

## Market Highlights<sup>1</sup> (January 24–February 6)

- The average DLAP price in the integrated forward market was \$30.55. The
  maximum and minimum DLAP prices were \$86.15 and \$1.08, respectively. The
  maximum and minimum PNode prices in the integrated forward market were
  \$71.14 and -\$6.59 respectively.
- The top two interties congested in the integrated forward market were NOB\_ITC and MALIN500. Congestion rents in these two weeks totaled \$16,938,703.56.
- The average day-ahead ancillary service prices were between \$0.00 and \$45.55.
- Approximately 97.52 percent of the RUC requirements were met from RA units.
- The average real-time FMM DLAP price was \$30.12, with a maximum price of \$414.87 and a minimum price of -\$0.49. The maximum and minimum PNode prices in the FMM were \$634.99 and -\$520.05, respectively.
- Out of the total 1,344 FMM intervals, 3 intervals saw DLAP prices above \$250, and 0 intervals saw DLAP prices below -\$150.
- Out of the total 1,344 FMM intervals, 7 intervals saw ELAP prices above \$250 and 2 intervals saw ELAP prices below -\$150.
- The average real-time FMM ELAP price was \$20.96, with a maximum price of \$304.16 and a minimum price of -\$152.03.
- The average real-time RTD DLAP price was \$28.82, with a maximum price of \$1,104.46 and a minimum price of -\$17.82. The maximum and minimum PNode prices in the RTD were \$1,642.09 and -\$718.00, respectively.
- Out of the total 4,032 RTD intervals, 21 intervals saw DLAP prices above \$250 and 0 interval saw DLAP prices below -\$150.
- Out of the total 4,032 RTD intervals, 18 intervals saw ELAP prices above \$250 and 7 intervals saw ELAP prices below -\$150. The average real-time RTD ELAP price was \$19.63, with a maximum price of \$989.21 and a minimum price of \$641.83.
- Root cause for daily high price events are noted in Tables 1 and 2.

Table 1 FMM Intervals			
Trade Date	Root Cause		
FMM Jan 28 HE 17	Load changes and change of renewable forecast.		
FMM Jan 29 HE 18	Congestion on 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P.		
FMM Jan 30 HE 9,10	Congestion on OMS 5092302 MG_BK81_NG.		

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

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Table 2 RTD Intervals			
Trade Date	Root Cause		
RTD Jan 24 HE 16; Jan 29 HE 17; Feb 2	Load changes and renewable deviation.		
HE 17	Load changes and followable deviation.		
RTD Jan 24 HE 18	Congestion on OMS 5555651 CRY-MCC_6510_NG and load changes.		
RTD Jan 29 HE 16	Congestion on 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P		
	and re-dispatch of resources.		
RTD Jan 30 HE 18	Congestion on 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P and 7820 TL23040 IV SPS NG.		
RTD Jan 30 HE 8, 23	Congestion on OMS 5092302 MG_BK81_NG.		
RTD Jan 30 HE 10,11;	Congestion on 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P		
Jan 31 HE 17	and congestion on 7820_TL 230S_OVERLOAD_NG.		
RTD Feb 2 HE 21;	Load changes and reduction of imports.		
Feb 5 HE 7	Load changes and reduction of imports.		
RTD Feb 6 HE 17	Load changes, renewable deviation, and reduction of imports.		

Figure 1: Day-Ahead (IFM) LAP LMP and Cleared Bid-In Demand 100 35 90 30 80 25 70 Price (\$/MWh) 60 20 50 15 40 30 10 20 5 10 0 0 25-Jan 24-Jan 28-Jan 29-Jan 31-Jan 1-Feb 2-Feb 3-Feb 4-Feb 5-Feb 6-Feb 26-Jan 27-Jan SCE SDGE --VEA Cleared Bid-In Demand (GW)



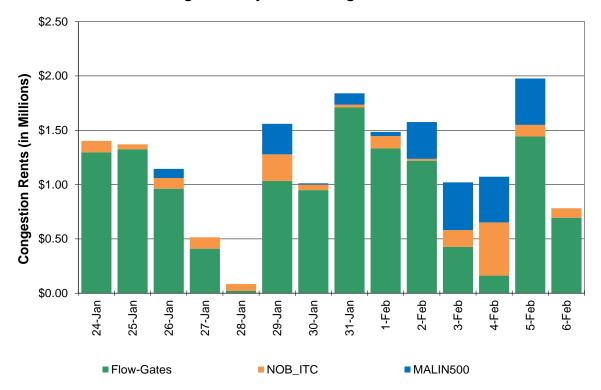


Figure 2: Day-Ahead Congestion Rents

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

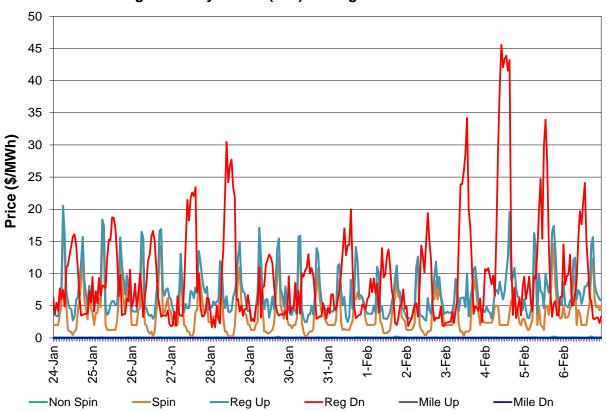
Transmission Constraint	Congestion Rent
24138_SERRANO _500_24137_SERRANO _230_XF_1 _P	\$8,153,451
22192_DOUBLTTP_138_22300_FRIARS _138_BR_1 _1	\$3,281,305
24086_LUGO _500_26105_VICTORVL_500_BR_1 _1	\$691,509
7820_TL 230S_OVERLOAD_NG	\$389,741
OMS 5092302 MG_BK81_NG	\$162,062
30275_CRESTA _230_30330_RIO OSO _230_BR_1 _1	\$63,557
25001_GOODRICH_230_24076_LAGUBELL_230_BR_1 _1	\$56,472
OMS 4790142 Caribou Bank	\$50,648
HUMBOLDT_IMP_NG	\$23,506
7820_TL23040_IV_SPS_NG	\$21,391
24402_ANTELOPE_66.0_24420_NEENACH _66.0_BR_1 _1	\$20,884
31336_HPLND JT_60.0_31206_HPLND JT_115_XF_2	\$19,057
31214_GEYERS56_115_31220_EGLE RCK_115_BR_1_1	\$18,231
30450_CORTINA _230_30460_VACA-DIX_230_BR_1 _1	\$14,009
31227_HGHLNDJ2_115_31950_CORTINA _115_BR_1 _1	\$6,188
99254_J.HINDS2_230_24806_MIRAGE	\$3,605
31334_CLER LKE_60.0_31338_KONOCTI6_60.0_BR_1 _1	\$1,572
31336_HPLND JT_60.0_31370_CLVRDLJT_60.0_BR_1 _1	\$1,540
IID-SCE_BG	\$1,382



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

Transmission Constraint	Congestion Rent
22484_MIRAMAR1_69.0_22492_MIRAMRTP_69.0_BR_1 _1	\$899
22324_GLENCLIF_69.0_22328_GLNCLFTP_69.0_BR_1 _1	\$528
33310_SANMATEO_115_33315_RAVENSWD_115_BR_1 _1	\$420
32374_DRUM _60.0_32376_BONNIE N_60.0_BR_1 _1	\$251
22644_PENSQTOS_69.0_22164_DELMARTP_69.0_BR_1 _1	\$200
22200_DUNHILTP_69.0_22196_DUNHILL _69.0_BR_1 _1	\$33
Total	\$ 8,153,451.43

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





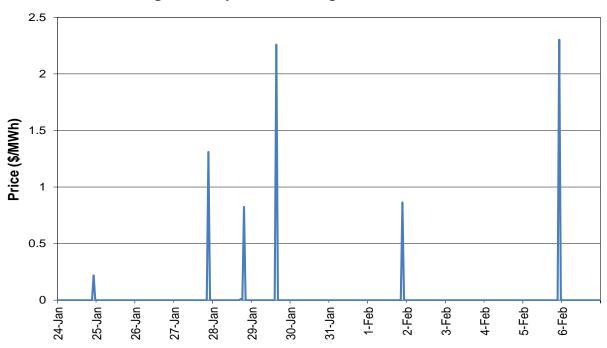
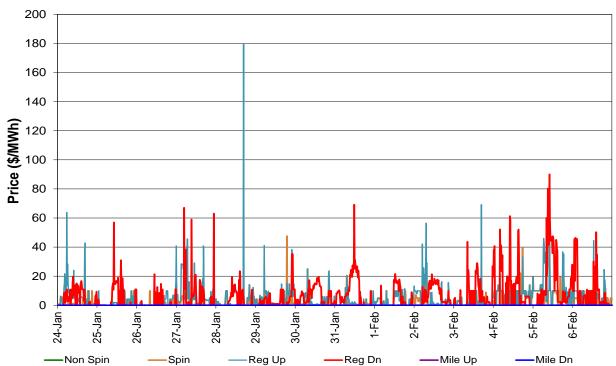


Figure 5: Day-Ahead Average RUC Price







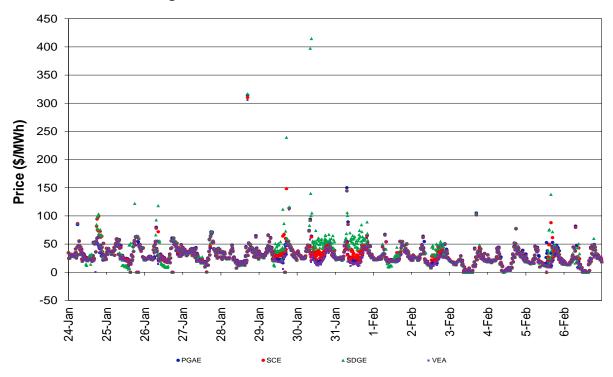


Figure 7: Real-Time FMM DLAP LMP

Figure 8: Real-Time RTD DLAP LMP

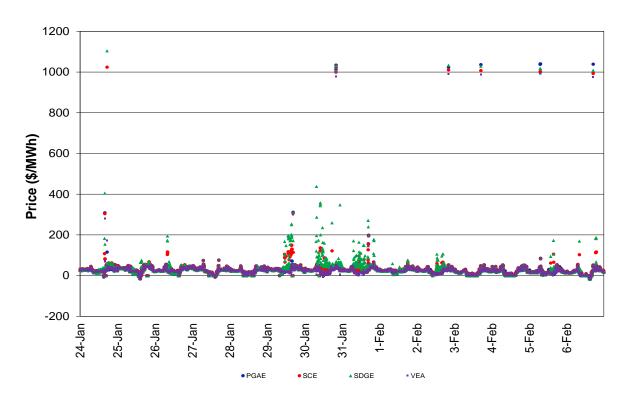




Figure 9: Real-Time FMM ELAP LMP

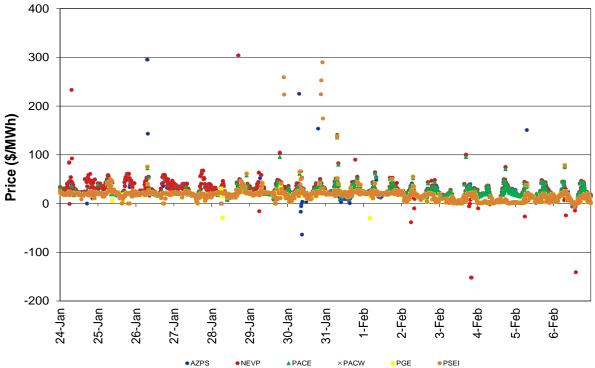


Figure 10: Real-Time RTD ELAP LMP

