

Market Highlights¹ (September 19–October 2)

- The average DLAP price in the integrated forward market was \$36.44. The maximum and minimum DLAP prices were \$106.43 and \$14.60, respectively. The maximum and minimum PNode prices in the integrated forward market were \$1,010.07 and -\$129.19 respectively.
- The top two interties congested in the integrated forward market were MALIN500 and NOB_ITC. Congestion rents in these two weeks totaled \$21,686,392.61.
- The average day-ahead ancillary service prices were between \$0.00 and \$59.18.
- Approximately 97.99 percent of the RUC requirements were met from RA units.
- The average real-time FMM DLAP price was \$37.80, with a maximum price of \$1,126.71 and a minimum price of \$3.66. The maximum and minimum PNode prices in the FMM were \$2,848.96 and -\$575.45, respectively.
- Out of the total 1,344 FMM intervals, 9 intervals saw DLAP prices above \$250, and 0 intervals saw DLAP prices below -\$150.
- Out of the total 1,344 FMM intervals, 32 intervals saw ELAP prices above \$250 and 0 intervals saw ELAP prices below -\$150.
- The average real-time FMM ELAP price was \$27.90, with a maximum price of \$1,001.14 and a minimum price of -\$150.00.
- The average real-time RTD DLAP price was \$38.91, with a maximum price of \$1,212.55 and a minimum price of -\$13.96. The maximum and minimum PNode prices in the RTD were \$1,222.09 and -\$388.68, respectively.
- Out of the total 4,032 RTD intervals, 65 intervals saw DLAP prices above \$250 and 0 interval saw DLAP prices below -\$150.
- Out of the total 4,032 RTD intervals, 82 intervals saw ELAP prices above \$250 and 0 intervals saw ELAP prices below -\$150. The average real-time RTD ELAP price was \$29.19, with a maximum price of \$1,101.73 and a minimum price of -\$150.00.
- Root cause for daily high price events are noted in Tables 1 and 2.

Table 1 FMM Intervals	
Trade Date	Root Cause
FMM Oct 1 HE 18	Change in load and change in renewable forecast.
FMM Oct 1 HE 20	Change in load and net import reduction.
FMM Oct 2 HE 19, 20	Changes in load, changes in renewable forecast, and net import reduction.

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 Oct 2 HE 21	Load changes and net import reduction.

Table 1 RTD Intervals	
Trade Date	Root Cause
RTD Sep 21 HE 12	Congestion on 24016_BARRE _230_24154_VILLA PK_230_BR_1_1 and congestion on 24016_BARRE _230_25201_LEWIS _230_BR_1_1.
RTD Sep 21 HE 18	Congestion on 6410_CP5_NG.
RTD Sep 22 HE 17, 18; Sep 29 HE 18; Sep 30 HE 13, HE 14; Oct 1 HE 15, HE 20, HE 23; Oct 2 HE 8, HE 19	Load changes and renewable deviation.
RTD Sep 26 HE 18	Congestion on 6410_CP5_NG, renewable deviation, and load changes.
RTD Sep 26 HE 20	Congestion on 24086_LUGO _500_26105_VICTORVL_500_BR_1_1 and congestion on 6410_CP5_NG.
RTD Sep 27 HE 9, HE 10	Congestion on 22886_SUNCREST_230_22885_SUNCREST_500_XF_1_P.
RTD Sep 27 HE 17	Congestion on 22886_SUNCREST_230_22885_SUNCREST_500_XF_1_P.
RTD Sep 27 HE 18, HE 19	Congestion on 6410_CP5_NG.
RTD Sep 29 HE 23	Renewable deviation.
RTD Oct 2 HE 9	Load changes, renewable deviation, net import reduction.
RTD Oct 2 HE 18	Congestion on 6410_CP5_NG and renewable deviation.
RTD Oct 2 HE 24	Load changes.



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

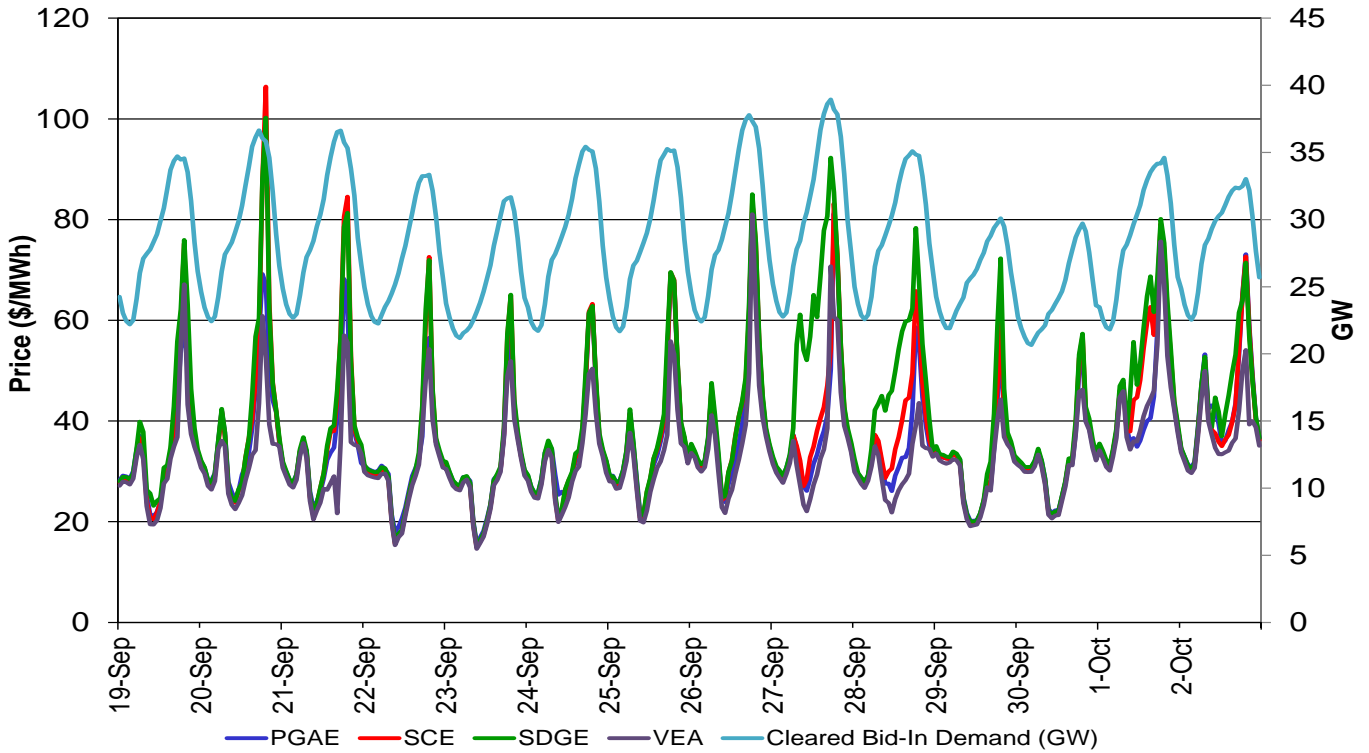


Figure 2: Day-Ahead Congestion Rents

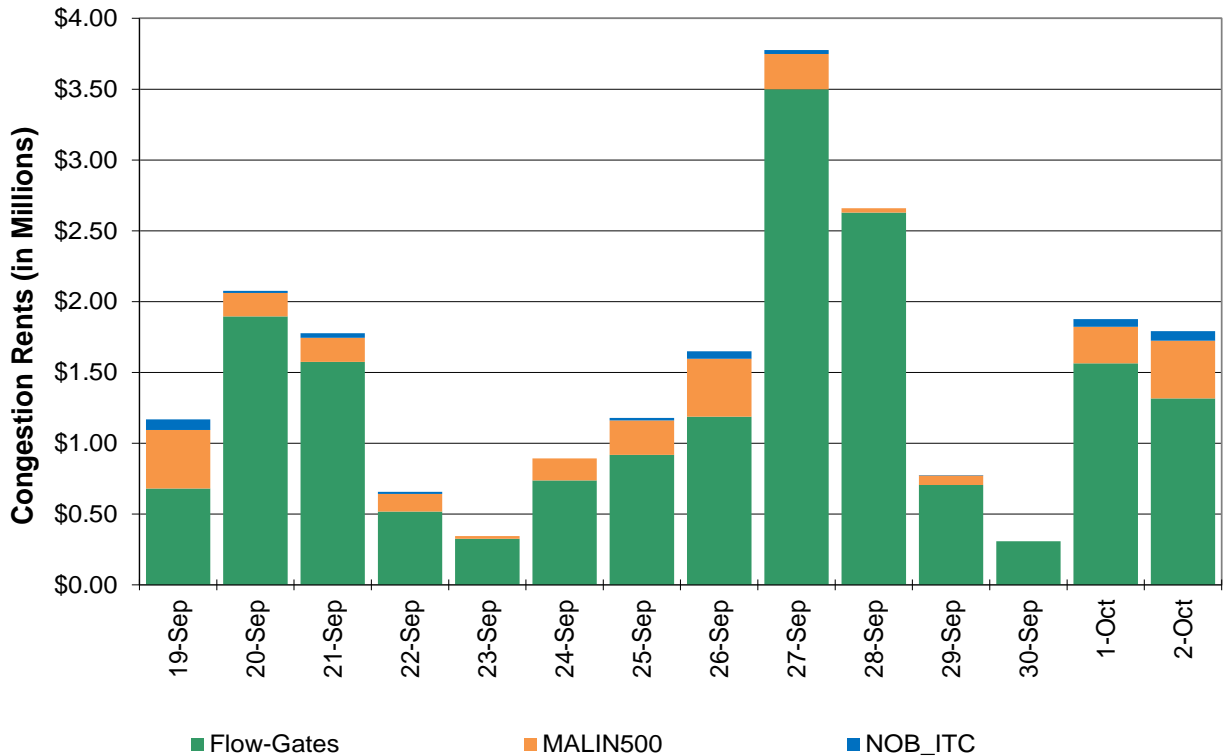


Figure 3: Day-Ahead Congestion Rents for Flow-Based Constraints

Transmission Constraint	Congestion Rent
24086_LUGO _500_26105_VICTORVL_500_BR_1_1	\$ 5,564,575.68
22357_IV PFC1 _230_22358_IV PFC _230_PS_1	\$ 1,316,129.32
24036_EAGLROCK_230_24059_GOULD _230_BR_1_1	\$ 903,916.42
24091_MESA CAL_230_24126_RIOHONDO_230_BR_1_1	\$ 810,809.76
24016_BARRE _230_25201_LEWIS _230_BR_1_1	\$ 770,476.78
OMS 6369451_50001_OOS_NG	\$ 724,876.23
30261_BELDENTP_230_30300_TABLMTN_230_BR_1_1	\$ 585,818.01
22886_SUNCREST_230_22885_SUNCREST_500_XF_1_P	\$ 532,178.44
OMS 6369454_50001_OOS_NG	\$ 462,353.06
6410_CP5_NG	\$ 447,810.39
30915_MORROBAY_230_30916_SOLARSS_230_BR_2_1	\$ 447,781.51
36851_NORTHERN_115_36852_SCOTT _115_BR_2_1	\$ 310,033.01
34860_TAFT _70.0_34943_Q356TAP_70.0_BR_1_1	\$ 165,757.41
34548_KETTLEMN_70.0_34552_GATES _70.0_BR_1_1	\$ 98,028.99
31640_TRES VIS_60.0_31644_BIGGSJCT_60.0_BR_1_1	\$ 96,058.70
24385_WEST TS_500_24384_EAST TS_500_BR_1_1	\$ 81,952.85
OMS_6451207_TRACY-LOSBANOS	\$ 53,121.57
34112_EXCHEQUR_115_34116_LE GRAND_115_BR_1_1	\$ 49,628.21
22824_SWTWTRTP_69.0_22820_SWEETWTR_69.0_BR_1_1	\$ 46,897.79
OMS_6246684_Tracy-LosBanos	\$ 46,147.28
38136_MARBLE _69.0_64281_MARBLSP_60.0_XF_1	\$ 37,568.65
34469_GFFNJCT_70.0_34470_GIFFEN _70.0_BR_1_1	\$ 37,565.62
31334_CLER LKE_60.0_31338_KONOCI6_60.0_BR_1_1	\$ 29,284.60
34116_LE GRAND_115_34134_WILSONAB_115_BR_1_1	\$ 28,507.09
33506_STANISLS_115_33503_FRGTNTP2_115_BR_1_1	\$ 26,482.94
7820_TL 230S_OVERLOAD_NG	\$ 21,872.82
31214_GEYERS56_115_31220_EGLE RCK_115_BR_1_1	\$ 20,353.89
30105_COTTNWD_230_30245_ROUND MT_230_BR_3_1	\$ 18,035.63
30060_MIDWAY_500_24156_VINCENT_500_BR_1_1	\$ 17,047.52
22609_OTAYMESA_230_22466_MLMS3TAP_230_BR_1_1	\$ 15,570.99
OMS 4790142_Caribou Bank	\$ 15,493.15
22192_DOUBLTTP_138_22300_FRIARS _138_BR_1_1	\$ 11,704.04
OMS_5548842_HUMB TRNTY	\$ 11,276.95
7820_TL 230S_TL50001OUT_NG	\$ 9,164.05
34752_KERN PWR_115_34755_TEVISJ2_115_BR_1_1	\$ 7,238.77
31220_EGLE RCK_115_31228_HOMSTKTP_115_BR_1_1	\$ 6,951.15
31604_COTTONWD_60.0_31611_RAWSON_60.0_BR_2_1	\$ 6,193.65
35907_PAUL SWT_115_35908_ROB ROY_115_BR_1_1	\$ 5,835.56
31227_HGHLNDJ2_115_31950_CORTINA_115_BR_1_1	\$ 5,701.41
22256_ESCNDIDO_69.0_22724_SANMRCOS_69.0_BR_1_1	\$ 5,264.74
22208_EL CAJON_69.0_22408_LOSCOCHS_69.0_BR_1_1	\$ 3,981.31
35101_SN LNDRO_115_35113_DMTAR_SL_115_BR_1_1	\$ 2,451.28
6410_CP10_NG	\$ 2,407.29
31225_HGHLNDJ1_115_31222_REDBUD_115_BR_1_1	\$ 1,386.71

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

Transmission Constraint	Congestion Rent
33936_MELNS JB_115_33951_VLYHMTP1_115_BR_1_1	\$ 1,259.34
32214_RIO OSO_115_32244_BRNSWKT2_115_BR_2_1	\$ 1,040.90
30055_GATES1_500_30900_GATES_230_XF_11_S	\$ 996.20
31336_HPLND JT_60.0_31370_CLVRDLJT_60.0_BR_1_1	\$ 951.01
31080_HUMBOLDT_60.0_31092_MPLE CRK_60.0_BR_1_1	\$ 689.53
34887_TAP SKRN_70.0_34882_SAN EMDO_70.0_BR_1_1	\$ 424.90
32380_WEMR SWS_60.0_32382_FORST HL_60.0_BR_1_1	\$ 312.07
99254_J.HINDS2_230_24806_MIRAGE_230_BR_1_1	\$ 287.17
34471_SNJQJCT_70.0_34469_GFFNJCT_70.0_BR_1_1	\$ 234.72
31110_BRDGVLE_60.0_31112_FRUITLND_60.0_BR_1_1	\$ 157.30
33503_FRGTNTP2_115_33936_MELNS JB_115_BR_1_1	\$ 132.18
34321_MCSWAINJ_70.0_34232_EXCQUEUR_70.0_BR_1_1	\$ 102.42
30515_WARNERVL_230_30800_WILSON_230_BR_1_1	\$ 61.25
31670_CHESTER_60.0_31672_HMLTN BR_60.0_BR_1_1	\$ 28.17
39021_SC21ATP_70.0_39022_S621A_70.0_BR_1_1	\$ 26.01
34480_KEARNEY_70.0_34512_CARUTHRS_70.0_BR_1_1	\$ 21.07
Totals	\$ 13,868,415.46

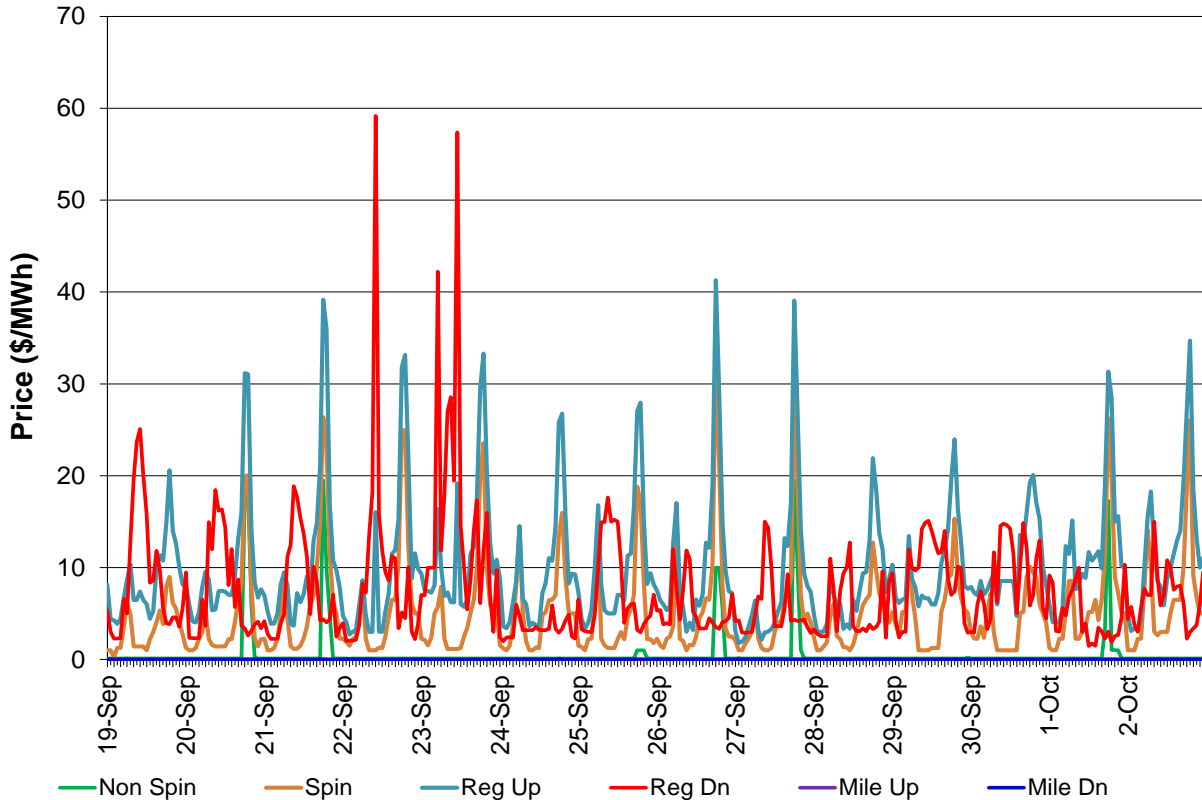
Figure 4: Day-Ahead (IFM) Average A/S Price




Figure 5: Day-Ahead Average RUC Price

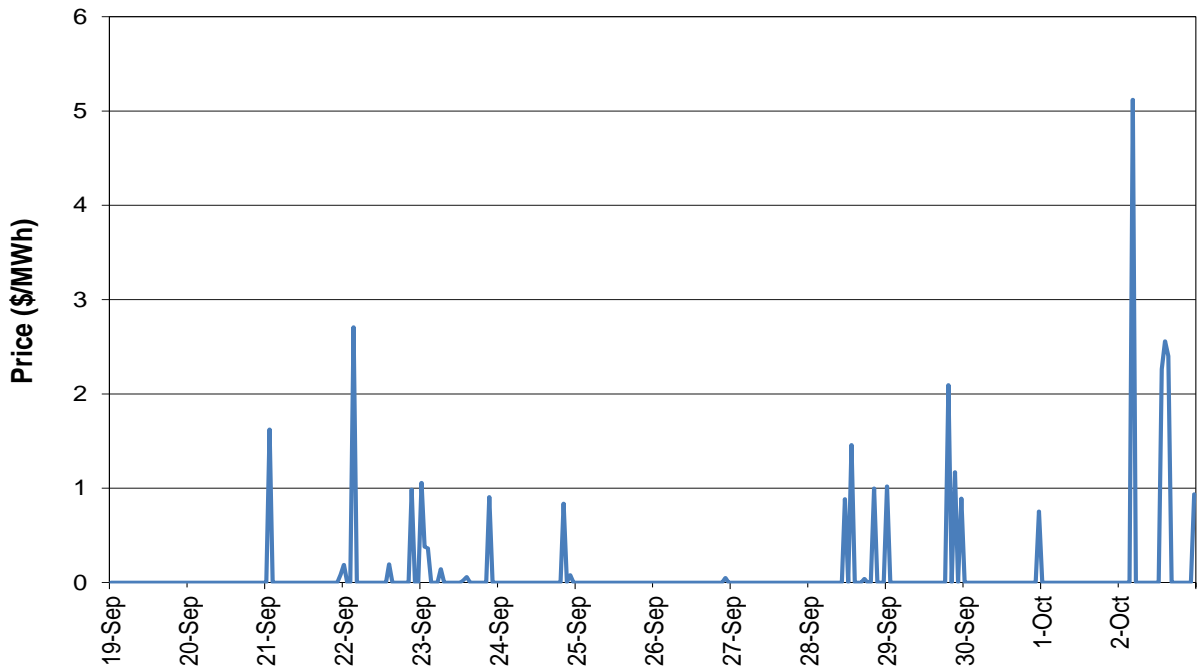


Figure 6: Real-Time FMM Average A/S Price

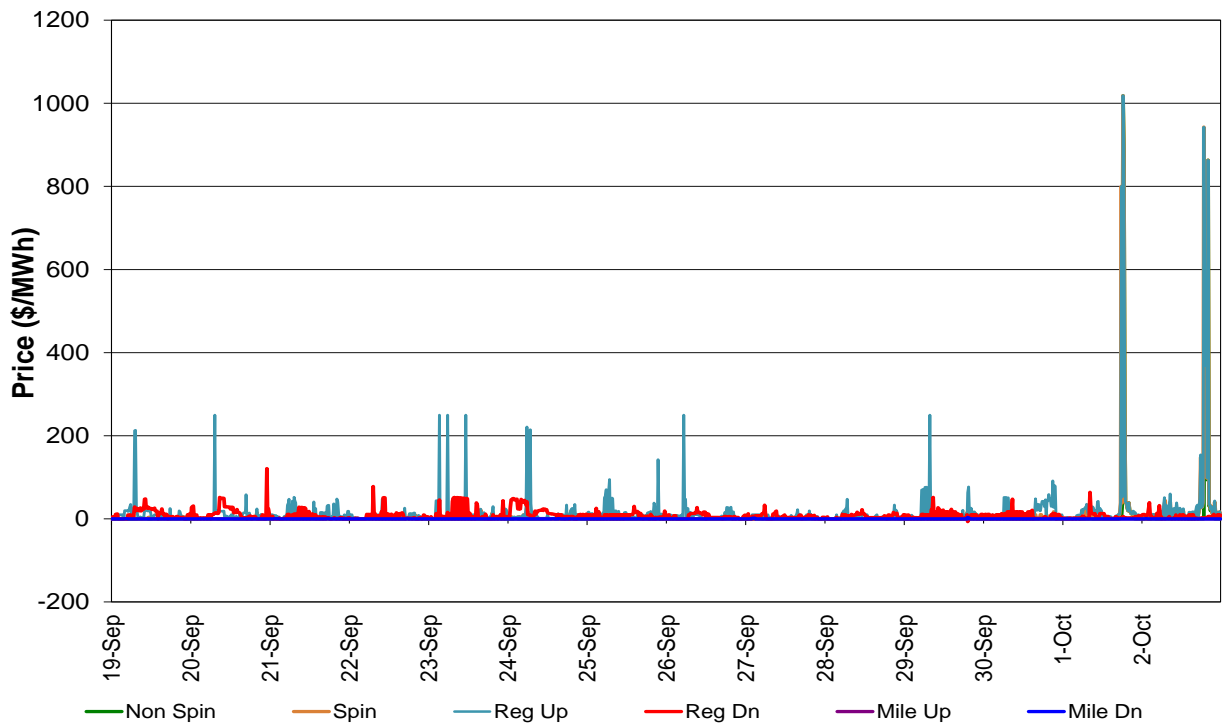


Figure 7: Real-Time FMM DLAP LMP

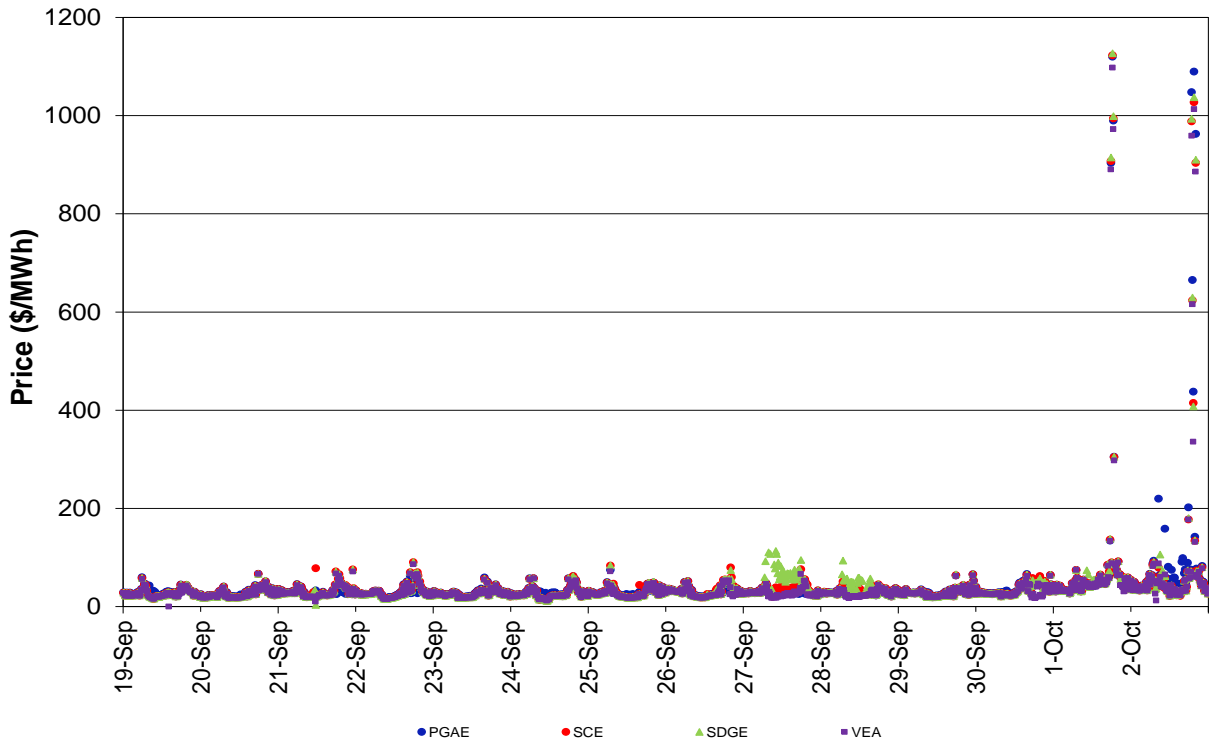


Figure 8: Real-Time RTD DLAP LMP

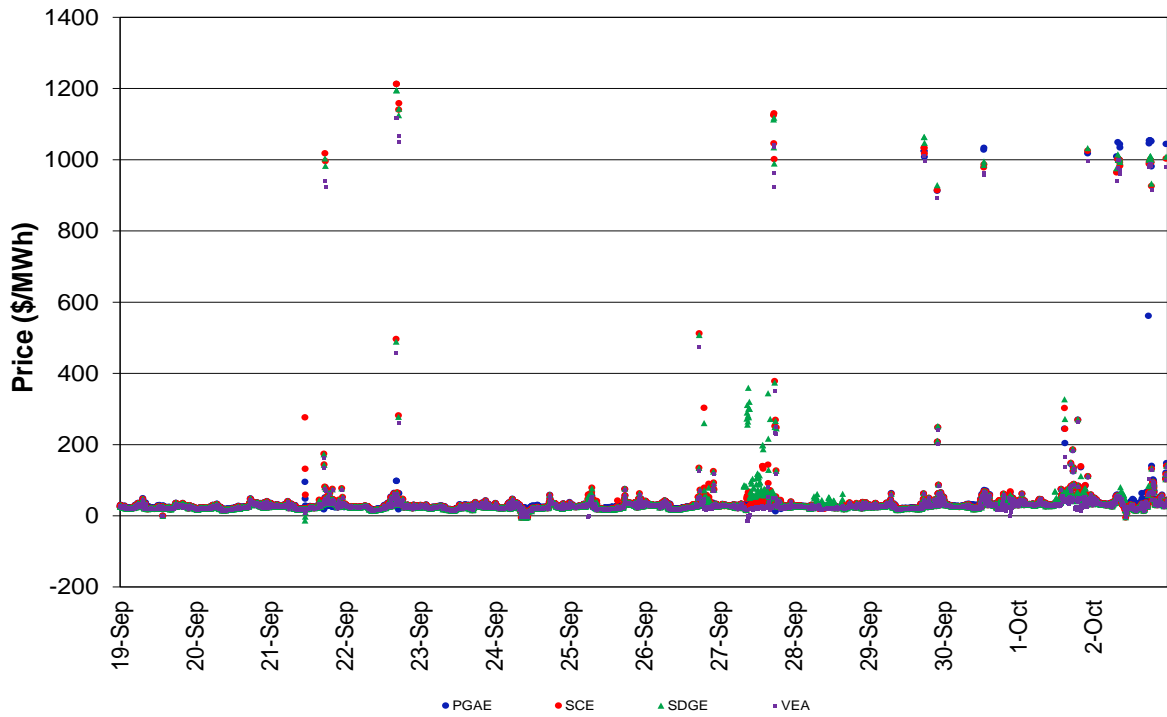


Figure 9: Real-Time FMM ELAP LMP

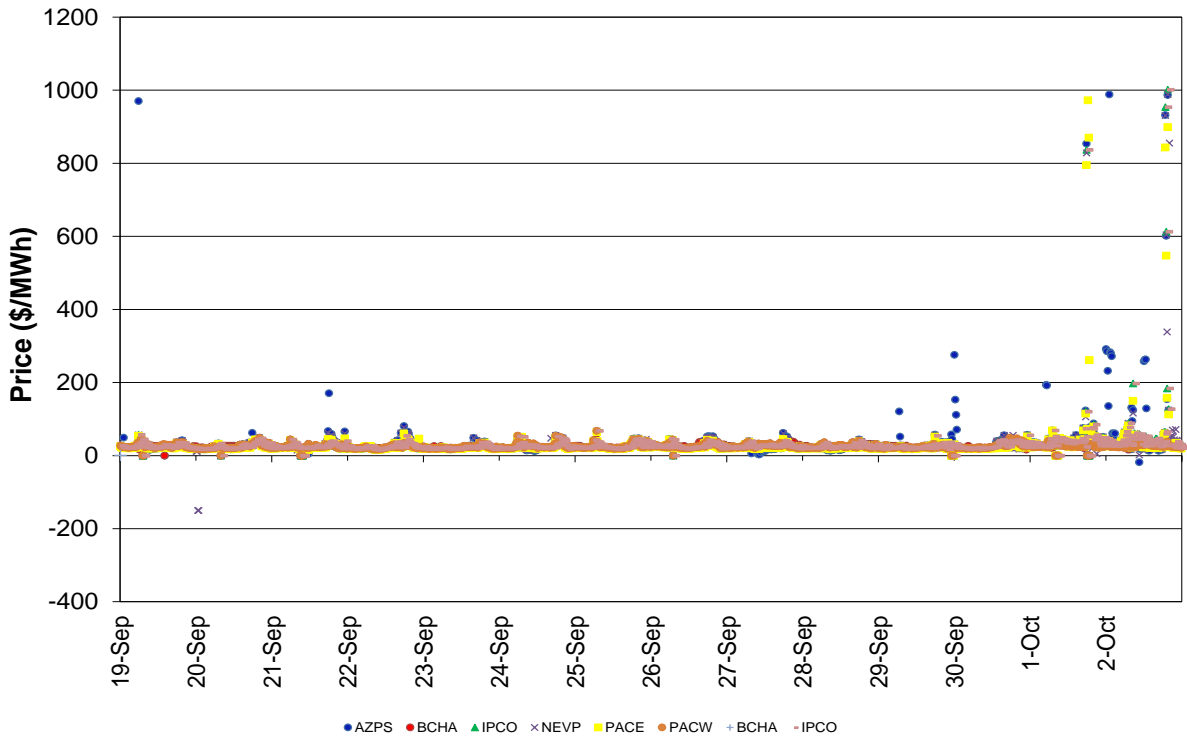


Figure 10: Real-Time RTD ELAP LMP

