

# August 1-3 EDRP/SCR Events Preliminary Analysis

Price Responsive Load Working Group  
September 7, 2006

*Draft – for discussion purposes only*

# Historical Summary of EDRP/SCR Events

## Summary of EDRP/SCR Events

Date	From	To	# Hours	Average MWh/h performance during the event												Total
				A	B	C	D	E	F	G	H	I	J	K		
8/7/2001	1500	1900	4	210.0	20.0	36.0	0.0	11.0	62.0	10.0	1.0	7.0	33.0	6.0	396.0	
8/8/2001	1300	1900	6	252.0	10.0	38.0	0.0	13.0	61.0	9.0	1.0	8.0	37.0	6.0	435.0	
8/9/2001	1100	1900	8	228.0	10.0	38.0	1.0	17.0	69.0	10.0	2.0	8.0	35.0	6.0	424.0	
8/10/2001	1330	1800	5						57.0	11.0	2.0	8.0	35.0	6.0	119.0	
4/17/2002	1200	1800	6							2.6	0.8	4.4	25.8	4.8	38.4	
4/18/2002	1200	1800	6							2.4	1.5	5.5	31.9	8.6	49.9	
7/30/2002	1300	1800	5	311.3	43.3	39.7	2.5	15.3	61.4	17.6	4.1	7.6	90.6	71.1	664.5	
8/14/2002	1300	1800	5	275.3	20.4	27.2	47.6	15.6	58.0	17.9	4.6	9.1	81.2	79.2	636.2	
8/15/2003	900	2300	14	292.4	32.9	61.3	13.1	33.8	84.4	26.0	4.6	13.1	173.5	70.1	805.2	
8/16/2003	1200	2000	8	251.4	28.2	41.5	6.5	9.6	61.6	13.6	0.9	1.8	43.6	12.3	471.0	
7/27/2005	1400	1800	4							15.9	2.7	13.2	201.9	111.3	345.0	
7/18/2006	1300	2200	9								4.0	15.0	414.0	225.0	658.0 estimated	
7/19/2006	1045	1900	9										414.0		414.0 estimated	
8/1/2006	1400	1900	5										426.2	227.2	653.4 estimated	
8/2/2006	1300	1900	6										428.9	261.2	690.1 estimated	
8/2/2006	1400	1900	5	328.2	59.6	94.1									481.9 estimated	
8/3/2006	1300	1900	6										439.4	224.3	663.7 estimated	

average hours per call: 6.5  
 std. dev.: 2.5  
 average hours per year: 18.5

# 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.
  - *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**

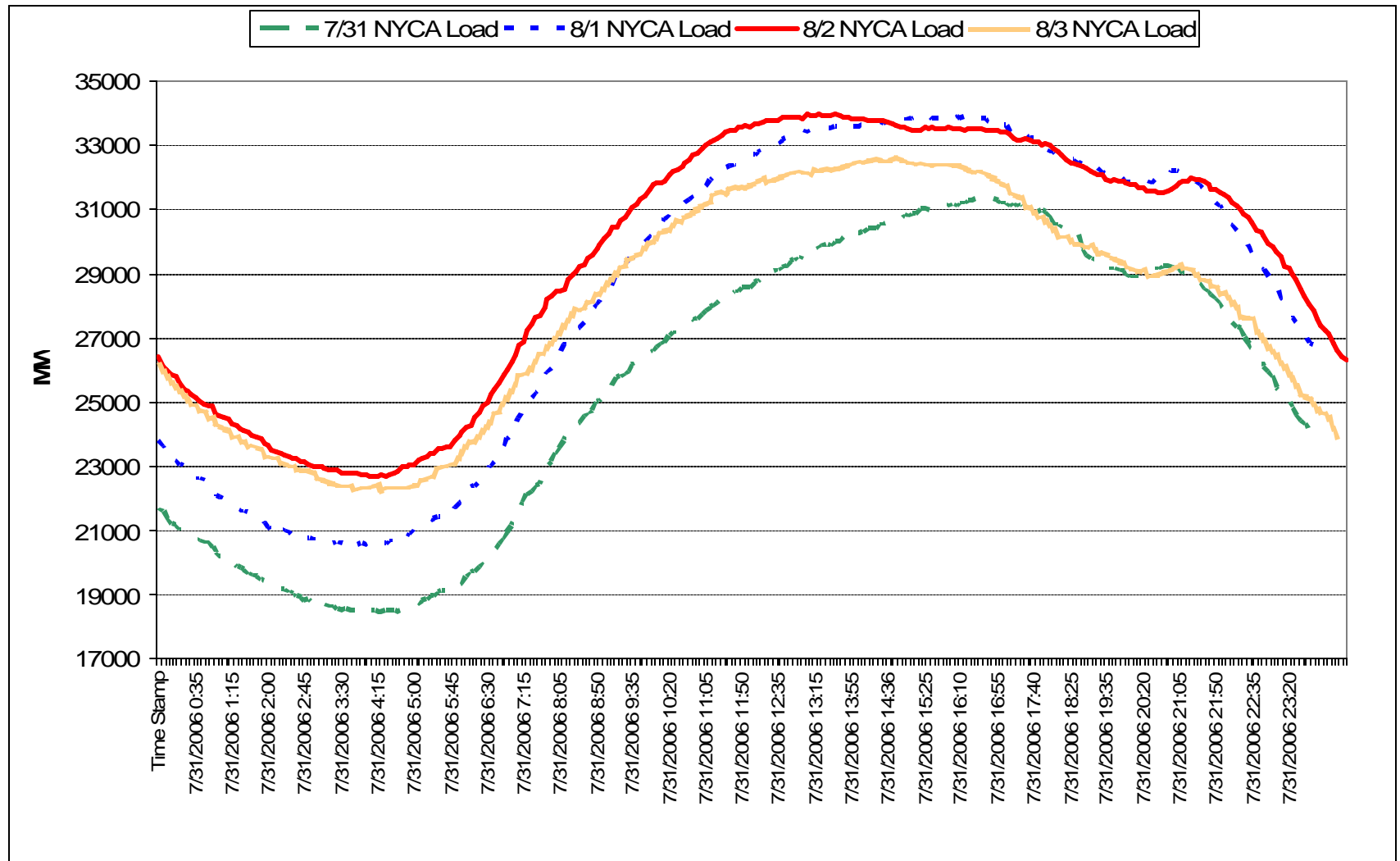
# August 2

- ✓ 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.
  - *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**

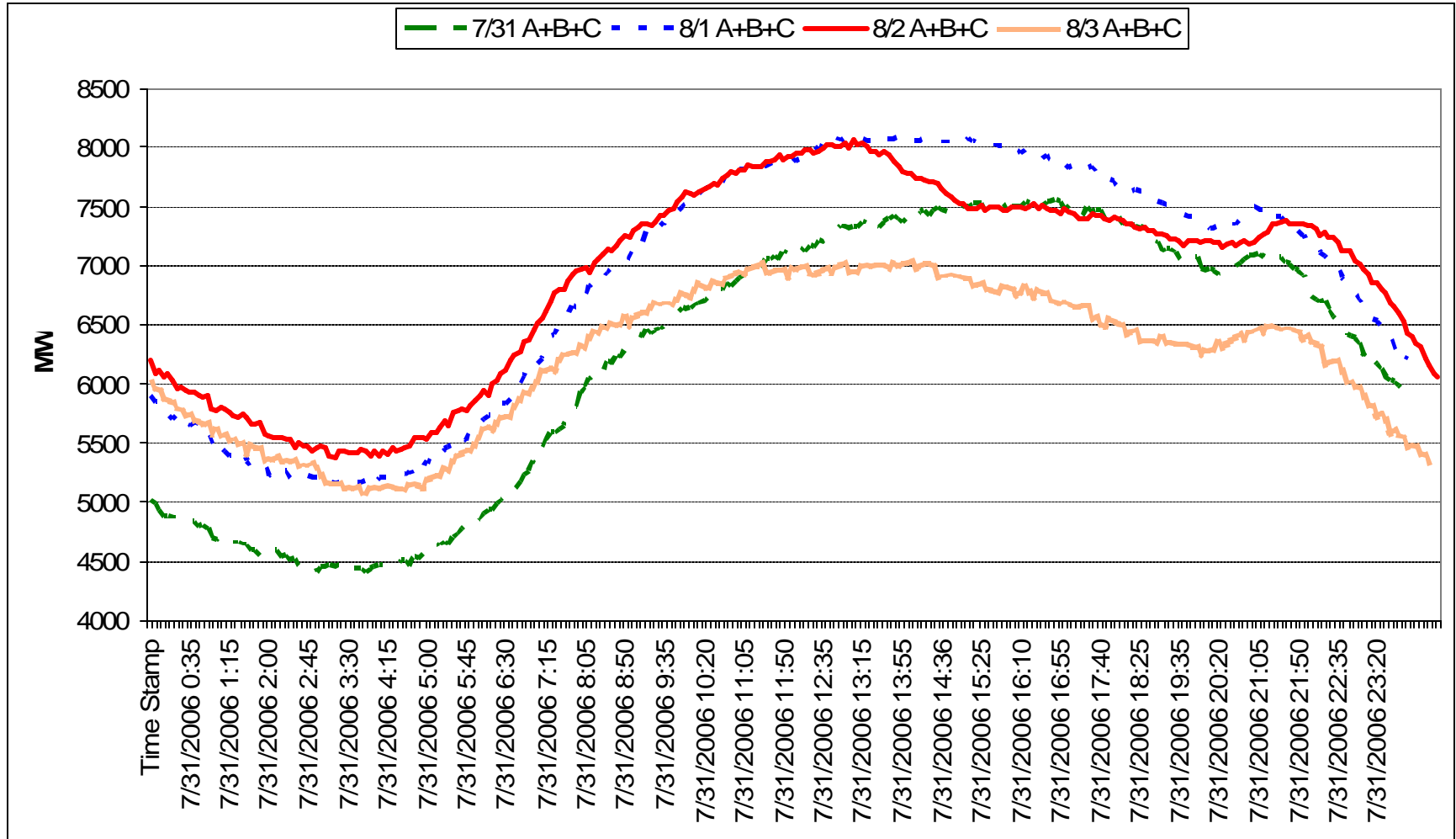
# August 3

- ✓ EDRP and SCR resources were activated in Zones J&K from 2 pm to 7 pm.
  - *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**

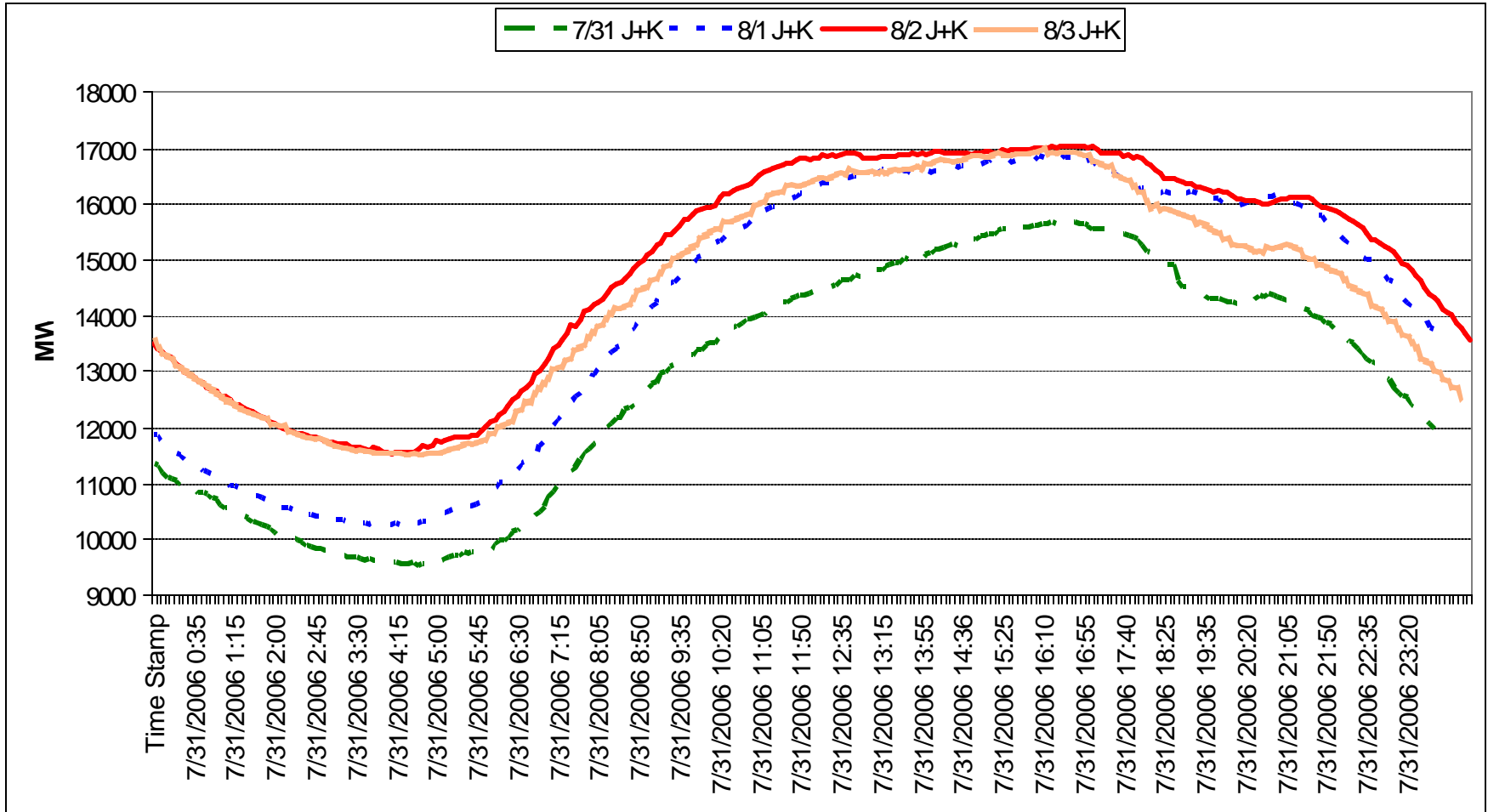
# NYCA Real-Time Load, 7/31 – 8/3



# Real-Time Load, Zones A-C, 7/31-8/3

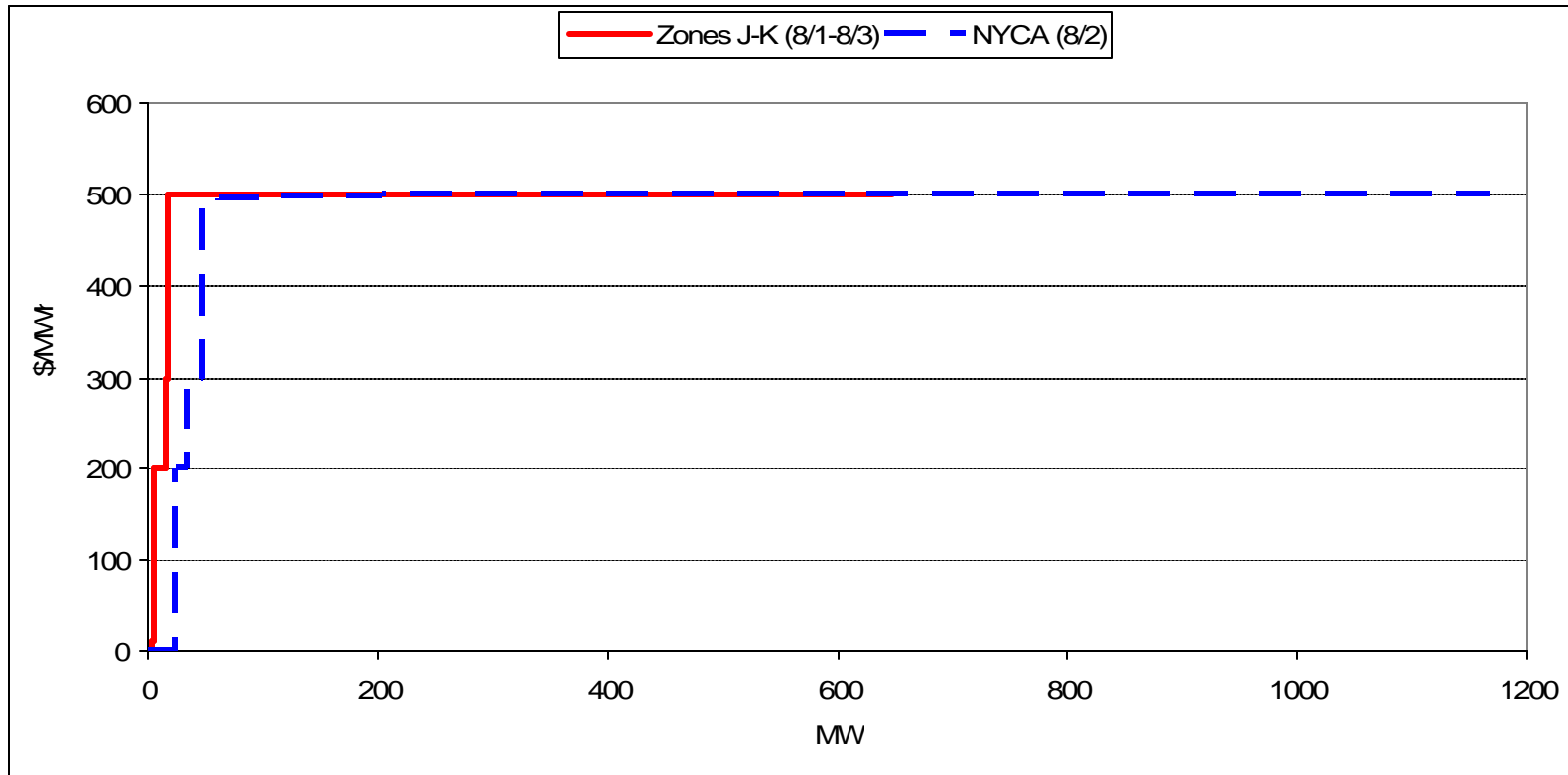


# Real-Time Load, Zones J&K, 7/31-8/3



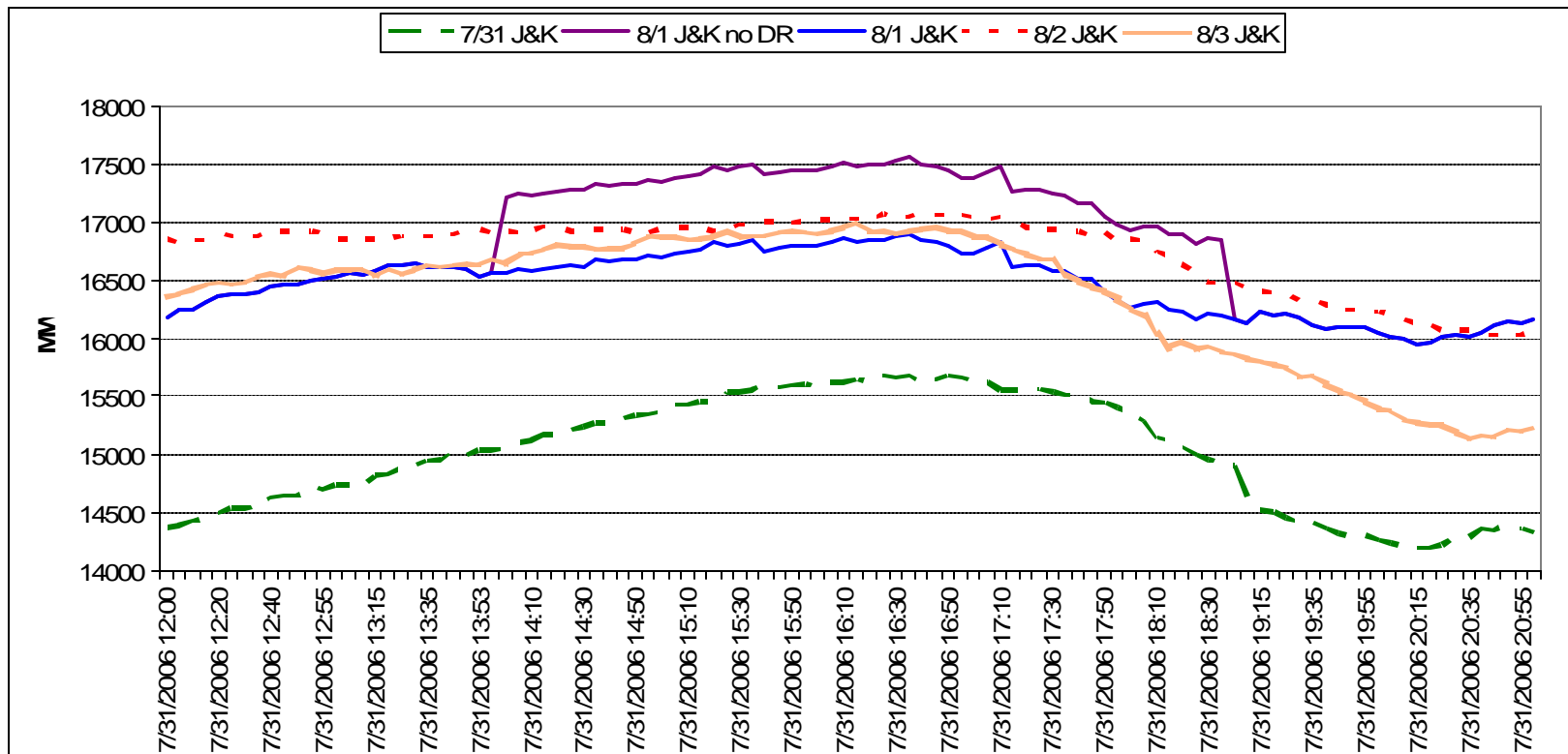


# Scarcity Pricing Curves



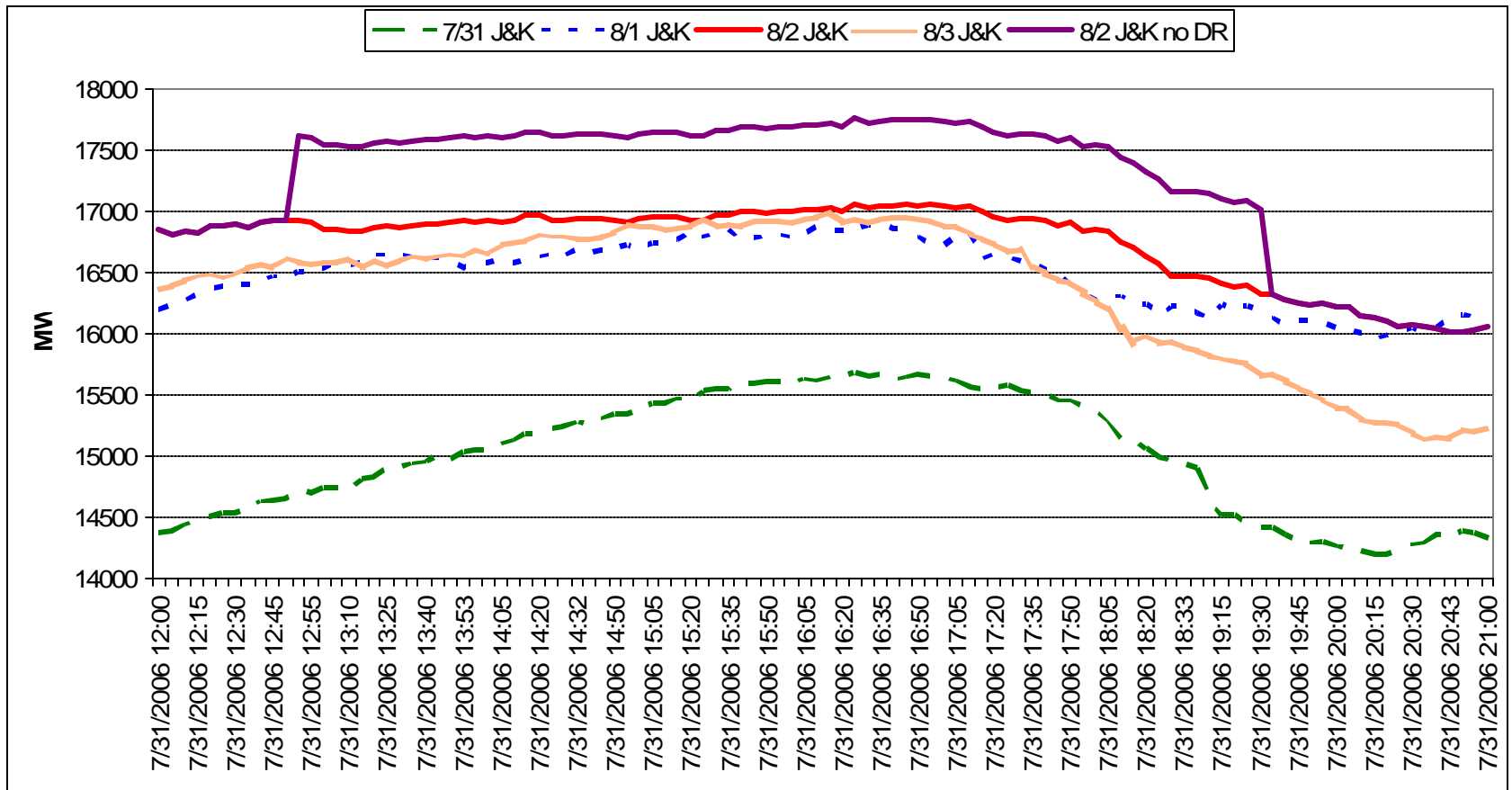
Note: Zones J&K curve length varies each day (8/1- 653 MW; 8/2 – 690 MW; 8/3 – 663 MW)

# 8/1 J&K Load – Effect of Demand Response Added Back



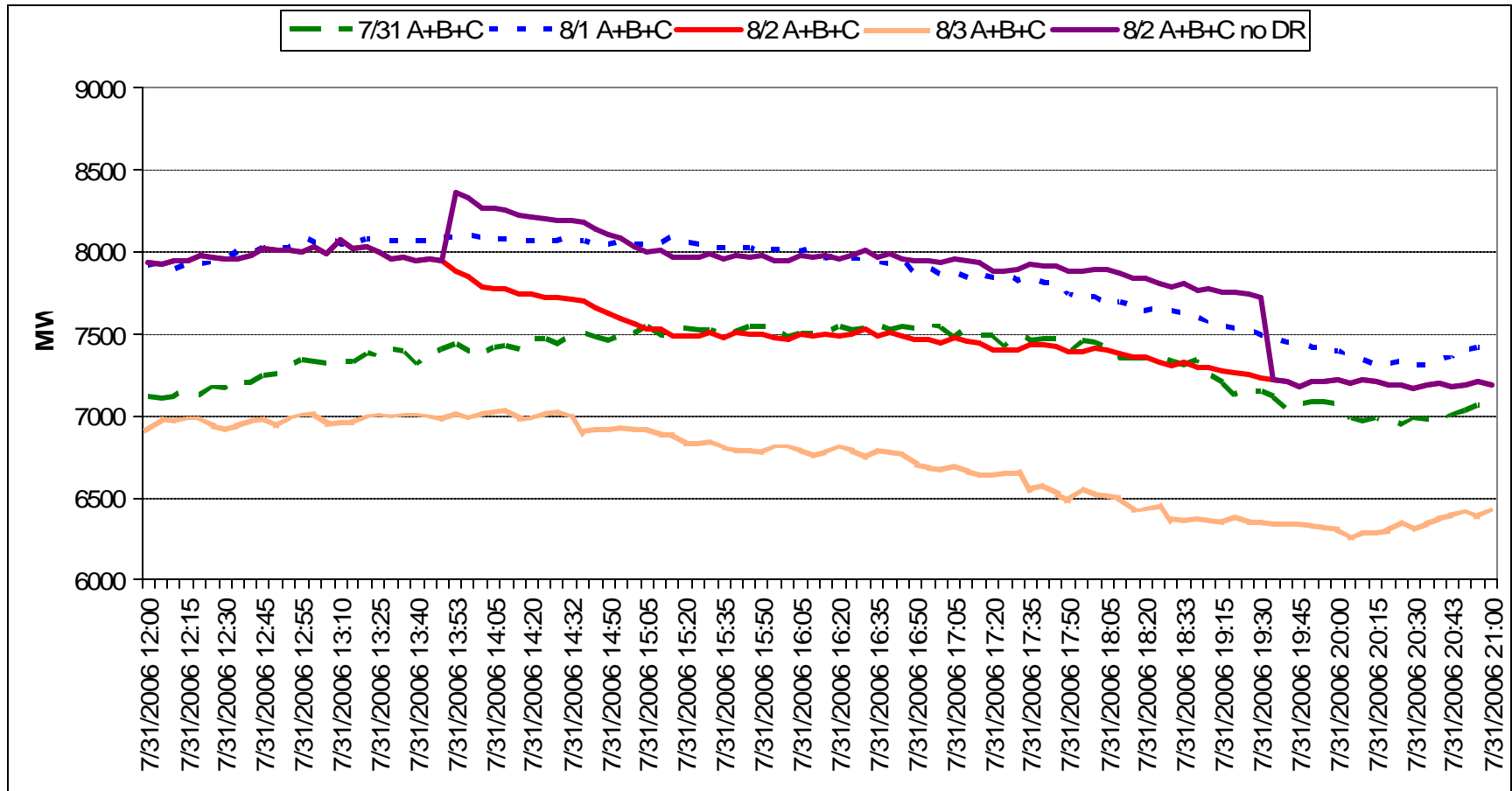
**J – 426 MW (331 MW SCR, 95 MW EDRP)**  
**K – 227 MW (175 MW SCR, 52 MW EDRP)**  
**Total – 653 MW**

# 8/2 J&K Load – Effect of Demand Response Added Back



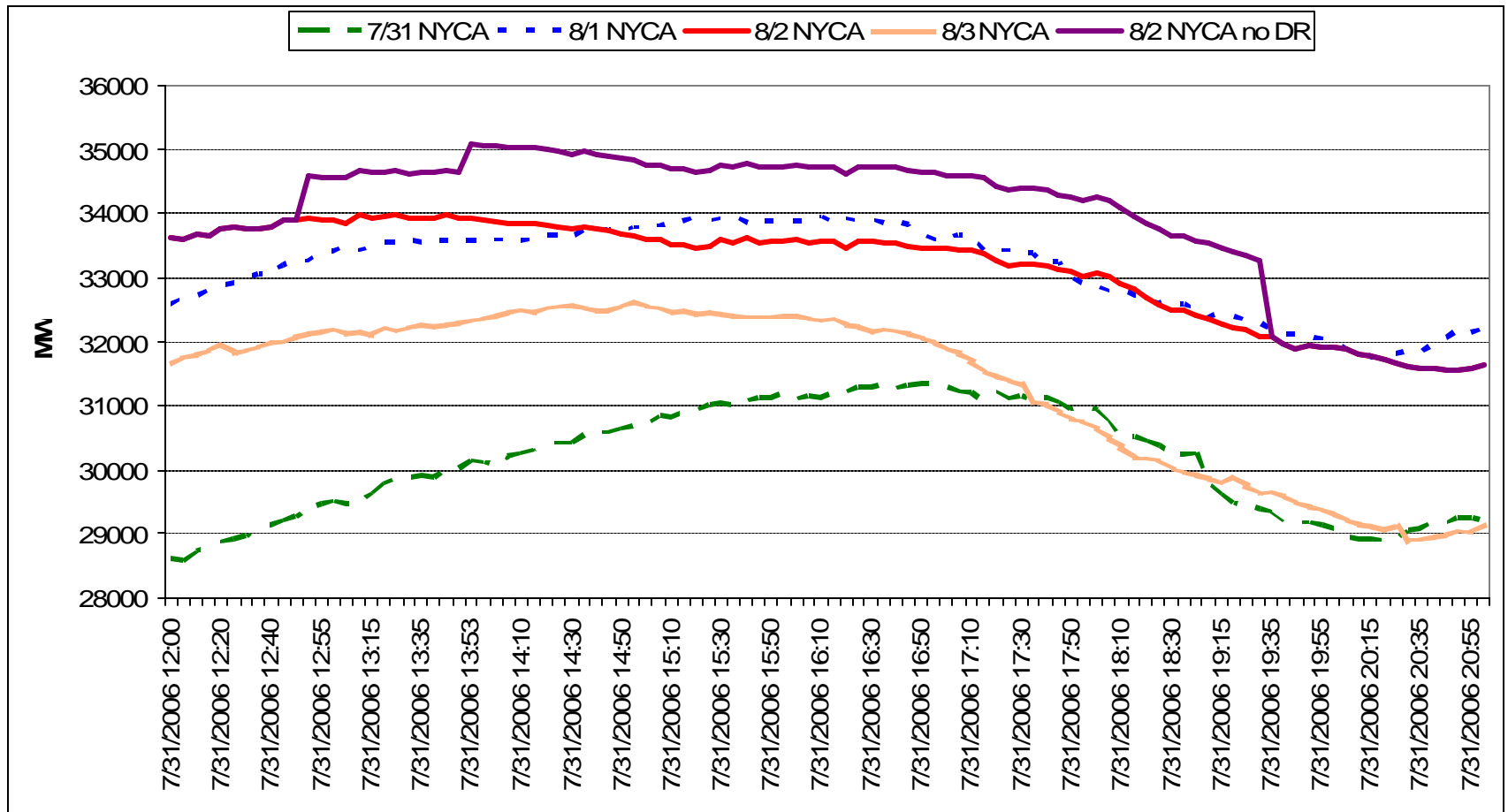
**J – 429 MW (334 MW SCR, 95 MW EDRP)**  
**K – 261 MW (174 MW SCR, 87 MW EDRP)**  
**Total – 690 MW**

# 8/2 – A-C Load – Effect of Demand Response Added Back



**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)**  
**Total – 482 MW**

# 8/2 NYCA Load – Effect of Demand Response Added Back



Total 1172 MW

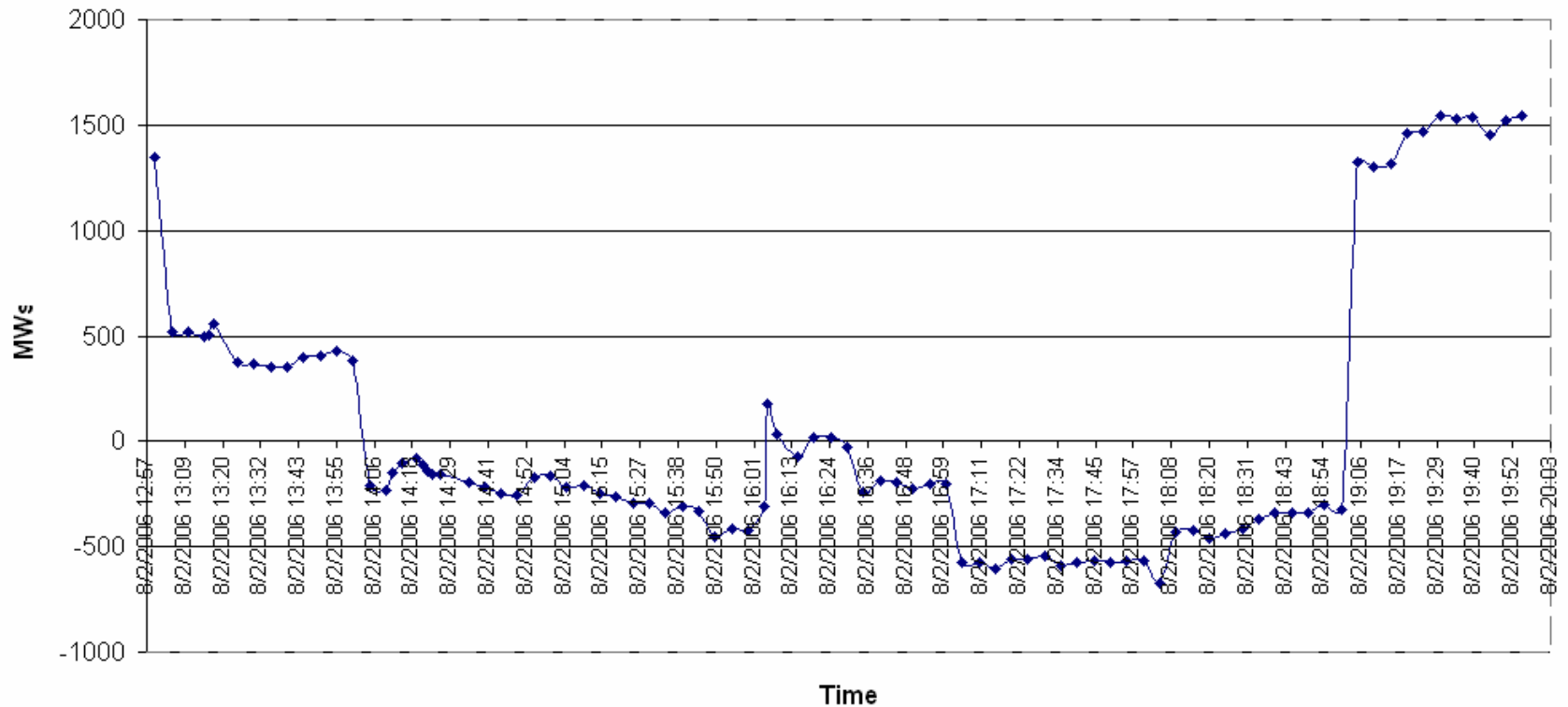
# 8/2 Scarcity Pricing Analysis



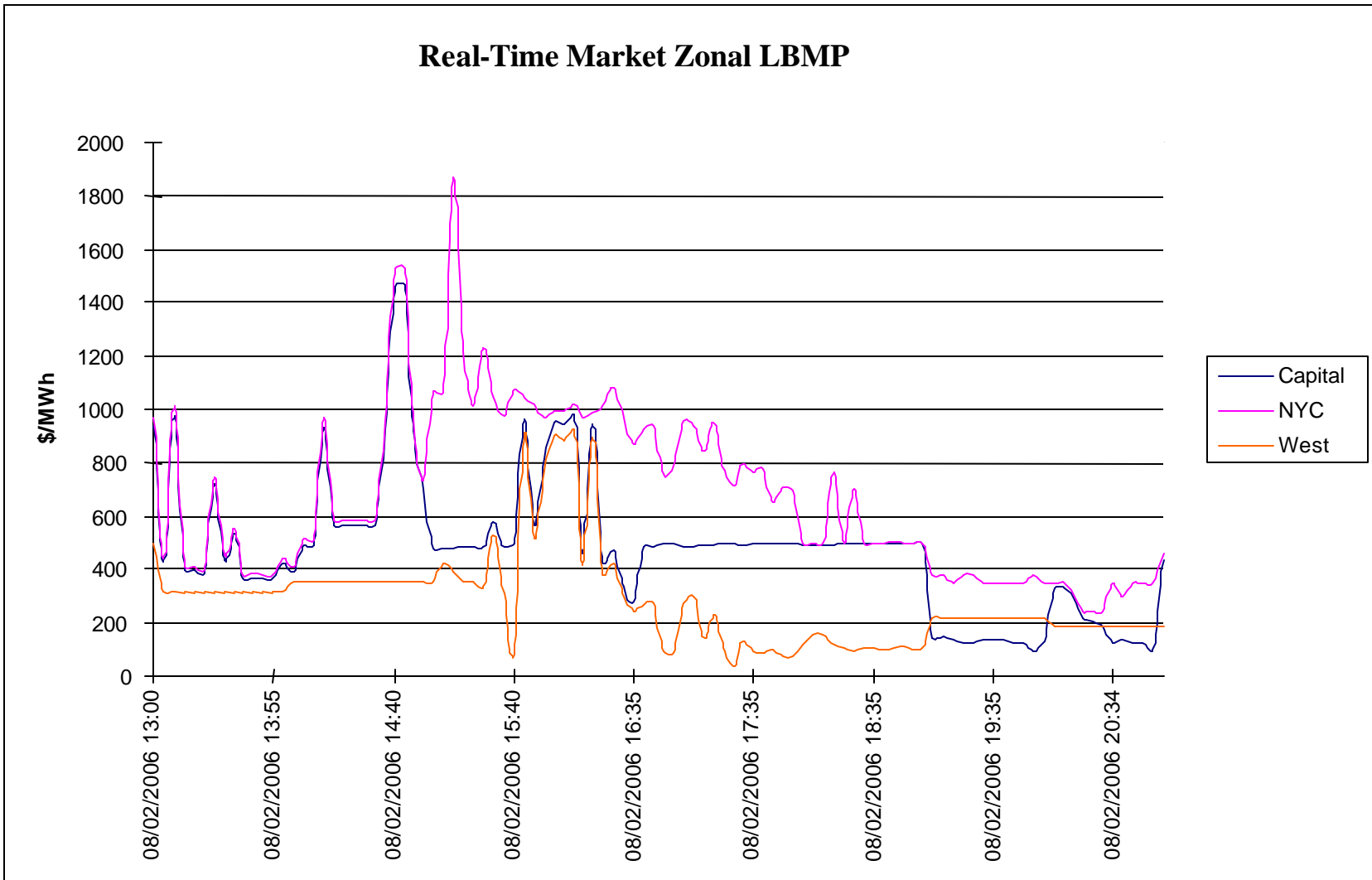
## August 2:

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

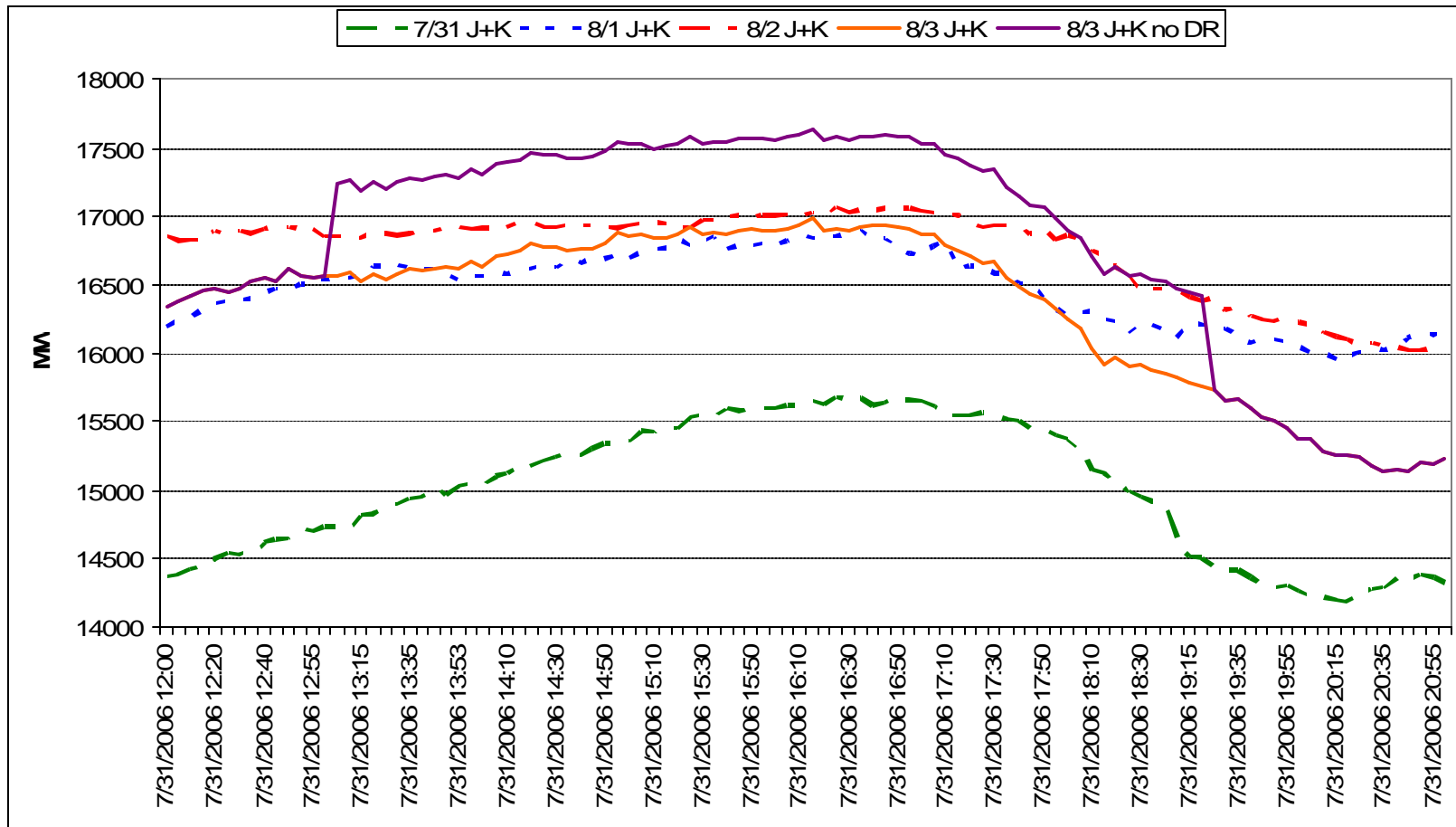
**[Available Reserves] less [East reserve Requirement + EDRP/SCR Load Reduction]**  
**08/02/2006**



# Real-Time Market Zonal Pricing – August 2



# 8/3 J&K Load – Effect of Demand Response Added Back



**J – 439 MW (334 MW SCR, 105 MW EDRP)**

**K – 224 MW (172 MW SCR, 52 MW EDRP)**

**Total – 663 MW**



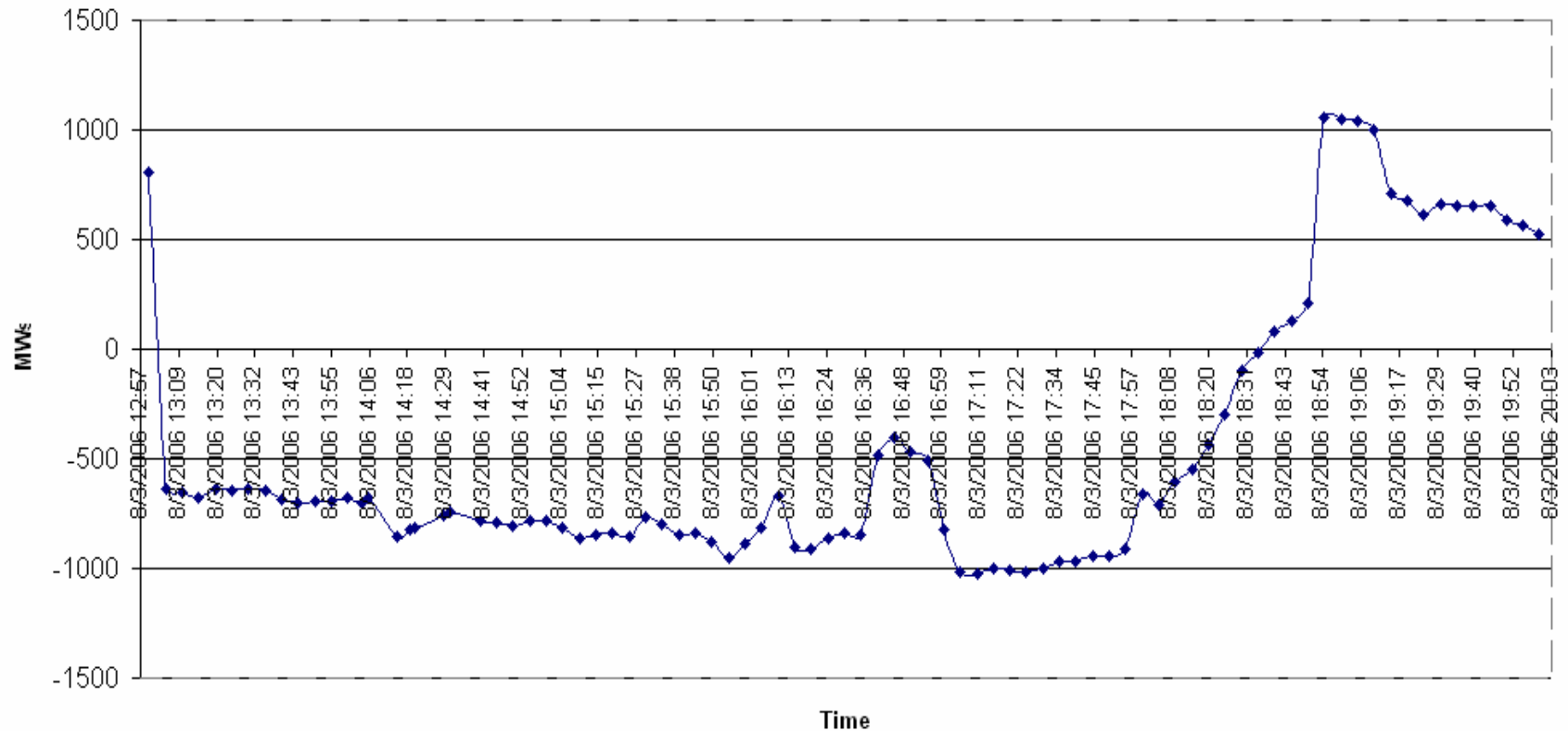
# 8/3 Scarcity Pricing Analysis



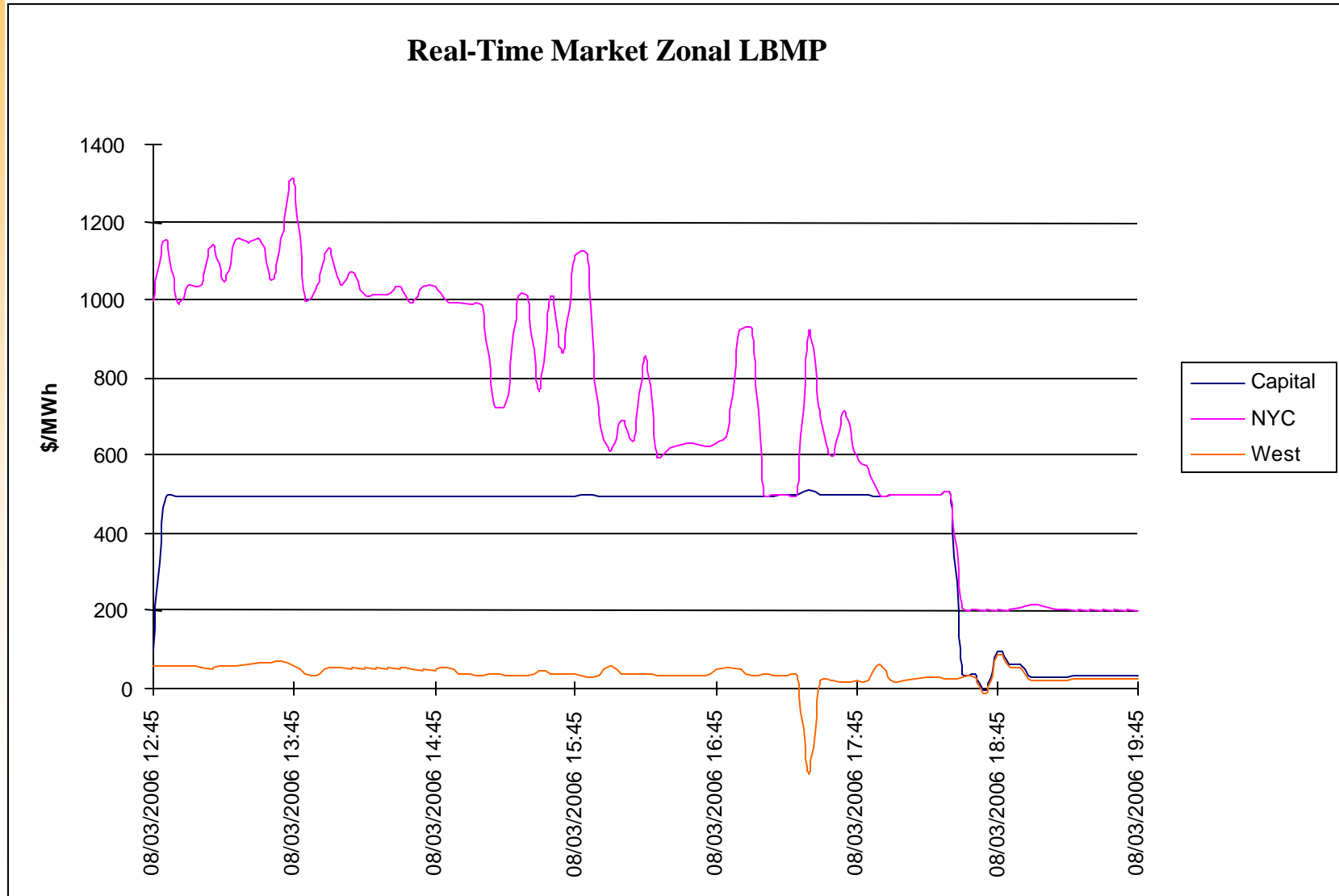
## August 3:

- 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



# Schedule for Data Submission

## ✓ SCRs

- *Event report form needs to be submitted to the NYISO within 60 days of an event*
  - ✦ **July 18-19: due September 18**
  - ✦ **August 1-3: due October 2**
- *Report is available on the NYISO website at:*  
***[http://www.nyiso.com/public/webdocs/products/icap/auctions/Summer-2006/forms/SCR\\_EventTest\\_Report.xls](http://www.nyiso.com/public/webdocs/products/icap/auctions/Summer-2006/forms/SCR_EventTest_Report.xls)***
- *Energy reduction data submitted in either Excel spreadsheet or .csv file format (Attachments C&D, EDRP manual)*
- *Energy reduction file formats on NYISO website at:*  
***[http://www.nyiso.com/public/products/demand\\_response/edrp.jsp](http://www.nyiso.com/public/products/demand_response/edrp.jsp)***

## ✓ EDRP

- *Will accept data up to 60 days after an event, consistent with SCRs*