



CALIFORNIA ISO

California Independent
System Operator

Market Analysis Report Events of February 2005

**Board of Governors Meeting
March 31, 2005**

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February Highlights

- Load growth has slowed to approx. 2 percent in January and February from 4 percent in 2004
- Intra-zonal congestion re-dispatch costs declined to \$3.1 million
 - Decremental OOS dispatches at Miguel and Cortina
- Inter-zonal congestion costs declined to \$1.1 million in February
- Decreased AS bid insufficiency
- Snowpack above normal in CA, Southwest, Canada, but below normal in OR, WA



February Highlights

- Real-time prices often tracking close to short-term bilateral prices
 - 2,300 MW of Long-term State contracts expired on 12/31/04; moderate decrease in forward scheduled energy relative to load
 - Real-time balancing more prevalent in the incremental direction, reversing trend of overall decremental imbalance market
 - Real-time dispatch of imported energy continues to increase under RTMA



Four percent load growth has tapered off since January

Load Growth Rates vs. Same Month in Prior Year, through Feb-05

	<u>Avg. Hrly. Load</u>	<u>Avg. Daily Peak</u>	<u>Avg. Daily Trough</u>	<u>Monthly Peak</u>
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	1.8%	2.8%	1.2%	5.0%
February-05	1.5%	1.8%	2.2%	0.3%

Note: Jan and Feb 2004 figures are adjusted for exit of WAPA on 12/31/05.



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Snowpack in excess of average in California and the Southwestern U.S. but below average in the Pacific Northwestern U.S.

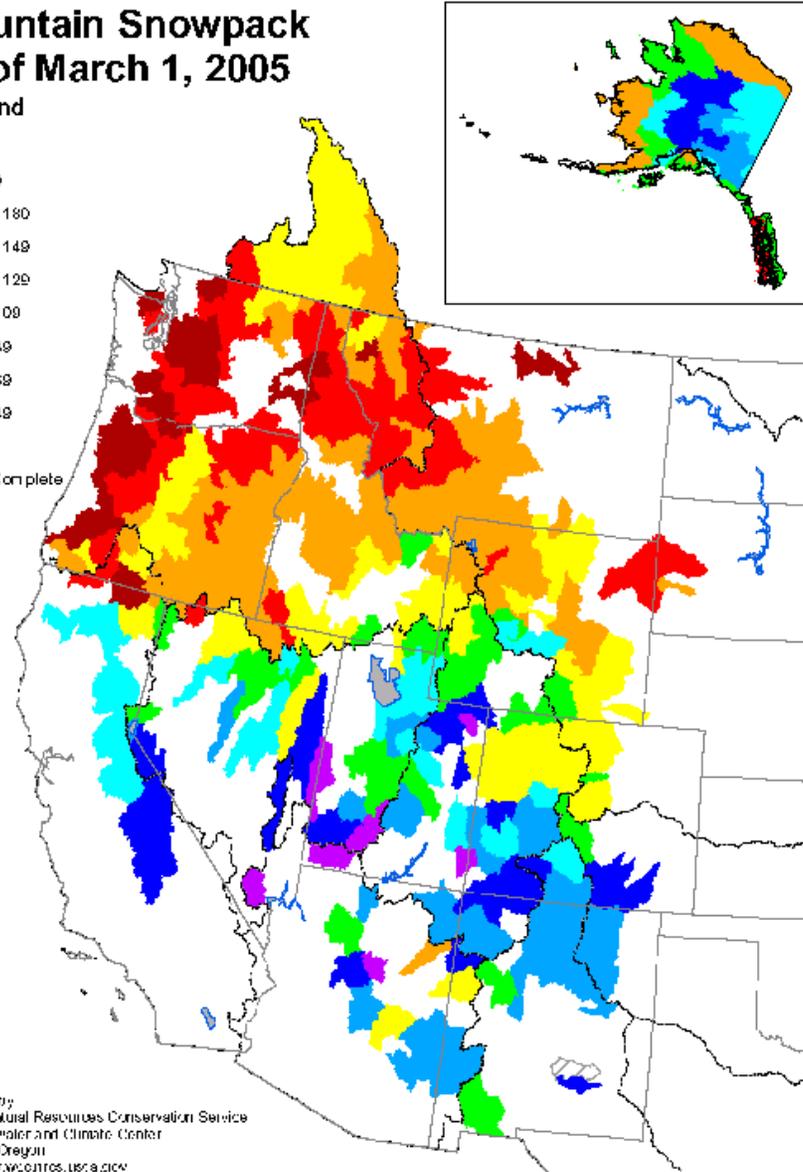
Hydroelectric production forecasts are commensurate with snowpack.

Mountain Snowpack as of March 1, 2005

Legend

percent

- > 180
- 150 - 180
- 130 - 149
- 110 - 129
- 90 - 109
- 70 - 89
- 50 - 69
- 25 - 49
- < 25
- Not Complete



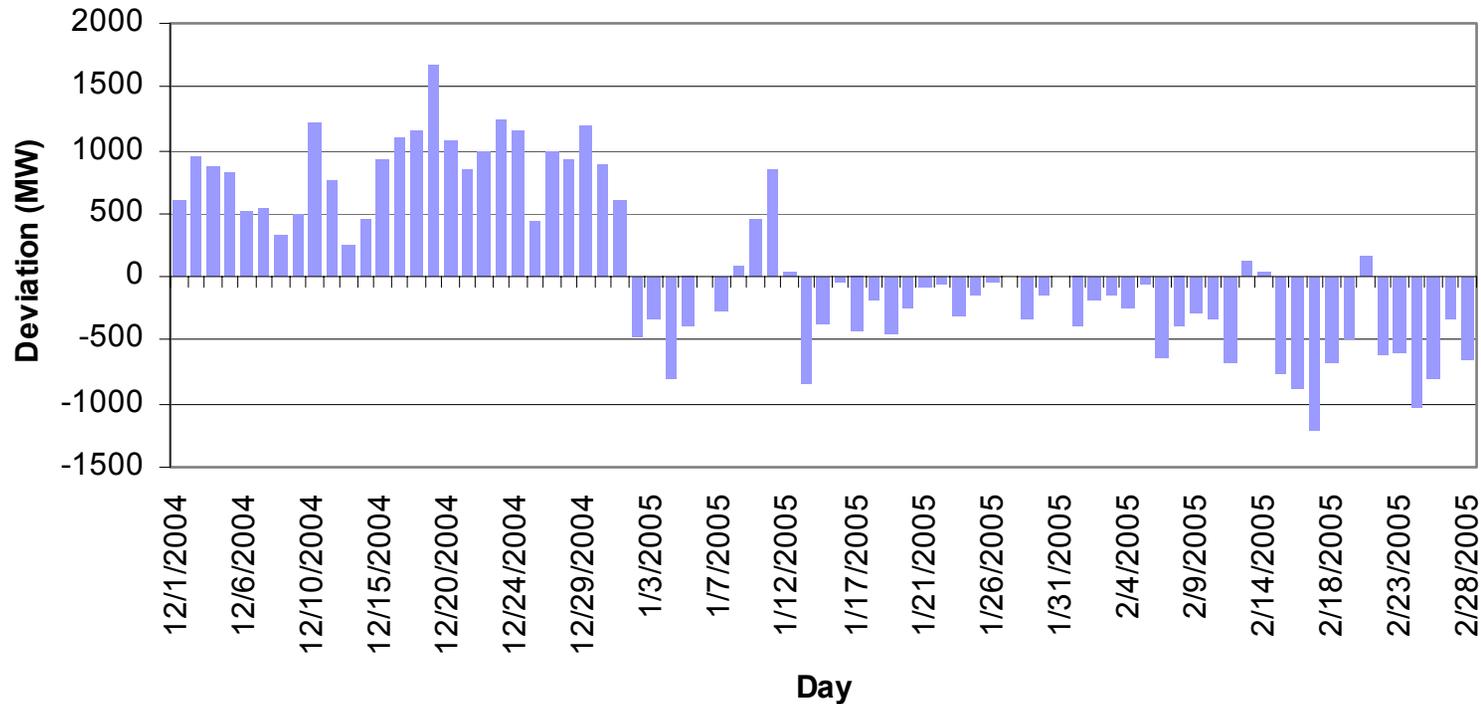
Source: USDA Natural Resources Conservation Service

Prepared by:
USDA, Natural Resources Conservation Service
National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>



Net Deviations in Schedules vs. Actual Load shifted from long to short on January 1, 2005

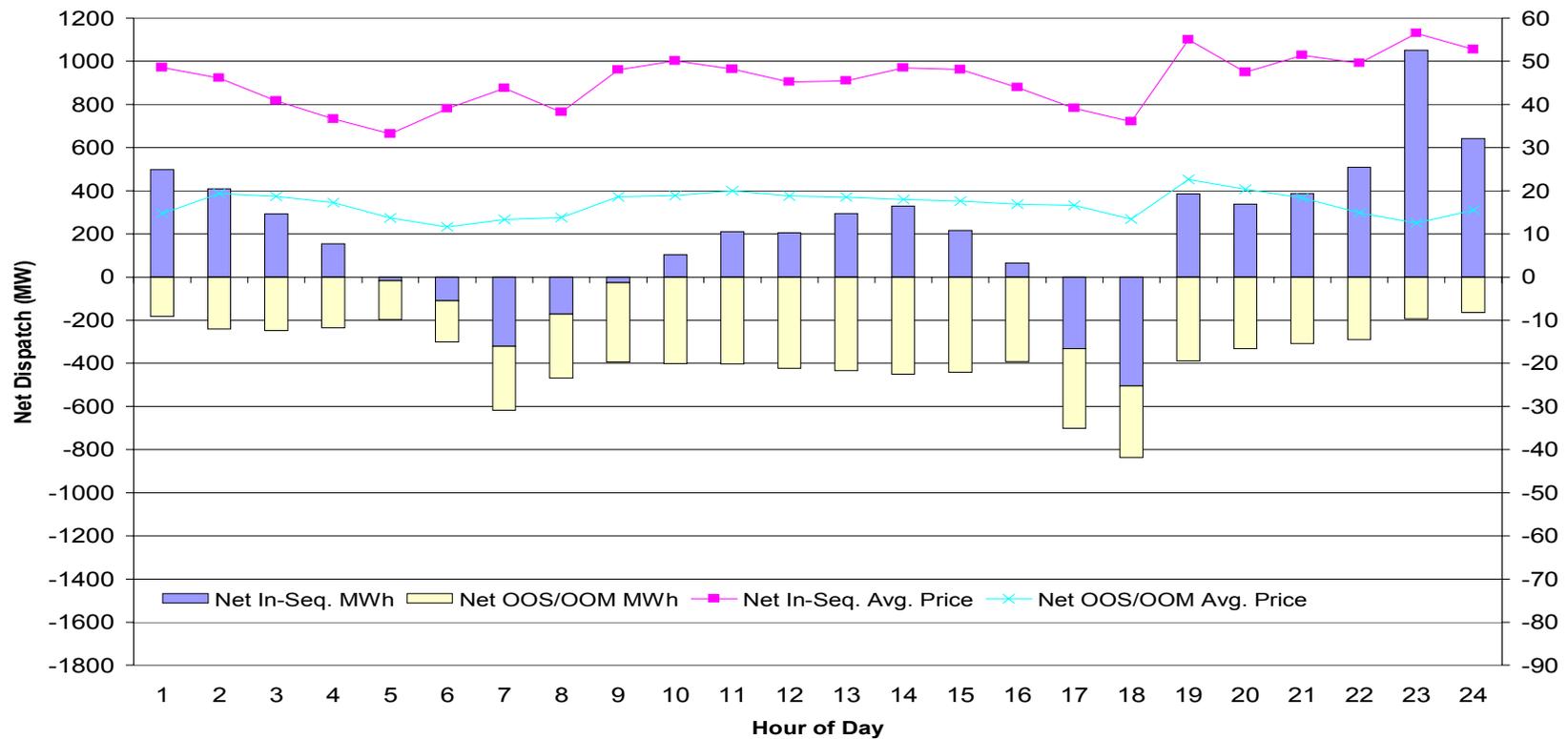
Net Scheduled Deviations: Daily Averages, 12/1/04 thru 2/28/05





In-sequence dispatches were largely incremental in Jan and Feb-05, except during morning and evening ramp hours, when real-time energy is decremented to balance rapid ramp of bulk scheduled power

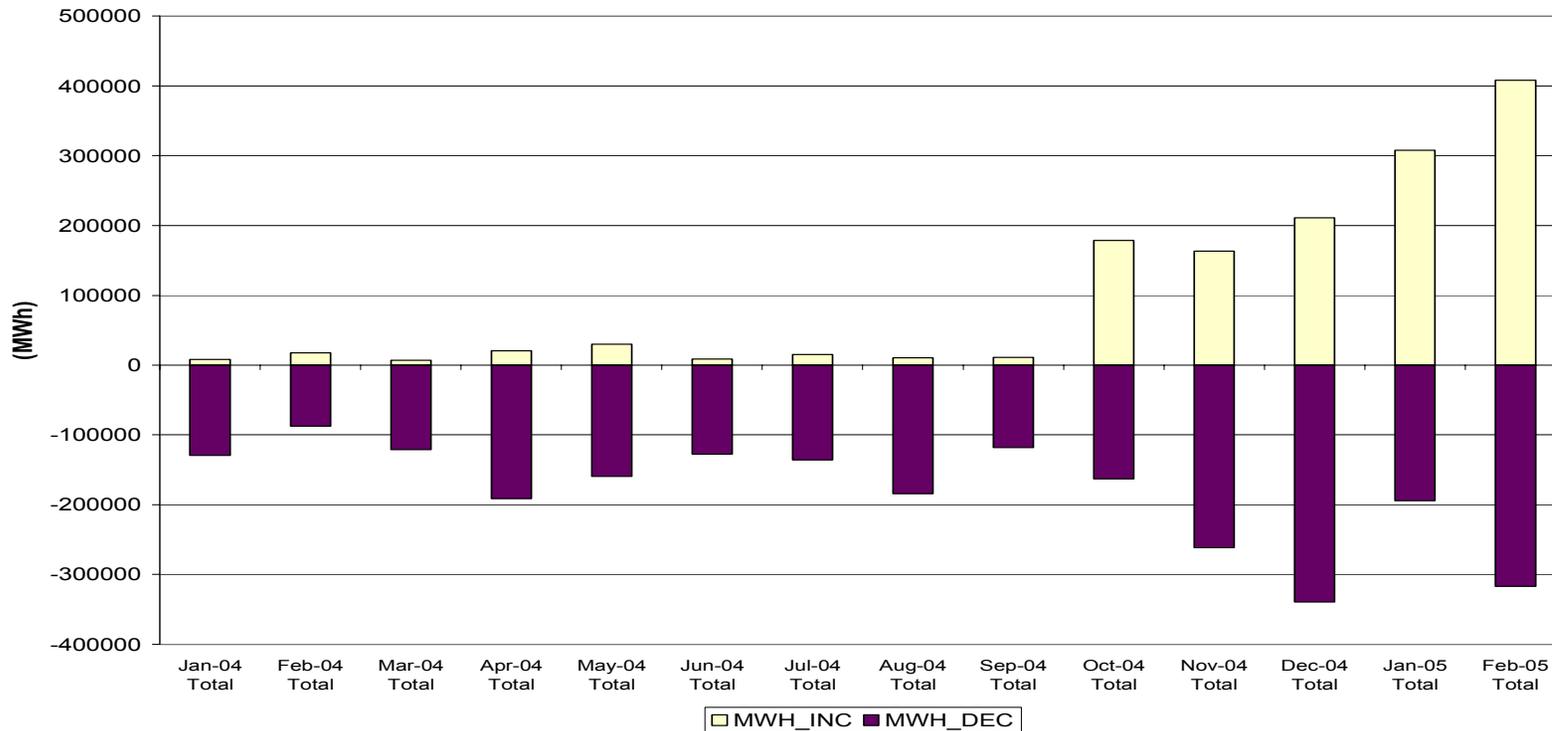
Hourly Average Profile of Real-time Prices and Net Volumes in February





Real-time dispatches of imports have increased since RTMA was implemented

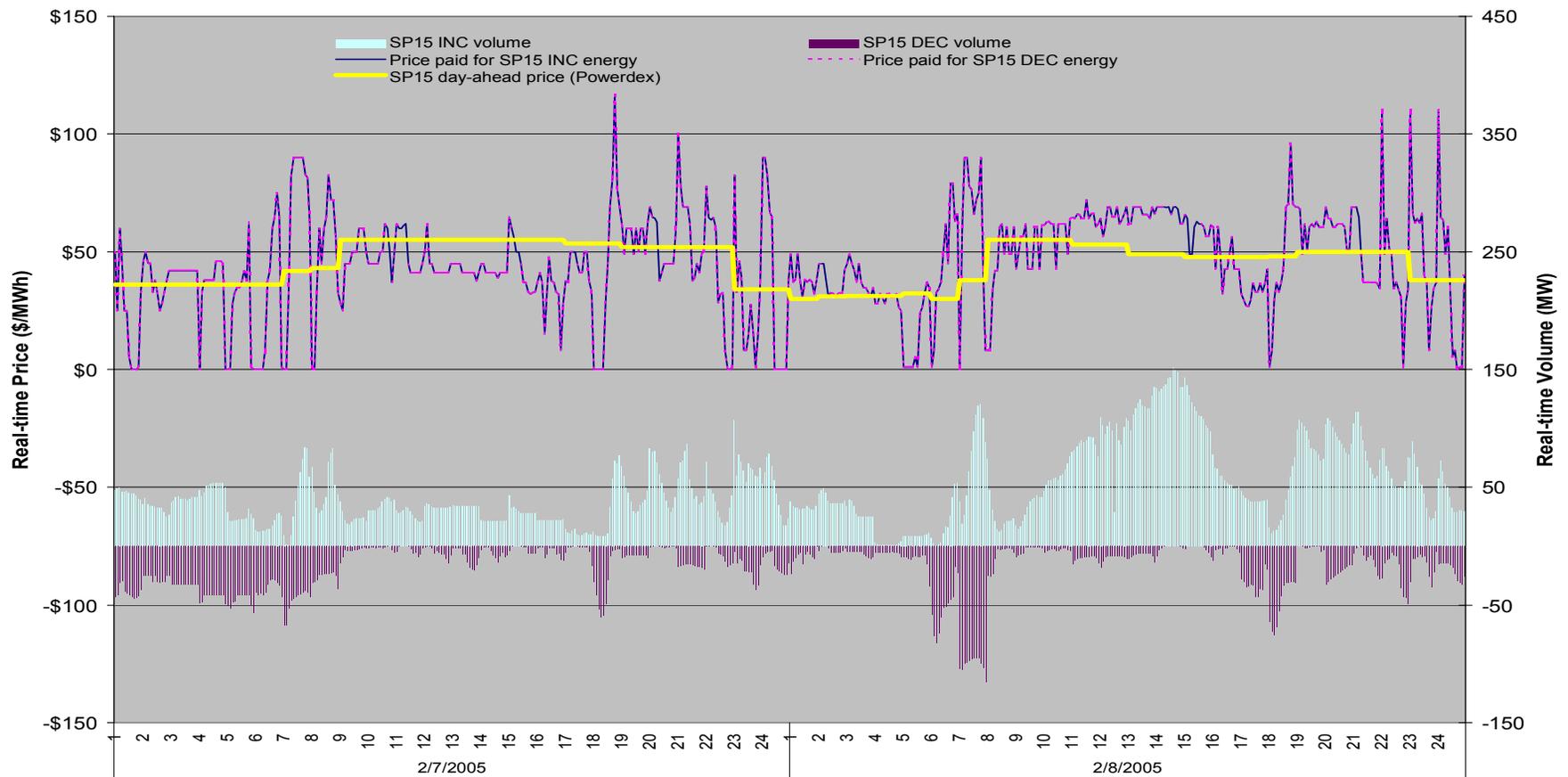
Monthly average import dispatch volume in ISO real-time balancing market through February





Real-time prices tend to be close to day-ahead prices, except during ramping periods

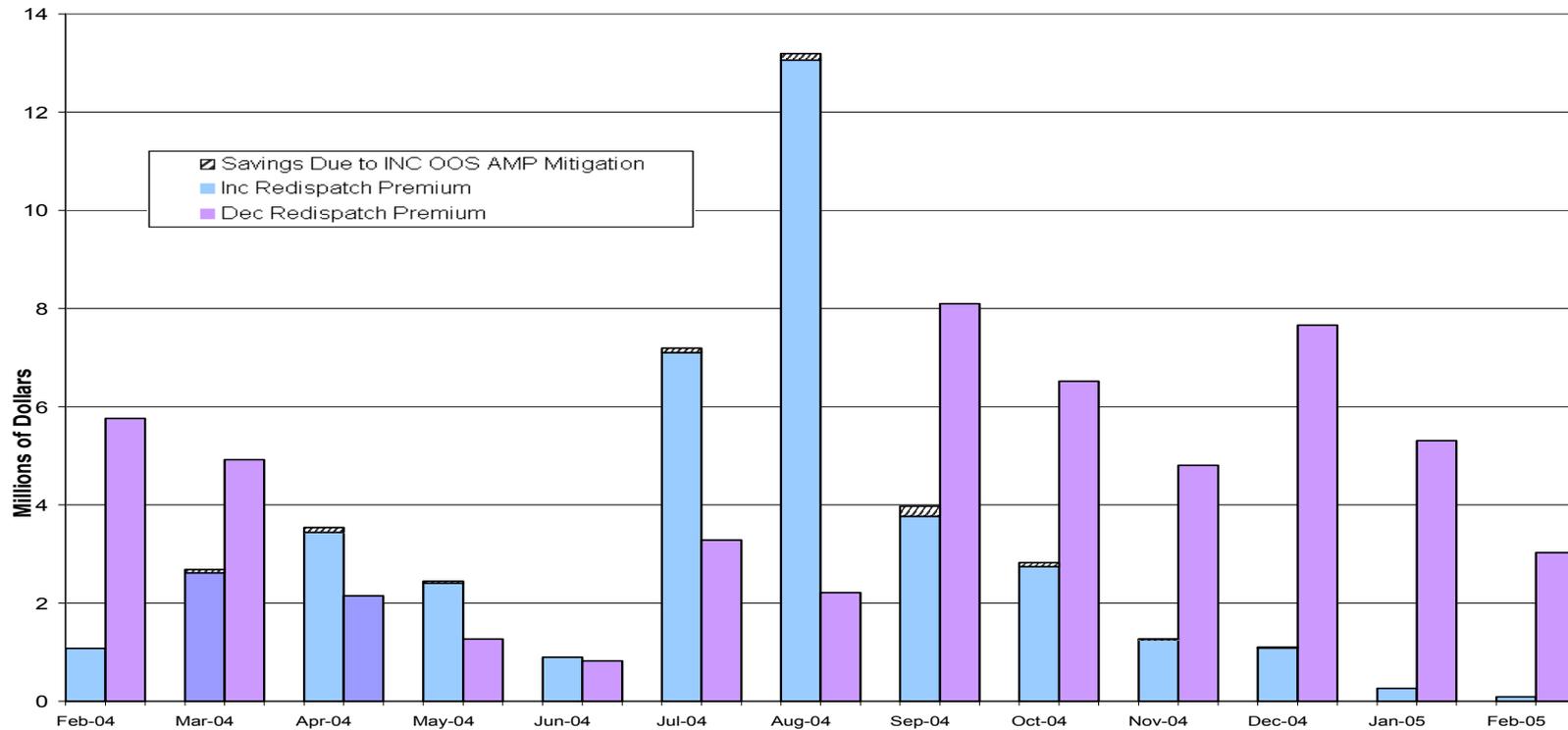
SP15 real-time vs. day-ahead prices, and real-time volume: Feb 7-8





February 2005 intra-zonal congestion redispatch costs decreased considerably from late 2004 levels

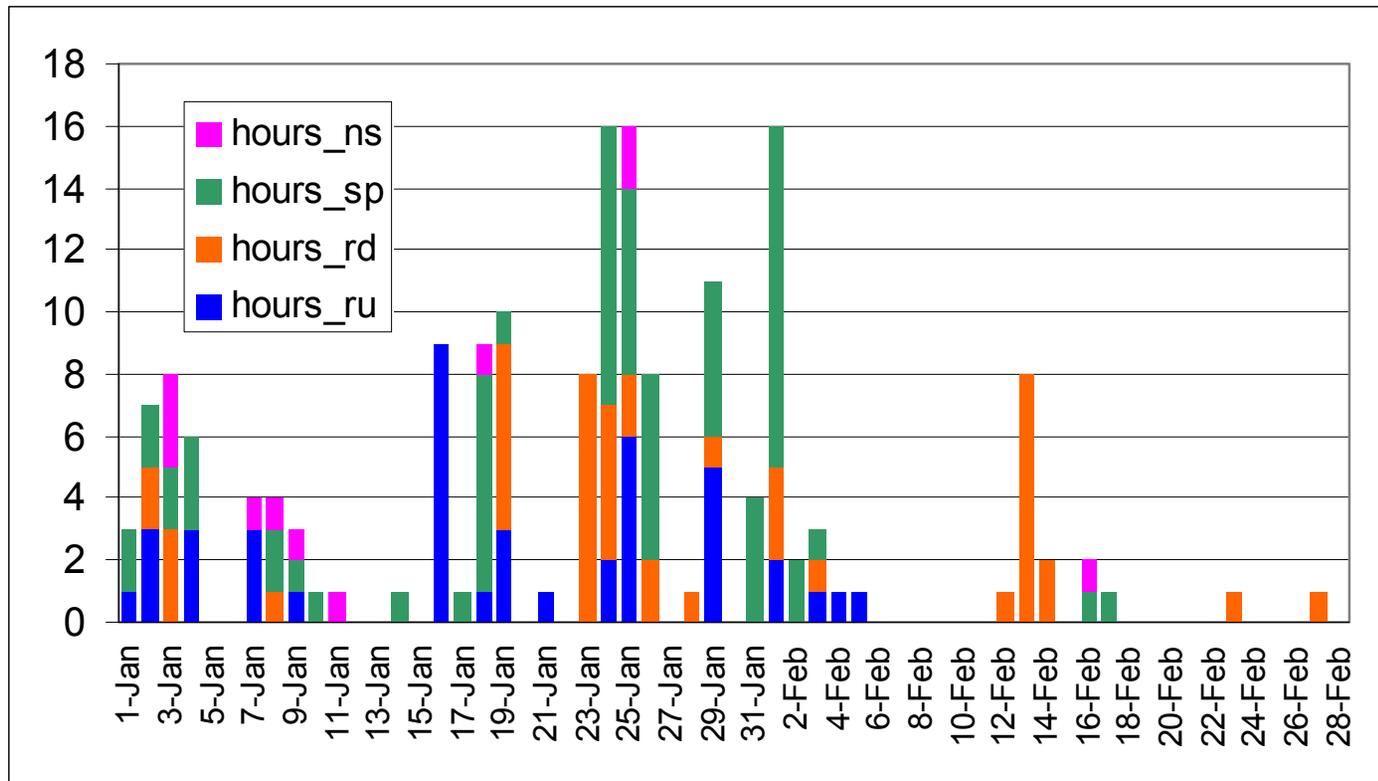
Monthly Total Intra-zonal Redispatch Costs through February





Bid insufficiency decreased in frequency in February

Daily Count of Bid Insufficiency by AS Service Type in Jan and Feb 2005





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Decreased bid insufficiency resulted in lower ancillary service market prices in February

Weekly Average Ancillary Service Prices

