

# Market Performance Report for October 2007



Alan Isemonger  
Manager, Market Information



Board of Governors  
General Session  
December 12-13, 2007

# Market Highlights

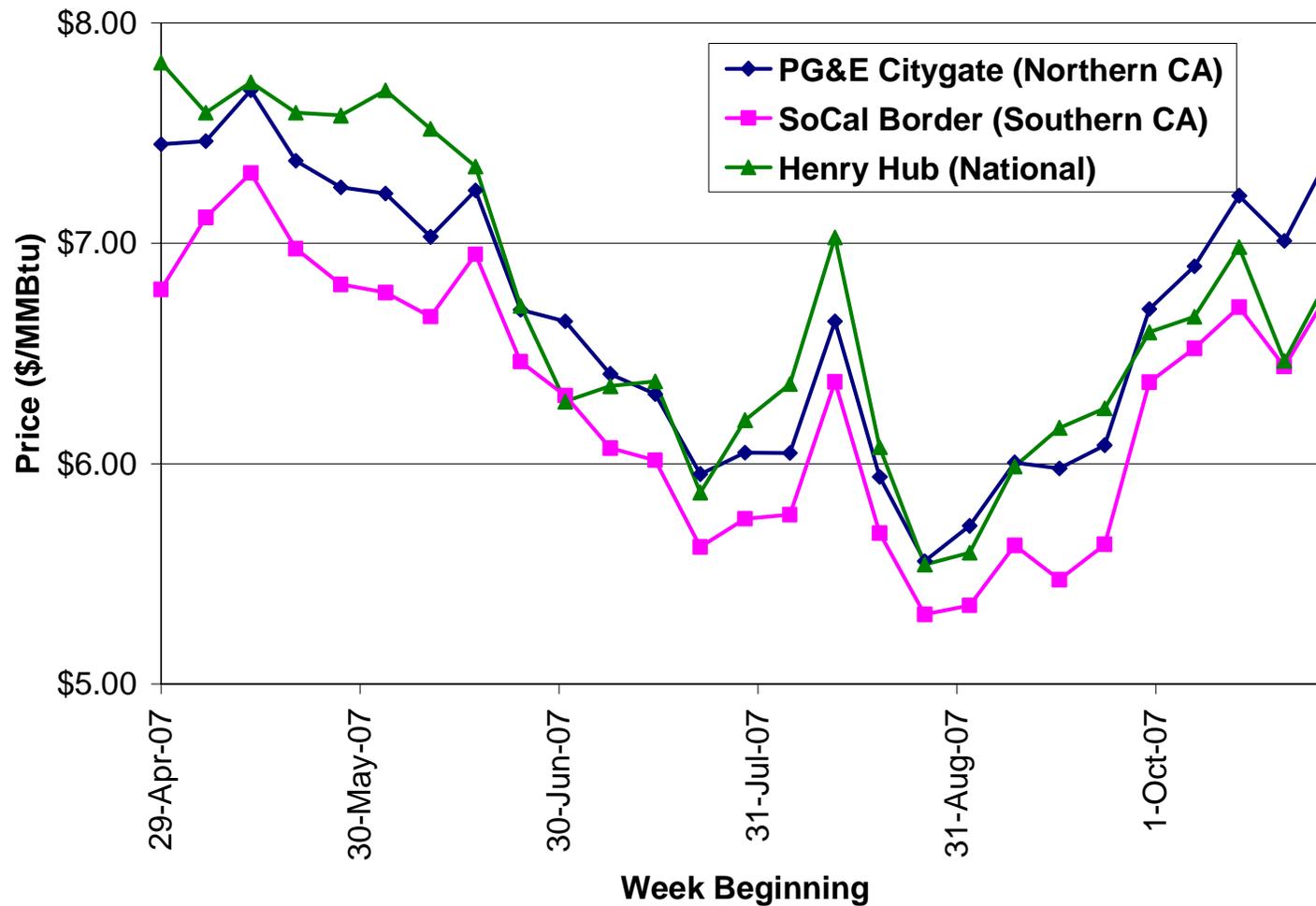
The full Market Performance Report is available at <http://www.caiso.com/1c27/1c27dd0dcfe0.pdf>

- 🌐 Fires in Southern California were the main grid event in October
- 🌐 Fires had two notable effects
  - Substantial increase in OOS costs
  - Substantial increase in interzonal costs

# Monthly Market Performance Metrics for 2007

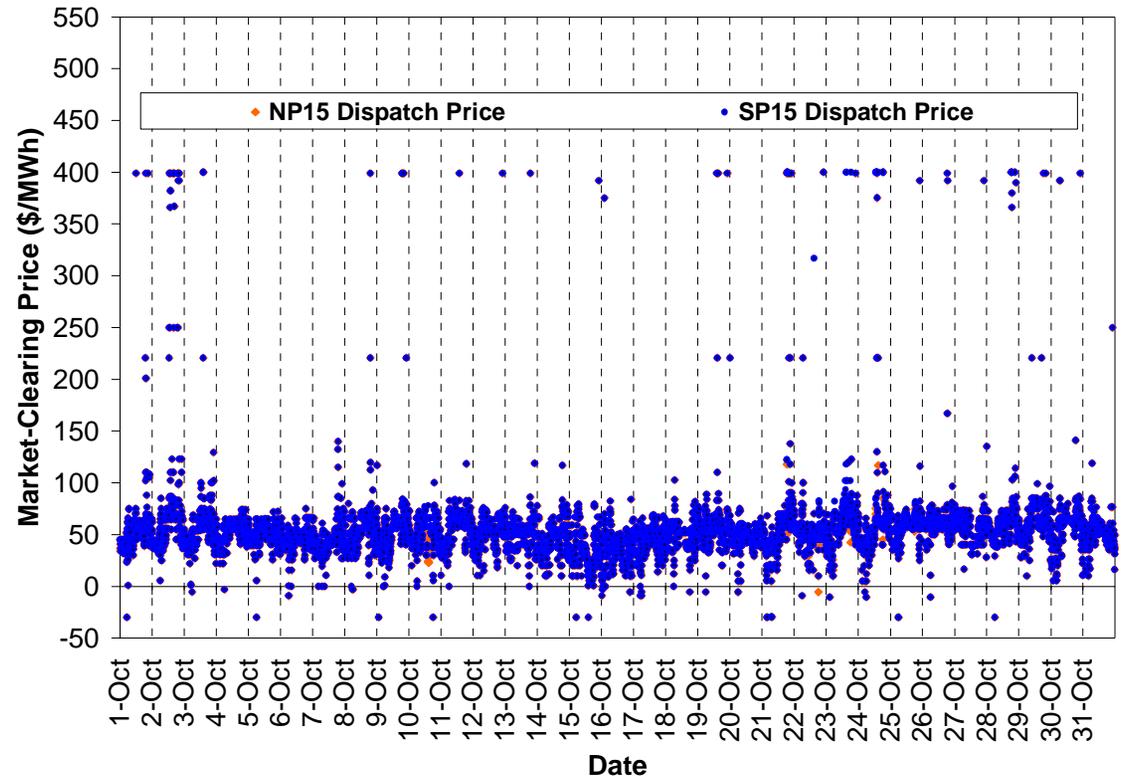
Monthly Metrics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
Average Gas Price	\$6.57	\$7.26	\$6.53	\$7.19	\$7.27	\$6.89	\$6.14	\$5.93	\$5.73	\$6.80			\$6.63
Average On-Peak Contract Price	\$63.32	\$64.25	\$54.90	\$64.78	\$75.04	\$68.47	\$71.76	\$71.40	\$59.64	71.89			\$66.54
Average Real-Time Price	\$50.35	\$51.25	\$41.75	\$50.24	\$59.14	\$54.85	\$55.84	\$62.44	\$47.22	\$56.59			\$52.97
No. of Price Spikes Over \$250	102	50	131	203	101	77	79	167	10	93			101
Costs Incurred over \$250 (percent)	24%	13%	24%	33%	22%	18%	14%	24%	3%	27%			20%
AS Cost (\$ per MWh)	\$0.54	\$0.41	\$0.58	\$0.38	\$0.74	\$0.59	\$1.16	\$0.78	\$0.58	0.47			\$0.62
RA Unit Commitment Costs (\$M)	\$2.5	\$1.6	\$1.3	\$2.1	\$1.9	\$3.4	\$4.8	\$3.2	\$2.9	\$4.3			\$2.8
FERC Unit Commitment Costs (\$M)	\$0.7	\$0.3	\$0.7	\$0.1	\$0.0	\$1.4	\$1.4	\$1.4	\$0.8	\$3.8			\$1.1
Inc OOS Redispatch Costs (\$M)	\$2.7	\$1.6	\$1.1	\$1.7	\$1.5	\$1.2	\$2.1	\$1.2	\$1.2	\$3.8			\$1.8
Dec OOS Redispatch Costs (\$M)	\$0.2	\$0.3	\$0.4	\$0.3	\$0.7	\$0.3	\$0.4	\$0.5	\$0.3	\$2.5			\$0.6
Total Interzonal Congestion (\$M)	\$4.0	\$1.8	\$8.1	\$5.0	\$12.5	\$4.5	\$4.2	\$3.1	\$4.3	\$12.9			\$6.0

# Natural Gas Prices



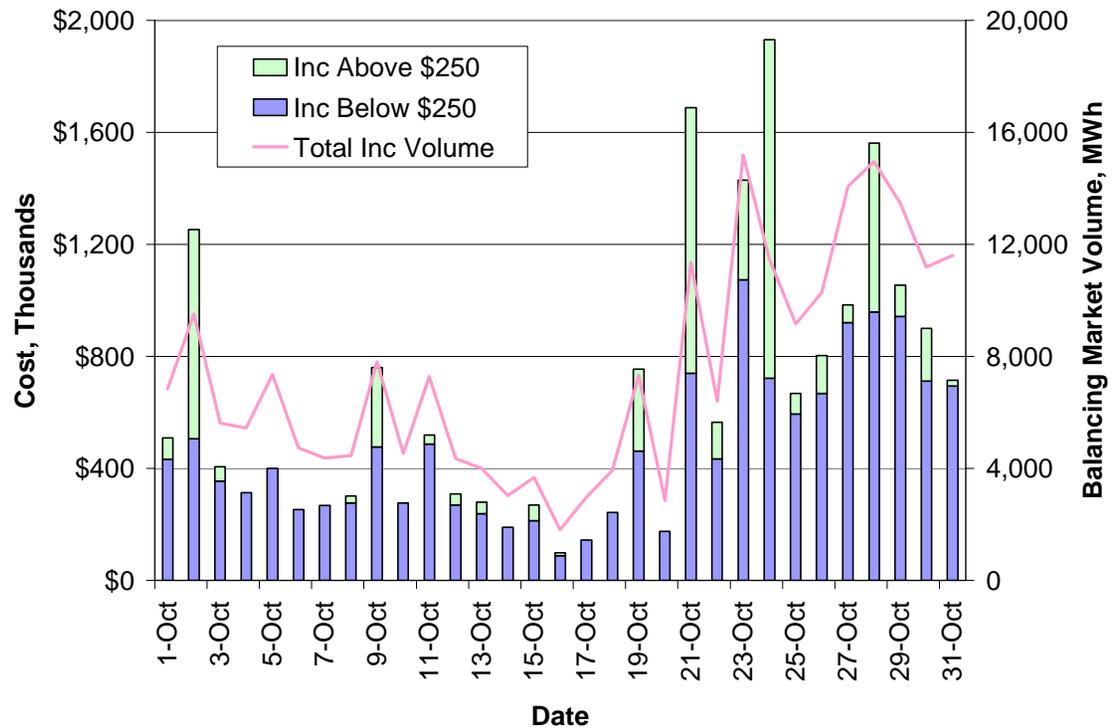
# Real Time Balancing Energy Prices

- There were 93 intervals of prices over \$250 in October, up from ten in September, but below the monthly average
- Half occurred during the fire period in Southern California



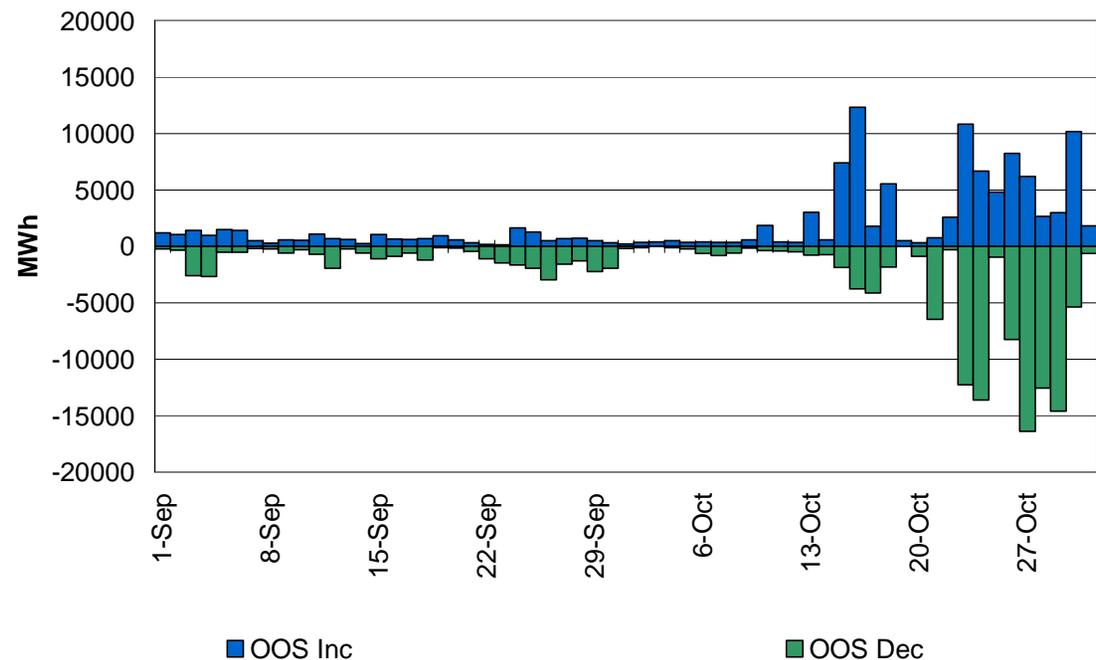
# Cost of Balancing Energy

- 27% of all incremental energy expenditures were incurred at prices greater than \$250, up from 3% last month
- Total expenditure on incremental energy in October was \$20 million vs. \$10.5 million in September



# Cost of Out of Sequence Energy

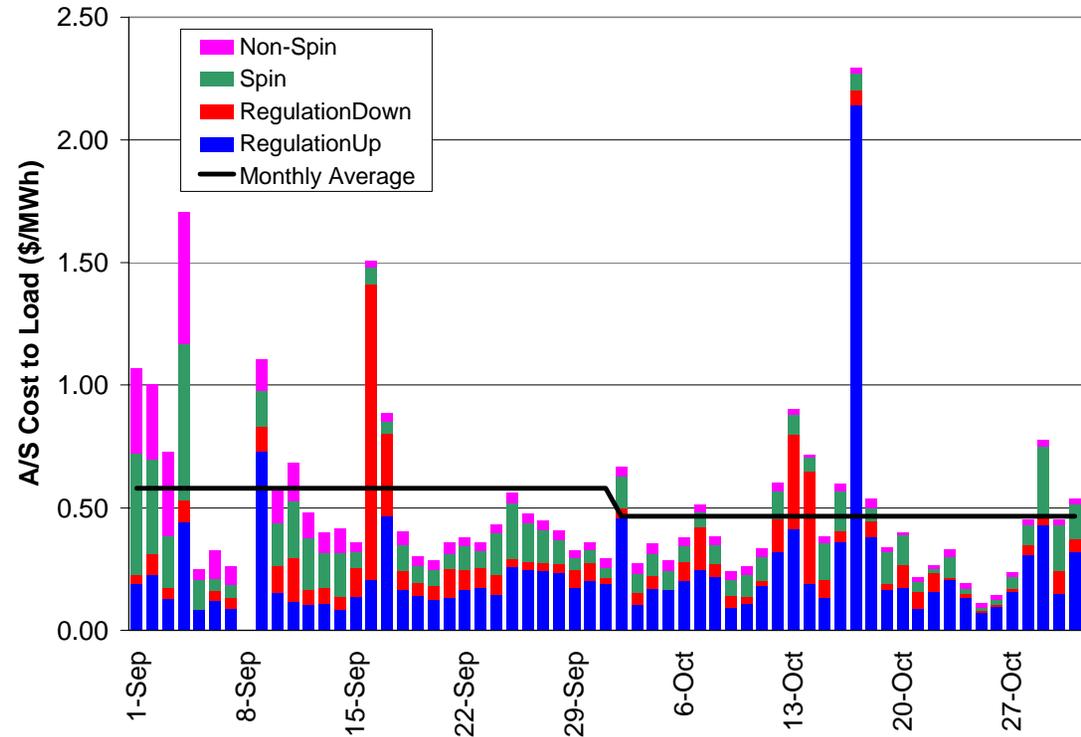
- October's incremental OOS costs tripled to \$3.8 million, up from September's \$1.20 million
- Decremental OOS costs increased to \$2.5 million from \$280,000
- High incremental volumes were driven primarily by maintenance at Sylmar and the wild fires in Southern California
- Decremental volumes were driven primarily by wild fires



Daily OOS MWh – September and October 2007

# Ancillary Services Markets

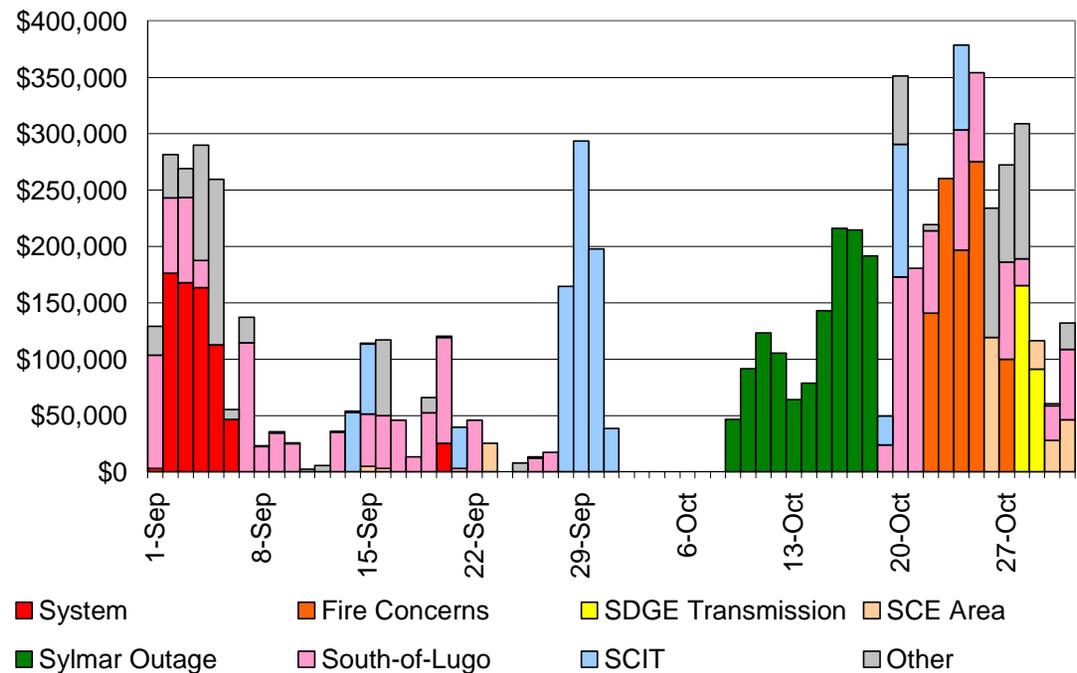
- Average Spin, Non-Spin and Reg Down prices all declined sharply in October
- Higher average Reg Up prices can be attributed to congestion on Mead which stranded dynamic resources outside the CAISO control area



	Average Required (MW)				Weighted Average Price (\$/MW)			
	RU	RD	SP	NS	RU	RD	SP	NS
Sep 07	391	369	951	897	\$ 14.89	\$ 8.93	\$ 5.20	\$ 3.81
Oct 07	373	362	786	769	\$ 18.91	\$ 5.26	\$ 2.90	\$ 0.93
	-4.6%	-2.0%	-17.4%	-14.3%	27.0%	-41.1%	-44.2%	-75.6%

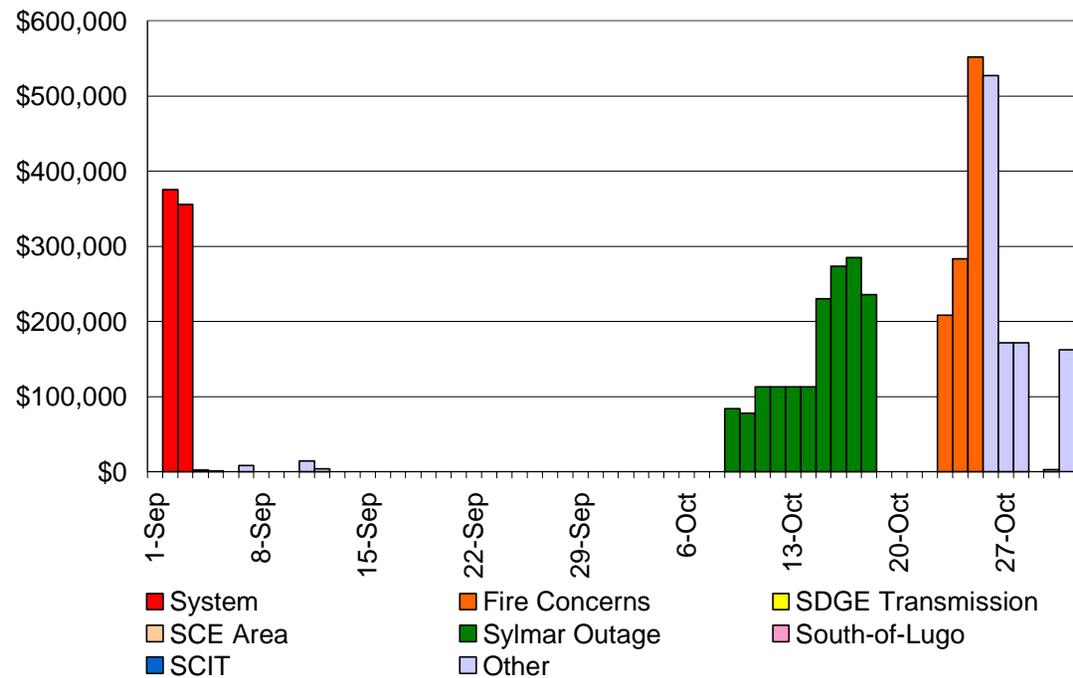
# RA Unit Commitment Costs

- Unit commitment costs in October spiked to over \$8 million from \$3.6 million in September
- Planned outages at the Sylmar Banks and transmission outages driven by wild fires motivated the increased charges
- RA costs comprised 53% of the total



# FERC MOO Commitment Costs

 FERC Must Offer commitments followed a similar pattern with the Sylmar Outage and Fire Concerns accounting for 70% of the nearly \$4 million FERC total



# Inter-zonal Congestion Costs

- Inter-zonal congestion costs climbed to \$12.9 million in October from \$4.3 million in September
- Congestion on Eldorado occurred throughout the month and was largely due to the path capacity de-rates motivated by planned and unplanned transmission line outages
- Congestion on Palo Verde was largely due to over scheduling, and path capacity de-rates motivated by planned and unplanned transmission line outages

