

# **EDRP / SCR Performance During the July 27, 2005 Event**

NYISO Price Responsive Load Working Group  
Meeting  
December 12, 2005

Draft – For Discussion Only

# EDRP/SCR Registration on July 27, 2005

## Registered EDRP/SCR MW by Zone, July 2005

Zone	Total	EDRP	SCR
G	38.8	34.4	4.4
H	7.5	6.8	0.7
I	17.5	7.5	10.0
J	395.3	131.8	263.4
K	244.3	138.9	105.5
	703.4	319.4	384.0

# SCR Performance Based on APMD and CMD

## SCR Performance (MW) Based on APMD & CMD - July 27, 2005

Zone	HB14	HB15	HB16	HB17	average	% of registered
G	2.6	3.3	4.1	4.2	3.6	80.8%
H	1.5	1.5	1.5	1.7	1.6	223.1%
I	11.5	11.1	11.5	11.1	11.3	112.7%
J	104.9	149.2	156.7	161.1	143.0	54.3%
K	15.1	92.9	92.5	94.9	73.8	70.0%
	135.7	258.1	266.3	272.9	233.2	60.7%

- Overall performance below historical levels
- Zone J performance well below registered levels

*APMD = Average Peak Monthly Demand as defined in Attachment J of the ICAP Manual*

*CMD = Contract Minimum Demand as defined in Attachment J of the ICAP Manual*

# Event Performance Based on CBL Calculation

<b>Energy Reduction (MWh/h) via CBL method - SCR only</b>						
<b>Zone</b>	HB14	HB15	HB16	HB17	average	% of registered
G	0.7	0.9	1.8	1.8	1.3	29.5%
H	0.7	0.7	0.7	0.9	0.8	109.7%
I	11.2	10.8	11.0	10.5	10.9	108.8%
J	66.2	75.3	74.5	68.3	71.1	27.0%
K	10.9	12.0	12.0	11.6	11.6	11.0%
	89.8	99.8	100.0	93.1	95.7	24.9%

<b>Energy Reduction (MWh/h) via CBL method - EDRP only</b>						
<b>Zone</b>	HB14	HB15	HB16	HB17	average	% of registered
G	8.4	11.3	14.2	15.5	12.3	35.9%
H	1.1	1.1	1.0	1.1	1.1	15.7%
I	1.7	2.3	1.9	1.7	1.9	25.5%
J	52.6	56.6	57.8	68.6	58.9	44.7%
K	35.7	38.8	41.2	34.2	37.5	27.0%
	99.5	110.2	116.2	121.0	111.7	35.0%

Energy reduction payments amounted to roughly \$815,000

# Performance Analysis

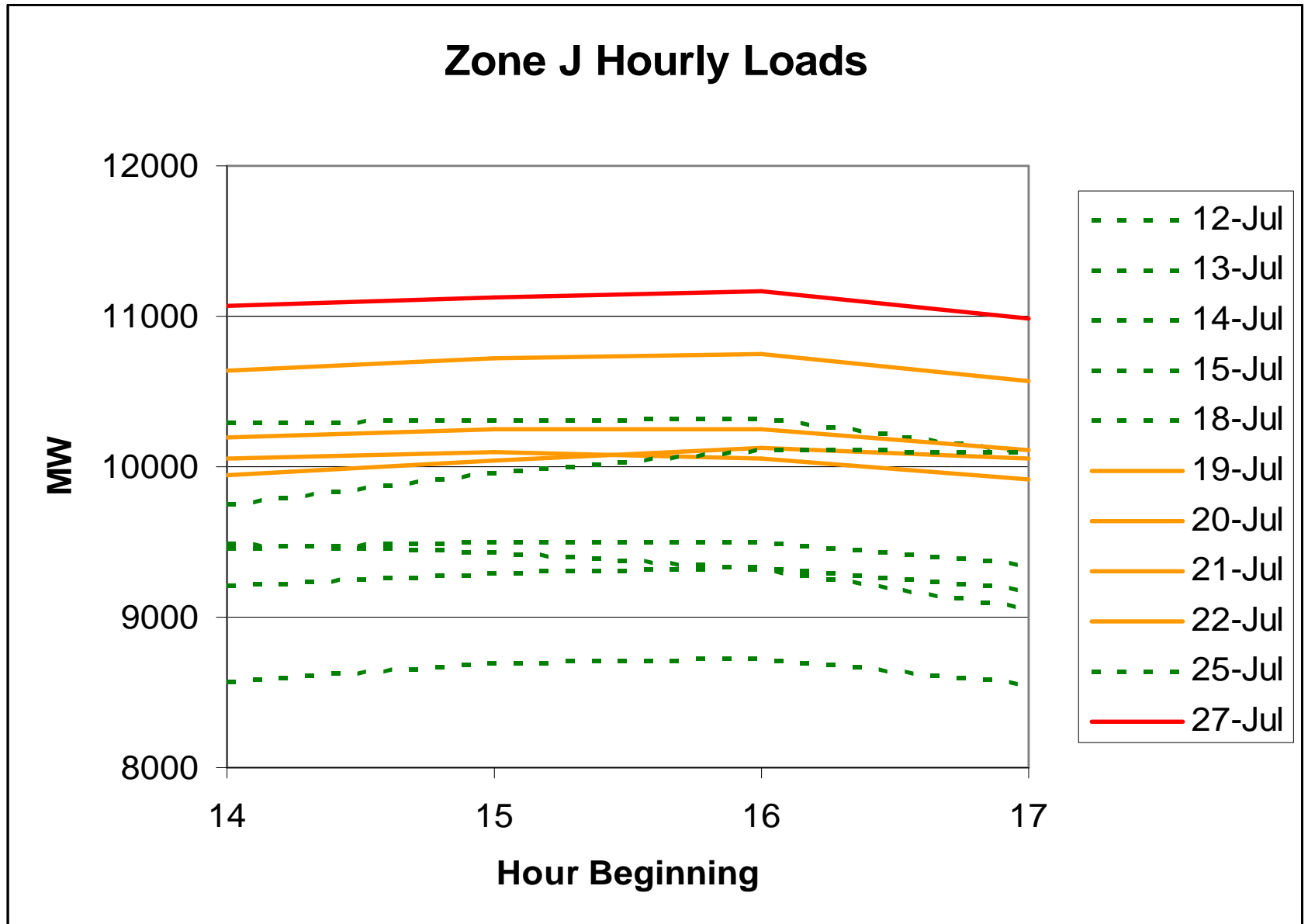
- ✓ 41 out of 63 SCR IDs did not reduce to their CMD at any point during the event
- ✓ 43 out of 63 SCR IDs provided Capacity performance (APMD – Meter) that exceeded Energy performance (CBL – Meter)
  - *Total Capacity Performance: 933 MWh*
  - *Total Energy Performance: 383 MWh*
- ✓ 2 out of 63 SCR IDs provided some Capacity performance but provided no Energy performance
  - *Implying  $CMD > Meter > CBL$*

# Observations

- ✓ Large performance difference between CBL and APMD methodologies:
  - *78% reduction using APMD vs. 32% using CBL*
- ✓ Some of these are due to reporting differences:
  - *Instances where subsets of SCR customer energy reduction reported*
  - *Discrepancies in metered load data reported for each program*

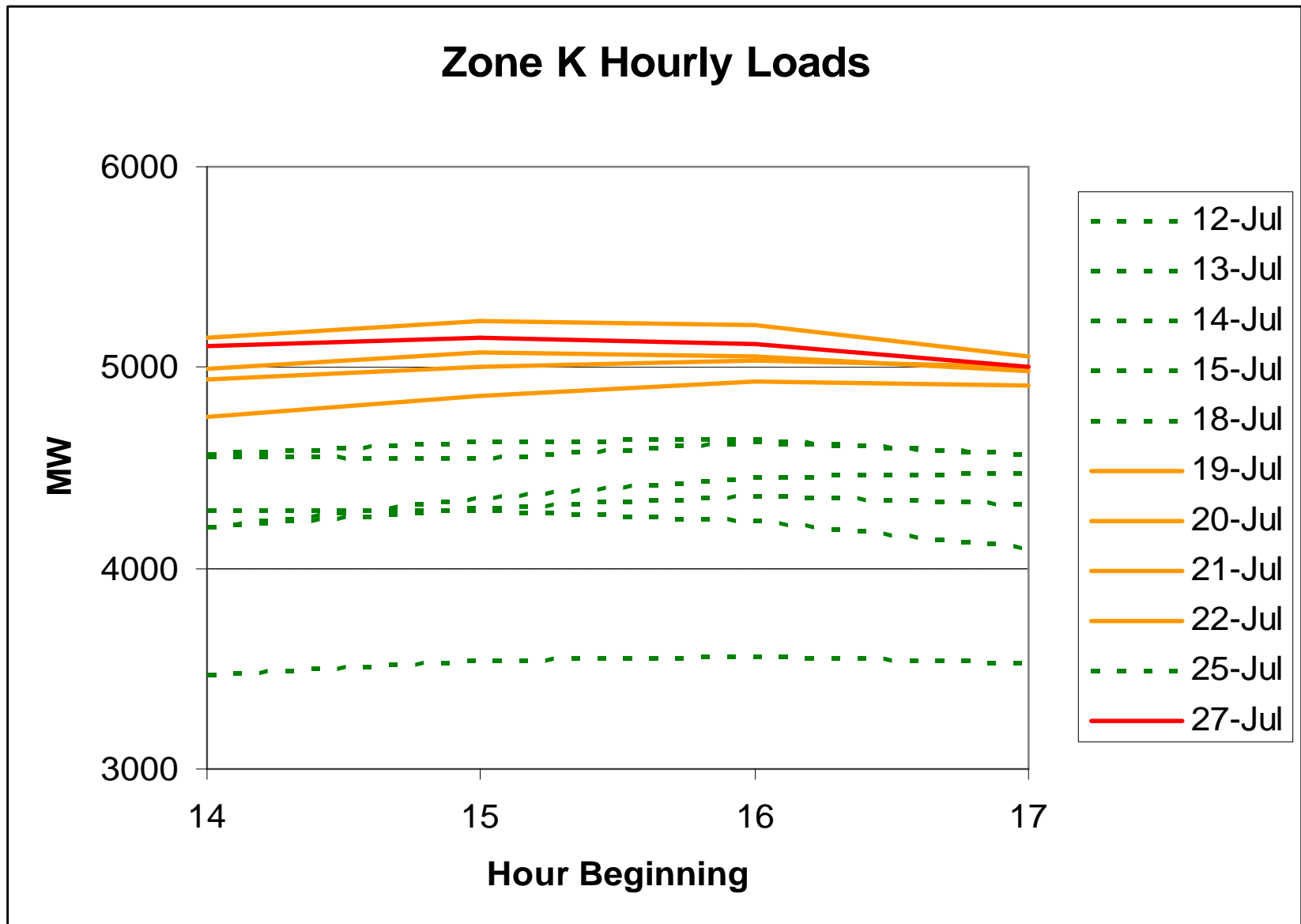
## Observations (cont'd)

- ✓ 4 day-ahead advisories issued prior to 7/27 event that fell within typical CBL window
  - *If resources reduced load on all 4 days in anticipation of an event, there would still be 6 valid CBL days not associated w/advisories*
- ✓ Event day load compared with CBL days:
  - *Zone J load on 7/27 was ~4% higher than next highest load day (7/19) in CBL window*
  - *Zone K load on 7/27 was just below 7/19, otherwise above all other CBL days*



*Red = event day; orange = advisory day; green dash = neither*





*Red = event day; orange = advisory day; green dash = neither*

## Observations (cont'd)

- ✓ Modifications are needed to the energy reporting worksheet in EDRP manual:
  - *Customer name and LDC account number will become mandatory*

# SCR Deficiency and EFORd Impact

- ✓ The Tariff and the ICAP Manual specify that NYISO may test SCRs each Capability Period to verify performance.
- ✓ Audit results as well as actual event data, if any, have been used to verify capability as well as to establish performance factors.
- ✓ All hours reported have applied to forward deratings, if any.
- ✓ NYISO practice has been to run such “audits” at least once each Capability Period, pending an actual event.

## SCR Deficiency and EFORd Impact (cont'd)

- ✓ It is proposed that actual Special Case Resource events will supplant audit results.
- ✓ The best hour in an event will be used to determine deficiencies, if any. Audit results will only be used if there is no event. Resources registered after an event or the last audit will be tagged with a class average derating.
- ✓ Underperformance has been calculated in accord with Attachment J of the ICAP Manual. It is proposed to use a straight seasonal performance factor rather than the average of the last six 12-month rolling calculations.

# SCR Impact of New Resources

- ✓ Current rules permit SCR resources changing RIPs to carry with them their individual performance history
- ✓ Resources new to the SCR program enter the program with a performance factor of 100%
- ✓ Registration numbers overstate capability, providing an unrealistic estimate of resources for Operations

# Conclusions

- ✓ SCR rules should be amended to indicate that DMNC tests are only provisional.
- ✓ Where SCR events are called, individual resource performance during the event(s) will supercede any DMNC tests for purposes of determining deficiency payments during that capability period and for derating factors going forward.
- ✓ New resources entering the SCR program in any given capability period will be assigned the class average performance factor of all resources registered during that capability period.

## Conclusions (cont'd)

- ✓ Performance factors will be seasonal rather than the average of the 6 most recent 12-month rolling performances.
- ✓ Need to revisit components of APMD calculation to ensure accurate reporting of load reduction
  - *Restricting allowable window for APMD calculation to peak hours should correct much of the problem*
- ✓ Need to further examine metered load data for some RIPs/CSPs to identify differences in load reporting for capacity and energy
- ✓ Energy reporting worksheet needs to be updated

# Summary of Proposed SCR Rule Modifications

- ✓ Best single hour during an event will be used to determine, or to avoid, a deficiency charge.
- ✓ Audits will only apply if there are no events; best single hour will apply
- ✓ Audits will only be conducted during DMNC Test Periods: June 1 to September 15 in Summer Capability Period, November 1 to subsequent April 15 in Winter Capability Period.
- ✓ Resources registering after audits/events will carry class average performance factors forward to the next like Capability Period.
- ✓ APMD, or better equivalent, will be on the 2-6 PM time period in summer and 4-8 PM time period in winter.



## Summary of Proposed SCR Rule Modifications (cont'd)

- ✓ If a new resource has no APMD from Interval Billing Meter data, APMD-CMD declarations may be provisionally based on billing demand data. Such declarations will be subject to actual in-period verification of an APMD-CMD performance during an event or audit and subject to all the same deficiency payments and forward deratings.
- ✓ Interval Billing data will absolutely be required, meaning one hour, on-the-hour to on-the-hour energy, consumption or production, metered and measure in MWh.

## Summary of Proposed SCR Rule Modifications (cont'd)

- ✓ 60 day maximum reporting time. No data in 60 days will be treated same as nonperformance.
- ✓ Metering to be certified by registered and independent MSP and read by MDSP.
- ✓ Meters must have certified test records
- ✓ Customer must register any and all generators used to reduce load, whether direct metered or not.