



California ISO

California Independent
System Operator

Market Analysis Report

Events of January 2005

Board of Governors Meeting
February 24, 2005

Greg Cook
Manager, Market Monitoring



January Highlights

- Load growth a moderate 1.6% in January
- SONGS 3 and Diablo Canyon Nuclear Units returned, Pacific DC Intertie back to full rating; moderate loads:
 - Low Real-time and forward energy prices
 - Must-Offer Commitment down sharply
 - Intra-zonal costs lower, but still high
- Decreased Ancillary Service Market Supply:
 - Increased bid insufficiency
 - Substantially higher prices



Load growth rate down, and decrease may be more significant than number would suggest (due to holiday and weather)

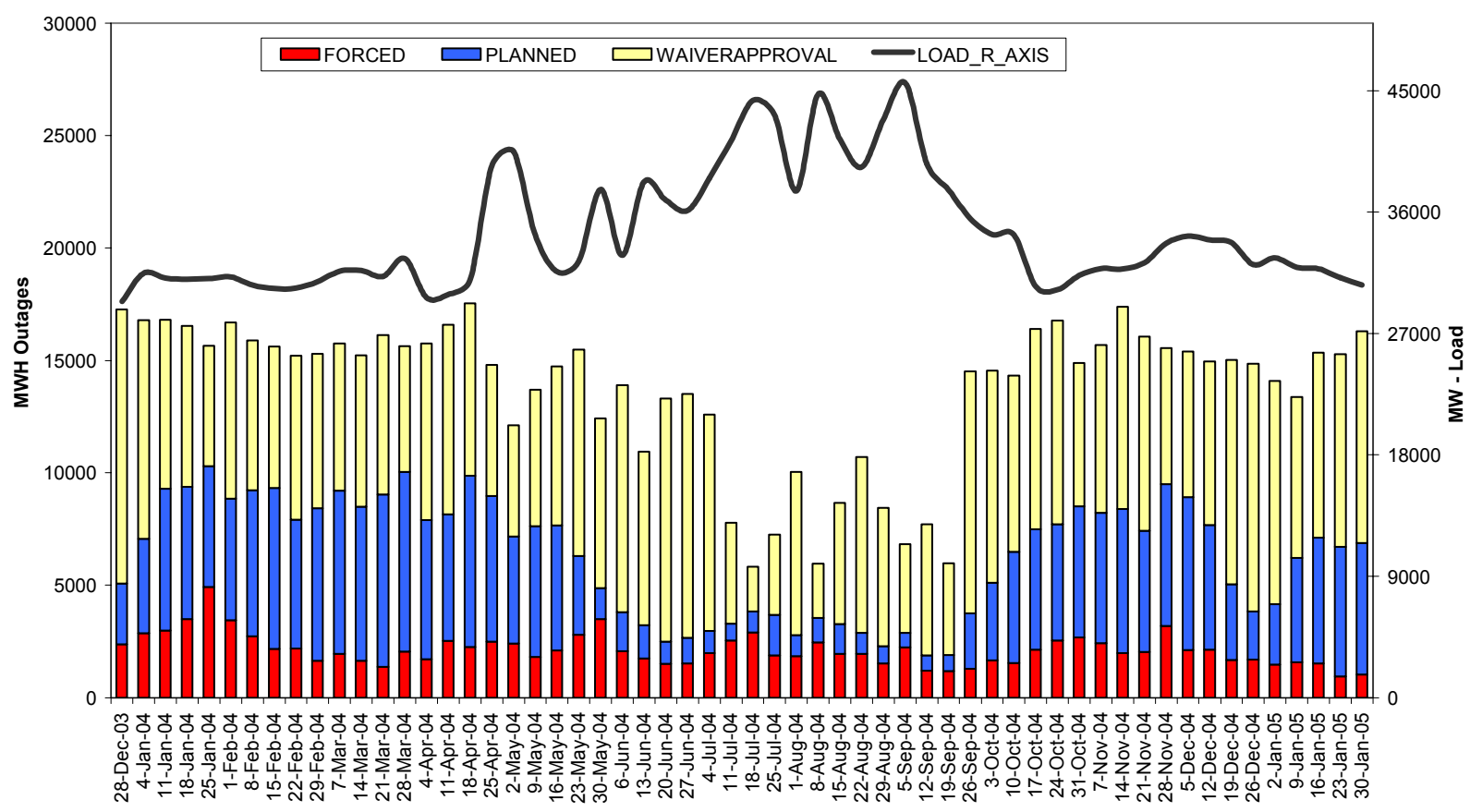
Same-month year-to-year growth rates through January

	<u>Avg. Hrly. Load</u>	<u>Avg. Daily Peak</u>	<u>Avg. Daily Trough</u>	<u>Monthly Peak</u>
February-04	4.5%	3.9%	5.4%	4.5%
March-04	4.4%	5.1%	2.5%	4.5%
April-04	7.1%	8.3%	4.8%	31.1%
May-04	7.3%	7.7%	5.5%	2.5%
June-04	6.6%	6.9%	6.1%	-4.7%
July-04	0.7%	0.3%	1.9%	4.0%
August-04	1.0%	0.6%	0.6%	5.2%
September-04	3.4%	3.5%	3.4%	10.1%
October-04	-1.4%	-2.8%	1.5%	-5.9%
November-04	4.2%	3.9%	3.9%	6.6%
December-04	4.4%	4.1%	6.5%	3.4%
January-05	1.6%	2.7%	1.4%	5.0%



SONGS and Diablo nuclear units returned, but SONGS unit was forced out in February

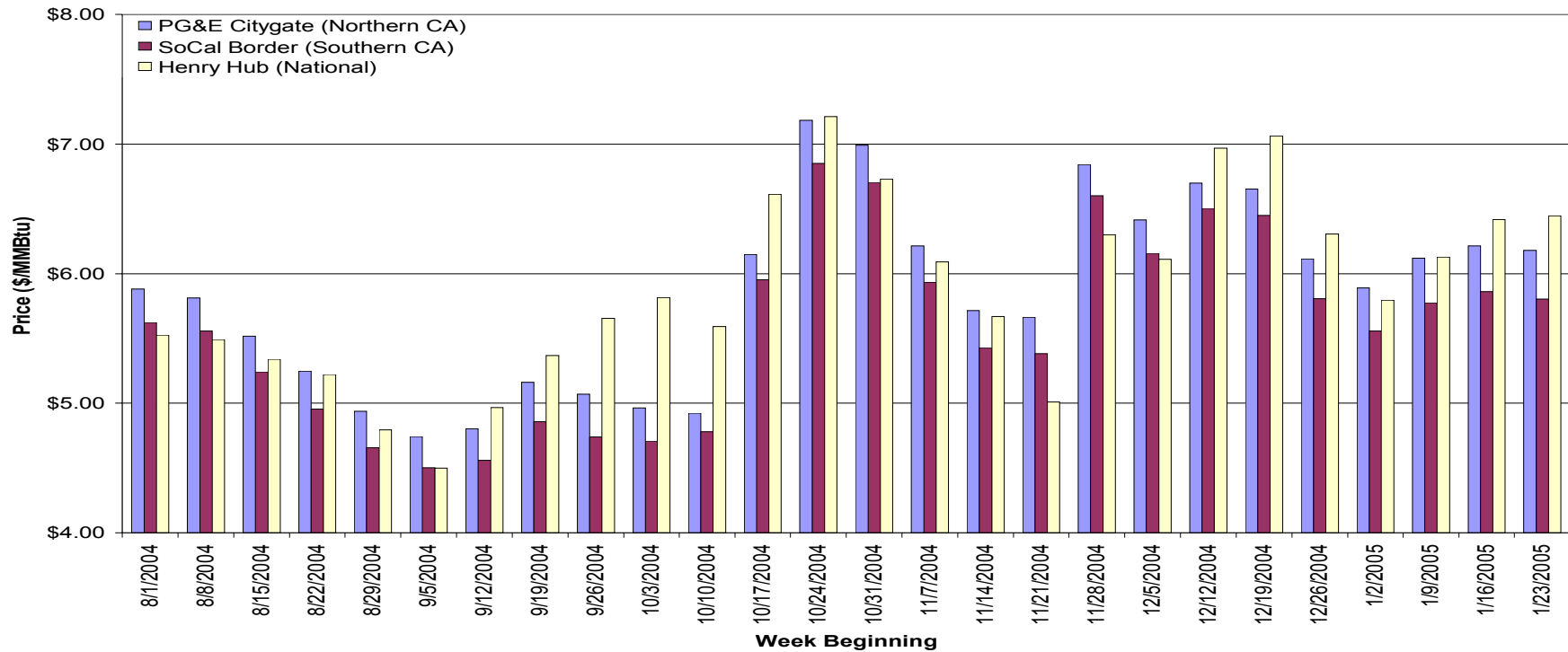
Outages by type: Weekly Averages through January





Natural Gas Prices Stable around \$6/mmbtu in January

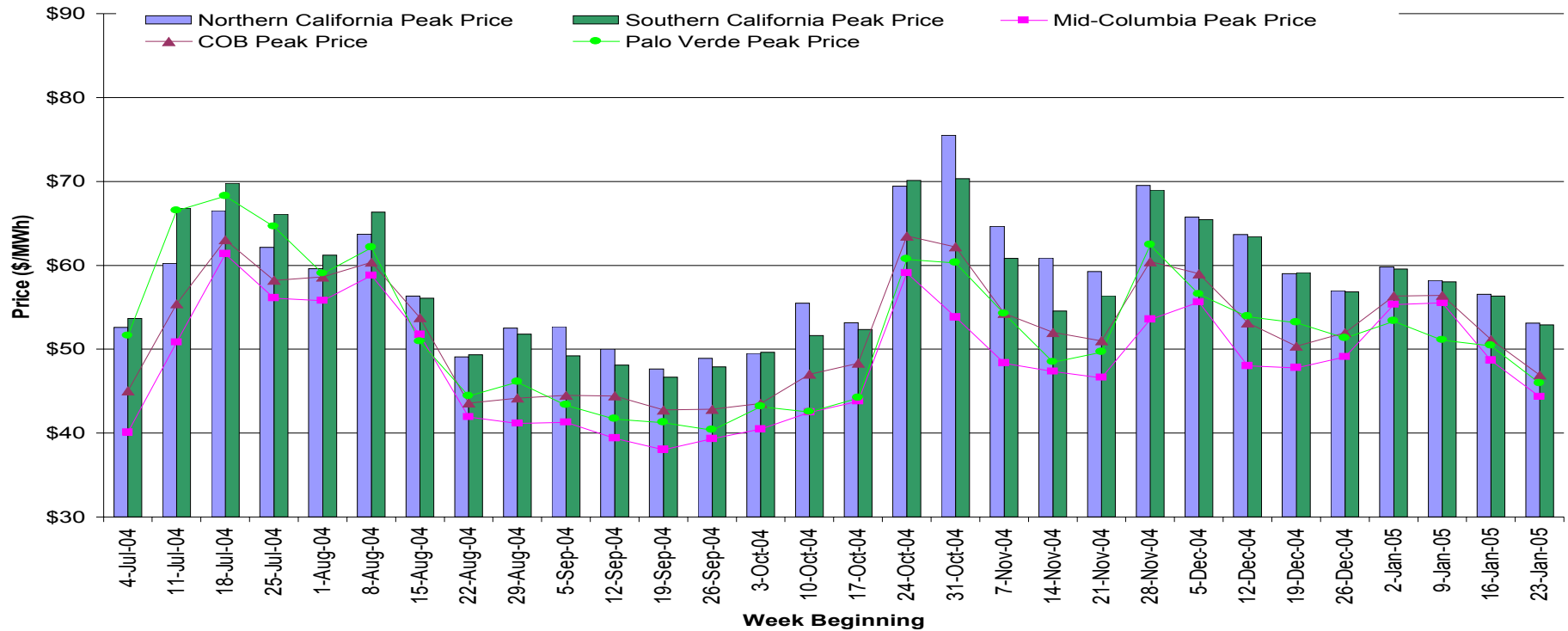
Weekly Average Natural Gas Prices





Since Path 15 upgrade, zonal splits are rare and prices equilibrate, in both forward and real-time markets

Day-ahead Bilateral Contract Prices: Weekly Averages



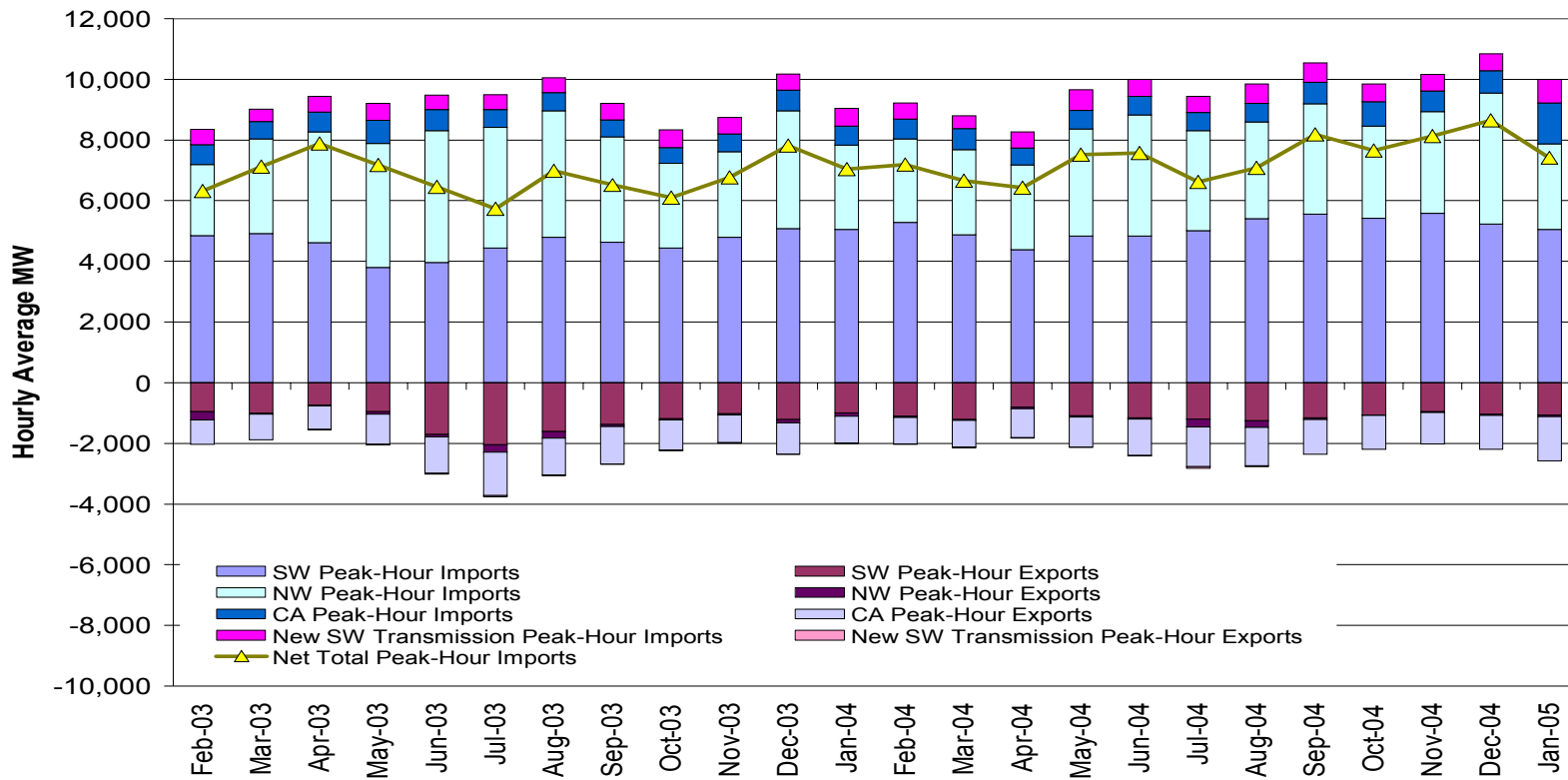


California ISO

California Independent System Operator

Net imports decreased, due to WAPA conversion to SMUD Control Area

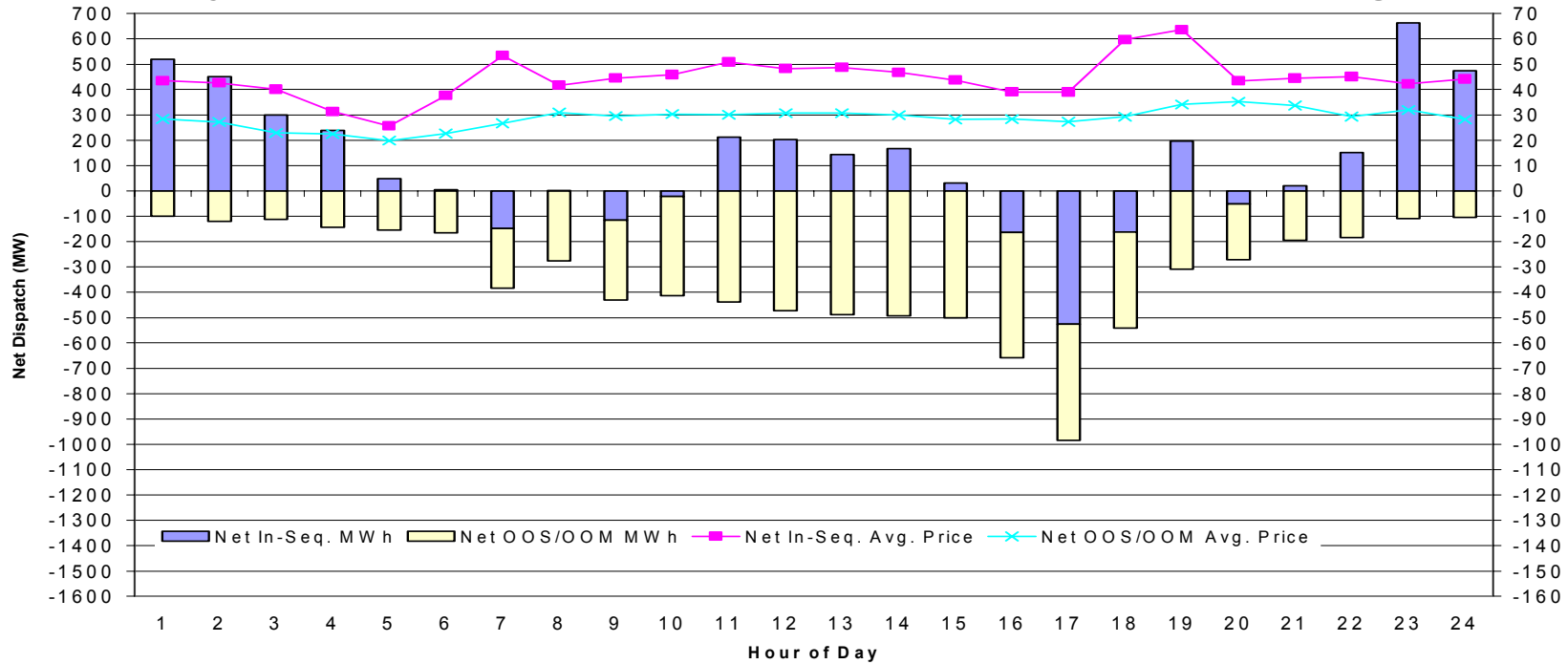
Monthly Average Peak-Hour Imports, Exports, and Net Imports





Real-time prices also low, due to strong supply and low demand

Hourly Profile of ISO RTMA Net Dispatch and Price: 01-Jan through 31-Jan

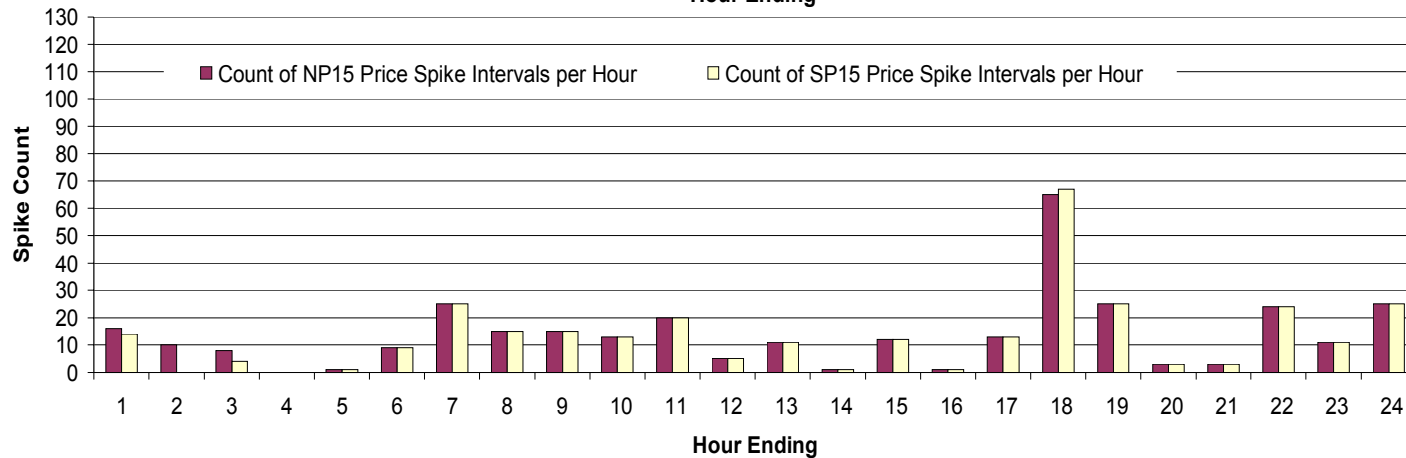
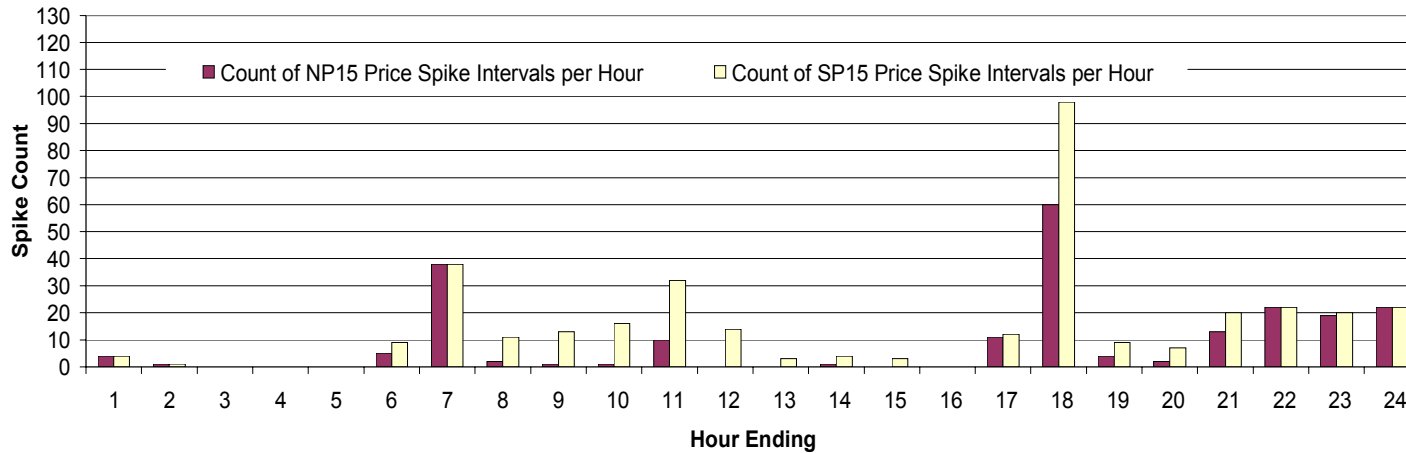


	In-Seq. RT Dispatch	OOS/OOM Dispatch	Total Dispatch	Average Loads and % Underscheduling
PEAK	\$ 49.00 /MWh 1.2 GWh	\$ 30.29 /MWh (176.2) GWh	\$ 44.69 /MWh (175.0) GWh	27,478 MW 1.2%
OFFPEAK	\$ 39.23 /MWh 80.7 GWh	\$ 25.26 /MWh (36.7) GWh	\$ 37.84 /MWh 44.0 GWh	21,580 MW 3.2%
ALL	\$ 45.20 /MWh 81.8 GWh	\$ 29.33 /MWh (212.9) GWh	\$ 42.27 /MWh (131.1) GWh	24,878 MW 2.0%



Zonal spikes uncommon in January due to Path 15 upgrade

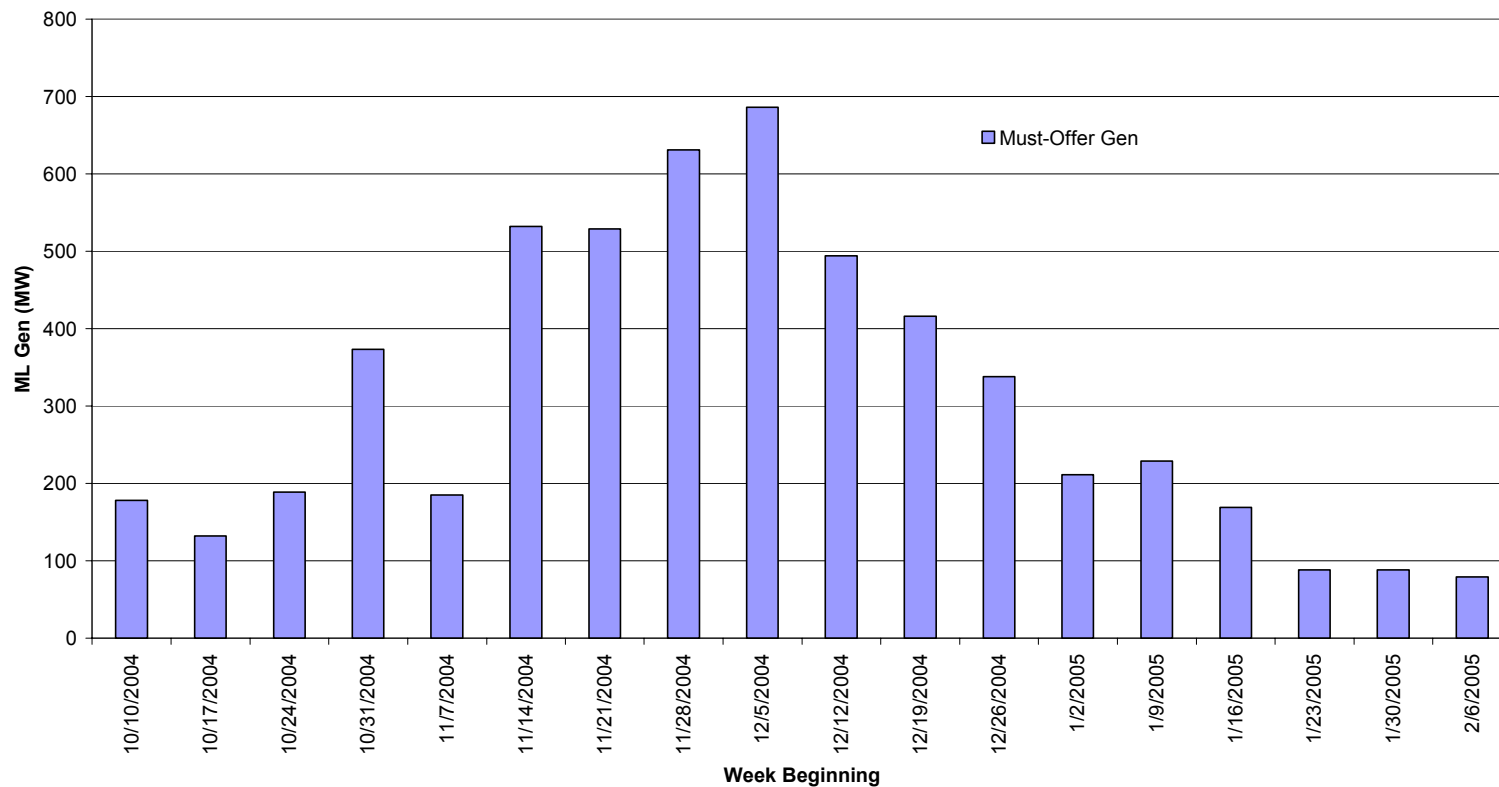
Hourly price spikes for Dec-04 (Top) and Jan-05 (Bottom)





Must-Offer committed generation was high in November and December, due to major facility outages; much lower in Jan and Feb

Weekly average minimum-load generation committed under Must-Offer Obligation through February 10



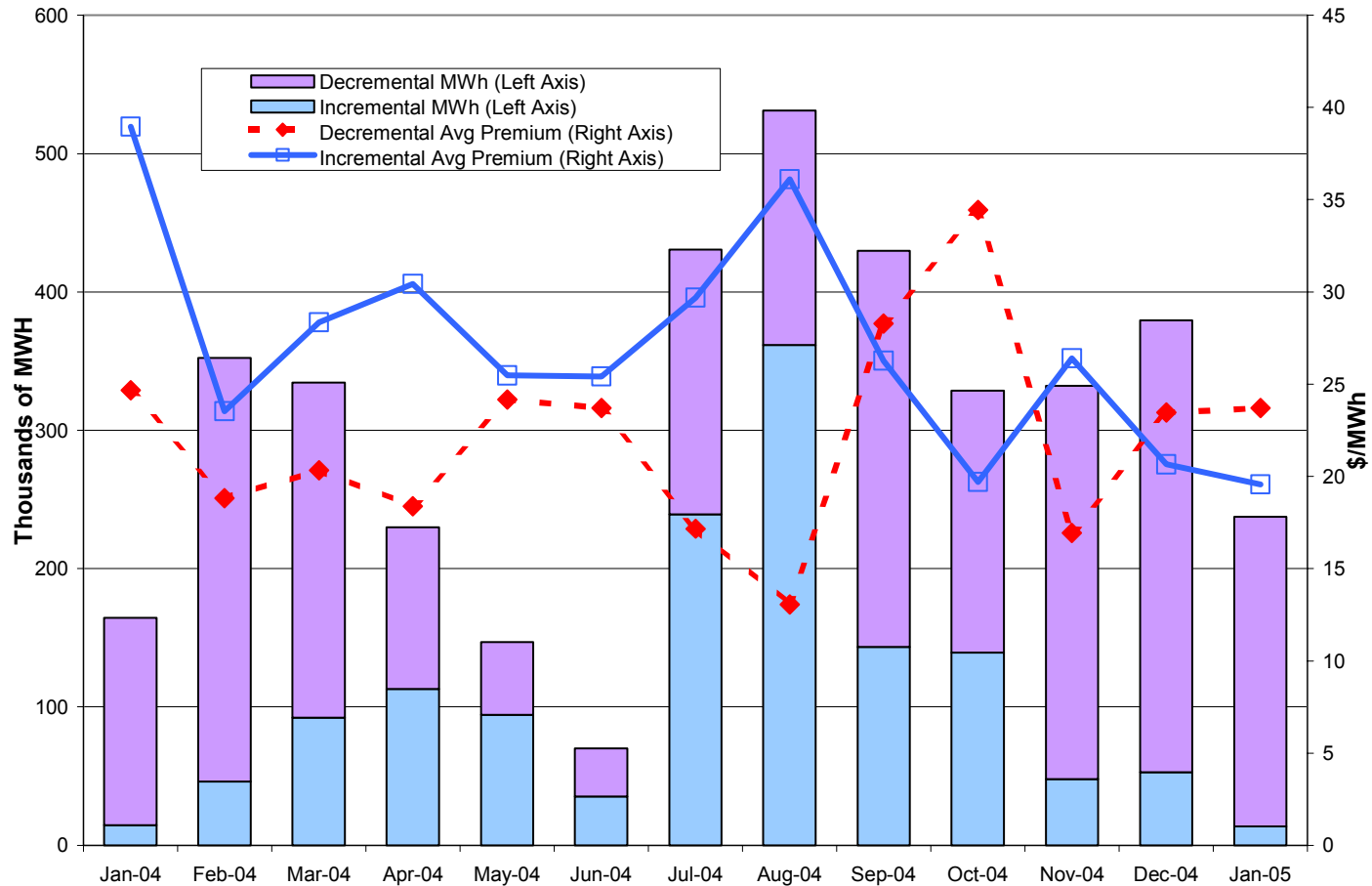


California ISO

California Independent System Operator

Intra-zonal congestion costs remain high, yet lower than recent months

Out-of-Sequence Volume and Average Redispatch Premium



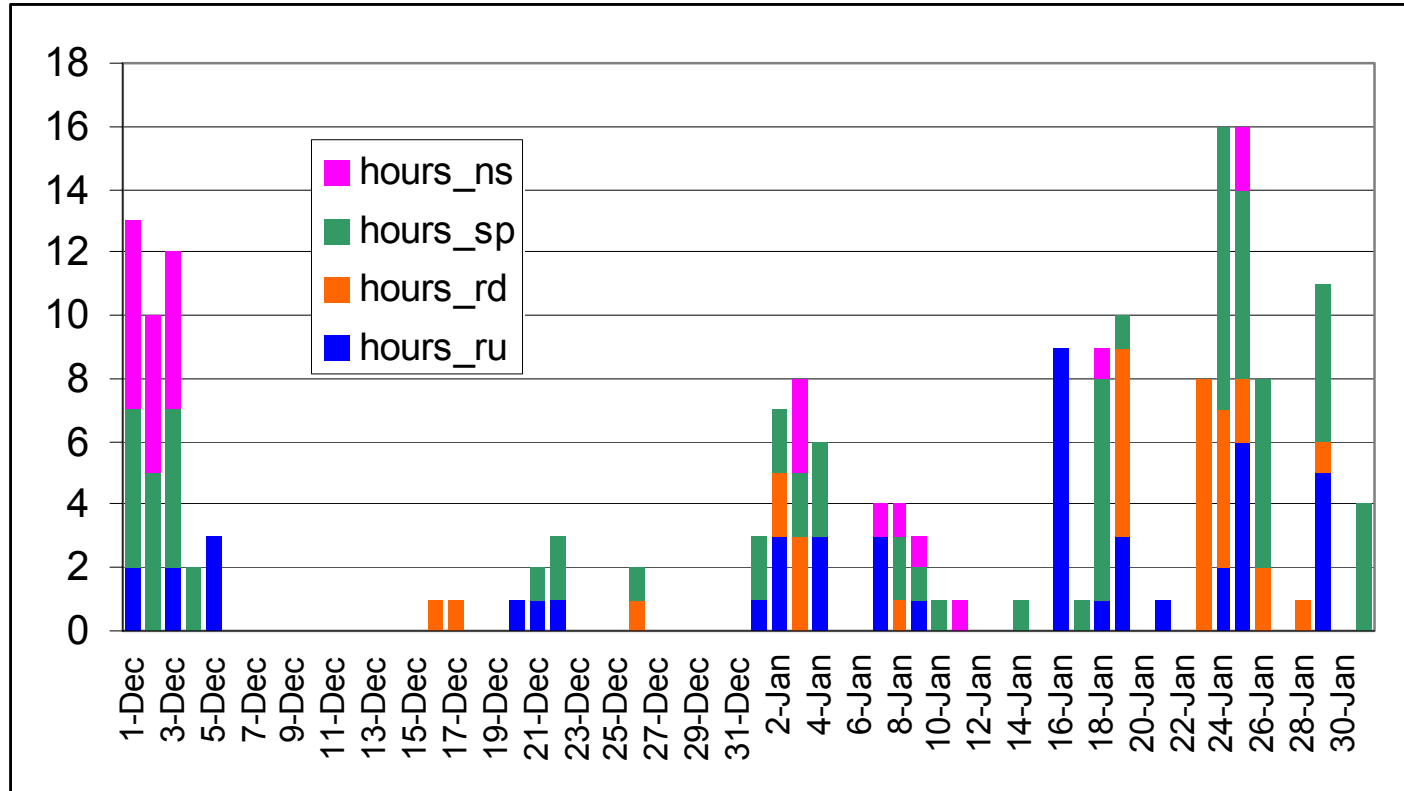


California ISO

California Independent System Operator

Frequency of A/S Bid insufficiency increased in January

Number of Hours/day of A/S Market Bid Insufficiency: Dec-Jan



	Average Required (MW)				Weighted Average Price (\$/MW)			
	RU	RD	SP	NS	RU	RD	SP	NS
Dec 04	389	373	755	735	\$ 18.20	\$ 7.29	\$ 7.41	\$ 2.20
Jan 05	377	389	773	771	\$ 23.64	\$ 14.86	\$ 12.01	\$ 2.37