

Market Highlights¹ (May 30–June 12)

- The average DLAP price in the integrated forward market was \$27.66. The maximum and minimum DLAP prices were \$95.44 and -\$5.71, respectively. The maximum and minimum PNode prices in the integrated forward market were \$1,515.09 and -\$727.63 respectively.
- The top two interties congested in the integrated forward market were MALIN500 and NOB_ITC. Congestion rents in these two weeks totaled \$27,829,289.88.
- The average day-ahead ancillary service prices were between \$0.00 and \$97.51.
- Approximately 97.01 percent of the RUC requirements were met from RA units.
- The average real-time FMM DLAP price was \$24.48, with a maximum price of \$1,021.23 and a minimum price of -\$17.50. The maximum and minimum PNode prices in the FMM were \$1,141.70 and -\$909.95, respectively.
- Out of the total 1,344 FMM intervals, 6 intervals saw DLAP prices above \$250, and 0 intervals saw DLAP prices below -\$150.
- Out of the total 1,344 FMM intervals, 22 intervals saw ELAP prices above \$250 And 11 intervals saw ELAP prices below -\$150.
- The average real-time FMM ELAP price was \$17.97, with a maximum price of \$1,028.26 and a minimum price of -\$838.47.
- The average real-time RTD DLAP price was \$27.51, with a maximum price of \$1,134.08 and a minimum price of -\$17.86. The maximum and minimum PNode prices in the RTD were \$1,316.15 and -\$494.69, respectively.
- Out of the total 4,032 RTD intervals, 51 intervals saw DLAP prices above \$250 and 0 interval saw DLAP prices below -\$150.
- Out of the total 4,032 RTD intervals, 83 intervals saw ELAP prices above \$250 and 17 intervals saw ELAP prices below -\$150. The average real-time RTD ELAP price was \$19.50, with a maximum price of \$1,064.29 and a minimum price of -\$157.17.
- Root cause for daily high price events are noted in Tables 1 and Table 2.

Table 1 FMM Intervals	
Trade Date	Root Cause
FMM May 31 HE 22; Jun 3 HE 21	Congestion on RM_TM12_NG.
FMM Jun 4 HE 19, 20	Congestion on 6410_CP6_NG.

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

Table 1 FMM Intervals	
Trade Date	Root Cause
FMM Jun 7 HE 22	Reduction in net imports and congestion on RM_TM12_NG.
FMM Jun 10 HE 21	Congestion on RM_TM12_NG, load changes and changes in renewable forecast.

Table 1 RTD Intervals	
Trade Date	Root Cause
RTD May 30 HE 1; Jun 2 HE 20	Load changes and reduction of net imports.
RTD May 31 HE 6; Jun 10 HE 19, 20	Renewable deviation and changes in load.
RTD Jun 2 HE 19	Renewable deviation and reduction of net imports.
RTD Jun 3 HE 19; Jun 11 HE 19	Congestion on RM_TM12_NG.
RTD Jun 4 HE 18, 19, 20, 21	Congestion on 6410_CP6_NG.
RTD Jun 7 HE 6, 7	Renewable deviation.
RTD Jun 7 HE 21	Reduction of net imports, renewable deviation, congestion on RM_TM12_NG.
RTD Jun 7 HE 23	Load changes, re-dispatch of resources, and reduction of net imports.
RTD Jun 10 HE 7	Load changes.

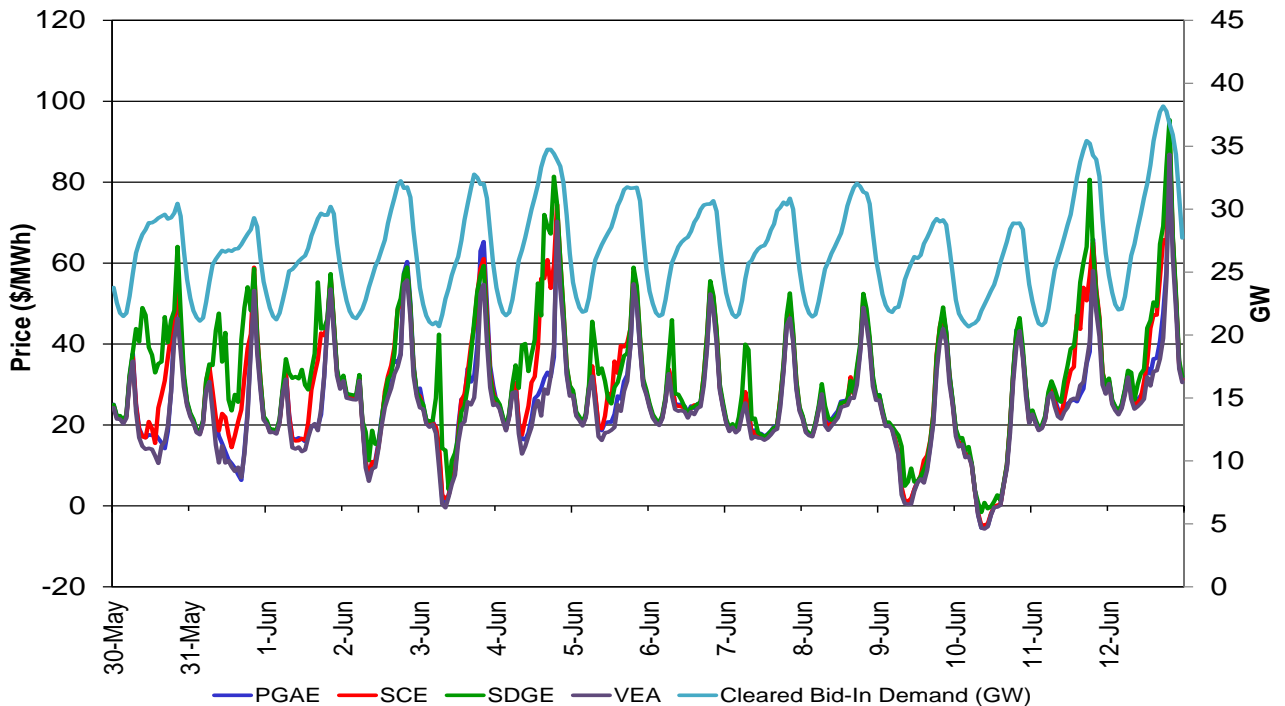
Figure 1: Day-Ahead (IFM) LAP LMP and Cleared Bid-In Demand




Figure 2: Day-Ahead Congestion Rents

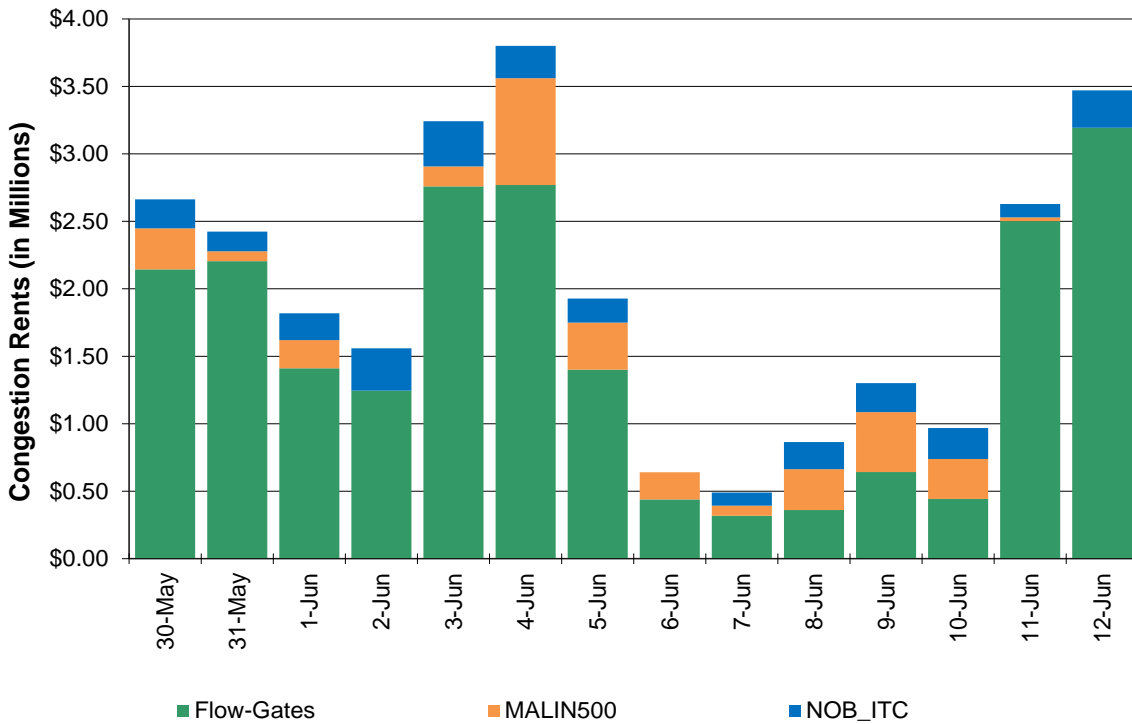


Figure 3: Day-Ahead Congestion Rents for Flow-Based Constraints

Transmission Constraint	Congestion Rent
24016_BARRE_230_24154_VILLA PK_230_BR_1_1	\$ 6,398,343.02
30055_GATES1_500_30900_GATES_230_XF_11_S	\$ 3,563,398.58
24086_LUGO_500_26105_VICTORVL_500_BR_1_1	\$ 2,813,530.03
22192_DOUBLTTP_138_22300_FRIARS_138_BR_1_1	\$ 1,575,845.70
OMS 5717006_50001_OOS_NG	\$ 1,094,093.81
30523_CC SUB_230_30525_C.COSTA_230_BR_1_1	\$ 765,630.76
7820_TL_230S_OVERLOAD_NG	\$ 635,721.32
24091_MESA CAL_230_24126_RIOHONDO_230_BR_1_1	\$ 505,950.18
6410_CP5_NG	\$ 451,447.82
22831_SYCAMORE_138_22832_SYCAMORE_230_XF_1	\$ 414,270.63
22820_SWEETWTR_69.0_22476_MIGUELTP_69.0_BR_1_1	\$ 394,772.74
33020_MORAGA_115_30550_MORAGA_230_XF_2_P	\$ 379,878.01
34548_KETTLEMN_70.0_34552_GATES_70.0_BR_1_1	\$ 362,257.66
33020_MORAGA_115_30550_MORAGA_230_XF_3_P	\$ 336,811.61
31334_CLER LKE_60.0_31338_KONOCI6_60.0_BR_1_1	\$ 274,090.84
24016_BARRE_230_25201_LEWIS_230_BR_1_1	\$ 251,659.32
22886_SUNCREST_230_92860_SUNC TP1_230_BR_1_1	\$ 250,577.79
34112_EXCHEQUR_115_34116_LE GRAND_115_BR_1_1	\$ 216,094.46
33936_MELNS JB_115_33951_VLYHMTP1_115_BR_1_1	\$ 177,924.59

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

Transmission Constraint	Congestion Rent
24092_MIRALOMA_500_24093_MIRALOM_230_XF_4_P	\$ 3,458,620.91
RM_TM12_NG	\$ 3,406,309.60
24036_EAGLROCK_230_24059_GOULD_230_BR_1_1	\$ 2,706,039.82
22192_DOUBLTTP_138_22300_FRIARS_138_BR_1_1	\$ 1,787,593.56
24016_BARRE_230_24154_VILLA PK_230_BR_1_1	\$ 1,686,141.87
33020_MORAGA_115_32780_CLARMNT_115_BR_1_1	\$ 1,445,594.89
24025_CHINO_230_24093_MIRALOM_230_BR_3_1	\$ 1,316,215.25
7820_TL_230S_OVERLOAD_NG	\$ 955,939.87
24016_BARRE_230_25201_LEWIS_230_BR_1_1	\$ 652,635.10
22597_OLDTWNTP_230_22504_MISSION_230_BR_1_1	\$ 561,910.85
34116_LE GRAND_115_34134_WILSONAB_115_BR_1_1	\$ 401,211.86
7820_TL23040_IV_SPS_NG	\$ 386,504.02
25001_GOODRICH_230_24076_LAGUBELL_230_BR_1_1	\$ 378,828.48
34548_KETTLEMN_70.0_34552_GATES_70.0_BR_1_1	\$ 348,911.14
33378_WTRSHTPA_60.0_33380_JEFFERSN_60.0_BR_1_1	\$ 320,564.32
33360_HILLSDL_60.0_33361_HLLSDLJT_60.0_BR_1_1	\$ 292,312.81
34427_ATWELL_115_34701_SMYRNA_1_115_BR_1_1	\$ 218,227.58
35349_AMES DST_115_35122_NWARK EF_115_BR_1_1	\$ 175,881.86
34112_EXCHEQR_115_34116_LE GRAND_115_BR_1_1	\$ 173,932.09
33315_RAVENSWD_115_33316_CLYLDG_115_BR_1_1	\$ 137,726.82
30523_CC SUB_230_30525_C.COSTA_230_BR_1_1	\$ 136,861.62
22820_SWEETWTR_69.0_22476_MIGUELTP_69.0_BR_1_1	\$ 123,489.46
35642_METCALF_115_30735_METCALF_230_XF_2	\$ 78,540.55
30055_GATES1_500_30060_MIDWAY_500_BR_1_3	\$ 73,678.03
22596_OLD TOWN_230_22504_MISSION_230_BR_1_1	\$ 64,562.16
32218_DRUM_115_32219_DR360370_115_BR_1_1	\$ 58,546.53
24086_LUGO_500_26105_VICTORVL_500_BR_1_1	\$ 58,509.17
30915_MORROBAY_230_30916_SOLARSS_230_BR_1_1	\$ 57,431.67
32218_DRUM_115_32244_BRNSWKT2_115_BR_2_1	\$ 53,223.61
34469_GFFNJCT_70.0_34470_GIFFEN_70.0_BR_1_1	\$ 40,149.44
33360_HILLSDL_60.0_33358_BERESFRD_60.0_BR_1_1	\$ 38,447.10
31336_HPLND JT_60.0_31206_HPLND JT_115_XF_2	\$ 34,704.21
31576_WNTU PMS_60.0_31578_LOMS JCT_60.0_BR_1_1	\$ 31,497.68
33310_SANMATEO_115_33315_RAVENSWD_115_BR_1_1	\$ 26,651.96
32225_BRNSWKT1_115_32222_DTCH2TAP_115_BR_1_1	\$ 21,461.38
31000_HUMBOLDT_115_31452_TRINITY_115_BR_1_1	\$ 16,749.72
30915_MORROBAY_230_30916_SOLARSS_230_BR_2_1	\$ 12,983.21
34860_TAFT_70.0_34943_Q356TAP_70.0_BR_1_1	\$ 12,121.94
36266_SNTA MRA_115_36267_SNTAMRTP_115_BR_1_1	\$ 10,726.45
34859_PRMTFMTP_70.0_34873_Q484TP_70.0_BR_1_1	\$ 9,570.46
36256_MESA_PGE_115_36267_SNTAMRTP_115_BR_1_1	\$ 8,669.89

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

Transmission Constraint	Congestion Rent
34418_KINGSBRG_115_34405_FRWT TAP_115_BR_1_1	\$ 7,287.21
6410_CP1_NG	\$ 7,076.93
34887_TAP SKRN_70.0_34882_SAN EMDO_70.0_BR_1_1	\$ 5,937.16
38000_LODI_230_30622_EIGHT MI_230_BR_1_1	\$ 4,950.20
34861_TAFT A_J_70.0_34863_MOCO_JCT_70.0_BR_1_1	\$ 4,595.08
22480_MIRAMAR_69.0_22756_SCRIPPS_69.0_BR_1_1	\$ 4,277.03
33380_JEFFERSN_60.0_33387_WOODSIDE_60.0_BR_1_1	\$ 3,721.79
31597_DESCHTP1_60.0_31592_DESCHUTS_60.0_BR_1_1	\$ 2,722.34
33385_MNLOJCT2_60.0_33388_S.L.A.C._60.0_BR_1_1	\$ 1,481.79
32056_CORTINA_60.0_30451_CRTNA M_1.0_XF_1	\$ 1,165.26
31593_COWCREEK_60.0_31597_DESCHTP1_60.0_BR_1_1	\$ 1,133.17
31604_COTTONWD_60.0_31611_RAWSON_60.0_BR_2_1	\$ 825.02
31218_ER_FTNJT_115_31220_EGLE RCK_115_BR_1_1	\$ 743.39
31566_KESWICK_60.0_31582_STLLWATR_60.0_BR_1_1	\$ 653.72
31580_CASCADE_60.0_31582_STLLWATR_60.0_BR_1_1	\$ 461.04
HUMBOLDT_IMP_NG	\$ 449.58
22256_ESCNDIDO_69.0_22724_SANMRCOS_69.0_BR_1_1	\$ 328.26
22040_BARRETT_69.0_22416_LOVELAND_69.0_BR_1_1	\$ 117.90
BLYTHE_BG	\$ 113.33
Totals	\$ 21,827,719.10



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

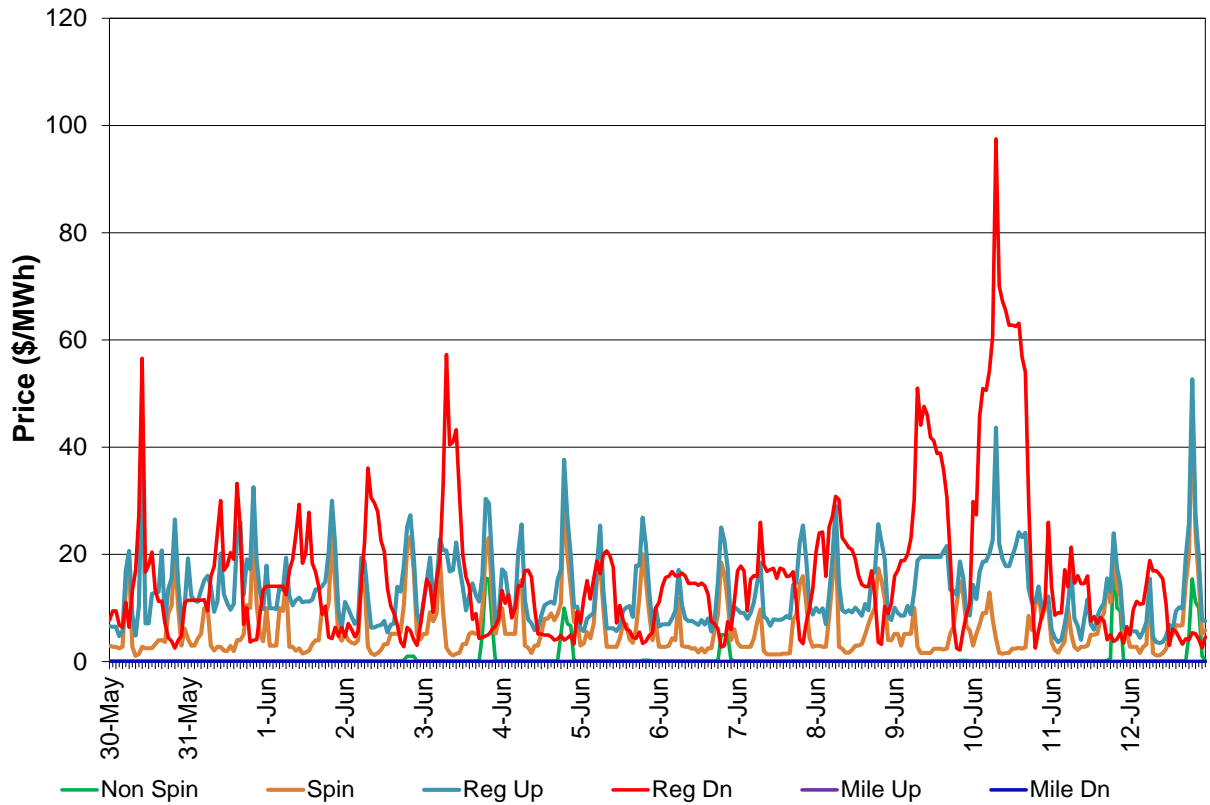


Figure 5: Day-Ahead Average RUC Price

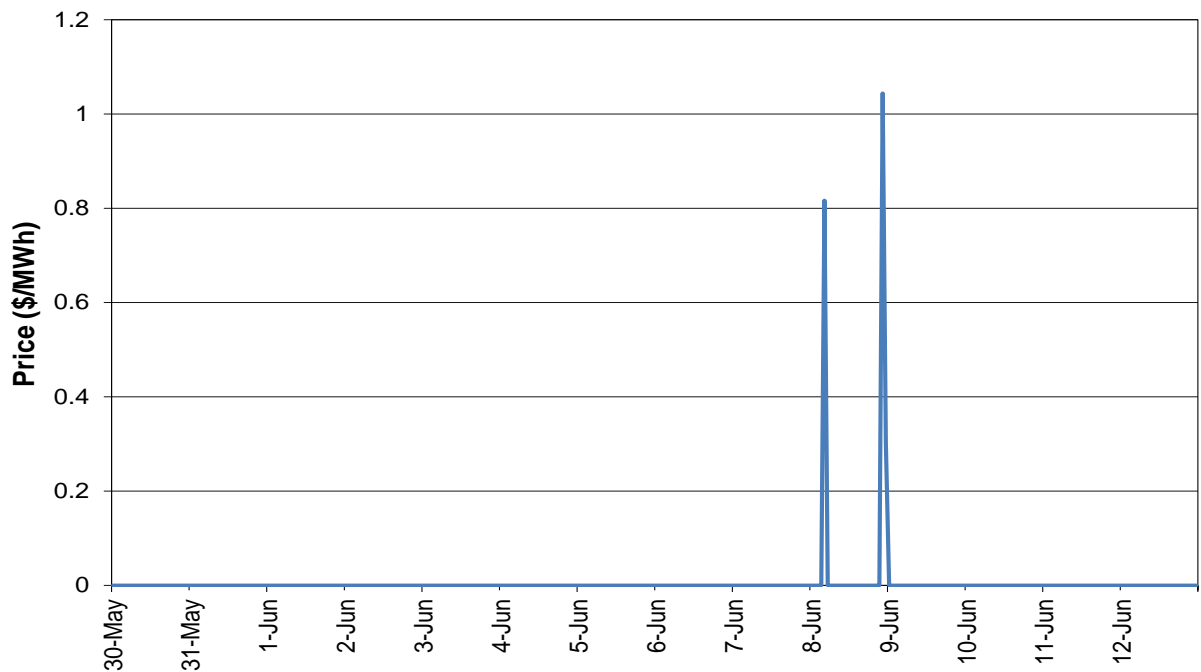




Figure 6: Real-Time FMM Average A/S Price

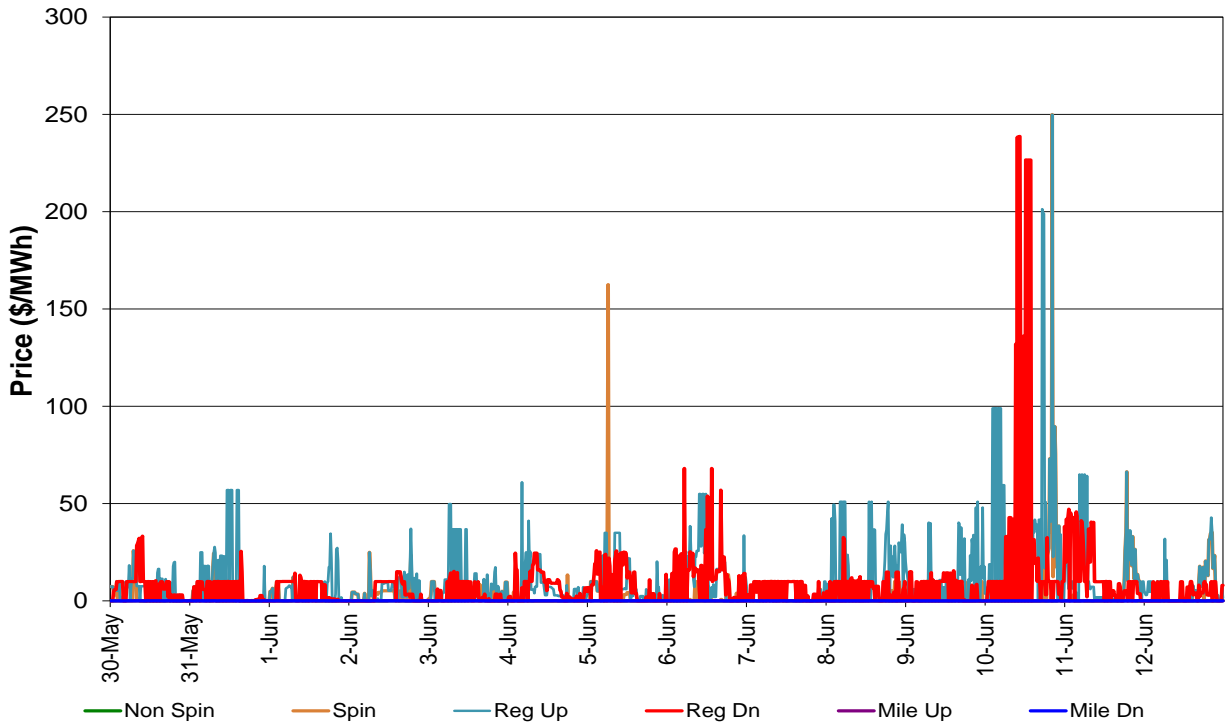


Figure 7: Real-Time FMM DLAP LMP

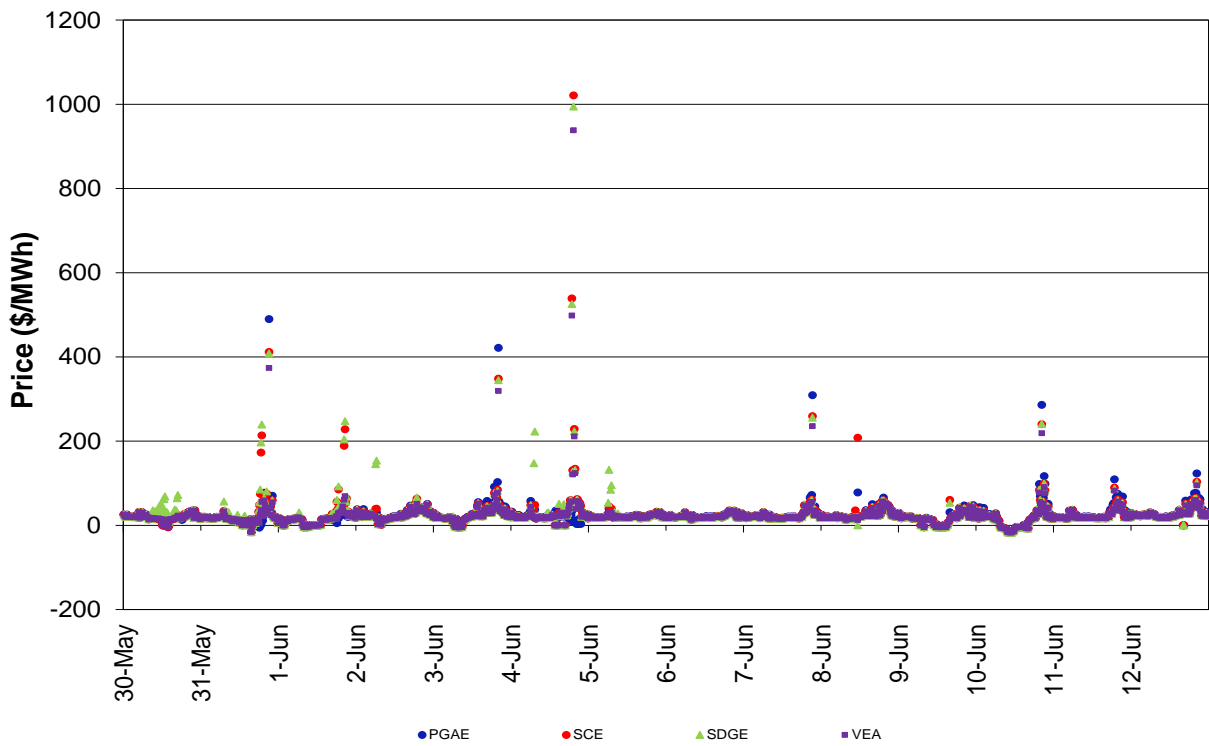


Figure 8: Real-Time RTD DLAP LMP

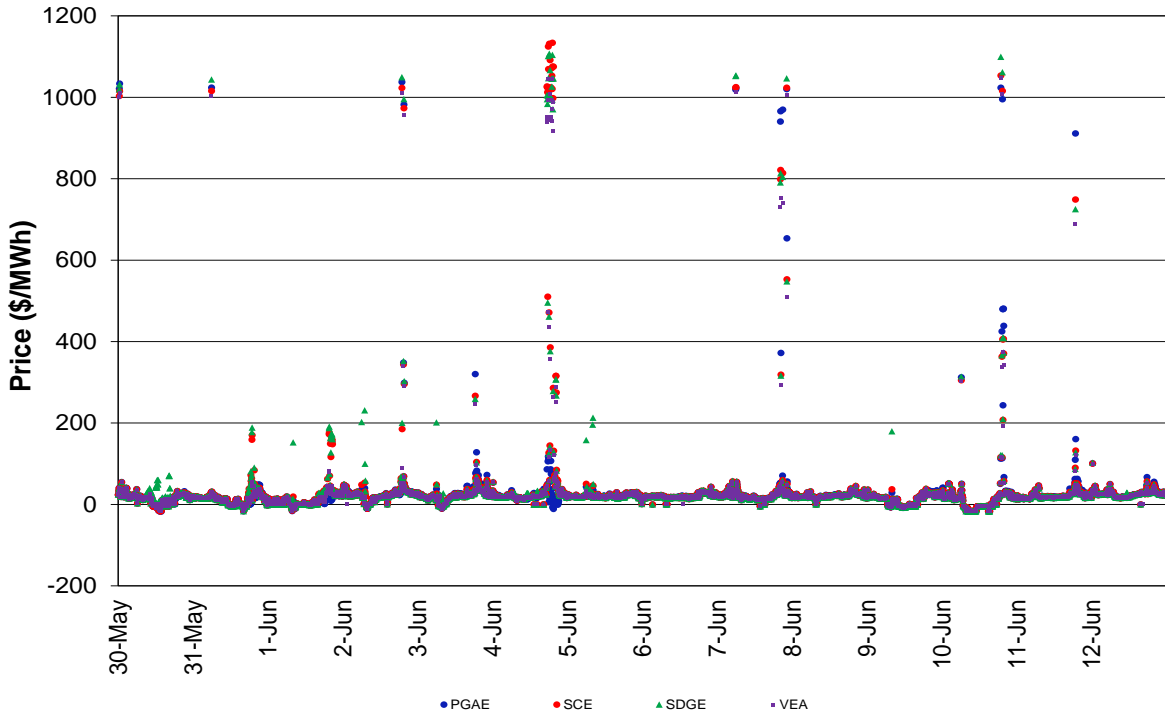


Figure 9: Real-Time FMM ELAP LMP

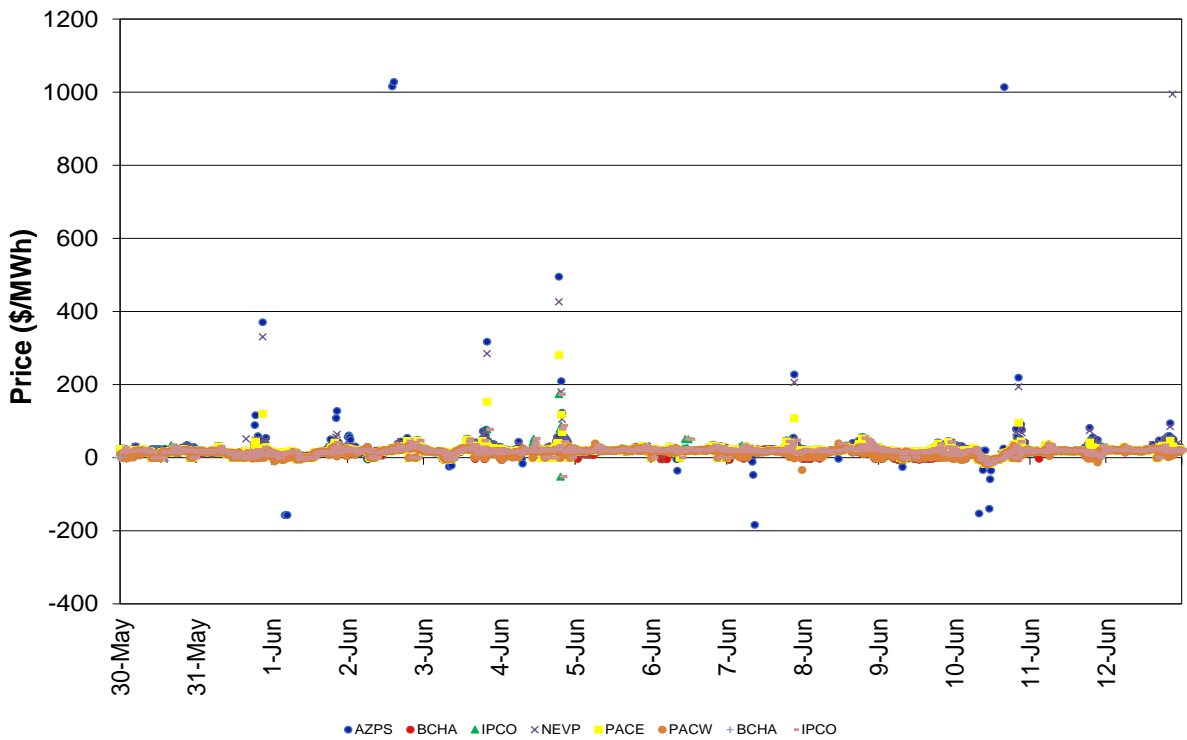




Figure 10: Real-Time RTD ELAP LMP

