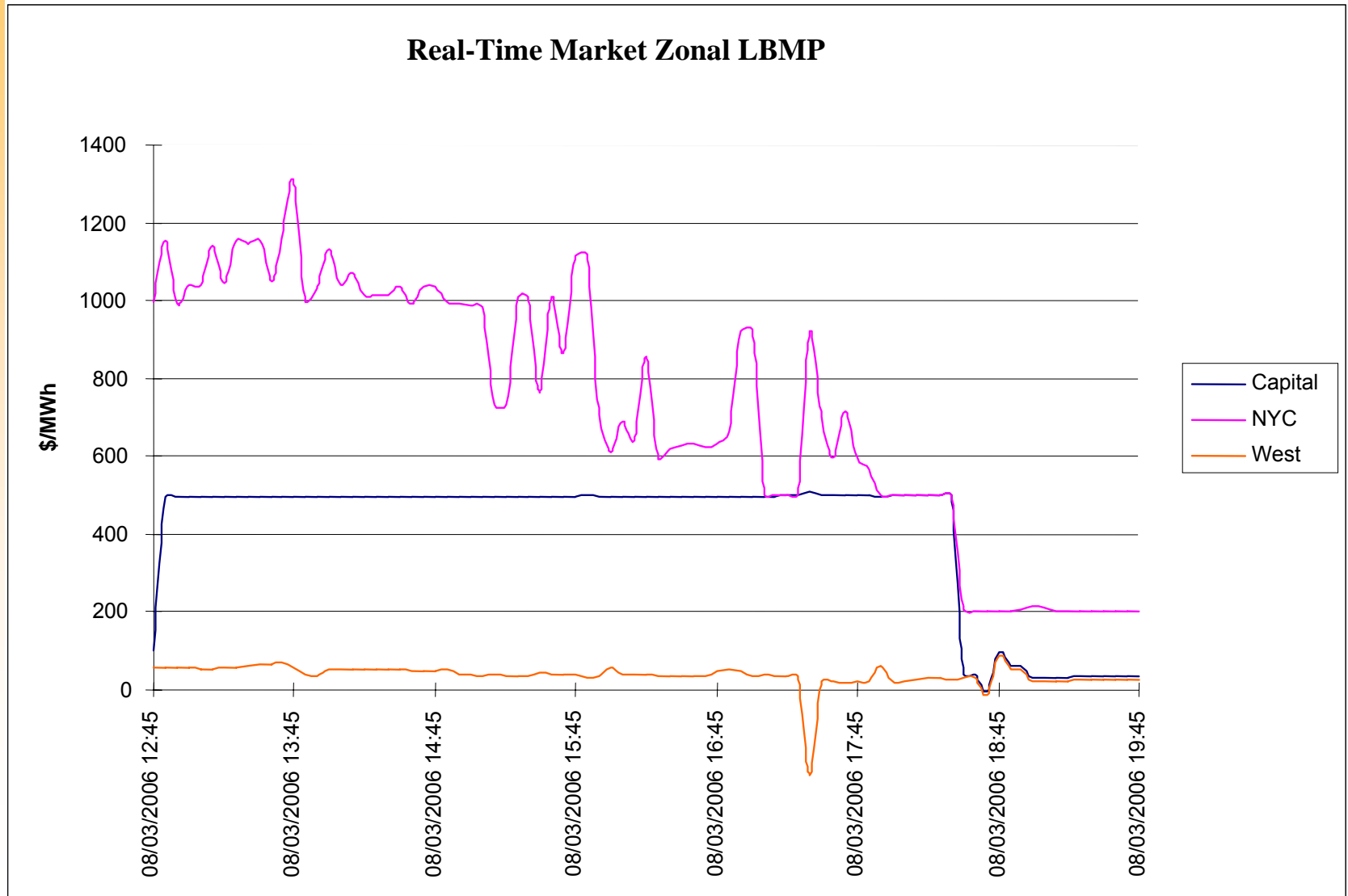
# 8/3 Scarcity Pricing Analysis

✓ **August 3:**

- ▪ *RTD prices were subject to EDRP/SCR scarcity pricing rules*
  - ↳ RTD intervals; 13:05-18:40



[Available Reserves] less [East reserve Requirement + EDRP/SCR Load Reduction]
08/03/2006

# Real-Time Market Zonal Pricing – August 3



Real-Time Market Zonal LBMP

# EDRP/SCR Real-Time Price-Setting Rules

✓ Operations determines the reason(s) for activating EDRP / SCR and issues activation notice (typically w/2 hours notice)

✓ Estimated load reductions reported by RIPs/CSPs are entered into MIS prior to event start time:

- *East and NYCA scarcity pricing curves built based upon registration data and Zones activated*

✓ Checks on actual East and NYCA reserve status are made each RTD interval per MST Attachment B, Sections I.A.2.a and I.A.2.b (sheets 331.01.02ff)

# EDRP/SCR Real-Time Price-Setting Rules (cont'd)

✓ Scarcity pricing will be set regardless of the reason for activation if, in any RTD interval, reserves would have been insufficient but for EDRP/SCR

  ■ *NYC prices on 8/2 and 8/3 are representative*

# EDRP/SCR Real-Time Price-Setting Rules (cont'd)

- ✓ EDRP/SCR events called for local reliability currently provide opportunities to capture scarcity revenue
- ✓ Any EDRP/SCR scarcity pricing refinements require criteria based upon real-time measurable data, consistent pricing rules, and well-defined facilities eligible for payment and cost allocation
- ✓ The NYISO recommends that no changes be made to the current EDRP/SCR scarcity pricing structure
- ✓ It is appropriate to review the consistency of EDRP/SCR scarcity and reserve demand curve pricing levels