

## Market Highlights<sup>1</sup> (January 11–January 24)

- The average DLAP price in the integrated forward market was \$34.67. The maximum and minimum DLAP prices were \$67.29 and \$4.96, respectively. The maximum and minimum PNode prices in the integrated forward market were \$176.47 and -\$211.49 respectively.
- The top two interties congested in the integrated forward market were MALIN500 and NOB\_ITC. Congestion rents in these two weeks totaled \$6,477,940.62.
- The average day-ahead ancillary service prices were between \$0.00 and \$91.61.
- Approximately 83.09 percent of the RUC requirements were met from RA units.
- The average real-time FMM DLAP price was \$34.38, with a maximum price of \$1,041.22 and a minimum price of -\$318.50. The maximum and minimum PNode prices in the FMM were \$1,348.01 and -\$1,032.80, respectively.
- Out of the total 1,344 FMM intervals, 1 intervals saw DLAP prices above \$250, and 3 intervals saw DLAP prices below -\$150.
- Out of the total 1,344 FMM intervals, 2 intervals saw ELAP prices above \$250 and 4 intervals saw ELAP prices below -\$150. The average real-time FMM ELAP price was \$26.43, with a maximum price of \$975.67 and a minimum price of -\$286.75.
- The average real-time RTD DLAP price was \$31.71, with a maximum price of \$1,102.57 and a minimum price of -\$294.00. The maximum and minimum PNode prices in the RTD were \$1,375.02 and -\$1,080.85, respectively.
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- Out of the total 4,032 RTD intervals, 22 intervals saw DLAP prices above \$250 and 12 intervals saw DLAP prices below -\$150.
- Out of the total 4,032 RTD intervals, 31 intervals saw ELAP prices above \$250 and 41 intervals saw ELAP prices below -\$150. The average real-time RTD ELAP price was \$22.78, with a maximum price of \$994.69 and a minimum price of -\$268.02.
- Root cause for daily high price events are noted in Tables 1 and 2.

Table 1 FMM Intervals				
Trade Date	Root Cause			
FMM Jan 19 HE 17	Renewable deviation			

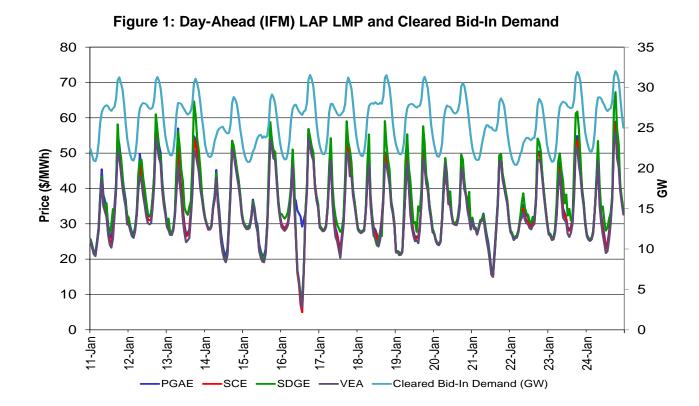
Table 2 RTD Intervals				
Trade Date	Root Cause			
RTD Jan 17 HE 17	Load changes			

<sup>&</sup>lt;sup>1</sup> A description of the metrics presented in this report is available at <u>http://www.caiso.com/Documents/WeeklyPerformanceReportMetricsKey.pdf</u>



Bi-weekly Market Performance Report

Table 2 RTD Intervals				
Trade Date	Root Cause			
RTD Jan 19 HE 20	Reduction of net import and renewable deviation			
RTD Jan 20 HE 11, 12	Renewable deviation and load changes			
RTD Jan 22 HE 14	Load changes and renewable deviation			
RTD Jan 23 HE 18, 19	Reduction of net import and load changes			
RTD Jan 24 HE 18	Load changes and re-dispatch of resources			



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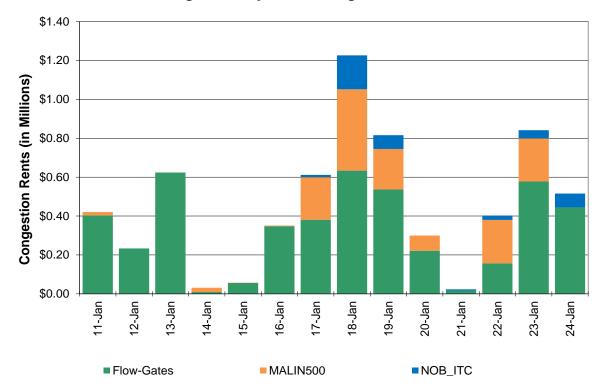


Figure 2: Day-Ahead Congestion Rents

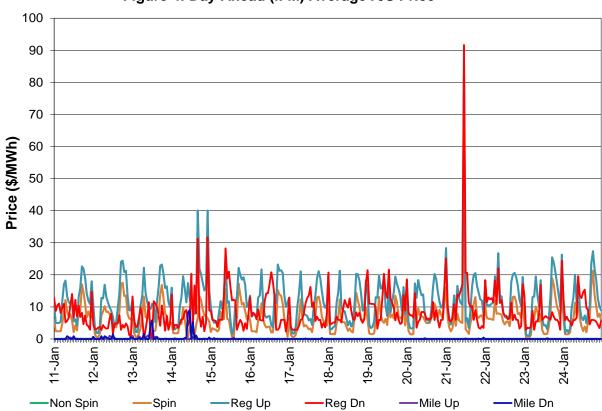
Figure 3: Day-Ahead Congestion Rents for Flow-Based Constraints

Transmission Constraint		Congestion Rent	
23040_CROSSTRIP	\$	3,223,854.61	
22192_DOUBLTTP_138_22300_FRIARS _138_BR_1 _1	\$	338,901.60	
22865_GRNT HLL_138_22852_TELECYN _138_BR_1 _1	\$	279,297.67	
OMS 4583153_PATH15_S-N	\$	188,476.49	
MAXBURN_ALISO_SDGE		96,246.72	
24085_LUGO _230_24086_LUGO _500_XF_1 _P	\$	74,536.23	
22256_ESCNDIDO_69.0_22724_SANMRCOS_69.0_BR_1_1	\$	66,119.79	
32314_SMRTSVLE_60.0_32316_YUBAGOLD_60.0_BR_1_1	\$	55,328.17	
HUMBOLDT_IMP_NG	\$	50,344.23	
30300_TABLMTN _230_30066_TB MT 1M_ 1.0_XF_1	\$	39,507.45	
22480_MIRAMAR _69.0_22756_SCRIPPS _69.0_BR_1 _1	\$	36,647.60	
24086_LUGO _500_26105_VICTORVL_500_BR_1_1	\$	35,097.48	
35122_NWARK EF_115_35350_AMES BS _115_BR_2 _1	\$	33,770.42	
34874_WHEELER _70.0_34756_WHEELER _115_XF_2	\$	29,773.20	
31461_JESSTAP _115_31464_COTWDPGE_115_BR_1 _1	\$	18,304.19	
MAXBURN_ALISO_TOTAL	\$	15,783.61	
31464_COTWDPGE_115_30105_COTTNWD _230_XF_1	\$	13,875.01	
7820_TL 230S_OVERLOAD_NG	\$	12,591.37	
22831_SYCAMORE_138_22124_CHCARITA_138_BR_1_1	\$	12,459.45	
22124_CHCARITA_138_22437_NCMTAP _138_BR_1 _1	\$	7,191.72	



## Figure 3: Day-Ahead Congestion Rents for Flow-Based Constraints (cont)

Transmission Constraint	Congestion Rent	
31108_SWNS FLT_60.0_31110_BRDGVLLE_60.0_BR_1_1	\$	5,189.60
31080_HUMBOLDT_60.0_31088_HMBLT JT_60.0_BR_1_1	\$	3,576.42
22596_OLD TOWN_230_22504_MISSION _230_BR_1 _1	\$	2,895.41
Devers NORTH BUS OUTAGE NG	\$	1,758.06
31566_KESWICK _60.0_31582_STLLWATR_60.0_BR_1 _1	\$	565.29
31104_CARLOTTA_60.0_31105_RIODLLTP_60.0_BR_1_1	\$	341.52
Total	\$	4,642,433.29



## Figure 4: Day-Ahead (IFM) Average A/S Price



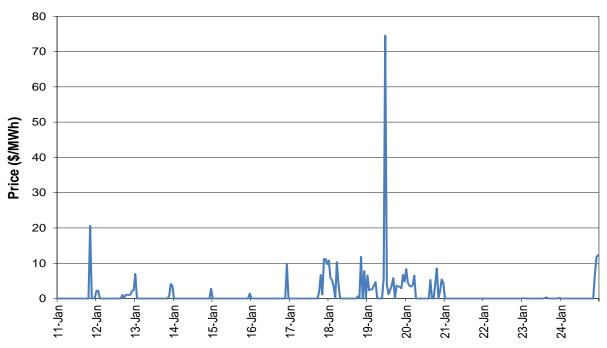
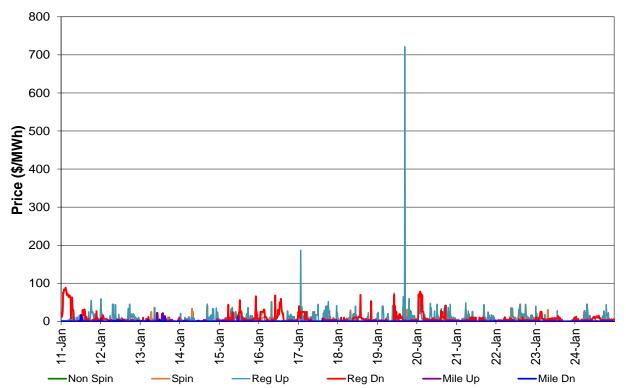
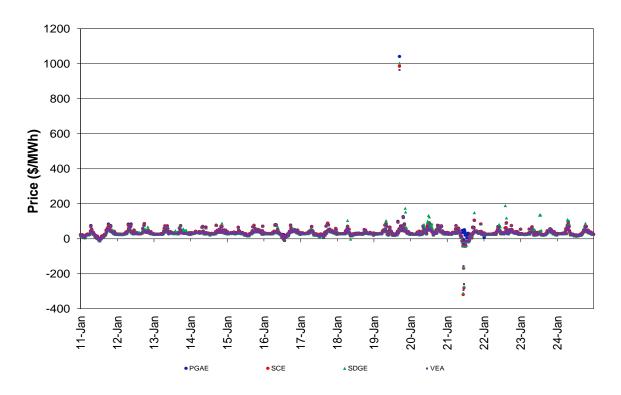


Figure 5: Day-Ahead Average RUC Price



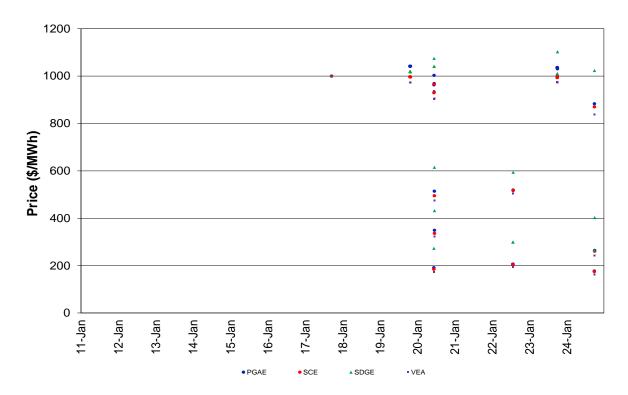




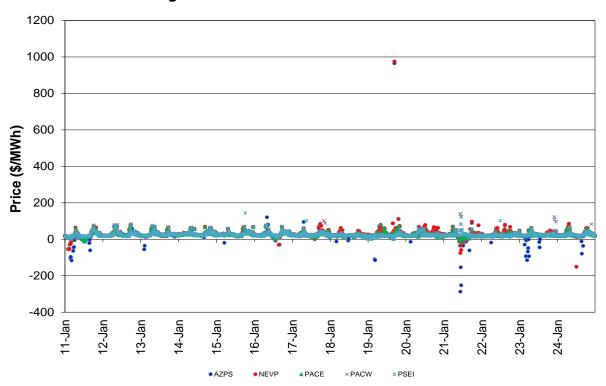


## Figure 7: Real-Time FMM DLAP LMP











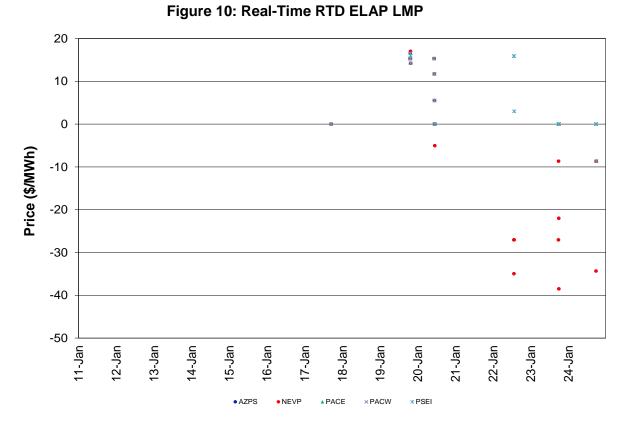


Figure 9: Real-Time FMM ELAP LMP