

# Market Performance Report for May 2007



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Board of Governors  
General Session  
July 18<sup>th</sup> - 19<sup>th</sup>, 2007

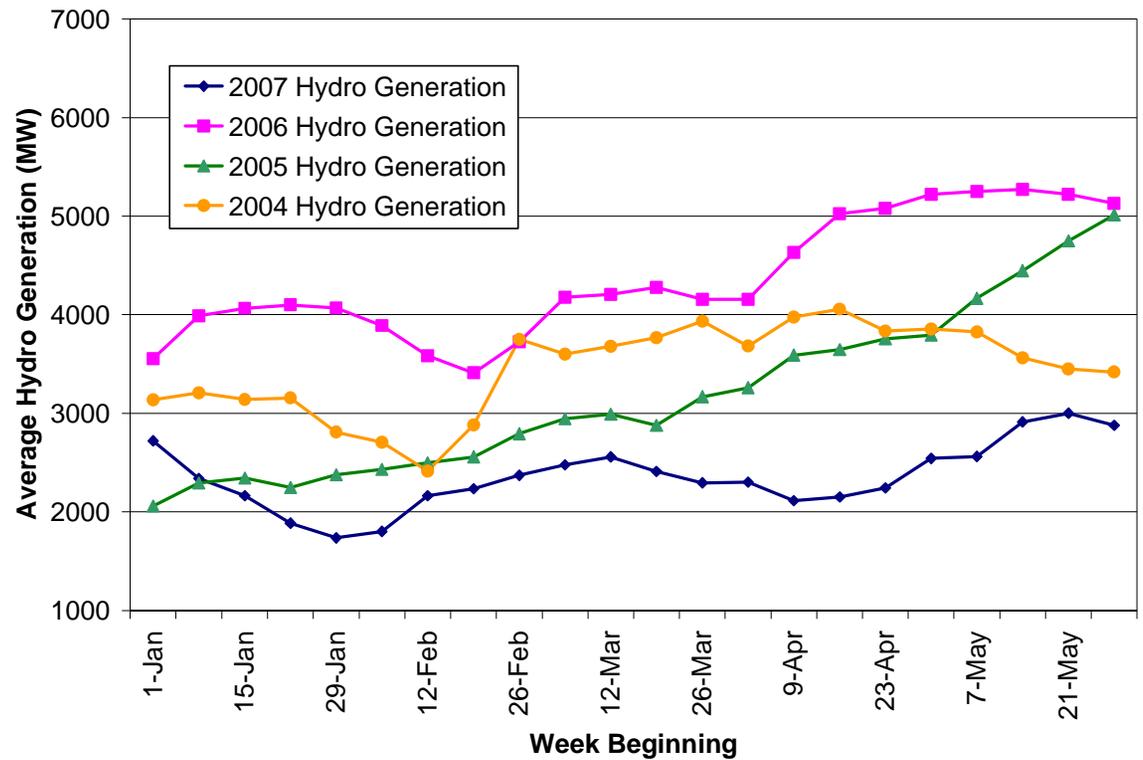
# Market Highlights

The full May Market Performance Report is available at <http://www.caiso.com/1be8/1be8723649d20.pdf>

- 🌐 Hydroelectric generation has peaked
- 🌐 With the exception of May 8<sup>th</sup> the Balancing Energy Market was subdued
- 🌐 Average Ancillary Services prices rose
- 🌐 Total inter-zonal congestion costs increased substantially

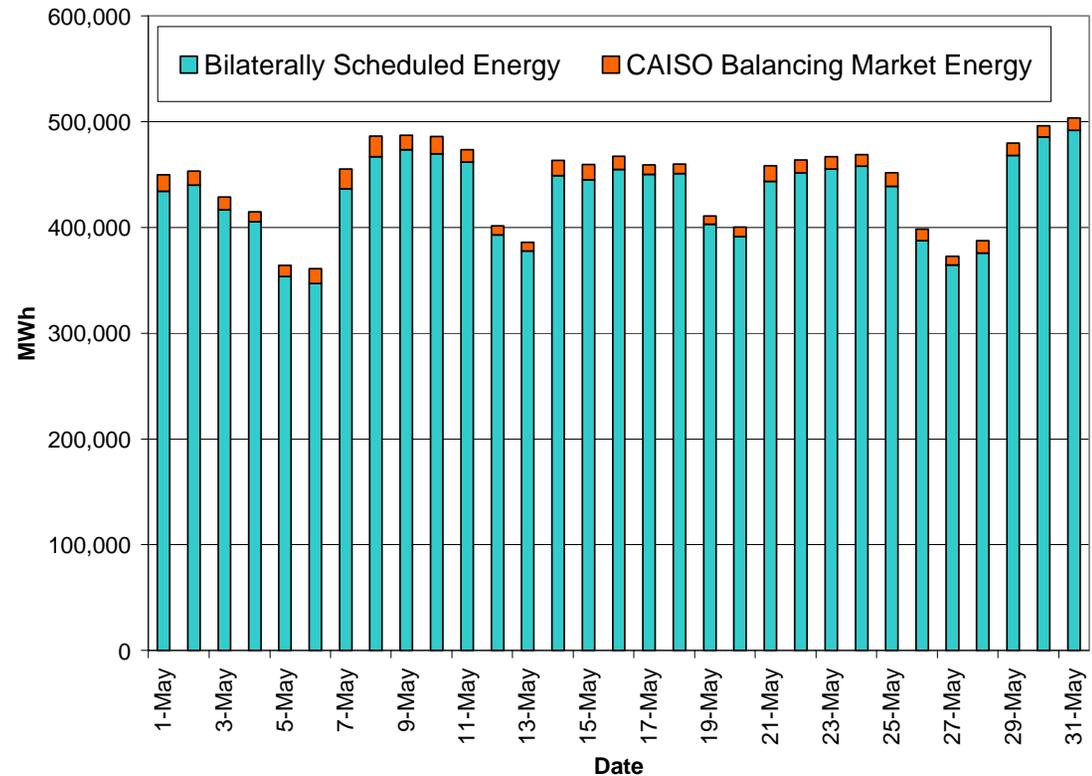
# Hydroelectric Generation Capacity

- Average hydroelectric generation peaked at 3,000 MW in May, while remaining well below production levels in previous years.



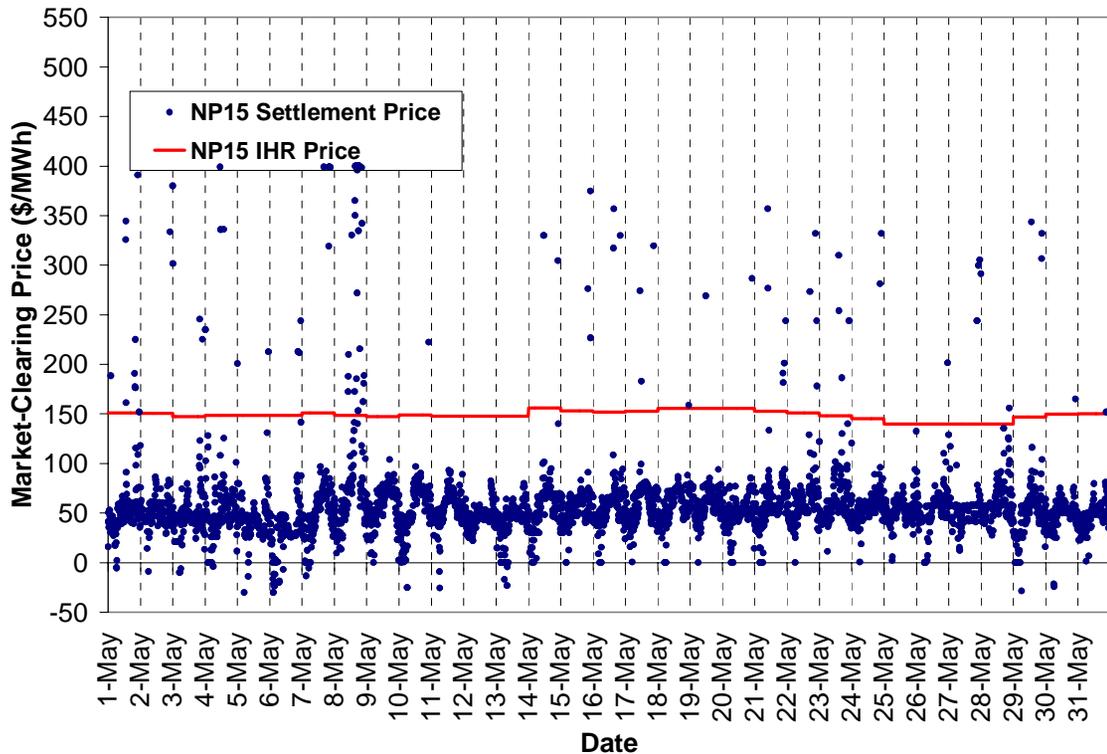
# Balancing Energy Perspective

- Red bars are balancing energy vs. total market volume.
- Balancing energy made up 2.8% of total energy consumed in April.



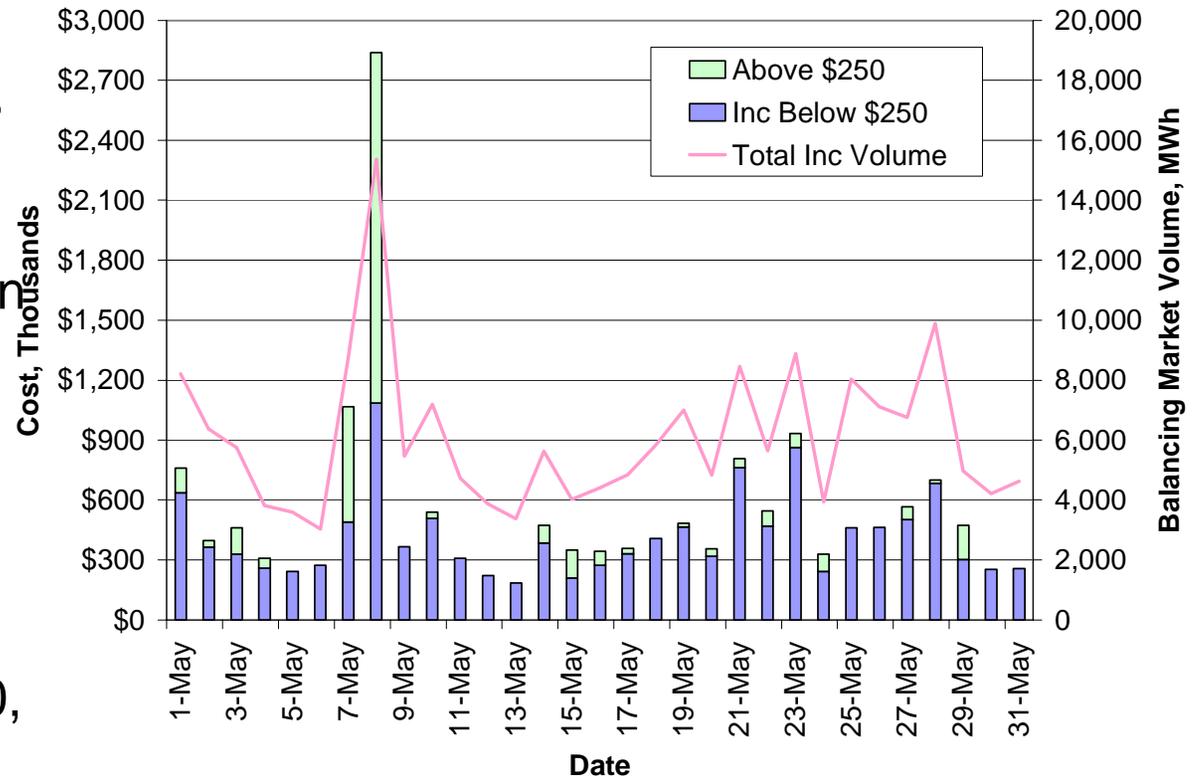
# Real Time Balancing Energy Prices

- There were only 101 instances of five-minute prices exceeding \$250 in May as compared to 203 in April and 131 in March.
- Representing 1.13% of the total number of pricing intervals in the month.
- Further, 41 of these high price intervals, over 40% of the total, occurred on May 8.



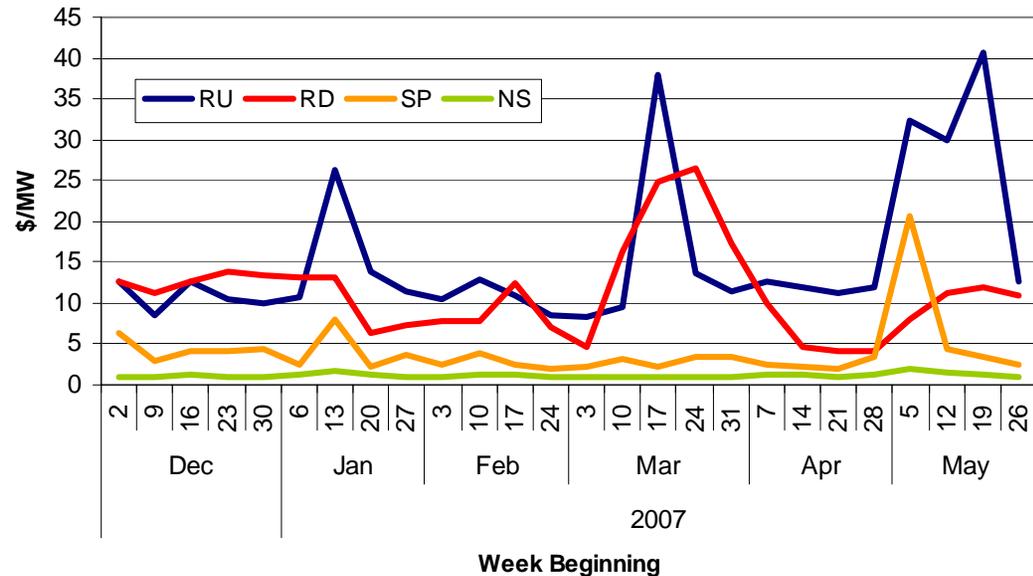
# Cost of Balancing Energy

- May 7<sup>th</sup> and 8<sup>th</sup> had a large proportion of the high priced intervals this month. Over 50% of costs on these days were incurred at prices in excess of \$250 MWh
- For the month 21.8% of costs for balancing energy were transacted during intervals with prices greater than \$250, with the balance below.



# Ancillary Services Markets

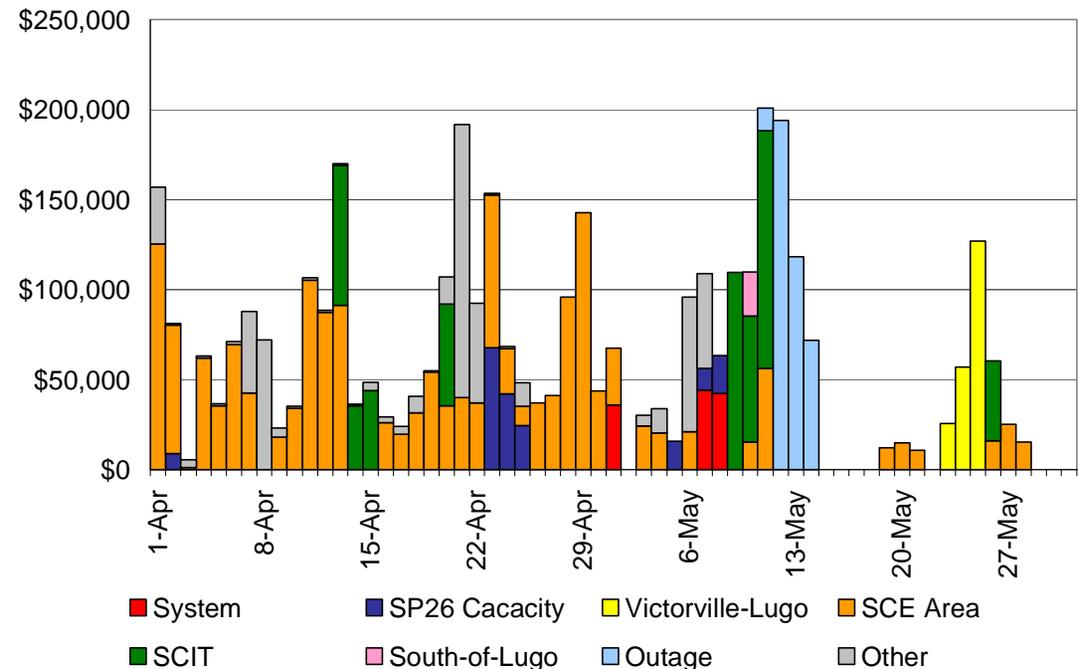
- Prices for Regulation Up and Spinning Reserve increased sharply by 139% and 201% respectively in May
- Due to inter-zonal congestion on the MEAD and PACI branch groups which caused lower priced bids to be skipped



	Average Required (MW)				Weighted Average Price (\$/MW)			
	RU	RD	SP	NS	RU	RD	SP	NS
Apr 07	377	355	721	701	\$ 11.48	\$ 8.26	\$ 2.48	\$ 1.10
May 07	367	356	740	739	\$ 27.49	\$ 9.65	\$ 7.45	\$ 1.36
	-2.7%	0.2%	2.5%	5.5%	139.4%	16.9%	200.8%	23.3%

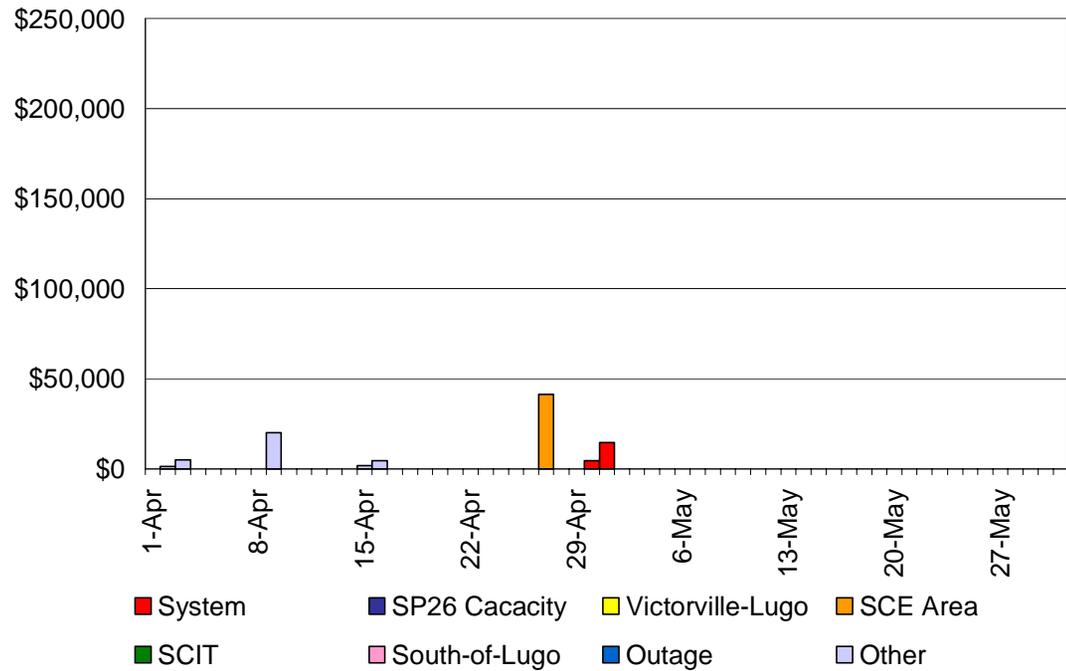
# RA Unit Commitment Costs

- Total unit commitment costs (RA and FERC MOO) declined sharply in May to \$1.2 million from 2.2 million in April.
- RA commitment costs in May were driven by a large unit outage around the 13th of the month, and by the loss of the McCullough-Victorville transmission line which increased the SCIT nomogram requirements.
- Victorville-Lugo congestion and SCE Area requirements also contributed about 20 percent each to the total.



# FERC MOO Commitment Costs

FERC MOO commitments totaled a mere \$14,000 for some System energy on May 1.



# Inter-zonal Congestion Costs

- 🌐 Total inter-zonal congestion costs increased to \$12.5 million in May from \$5 million in April.
- 🌐 Congestion was driven largely by Schedule Coordinators attempting to move cheap hydroelectric power from the Pacific Northwest into the CAISO control area.
- 🌐 Outages, scheduled maintenance on transmission lines and related transmission de-rates also contributed to the high level of congestion this month.