



Market Highlights¹ (May 31–June 13)

- The average DLAP price in the integrated forward market was \$25.29. The maximum and minimum DLAP prices were \$67.91 and -\$11.57, respectively. The maximum and minimum PNode prices in the integrated forward market were \$70.86 and -\$125.05 respectively.
- The top two interties congested in the integrated forward market were MALIN500 and NOB_ITC. Congestion rents in these two weeks totaled \$14,736,193.01.
- The average day-ahead ancillary service prices were between \$0.00 and \$40.63.
- Approximately 88.63 percent of the RUC requirements were met from RA units.
- The average real-time FMM DLAP price was \$25.03, with a maximum price of \$235.72 and a minimum price of -\$67.86. The maximum and minimum PNode prices in the FMM were \$1,679.04 and -\$887.17, respectively.
- Out of the total 1,344 FMM intervals, 0 intervals saw DLAP prices above \$250, and 0 intervals saw DLAP prices below -\$150.
- Out of the total 1,344 FMM intervals, 2 intervals saw ELAP prices above \$250 and 29 intervals saw ELAP prices below -\$150. The average real-time FMM ELAP price was \$16.44, with a maximum price of \$286.81 and a minimum price of -\$153.68.
- The average real-time RTD DLAP price was \$24.22, with a maximum price of \$1,052.20 and a minimum price of -\$21.81. The maximum and minimum PNode prices in the RTD were \$1,334.24 and -\$957.87, respectively.
- Out of the total 4,032 RTD intervals, 25 intervals saw DLAP prices above \$250 and 0 interval saw DLAP prices below -\$150.
- Out of the total 4,032 RTD intervals, 41 intervals saw ELAP prices above \$250 and 86 intervals saw ELAP prices below -\$150. The average real-time RTD ELAP price was \$15.88, with a maximum price of \$1,031.82 and a minimum price of -\$158.17.
- Root cause for daily high price events¹ are noted in Table 1.

Table 1 RTD Intervals	
Trade Date	Root Cause
RTD May 31 HE 8	Congestion on 7820_TL 230S_TL50001OUT_NG and renewable deviation
RTD May 31 HE 10	Congestion on 92320_SYCA TP1_230_22832_SYCAMORE_230_BR_1_1 and renewable deviation
RTD May 31 HE 15, 16	Renewable deviation and load changes

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



Table 1 RTD Intervals	
Trade Date	Root Cause
RTD May 31 HE 17	Renewable deviation
RTD June 3 HE 18	Load changes and renewable deviation
RTD June 4 HE 19, 20	Renewable deviation, load changes and re-dispatch of resources
RTD June 7 HE 20	Renewable deviation and re-dispatch of resources
RTD June 11 HE 20	Renewable deviation and load changes
RTD June 11 HE 22	Re-dispatch of resources, load changes and renewable deviation

Figure 1: Day-Ahead (IFM) LAP LMP and Cleared Bid-In Demand

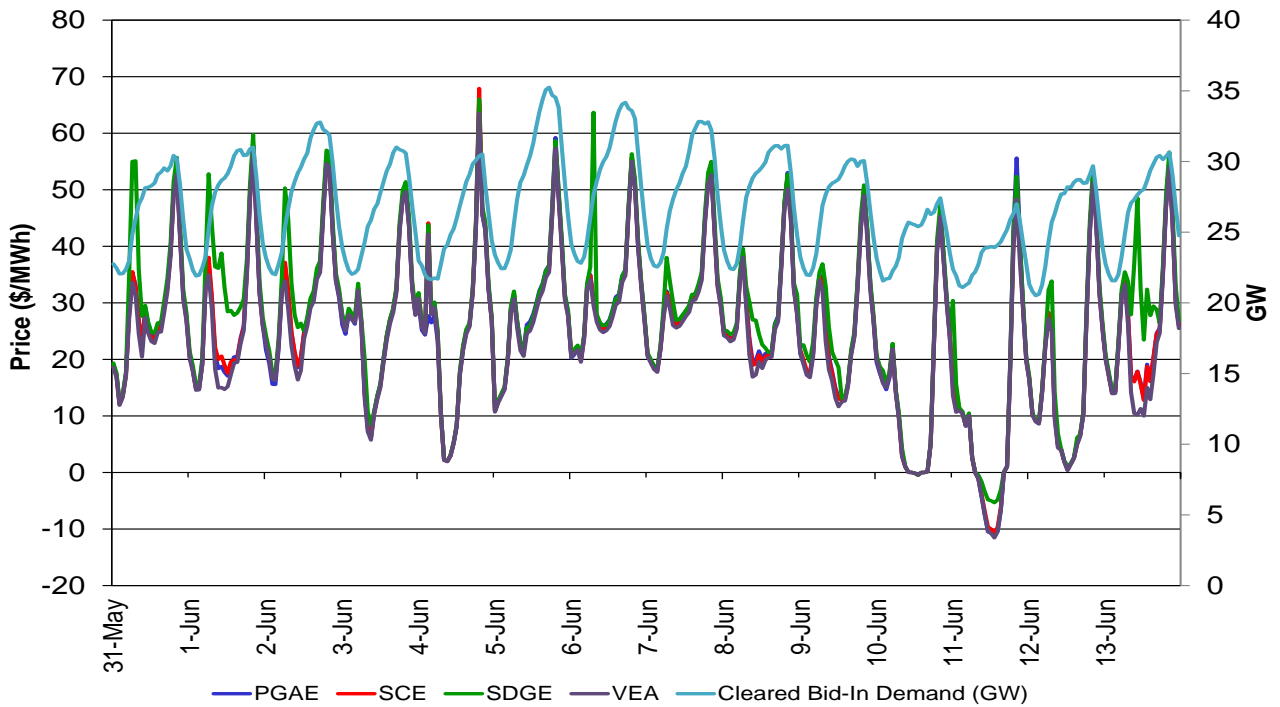




Figure 2: Day-Ahead Congestion Rents

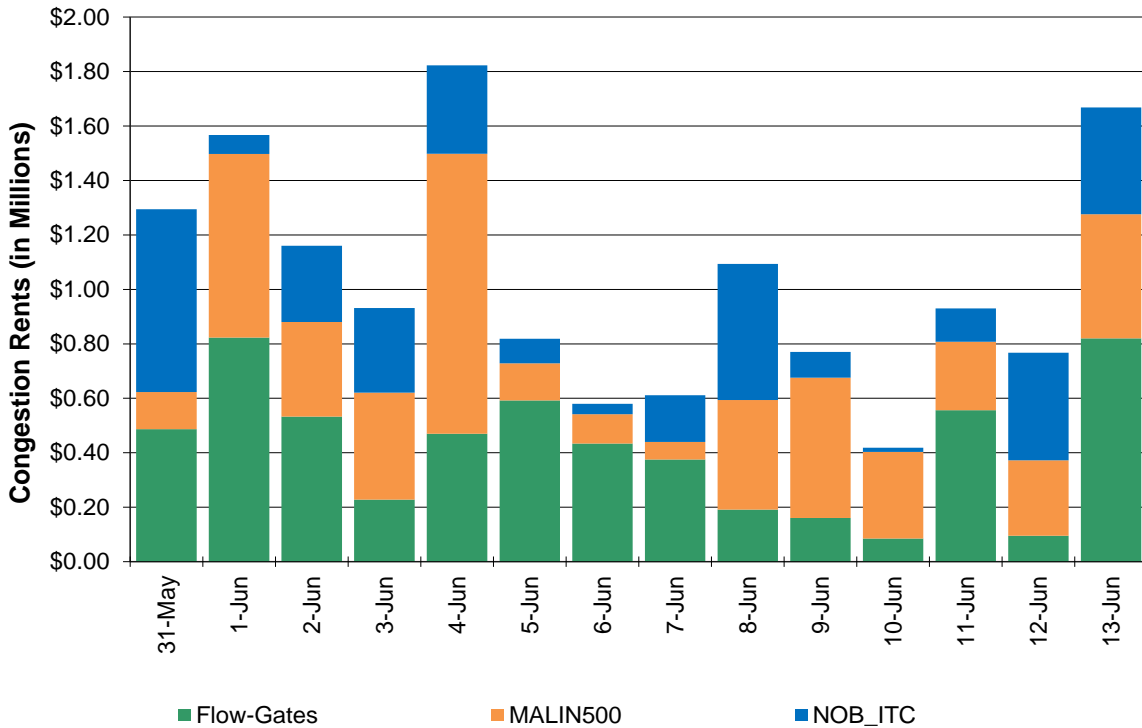


Figure 3: Day-Ahead Congestion Rents for Flow-Based Constraints

Transmission Constraint	Congestion Rent
22831_SYCAMORE_138_22832_SYCAMORE_230_XF_1	\$ 759,996.40
30005_ROUND MT_500_30015_TABLE MT_500_BR_1_2	\$ 604,747.35
22886_SUNCREST_230_92860_SUNC TP1_230_BR_1_1	\$ 481,158.37
6310_CP3_NG	\$ 341,777.60
30515_WARNERVL_230_30800_WILSON_230_BR_1_1	\$ 296,660.18
33936_MELNS JB_115_33951_VLYHMTP1_115_BR_1_1	\$ 252,781.77
7820_TL_230S_OVERLOAD_NG	\$ 250,137.94
31336_HPLND JT_60.0_31370_CLVRDLJT_60.0_BR_1_1	\$ 236,125.10
7820_TL_230S_TL50001OUT_NG	\$ 234,423.65
31334_CLER LKE_60.0_31338_KONOCI6_60.0_BR_1_1	\$ 233,225.94
34112_EXCHEQUR_115_34116_LE GRAND_115_BR_1_1	\$ 212,867.81
34427_ATWELL_115_34701_SMYRNA 1_115_BR_1_1	\$ 211,142.40
22192_DOUBLTTP_138_22300_FRIARS_138_BR_1_1	\$ 209,655.56
32212_E.NICOLS_115_32214_RIO OSO_115_BR_1_1	\$ 209,478.08
22820_SWEETWTR_69.0_22476_MIGUELTP_69.0_BR_1_1	\$ 139,759.50
32218_DRUM_115_32244_BRNSWKT2_115_BR_2_1	\$ 114,838.01
32206_BOGUE_115_32286_OLIVH J3_115_BR_1_1	\$ 113,164.81
OMS 4602677 50002_OOS_TDM	\$ 107,236.64
22208_EL CAJON_69.0_22408_LOSCOCHS_69.0_BR_1_1	\$ 80,480.76

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

Transmission Constraint	Congestion Rent
34158_PANOCHÉ_115_34350_KAMM_115_BR_1_1	\$ 78,567.76
31220_EGLE RCK_115_31228_HOMSTKTP_115_BR_1_1	\$ 73,520.18
6310_CP2_NG	\$ 65,102.57
40687_MALIN_500_30005_ROUND MT_500_BR_1_3	\$ 57,013.68
31378_FULTON_60.0_31382_FTCHMTNP_60.0_BR_1_1	\$ 53,501.27
34418_KINGSBRG_115_34405_FRWT TAP_115_BR_1_1	\$ 40,966.95
33932_MELONES_115_33936_MELNS JB_115_BR_1_1	\$ 40,887.04
33916_CURTISS_115_33917_FBERBORD_115_BR_1_1	\$ 39,166.56
32290_OLIVH J1_115_32214_RIO OSO_115_BR_1_1	\$ 35,855.01
22480_MIRAMAR_69.0_22756_SCRIPPS_69.0_BR_1_1	\$ 30,641.62
32290_OLIVH J1_115_32288_E.MRY J1_115_BR_1_1	\$ 28,438.90
34548_KETTLEMN_70.0_34552_GATES_70.0_BR_1_1	\$ 26,590.86
32218_DRUM_115_32222_DTCH2TAP_115_BR_1_1	\$ 23,403.02
33914_MI-WUK_115_33917_FBERBORD_115_BR_1_1	\$ 14,665.59
34807_ARVINJ2_115_34758_LAMONT_115_BR_1_1	\$ 13,812.13
31566_KESWICK_60.0_31582_STLLWATR_60.0_BR_1_1	\$ 13,206.21
33951_VLYHMTP1_115_33516_RIPON J_115_BR_1_1	\$ 11,700.24
32214_RIO OSO_115_32225_BRNSWKT1_115_BR_1_1	\$ 11,133.78
31466_JESSUP_115_31469_SPI AND_115_BR_1_1	\$ 10,576.03
38000_LODI_230_30622_EIGHT MI_230_BR_1_1	\$ 9,475.96
24086_LUGO_500_26105_VICTORVL_500_BR_1_1	\$ 8,951.22
33541_AEC_TP1_115_33540_TESLA_115_BR_1_1	\$ 8,685.00
30500_BELLOTA_230_30515_WARNERVL_230_BR_1_1	\$ 8,465.66
34116_LE GRAND_115_34134_WILSONAB_115_BR_1_1	\$ 7,448.22
7320_CP6_NG	\$ 5,591.87
31000_HUMBOLDT_115_31452_TRINITY_115_BR_1_1	\$ 5,155.34
30485_TIGR CRK_230_30490_VLLY SPS_230_BR_1_1	\$ 5,102.76
33950_RVRBK TP_115_33934_TULLOCH_115_BR_1_1	\$ 4,823.29
22604_OTAY_69.0_22616_OTAYLKTP_69.0_BR_1_1	\$ 4,436.83
32314_SMRTSVLE_60.0_32316_YUBAGOLD_60.0_BR_1_1	\$ 3,903.59
32056_CORTINA_60.0_30451_CRTNA M_1.0_XF_1	\$ 3,544.48
22884_WARNERS_69.0_22688_RINCON_69.0_BR_1_1	\$ 3,042.81
31092_MPLE CRK_60.0_31093_HYMPOMJT_60.0_BR_1_1	\$ 2,639.21
31576_WNTU PMS_60.0_31578_LOMS JCT_60.0_BR_1_1	\$ 2,451.68
34107_CERTANTP_115_34101_CERTANJ2_115_BR_1_1	\$ 2,183.28
33916_CURTISS_115_33920_RCTRK J_115_BR_1_1	\$ 1,842.23
31556_TRINITY_60.0_31555_MSS TAP2_60.0_BR_1_1	\$ 1,697.46
HUMBOLDT_IMP_NG	\$ 1,229.16
34887_TAP SKRN_70.0_34882_SAN EMDO_70.0_BR_1_1	\$ 1,152.13
31080_HUMBOLDT_60.0_31088_HMBLT JT_60.0_BR_1_1	\$ 1,099.57
31110_BRDGVLE_60.0_31112_FRUITLND_60.0_BR_1_1	\$ 337.94
31227_HGHLNDJ2_115_31950_CORTINA_115_BR_1_1	\$ 90.51
31104_CARLOTTA_60.0_31105_RIODLLTP_60.0_BR_1_1	\$ 69.68
Totals	\$ 5,851,827.17



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

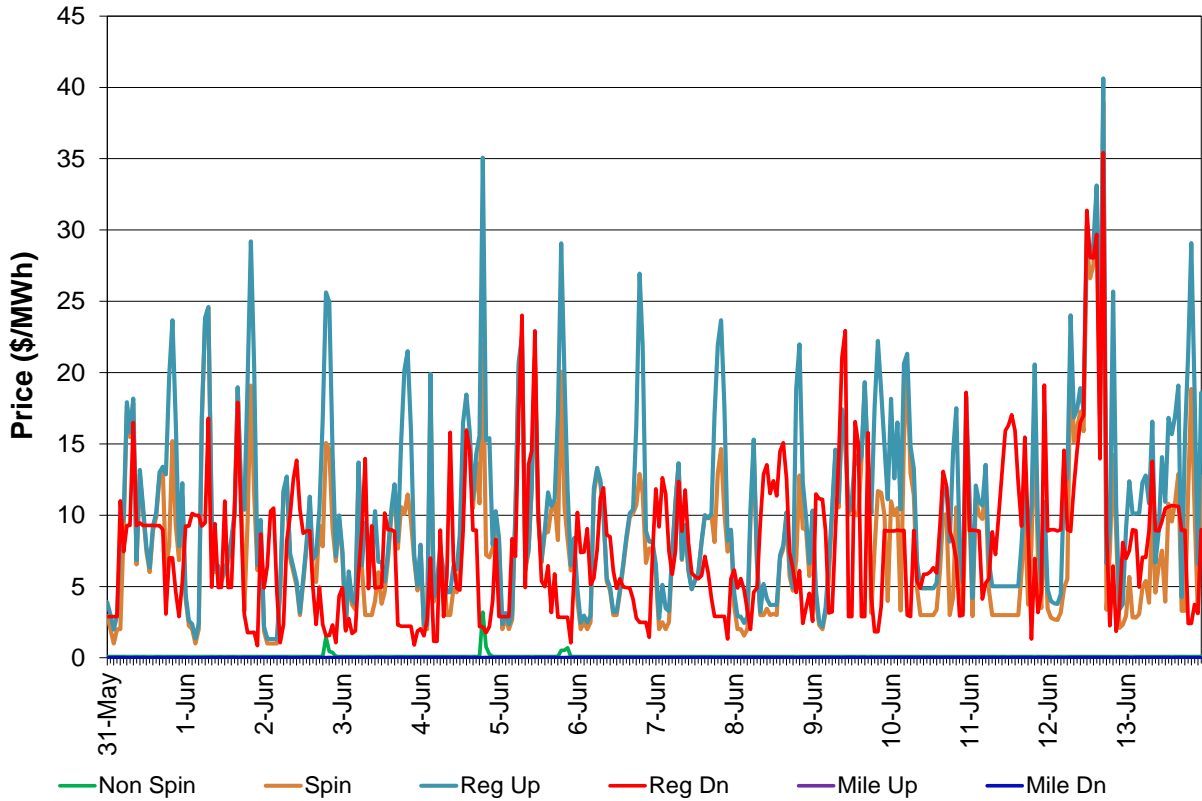


Figure 5: Day-Ahead Average RUC Price

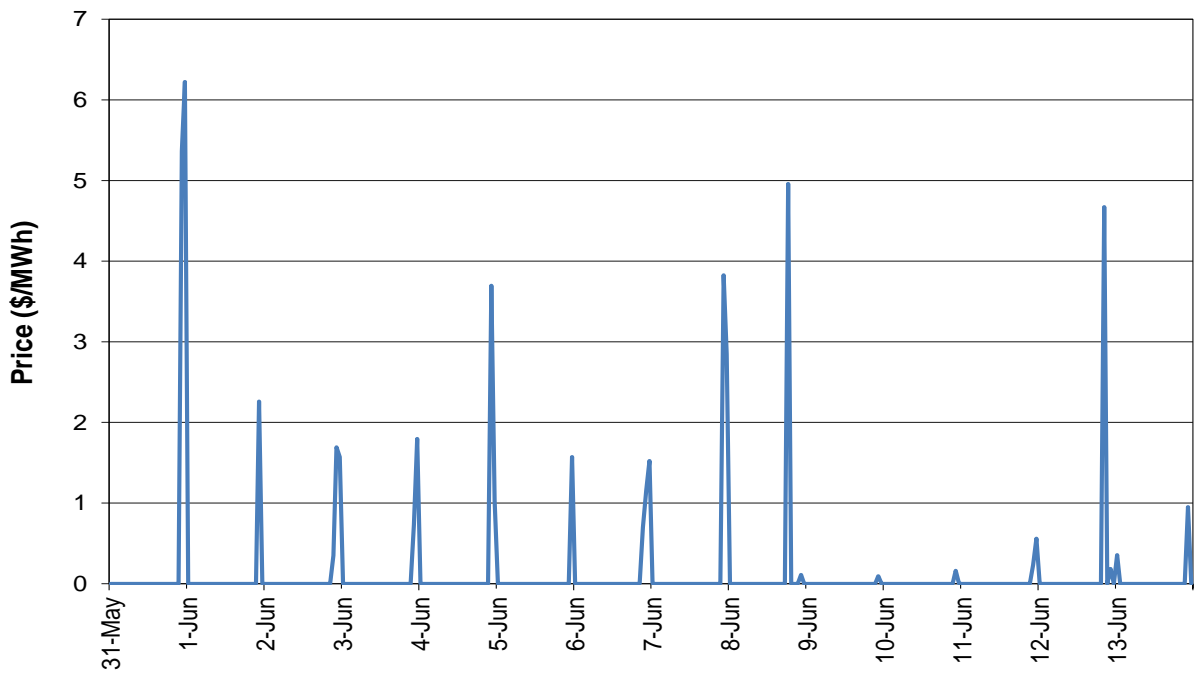




Figure 6: Real-Time FMM Average A/S Price

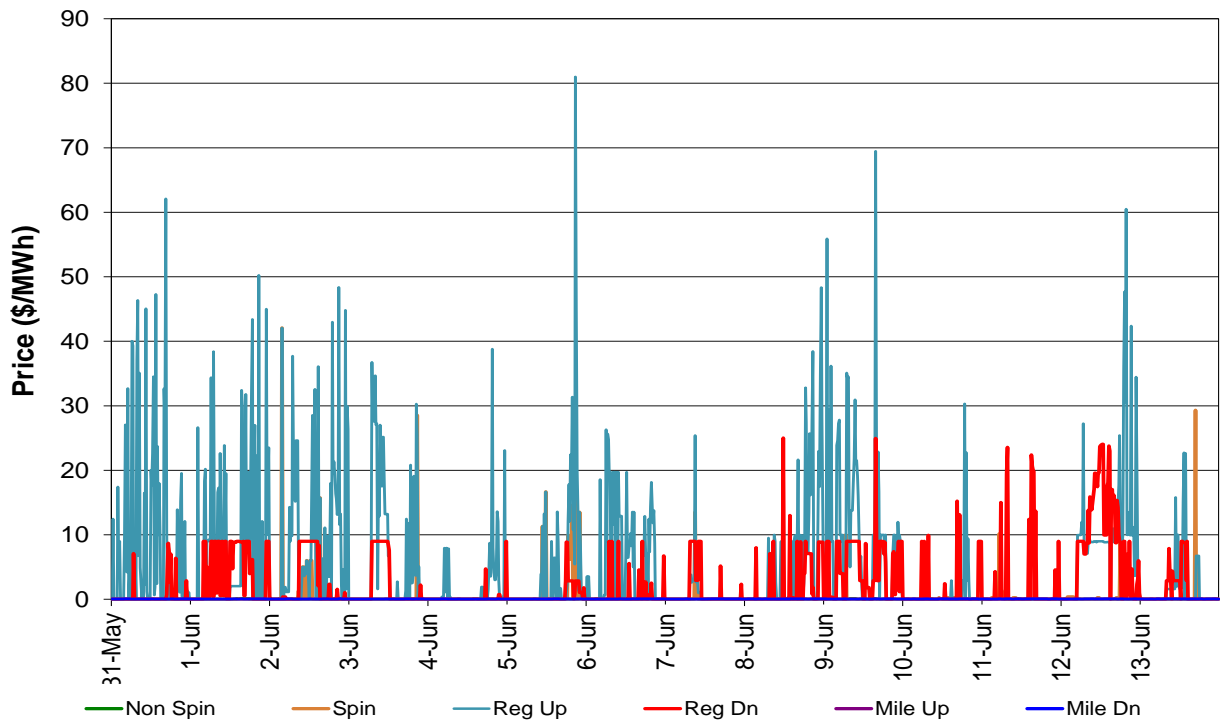


Figure 7: Real-Time FMM DLAP LMP

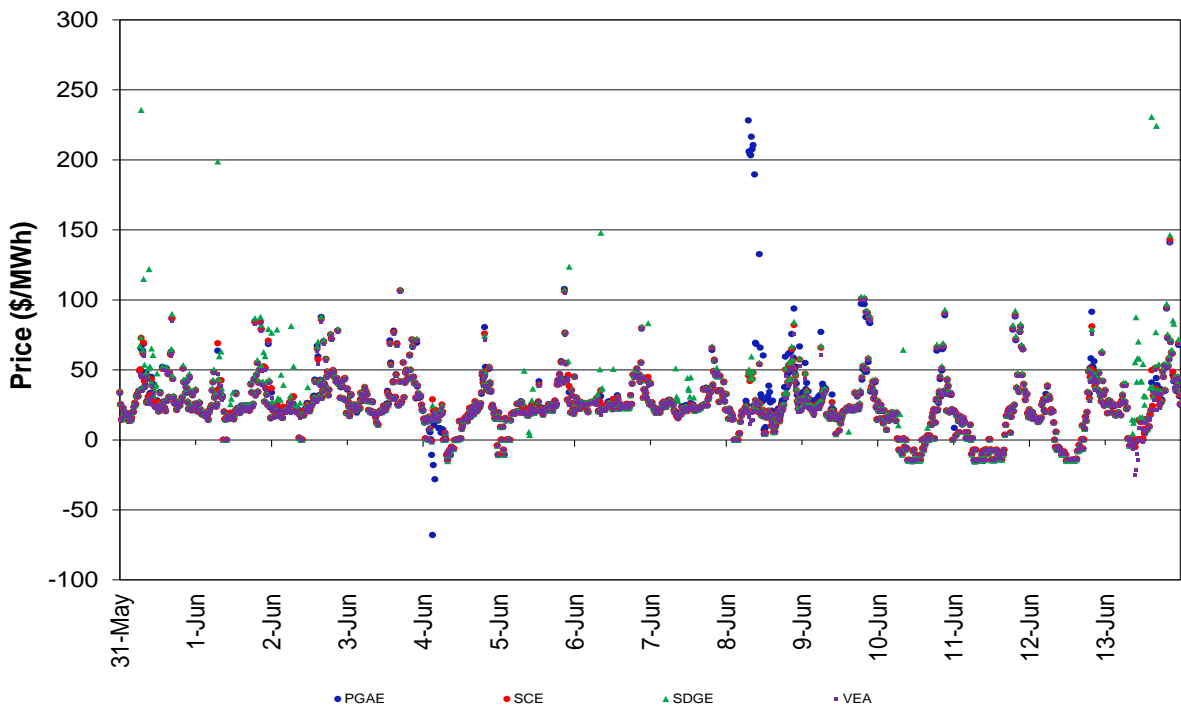


Figure 8: Real-Time RTD DLAP LMP

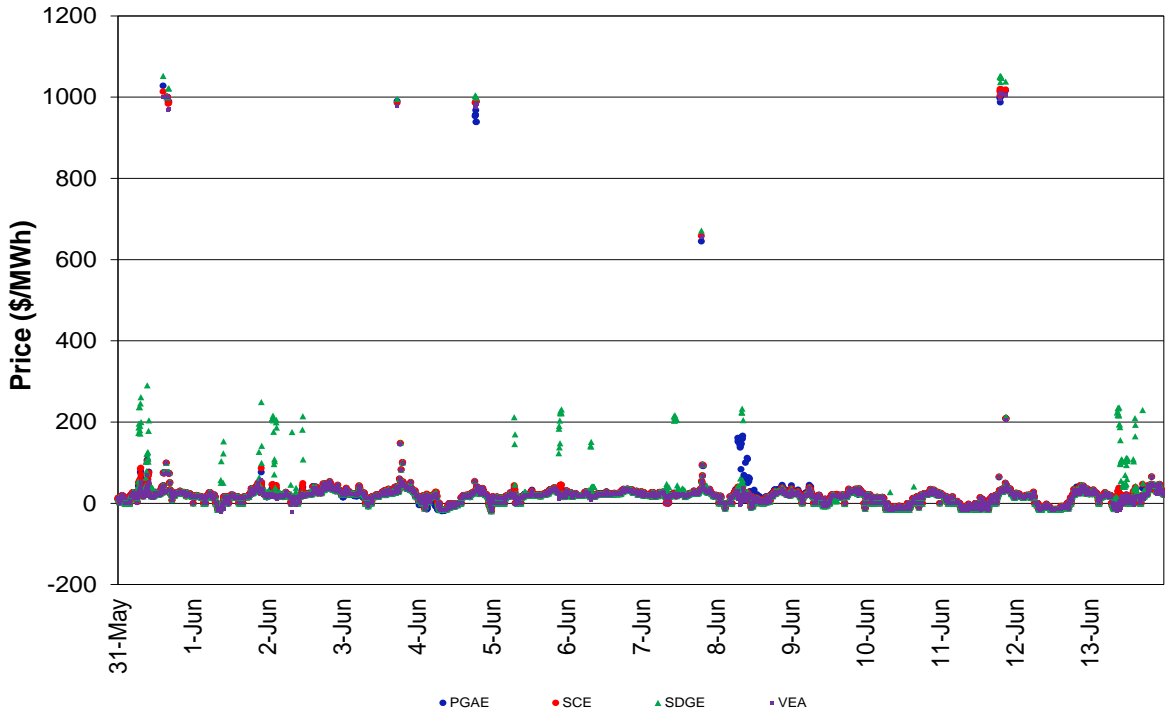


Figure 9: Real-Time FMM ELAP LMP

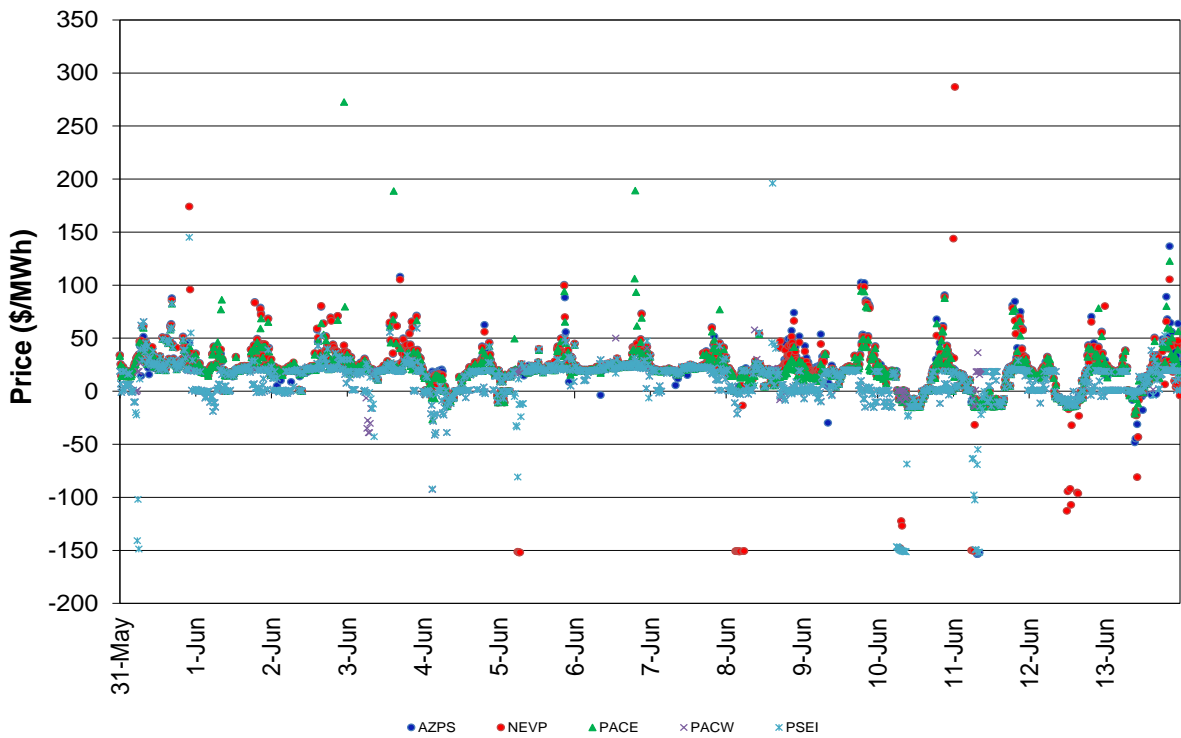




Figure 10: Real-Time RTD ELAP LMP

