

Market Highlights¹ (March 22–April 4)

- The average DLAP price in the integrated forward market was \$18.08. The maximum and minimum DLAP prices were \$73.57 and -\$13.23, respectively. The maximum and minimum PNode prices in the integrated forward market were \$450.00 and -\$259.33 respectively.
- The top two interties congested in the integrated forward market were MALIN500 and NOB_ITC. Congestion rents in these two weeks totaled \$12,429,760.77.
- The average day-ahead ancillary service prices were between \$0.00 and \$100.17.
- Approximately 81.00 percent of the RUC requirements were met from RA units.
- The average real-time FMM DLAP price was \$15.78, with a maximum price of \$970.17 and a minimum price of -\$356.48. The maximum and minimum PNode prices in the FMM were \$1,162.10 and -\$867.02, respectively.
- Out of the total 1,344 FMM intervals, 1 intervals saw DLAP prices above \$250, and 2 intervals saw DLAP prices below -\$150.
- Out of the total 1,344 FMM intervals, 6 intervals saw ELAP prices above \$250 and 95 intervals saw ELAP prices below -\$150. The average real-time FMM ELAP price was \$8.35, with a maximum price of \$964.78 and a minimum price of -\$500.96.
- The average real-time RTD DLAP price was \$11.25, with a maximum price of \$1,042.38 and a minimum price of -\$260.53. The maximum and minimum PNode prices in the RTD were \$1,373.54 and -\$1,510.98, respectively.
- Out of the total 4,032 RTD intervals, 23 intervals saw DLAP prices above \$250 and 21 intervals saw DLAP prices below -\$150.
- Out of the total 4,032 RTD intervals, 77 intervals saw ELAP prices above \$250 and 302 intervals saw ELAP prices below -\$150. The average real-time RTD ELAP price was \$5.41, with a maximum price of \$1,013.25 and a minimum price of -\$443.54.
- Root cause for daily high price events are noted in Tables 1 and 2.

Table 1 FMM Intervals	
Trade Date	Root Cause
FMM Apr 4 HE 20	Load changes and reduction of net import

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



Table 2 RTD Intervals	
Trade Date	Root Cause
RTD Mar 23 HE 20	Load changes and renewable deviation
RTD Mar 24 HE 11; Mar 25 HE 3	Load changes
RTD Mar 26 HE 18, 19	Renewable deviation and load changes
RTD Mar 27 HE 19	Renewable deviation, load changes and re-dispatch of resources
RTD Mar 29 HE 17; Mar 31 HE 23	Renewable deviation and load changes
RTD Apr 4 HE 15	Load changes
RTD Apr 4 HE 20	Load changes and re-dispatch of resources

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

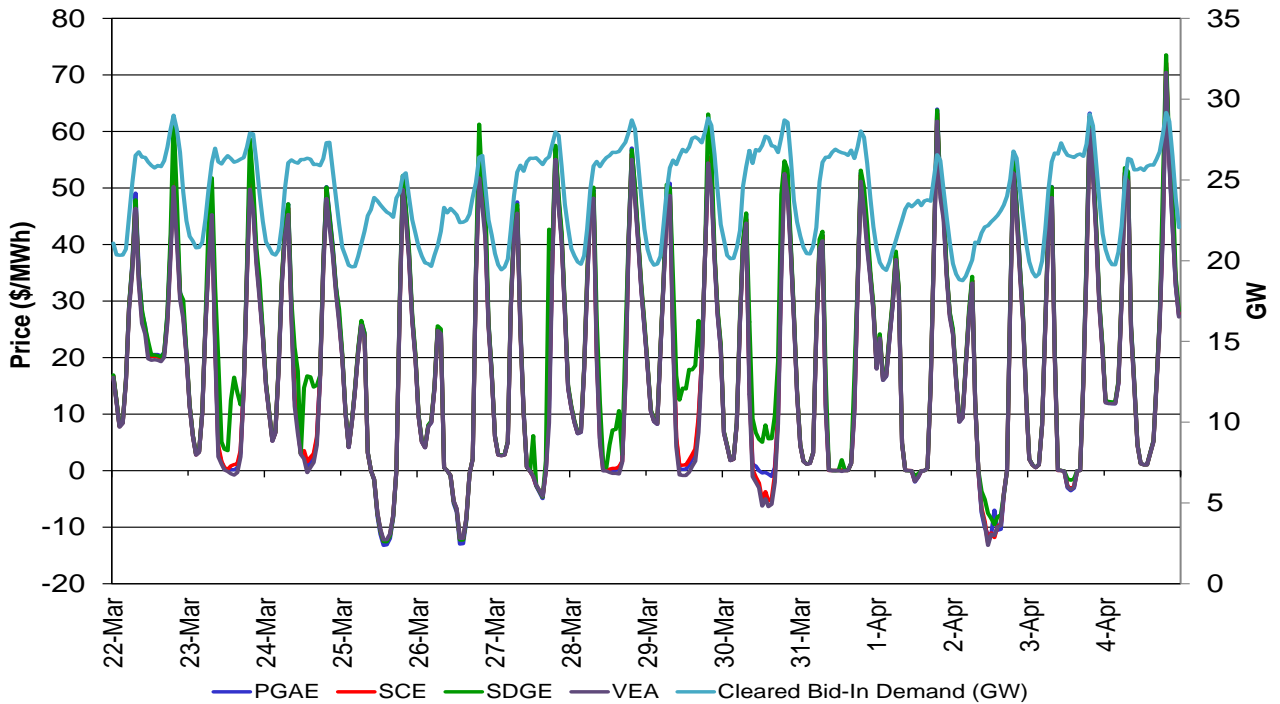




Figure 2: Day-Ahead Congestion Rents

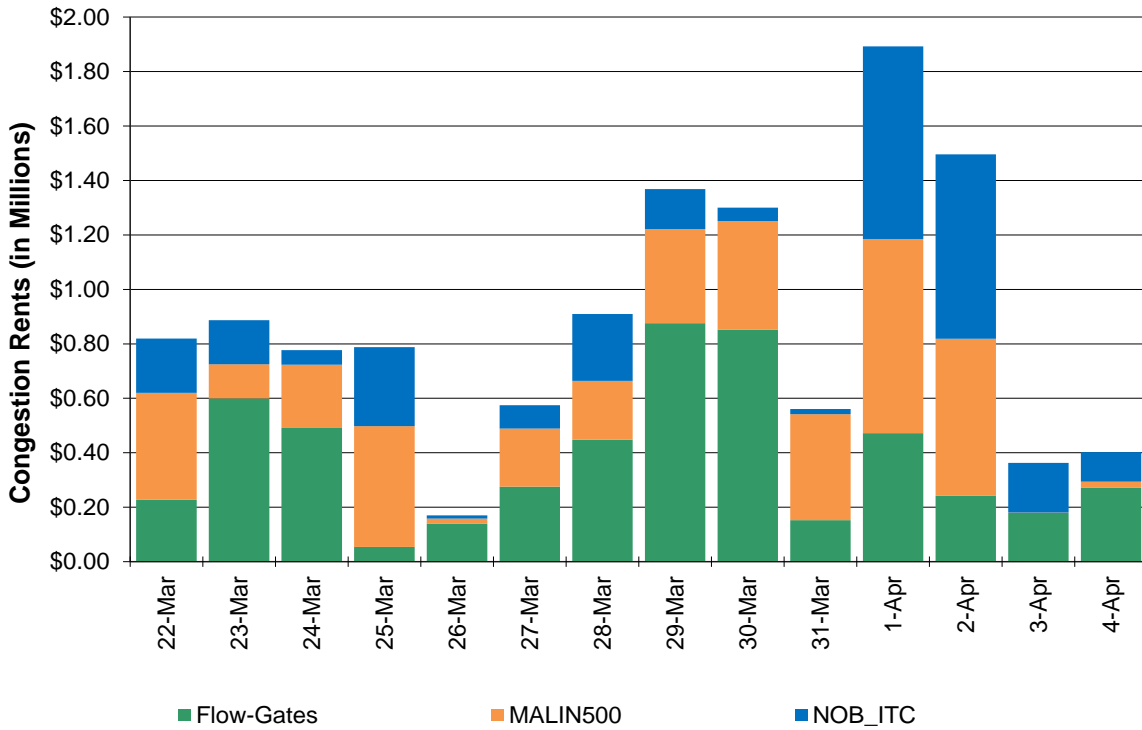


Figure 3: Day-Ahead Congestion Rents for Flow-Based Constraints

Transmission Constraint	Congestion Rent
7820_TL23040_IV_SPS_NG	\$ 3,218,250.07
31486_CARIBOU_115_30255_CARBOU M_1.0_XF_11	\$ 456,495.55
34112_EXCHEQUR_115_34116_LE GRAND_115_BR_1_1	\$ 343,471.02
32228_PLACER_115_32238_BELL PGE_115_BR_1_1	\$ 253,242.32
30335_ATLANTC_230_30337_GOLDHILL_230_BR_1_1	\$ 157,128.57
34874_WHEELER_70.0_34756_WHEELER_115_XF_2	\$ 116,952.34
OMS_4654659_LBN_S_N	\$ 102,411.04
32212_E.NICOLS_115_32214_RIO OSO_115_BR_1_1	\$ 94,737.00
7820_TL 230S_OVERLOAD_NG	\$ 93,178.52
33936_MELNS JB_115_33951_VLYHMTP1_115_BR_1_1	\$ 61,949.45
34807_ARVINJ2_115_34758_LAMONT_115_BR_1_1	\$ 55,269.68
6310_CP6_NG	\$ 45,106.36
22192_DOUBLTTP_138_22300_FRIARS_138_BR_1_1	\$ 44,106.72
33541_AEC_TP1_115_33540_TESLA_115_BR_1_1	\$ 34,716.33
33932_MELONES_115_33936_MELNS JB_115_BR_1_1	\$ 27,827.79
32314_SMRTSVLE_60.0_32316_YUBAGOLD_60.0_BR_1_1	\$ 27,276.08
34474_HELM_70.0_34556_STRD JCT_70.0_BR_1_1	\$ 26,288.88
34548_KETTLEMN_70.0_34552_GATES_70.0_BR_1_1	\$ 18,017.89

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

Transmission Constraint	Congestion Rent
22820_SWEETWTR_69.0_22476_MIGUELTP_69.0_BR_1_1	\$ 11,613.02
32308_COLGATE_60.0_32313_NRRWS2TP_60.0_BR_2_1	\$ 11,426.73
34887_TAP SKRN_70.0_34882_SAN EMDO_70.0_BR_1_1	\$ 10,144.73
31461_JESSTAP_115_31464_COTWDPGE_115_BR_1_1	\$ 9,276.92
31566_KESWICK_60.0_31582_STLLWATR_60.0_BR_1_1	\$ 4,384.01
32330_PEAS RG_60.0_32200_PEASE_115_XF_2	\$ 4,022.07
31464_COTWDPGE_115_30105_COTTNWD_230_XF_1	\$ 3,453.88
32380_WEMR SWS_60.0_32382_FORST HL_60.0_BR_1_1	\$ 2,087.06
32214_RIO OSO_115_32225_BRNSWKT1_115_BR_1_1	\$ 1,726.19
34556_STRD JCT_70.0_34562_SCHLNDLR_70.0_BR_1_1	\$ 1,180.39
31984_BRIGHTN_115_31993_BRKRJCT_115_BR_1_1	\$ 363.39
6310_CP7_NG	\$ 252.22
33916_CURTISS_115_33917_FBERBORD_115_BR_1_1	\$ 74.25
34116_LE GRAND_115_34134_WILSONAB_115_BR_1_1	\$ 30.51
Totals	\$ 5,280,323.35

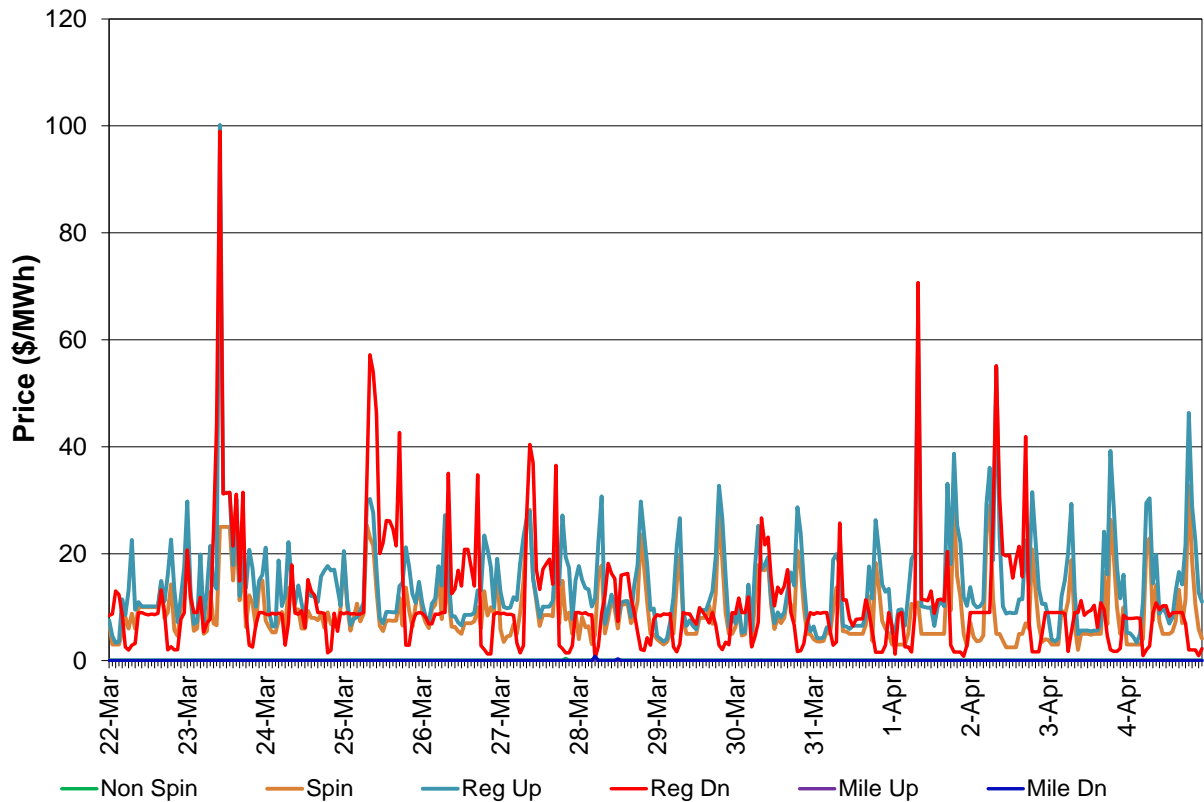
Figure 4: Day-Ahead (IFM) Average A/S Price


Figure 5: Day-Ahead Average RUC Price

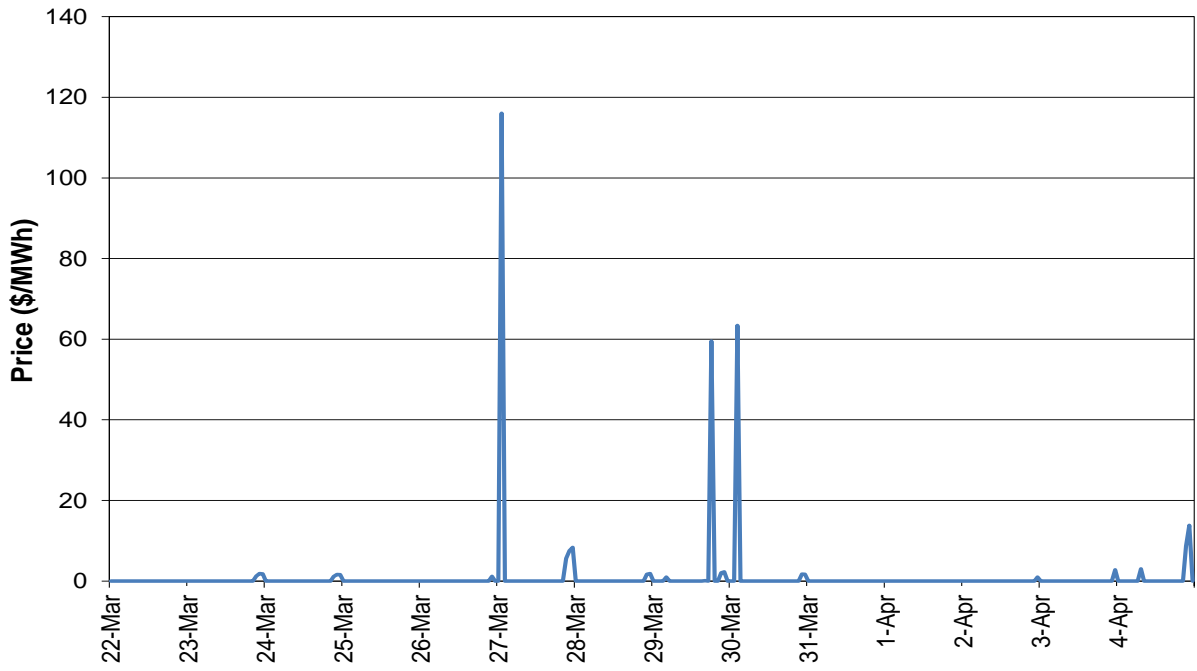


Figure 6: Real-Time FMM Average A/S Price

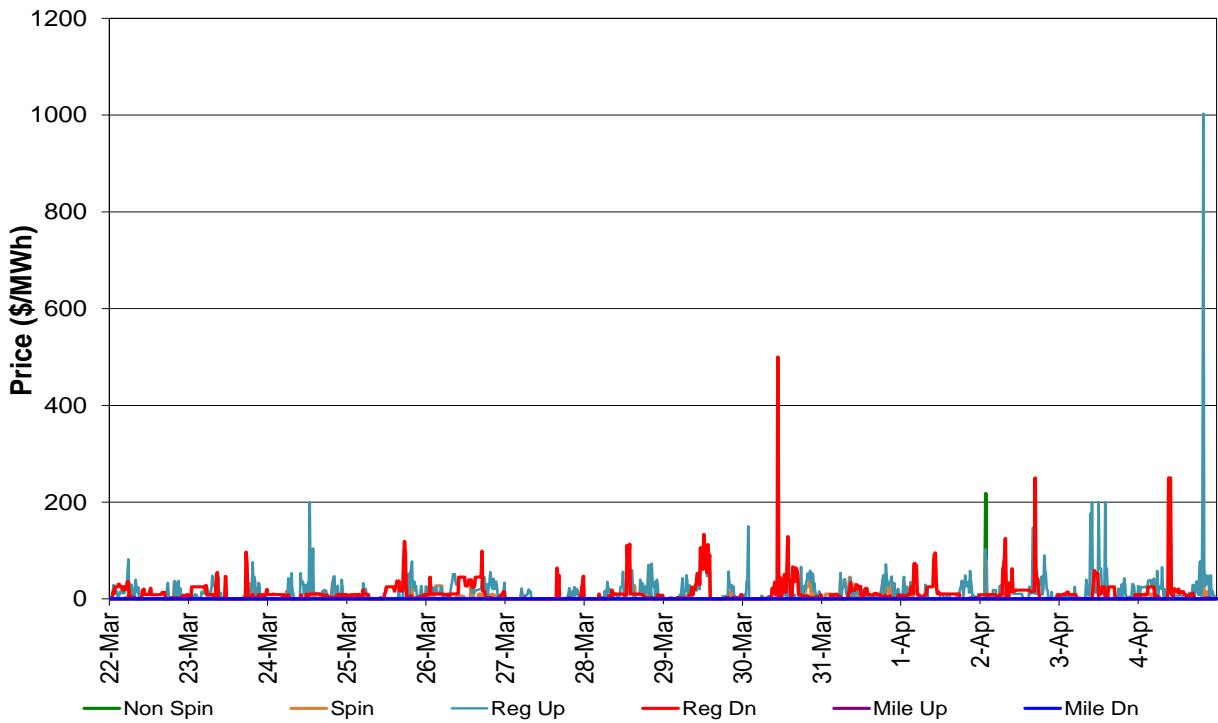


Figure 7: Real-Time FMM DLAP LMP

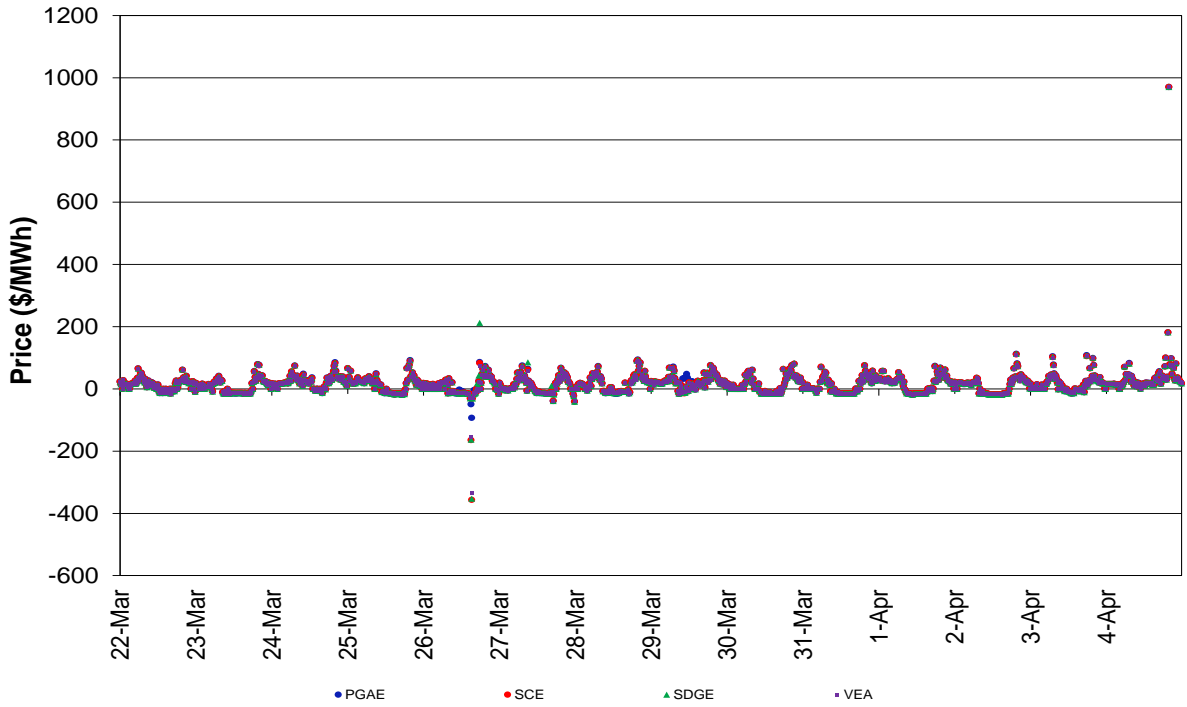


Figure 8: Real-Time RTD DLAP LMP

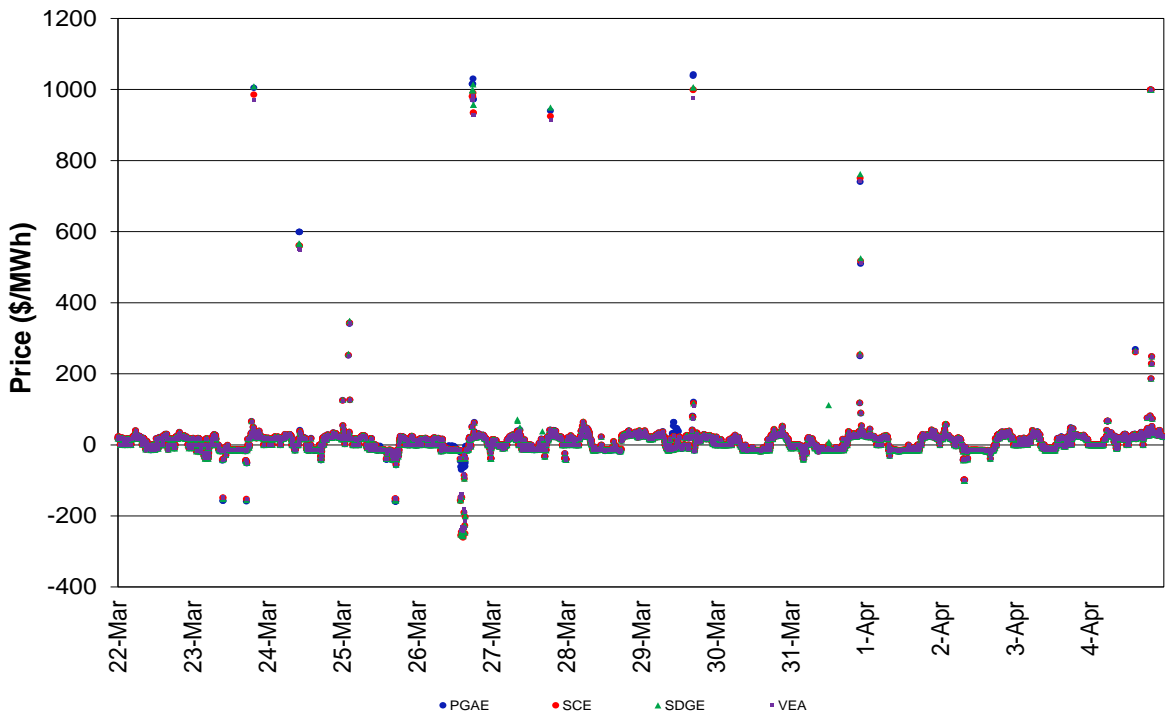


Figure 9: Real-Time FMM ELAP LMP

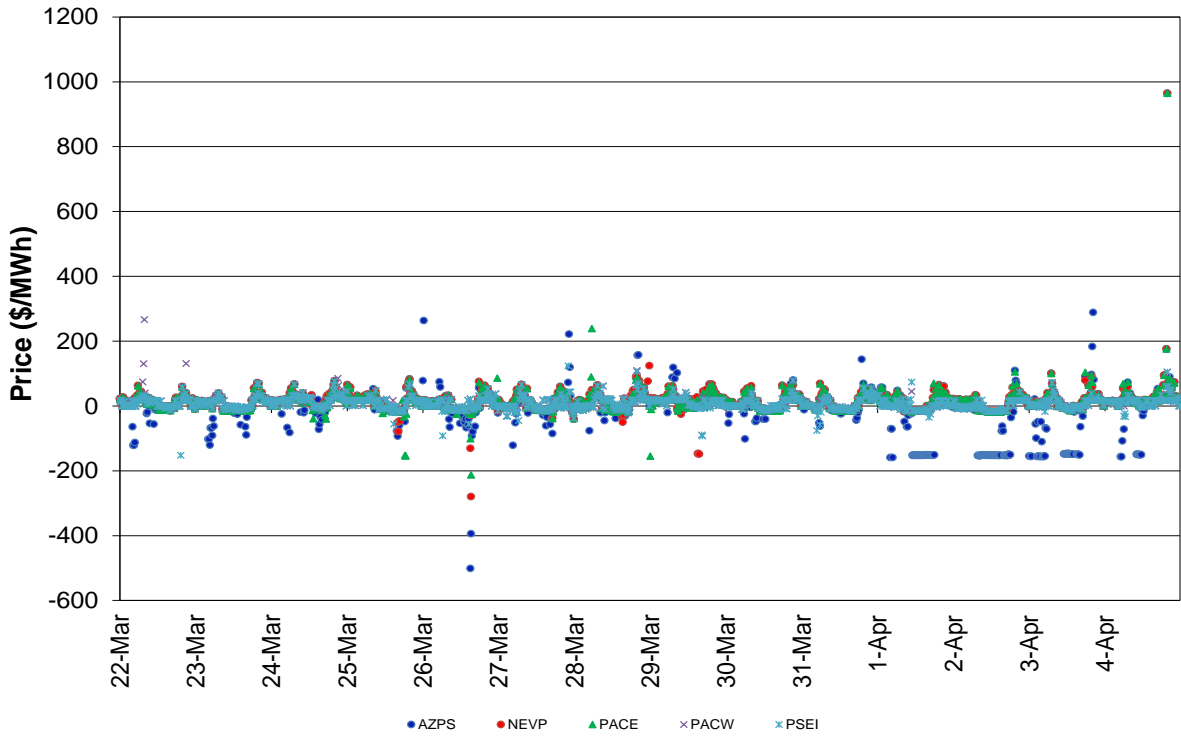


Figure 10: Real-Time RTD ELAP LMP

