

Market Performance Report for April and May 2007



Alan Isemonger
Manager, Market Information



California ISO
Your Link to Power

Board of Governors
General Session
July 18th - 19th, 2007

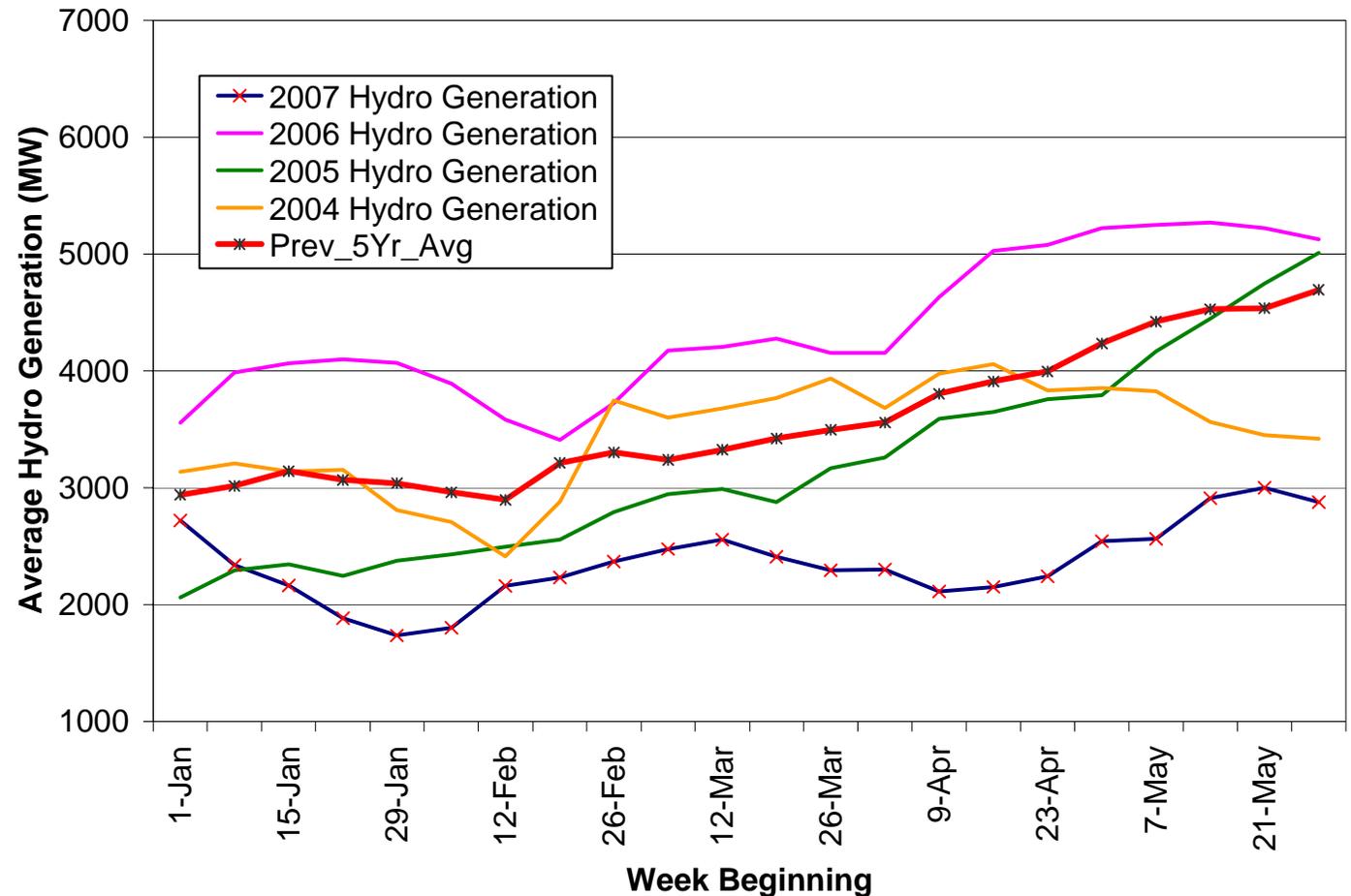
Market Highlights

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

-  Hydroelectric generation has peaked
-  With the exception of April 16th, 30th, and May 8th the Balancing Energy Market was subdued
-  Average Ancillary Services prices rose in May
-  Total inter-zonal congestion costs increased substantially

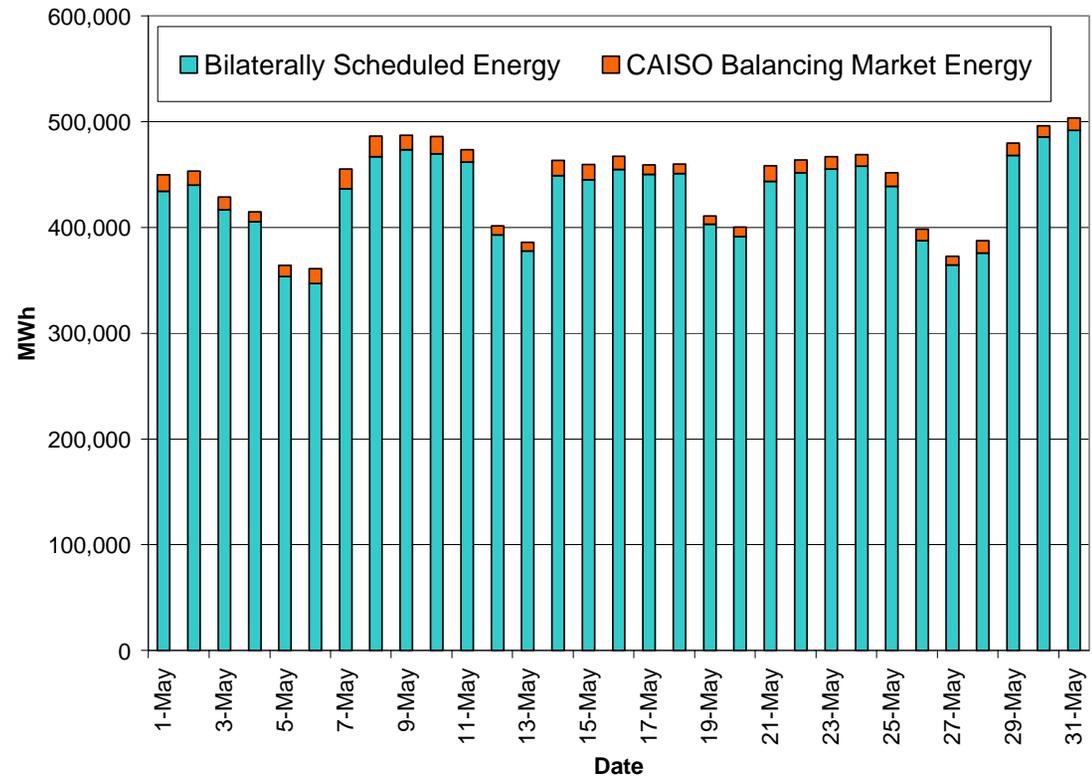
Hydroelectric Generation Capacity

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



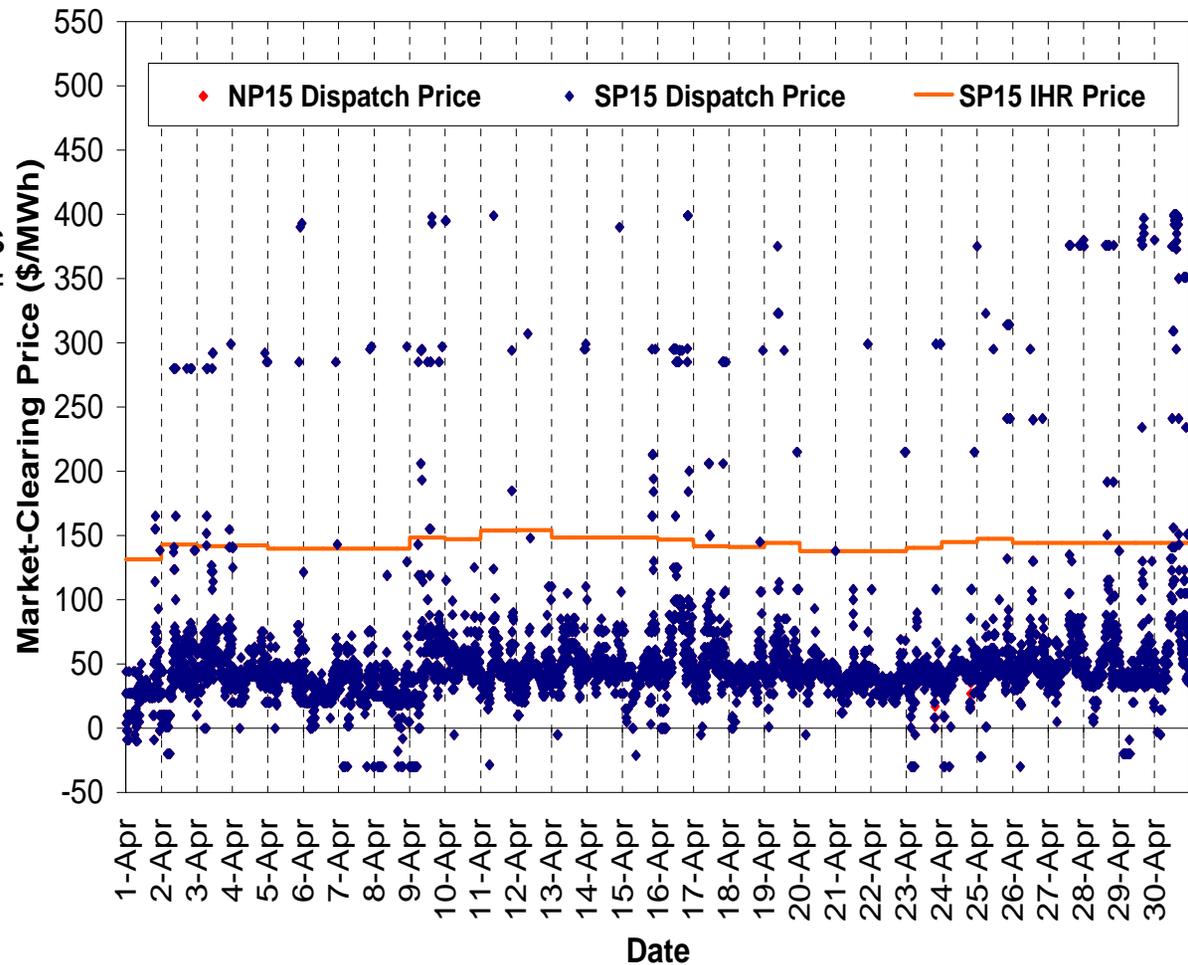
Balancing Energy Perspective

- Red bars are balancing energy vs. total market volume.
- Balancing energy made up 3% of total energy consumed in April and 2.8% of total energy consumed in May

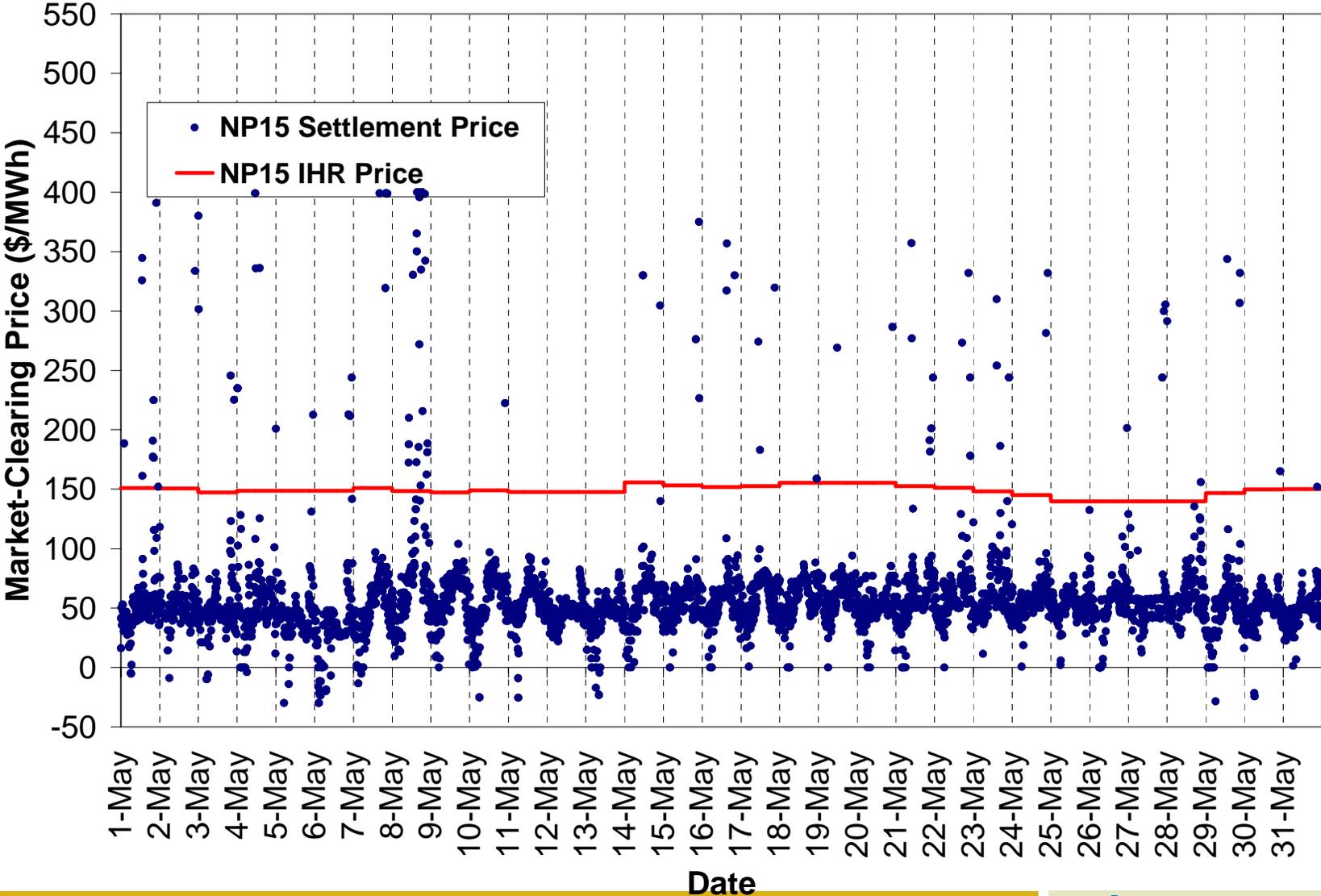


Real Time Balancing Energy Prices

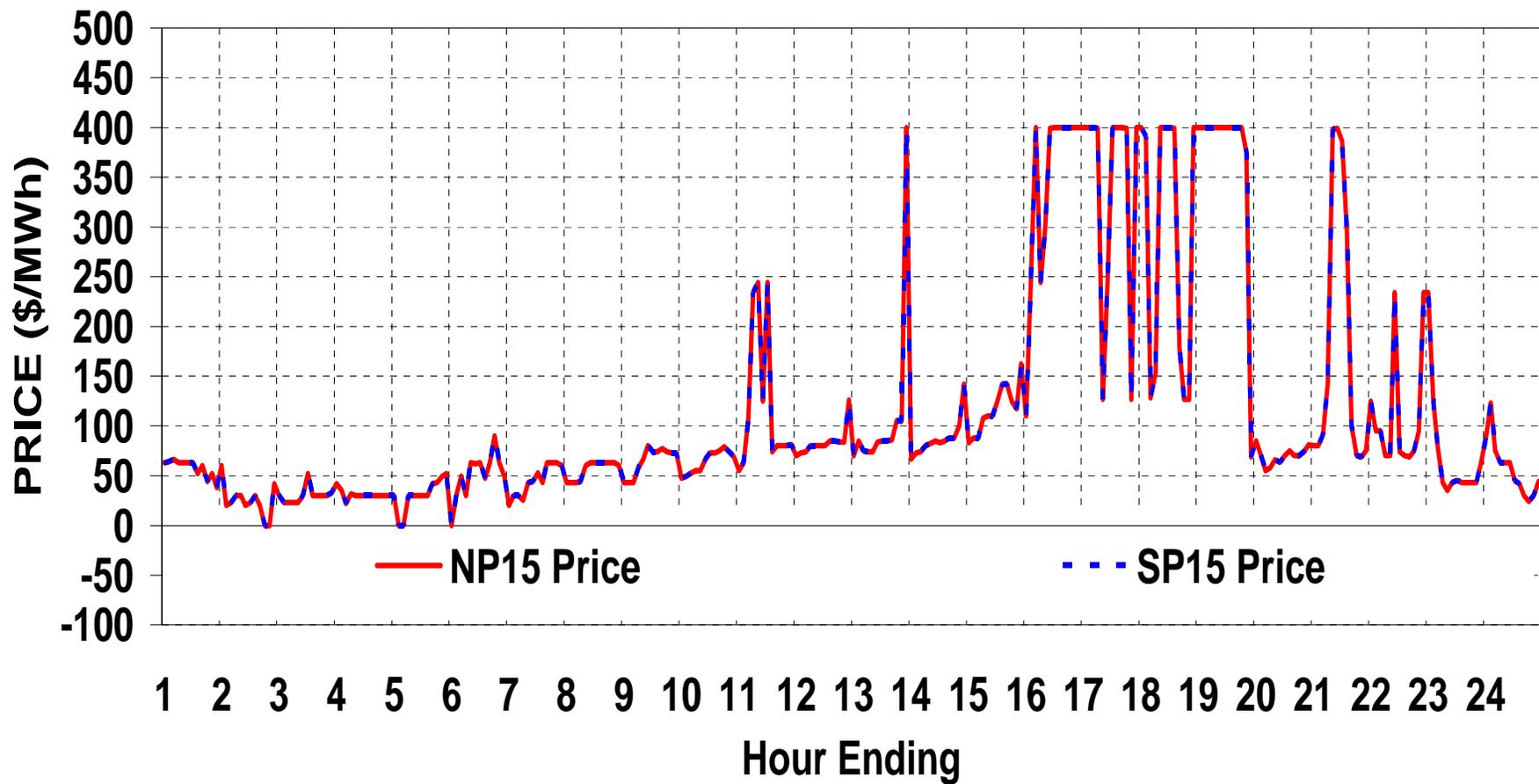
- There were only 101 instances of five-minute prices exceeding \$250 in May (1.1% of intervals) as compared to 203 (2.3% of intervals) in April and 131 in March (1.5% of intervals).
- April 16th: UD issues
- April 30th: USF and congestion
- May 8th: Missed temperature forecast



Real Time Balancing Energy Prices

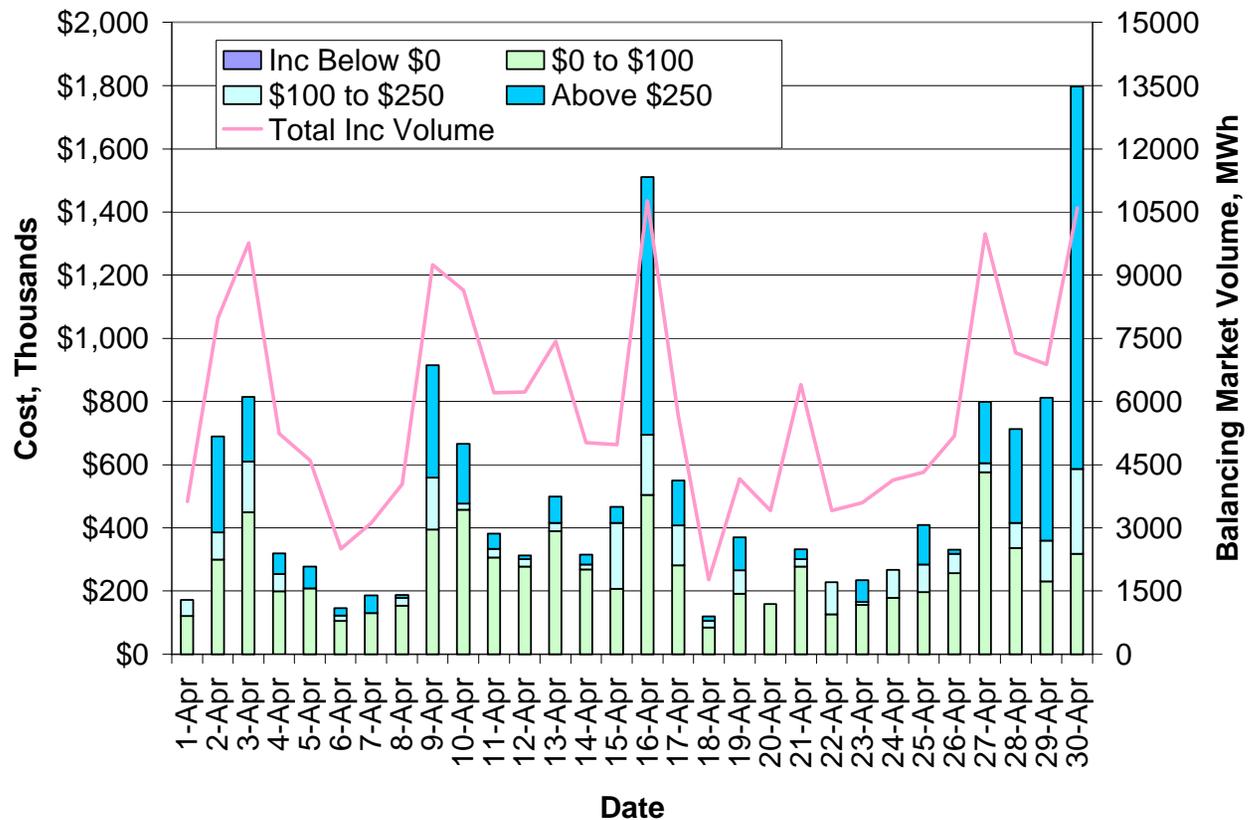


Real Time Balancing Energy Prices

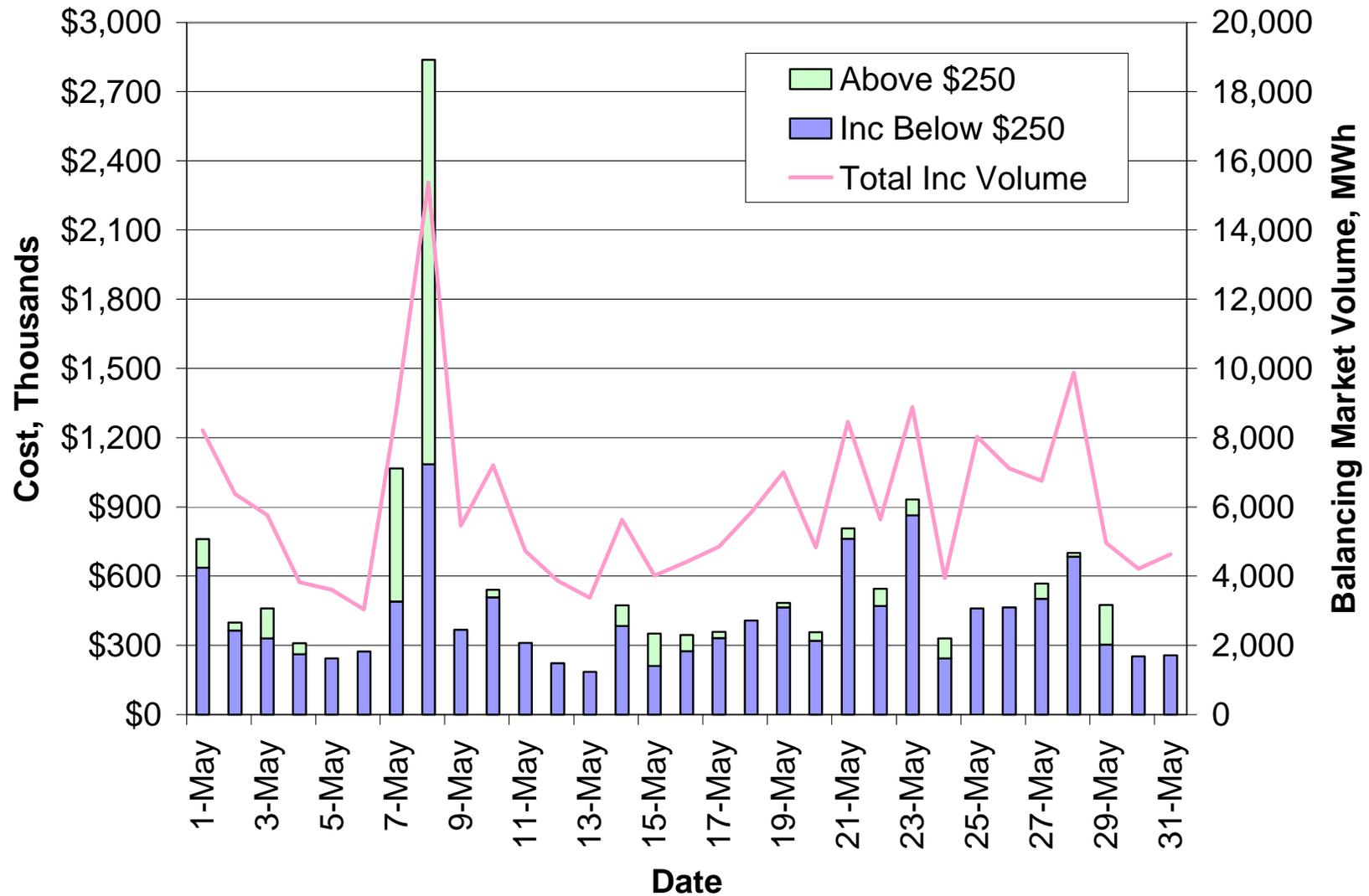


Cost of Balancing Energy

- April, 16th, 30th and May 8th had a large proportion of high priced intervals
- In May 21.8% of costs for balancing energy were transacted during intervals with prices greater than \$250, compared to 33.2% in April

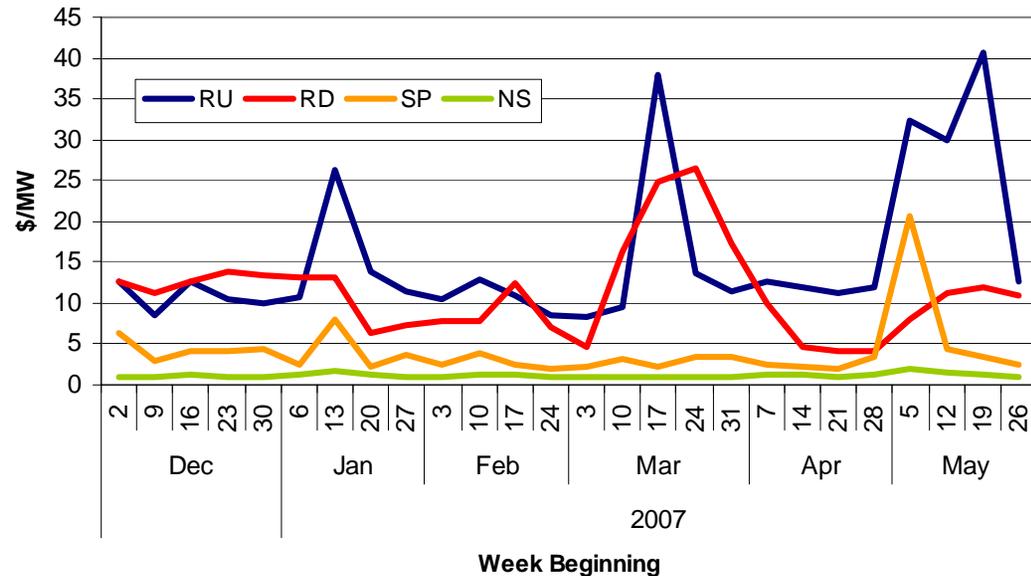


Cost of Balancing Energy



Ancillary Services Markets

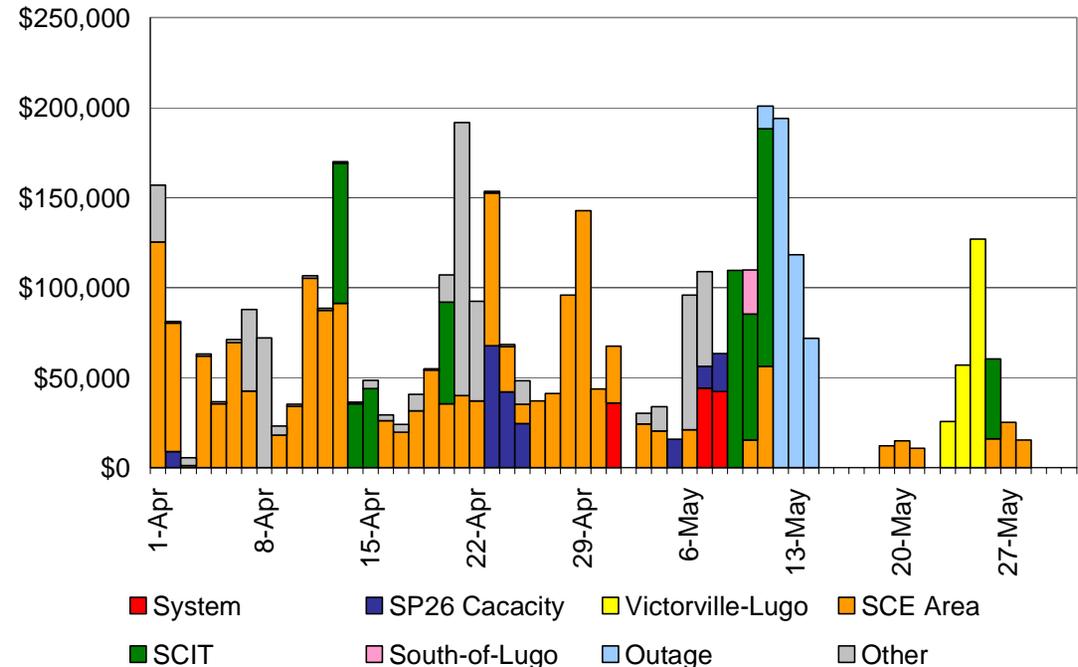
- April was quiet
- In May prices for Regulation Up and Spinning Reserve increased sharply by 139% and 201% respectively
- Due to inter-zonal congestion on the MEAD and PACI branch groups



	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%

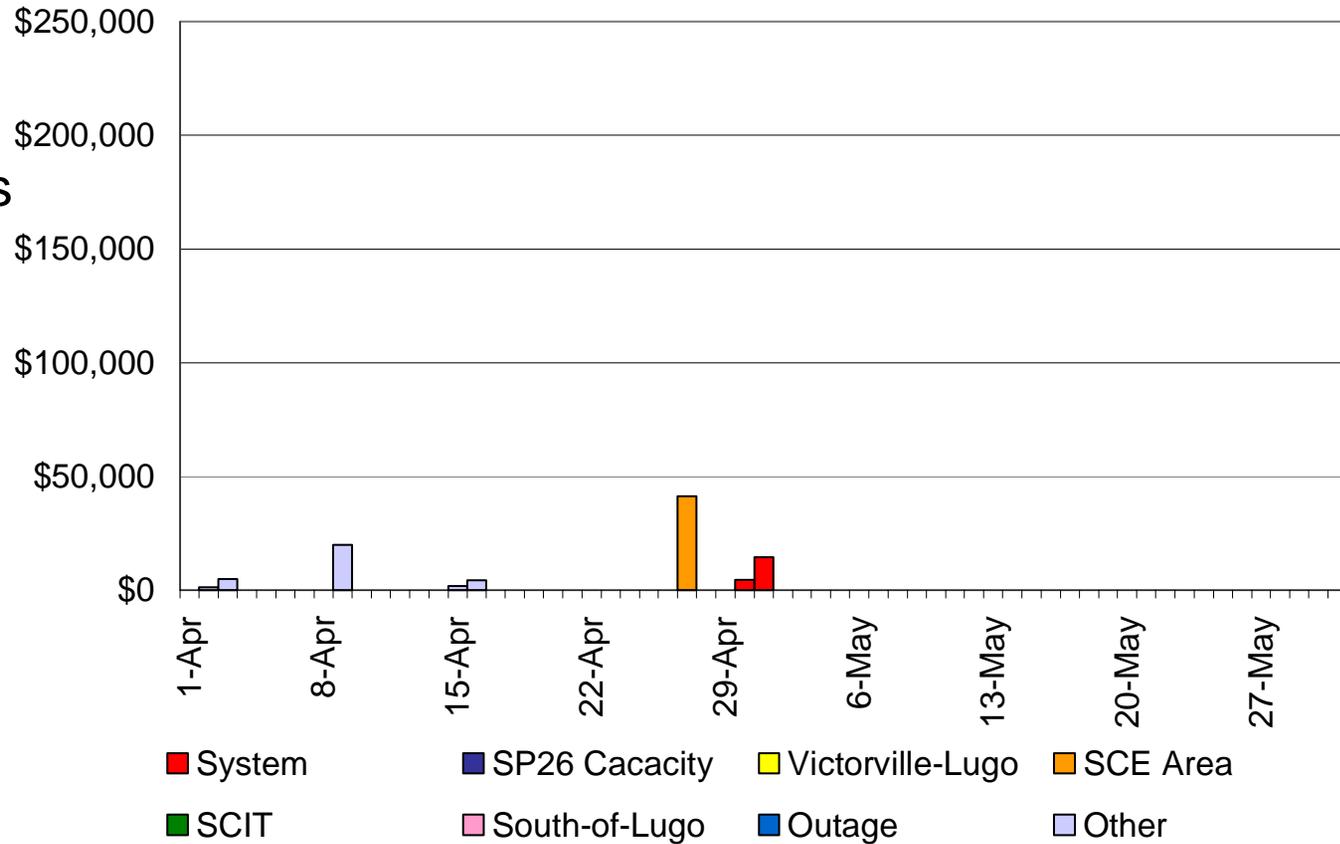
RA Unit Commitment Costs

- Total unit commitment costs (RA and FERC MOO) decreased in May to \$1.2 million from 2.2 million in April
- In April RA commitments were driven by local generation requirements and transmission line maintenance
- RA commitment costs in May were driven by a large unit outage around the 13th of the month, the loss of the McCullough-Victorville transmission line, as well as Victorville-Lugo congestion and SCE Area requirements



FERC MOO Commitment Costs

 FERC MOO commitments were minor for both months



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 in both of these months