

Market Performance Report for August 2007



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California ISO
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Board of Governors
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Market Highlights

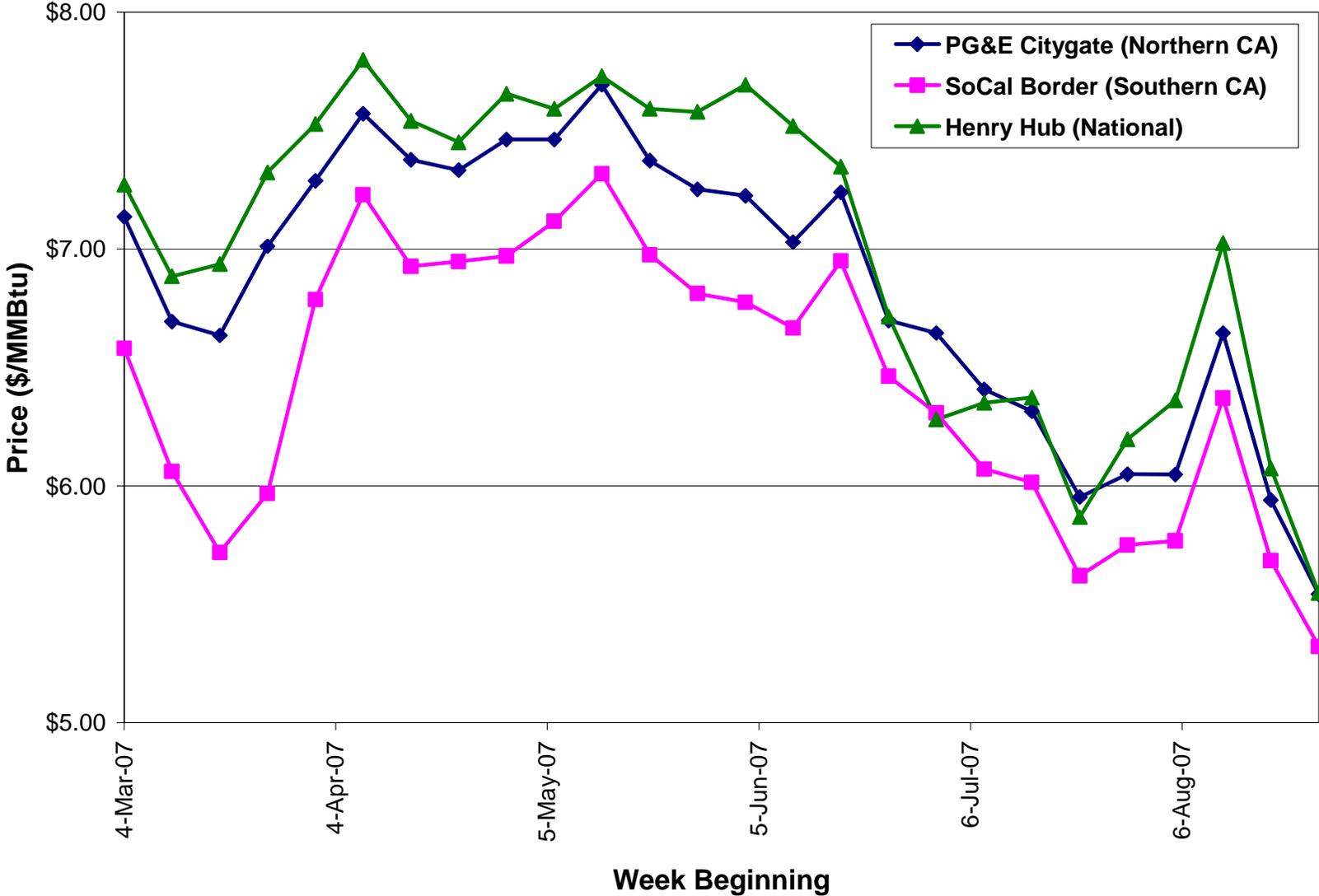
The full Market Performance Report is available at <http://www.caiso.com/1c27/1c27dd0dcfe0.pdf>

- 🌍 The main heat wave of 2007 lasted from August 29th to September 4th, with a peak load of 48,615 MW occurring on August 31st
- 🌍 Real-time prices exceeded \$250/MWh in 167 of 8,928 dispatch intervals (1.9% of the total), up sharply from 79 in July
- 🌍 Total unit commitment costs declined to an unusually low \$4 million due to self commitment

Monthly Market Performance Metrics for 2007

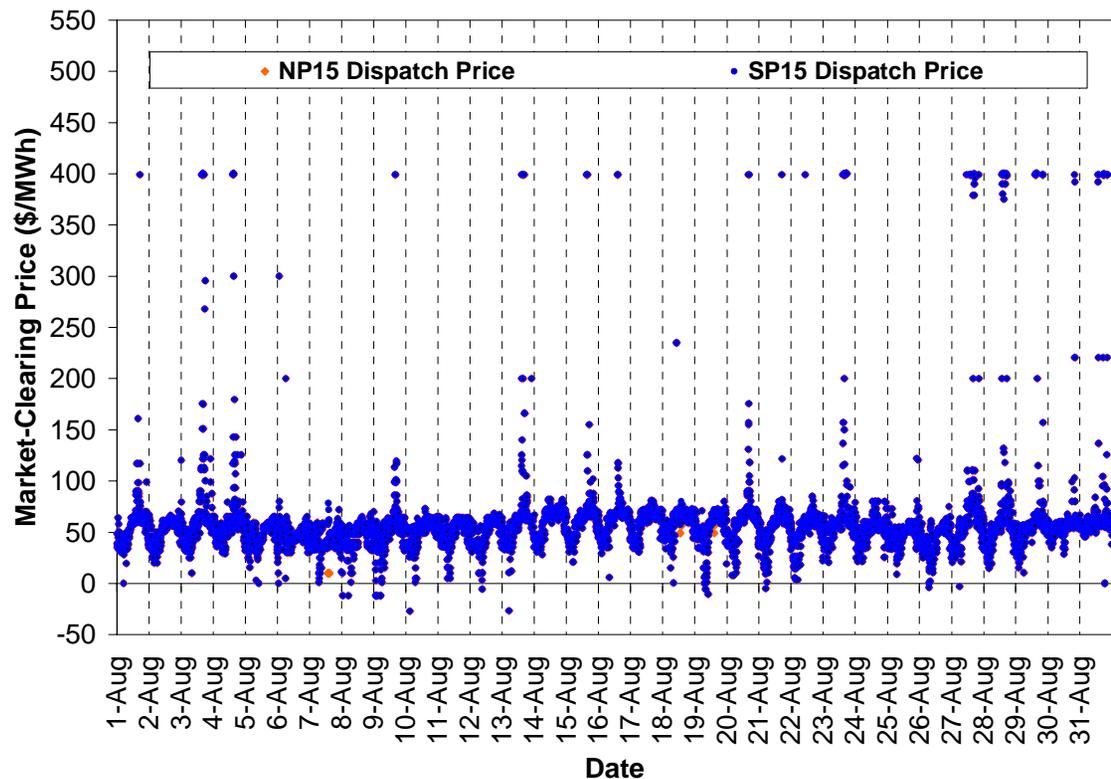
Monthly Metrics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Average Gas Price	\$6.78	\$7.32	\$6.48	\$7.19	\$7.25	\$6.88	\$6.28	\$6.38					\$6.82
Average On-Peak Contract Price	\$63.32	\$64.25	\$54.90	\$64.78	\$75.04	\$68.47	\$71.76	\$72.40					\$66.86
Average Real-Time Price	\$50.35	\$51.25	\$41.75	\$50.24	\$59.14	\$54.85	\$55.84	\$62.44					\$53.23
No. of Price Spikes Over \$250	102	50	131	203	101	77	79	167					114
Costs Incurred over \$250 (percent)	24%	13%	24%	33%	22%	18%	14%	24%					22%
AS Cost (\$ per MWh)	\$0.54	\$0.41	\$0.58	\$0.38	\$0.74	\$0.59	\$1.16	\$0.78					\$0.65
RA Unit Commitment Costs (\$M)	\$2.5	\$1.6	\$1.3	\$2.1	\$1.9	\$3.4	\$4.8	\$3.2					\$2.6
FERC Unit Commitment Costs (\$M)	\$0.7	\$0.3	\$0.7	\$0.1	\$0.0	\$1.4	\$1.4	\$1.4					\$0.7
Inc OOS Redispatch Costs (\$M)	\$2.7	\$1.6	\$1.1	\$1.7	\$1.5	\$1.2	\$2.1	\$1.2					\$1.6
Dec OOS Redispatch Costs (\$M)	\$0.2	\$0.3	\$0.4	\$0.3	\$0.7	\$0.3	\$0.4	\$0.5					\$0.4
Total Interzonal Congestion (\$M)	\$4.0	\$1.8	\$8.1	\$5.0	\$12.5	\$4.5	\$4.2	\$3.1					\$5.4

Natural Gas Prices



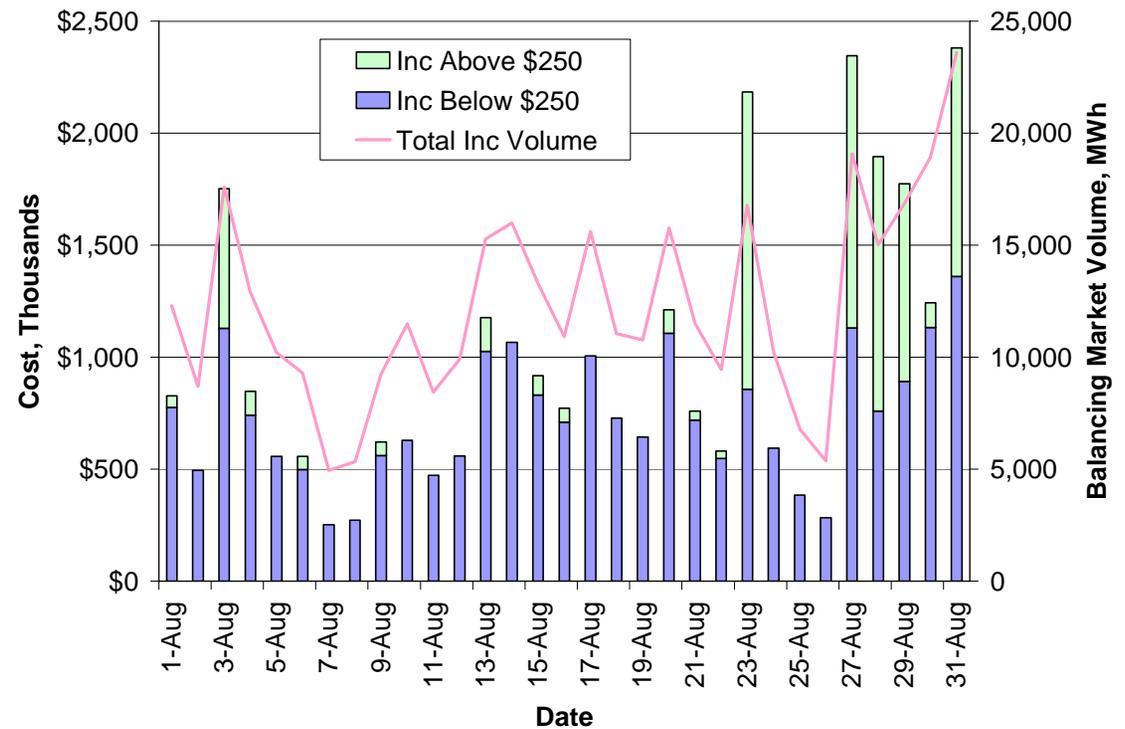
Real Time Balancing Energy Prices

- For the month, there were 167 intervals of prices over \$250, a sharp increase over last months' 79 intervals
- 100 (60%) of the high price intervals coincided with the heat wave on the last 5 days of the month
- Another 25 occurred on the 23rd due to a large volume of schedule deviations (about 750 MW) across the peak



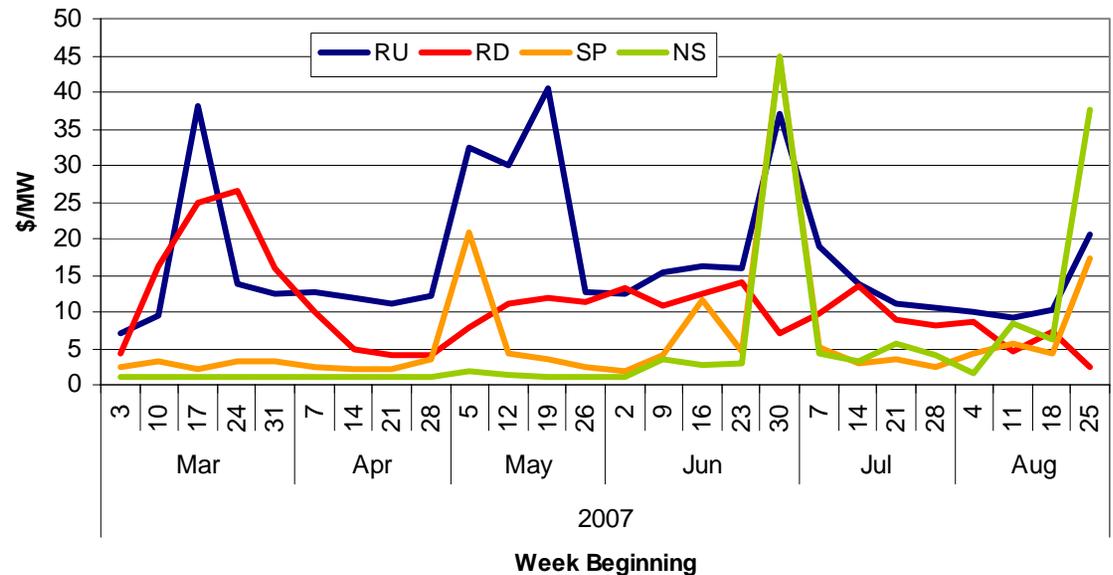
Cost of Balancing Energy

- 76% of all incremental energy expenditures occurred at prices less than \$250/MWh, while 24% were transacted at greater than \$250
- 89% of expenditures over \$250 occurred on 5 days of the month



Ancillary Services Markets

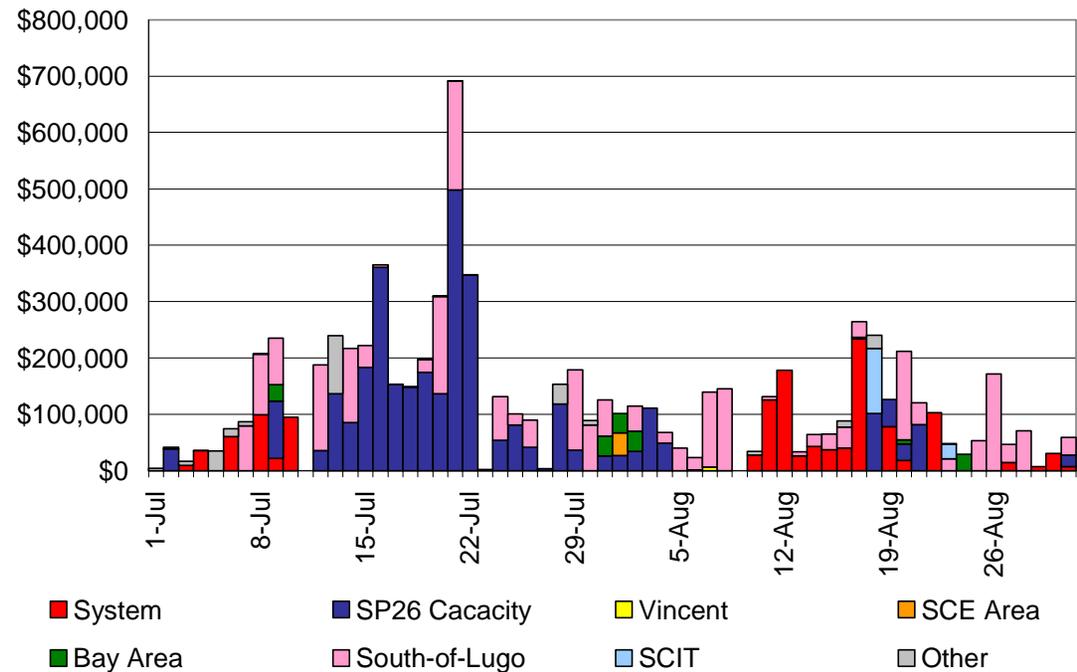
- AS prices were moderate for most of the month, spiking only during the last week's heat wave
- On average, prices were down sharply for most services



	Average Required (MW)				Weighted Average Price (\$/MW)			
	RU	RD	SP	NS	RU	RD	SP	NS
Jul 07	397	363	1028	897	\$ 19.49	\$ 9.54	\$ 12.71	\$ 14.04
Aug 07	396	366	1059	964	\$ 12.65	\$ 5.93	\$ 7.56	\$ 13.19
	-0.2%	0.7%	3.0%	7.5%	-35.1%	-37.8%	-40.5%	-6.1%

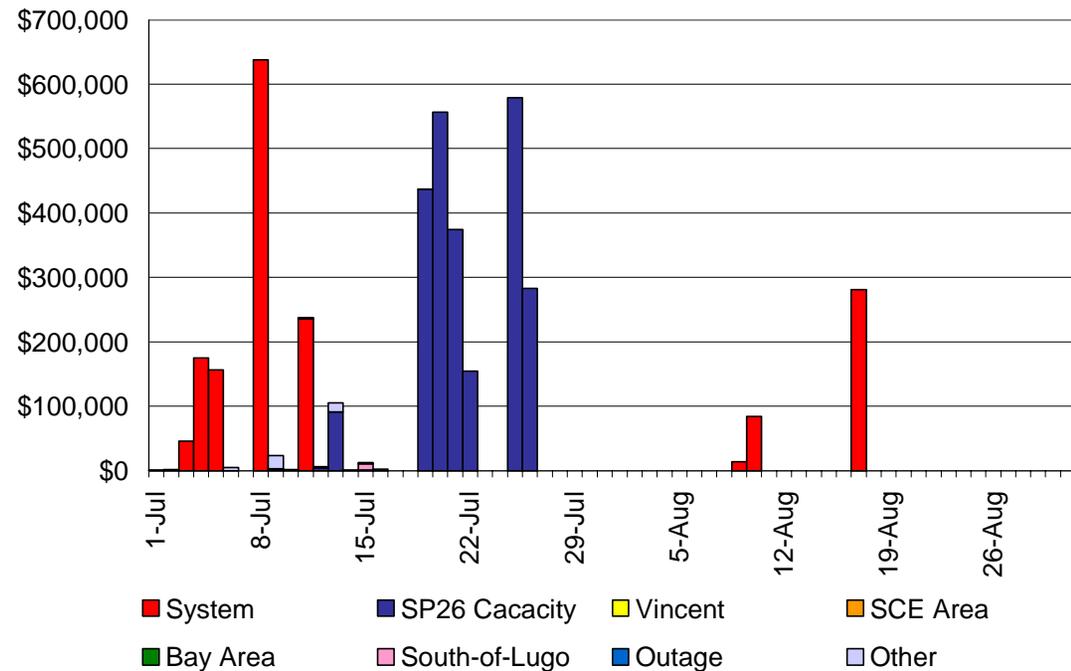
RA Unit Commitment Costs

- Total unit commitment costs dropped precipitously from \$9 mil in July to under \$4 mil in August
- Of the total RA costs for August, South-of-Lugo accounted for 38%, and System requirements accounted for 33%



FERC MOO Commitment Costs

The total cost of FERC unit commitments for August was only \$400,000 -- all for System needs



Inter-zonal Congestion Costs

- Total inter-zonal congestion costs fell to \$3.1 million in August, from July's \$4.2 million
- Most of congestion costs occurred on PACI NOB and the Palo Verde branch groups
- On the 29th, there were significant derates on PACI and NOB due to line repairs in the BPA area, again on the 30th due to scheduled NW generation and anticipated line loading in the BPA area

