Market Highlights[1] (February 8–February 21)

- The average DLAP price in the integrated forward market was $28.78. The maximum and minimum DLAP prices were $66.54 and -$0.44, respectively. The maximum and minimum PNode prices in the integrated forward market were $150.00 and -$150.16 respectively.

- The top two interties congested in the integrated forward market were MALIN500 and NOB_ITC. Congestion rents in these two weeks totaled $7,635,417.43.

- The average day-ahead ancillary service prices were between $0.00 and $98.97.

- Approximately 85.52 percent of the RUC requirements were met from RA units.

- The average real-time FMM DLAP price was $25.73, with a maximum price of $136.52 and a minimum price of -$41.75. The maximum and minimum PNode prices in the FMM were $1,138.40 and -$800.47, 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, 5 intervals saw ELAP prices above $250 and 0 intervals saw ELAP prices below -$150. The average real-time FMM ELAP price was $21.05, with a maximum price of $1,026.79 and a minimum price of -$121.94.

- The average real-time RTD DLAP price was $27.69, with a maximum price of $1,074.20 and a minimum price of -$151.08. The maximum and minimum PNode prices in the RTD were $1,547.90 and -$624.69, respectively.

- Out of the total 4,032 RTD intervals, 44 intervals saw DLAP prices above $250 and 1 intervals saw DLAP prices below -$150.

- Out of the total 4,032 RTD intervals, 148 intervals saw ELAP prices above $250 and 1 intervals saw ELAP prices below -$150. The average real-time RTD ELAP price was $21.71, with a maximum price of $1,184.50 and a minimum price of -$154.48.

- Root cause for daily high price events are noted in Table 1.

Table 1 RTD Intervals	
Trade Date	**Root Cause**
RTD Feb 8 HE 16	Renewable deviation and load changes
RTD Feb 9 HE 15 int 5	Congestion on PATH15_S-N, load changes and generator de-rate
RTD Feb 9 HE 15 int 11-12; Feb 10 HE 15	Load changes and renewable deviation
RTD Feb 10 HE 16	Renewable deviation and re-dispatch of resources

---

[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 Feb 11 HE 15	Load changes and renewable deviation
RTD Feb 12 HE 6	Renewable deviation and re-dispatch of resources
RTD Feb 12 HE 7	Load changes
RTD Feb 12 HE 18	Load changes and re-dispatch of resources
RTD Feb 15 HE 20	Load changes and renewable deviation
RTD Feb 16 HE 16	Load changes
RTD Feb 16 HE 17	Renewable deviation, load changes and re-dispatch of resources
RTD Feb 17 HE 18	Reduction of net import, load changes and renewable deviation
RTD Feb 17 HE 20	Reduction of net import and renewable deviation
RTD Feb 20 HE 14	Congestion on PATH15_S-N
RTD Feb 20 HE 17 int 8 – HE 18 int 1	Renewable deviation and re-dispatch of resources
RTD Feb 20 HE 18 int 3	Reduction of net import and generator de-rate
RTD Feb 21 HE 7, 9, 10, 11	Load changes and renewable deviation

Figure 1: Day-Ahead (IFM) LAP LMP and Cleared Bid-In Demand
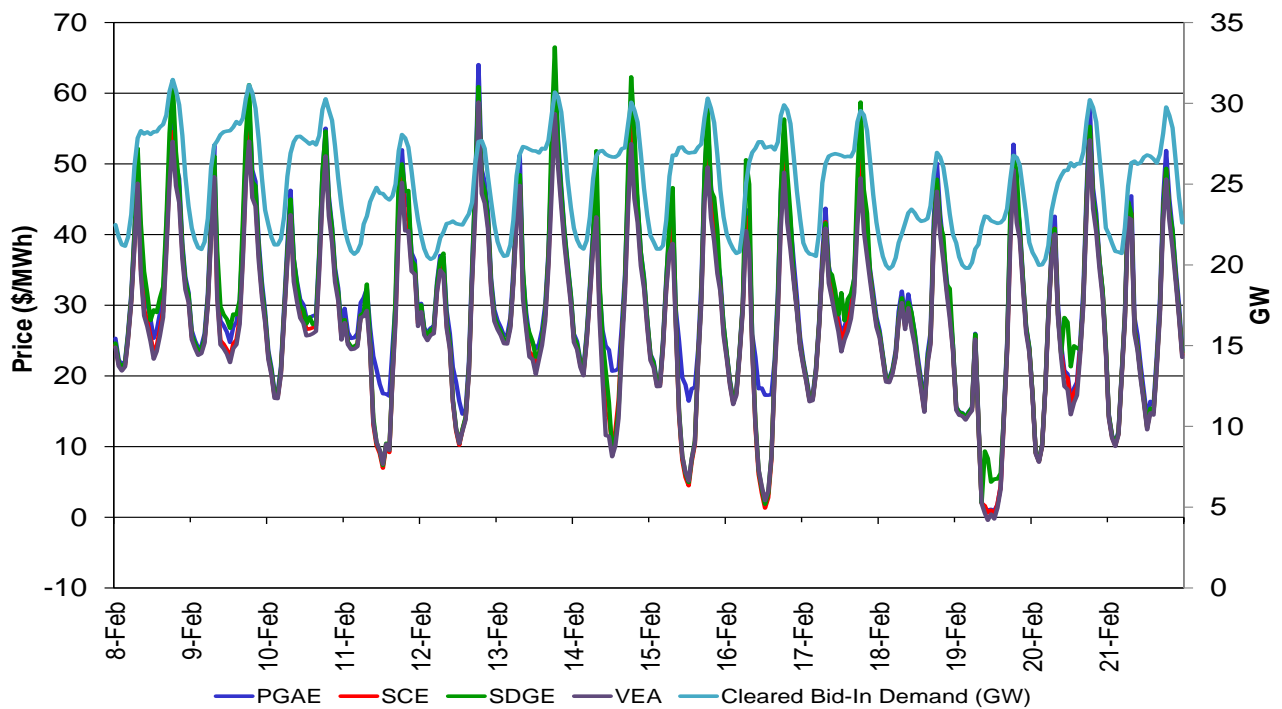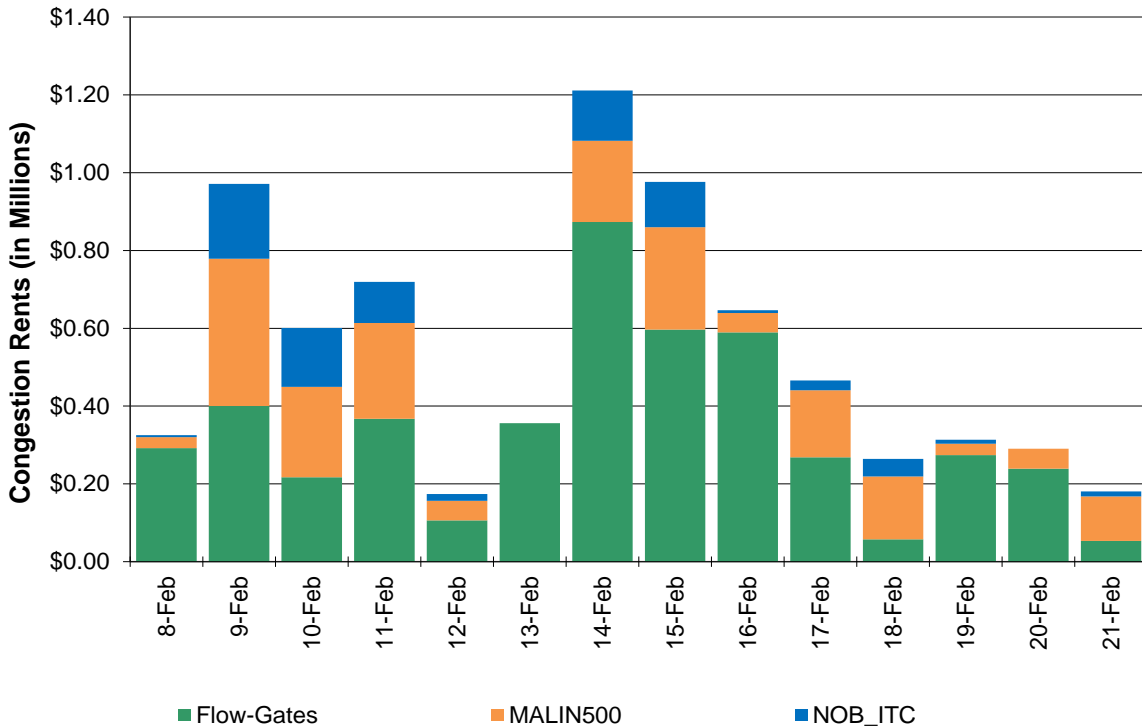
Bi-weekly Market Performance Report

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	$ 1,313,362.21
PATH15_S-N	$ 1,101,246.94
22596_OLD TOWN_230_22504_MISSION _230_BR_1 _1	$ 600,654.38
7750_D-VISTA2_OOS_SOL5_NG	$ 398,753.51
22356_IMPRLVLY_230_22360_IMPRLVLY_500_XF_81	$ 384,903.41
22192_DOUBLTTP_138_22300_FRIARS _138_BR_1 _1	$ 380,022.62
HUMBOLDT_IMP_NG	$ 98,233.04
24087_MAGUNDEN_230_24153_VESTAL _230_BR_1 _1	$ 87,976.96
22865_GRNT HLL_138_22852_TELECYN _138_BR_1 _1	$ 60,216.01
22597_OLDTWNTP_230_22504_MISSION _230_BR_1 _1	$ 47,081.34
34874_WHEELER _70.0_34756_WHEELER _115_XF_2	$ 41,017.41
22500_MISSION _138_22865_GRNT HLL_138_BR_1 _1	$ 39,208.47
31580_CASCADE _60.0_31581_OREGNTRL_60.0_BR_1 _1	$ 26,875.56
7820_TL 230S_OVERLOAD_NG	$ 26,767.44
31461_JESSTAP _115_31464_COTWDPGE_115_BR_1 _1	$ 22,596.67
33310_SANMATEO_115_33315_RAVENSWD_115_BR_1 _1	$ 15,986.91
22480_MIRAMAR _69.0_22756_SCRIPPS _69.0_BR_1 _1	$ 15,482.47
31658_BANGOR _60.0_32308_COLGATE _60.0_BR_1 _1	$ 14,259.53
31464_COTWDPGE_115_30105_COTTNWD _230_XF_1	$ 10,636.98

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

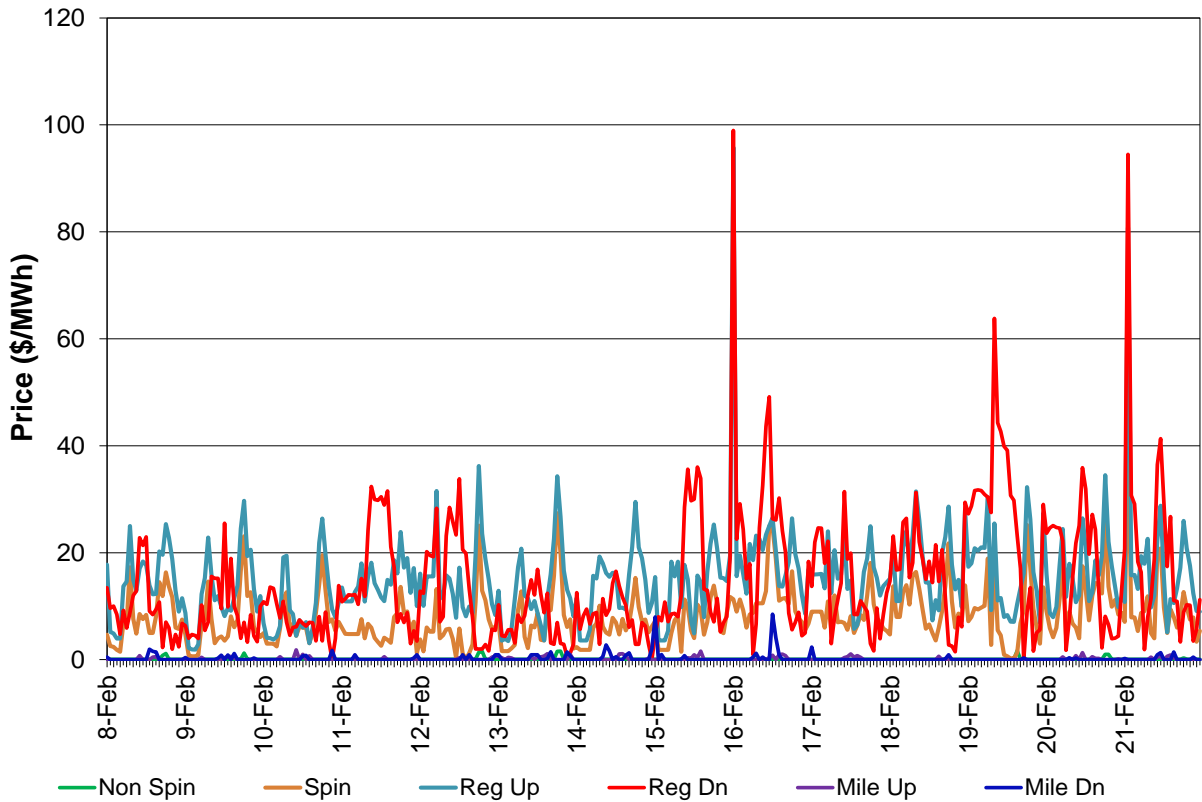| Transmission Constraint	Congestion Rent
32314_SMRTSVLE_60.0_32316_YUBAGOLD_60.0_BR_1 _1	$ 2,045.67
31093_HYMPOMJT_60.0_31553_BIG BAR _60.0_BR_1 _1	$ 1,734.56
31566_KESWICK _60.0_31582_STLLWATR_60.0_BR_1 _1	$ 1,356.03
31080_HUMBOLDT_60.0_31088_HMBLT JT_60.0_BR_1 _1	$ 215.00
Total	**$ 4,690,633.12**

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

Figure 5: Day-Ahead Average RUC Price
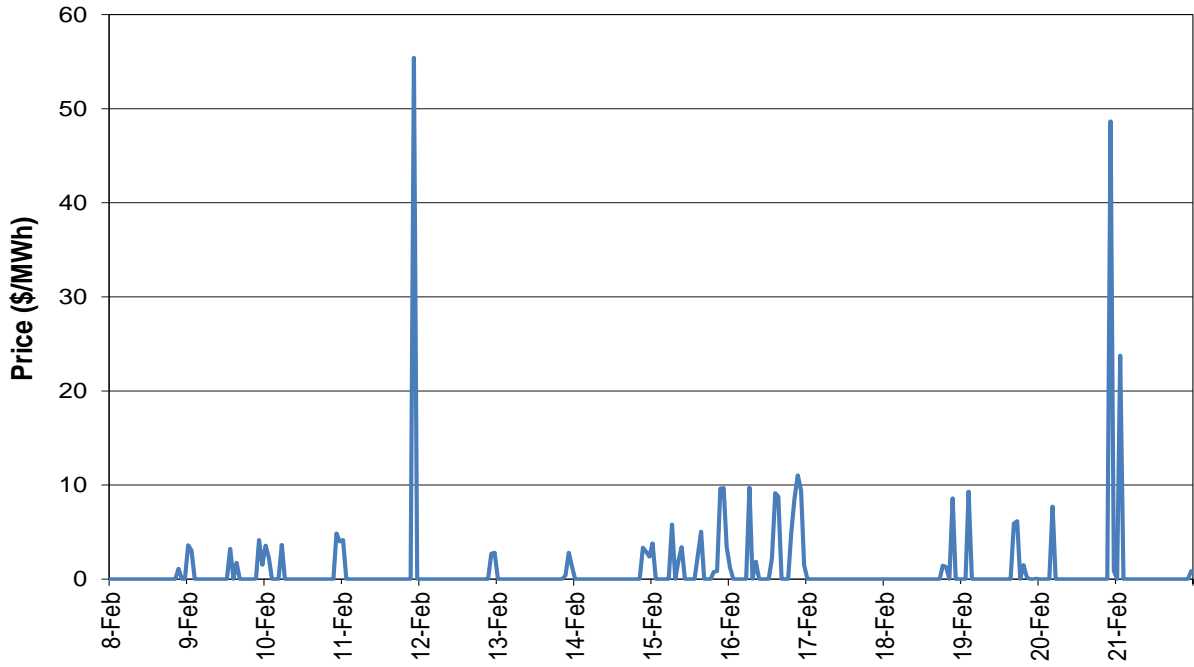
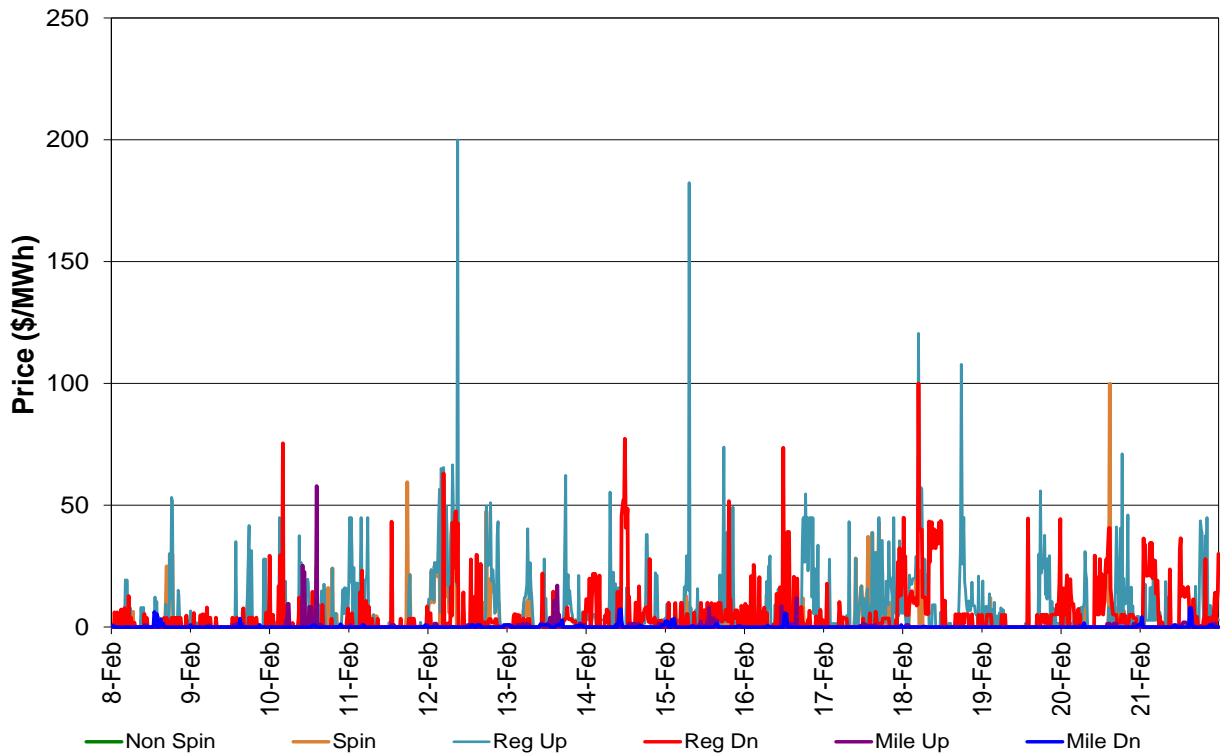**Figure 6: Real-Time FMM Average A/S Price**

Figure 7: Real-Time FMM DLAP LMP

Figure 8: Real-Time RTD DLAP LMP

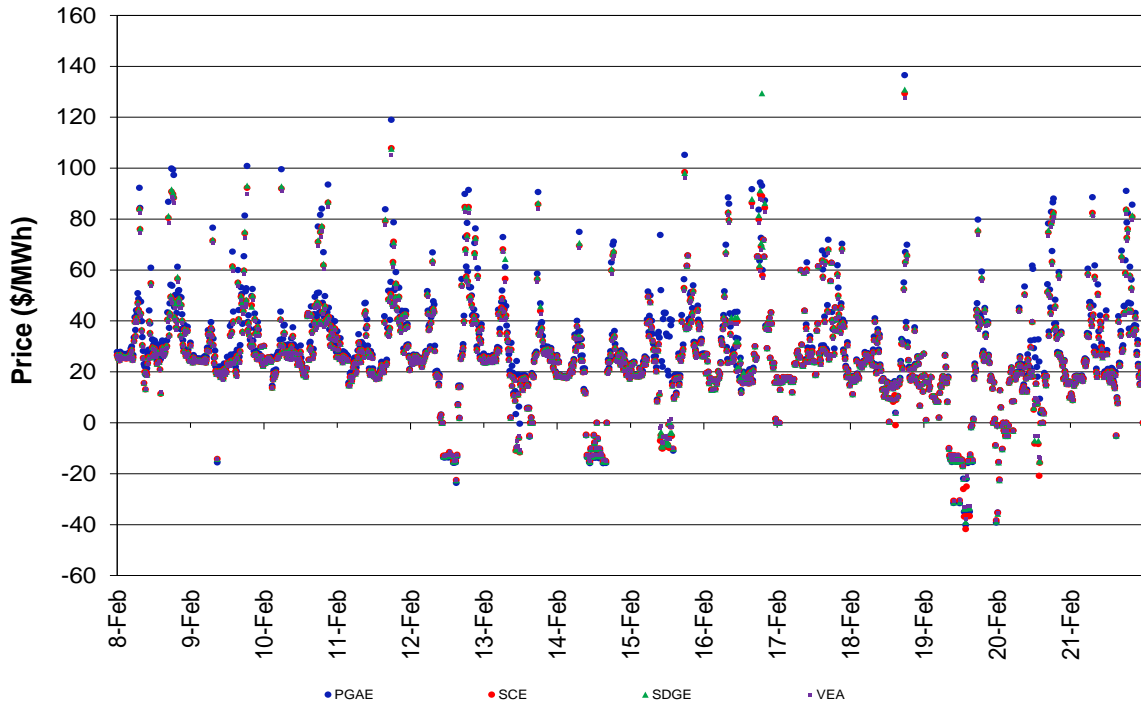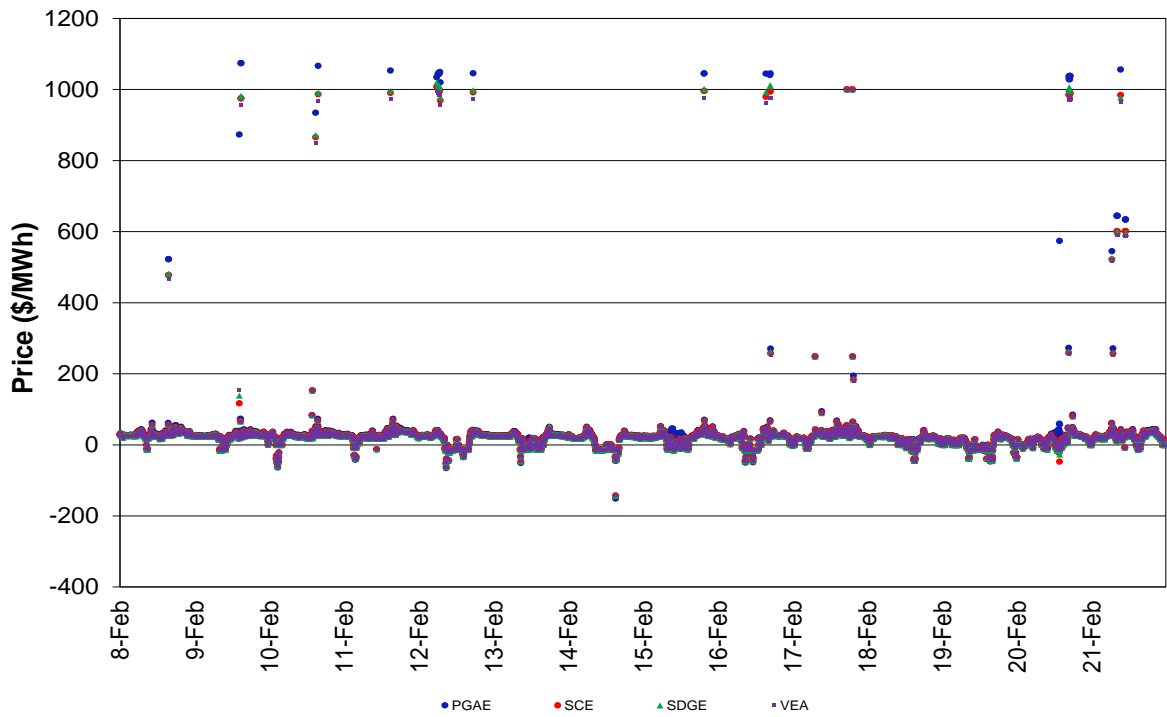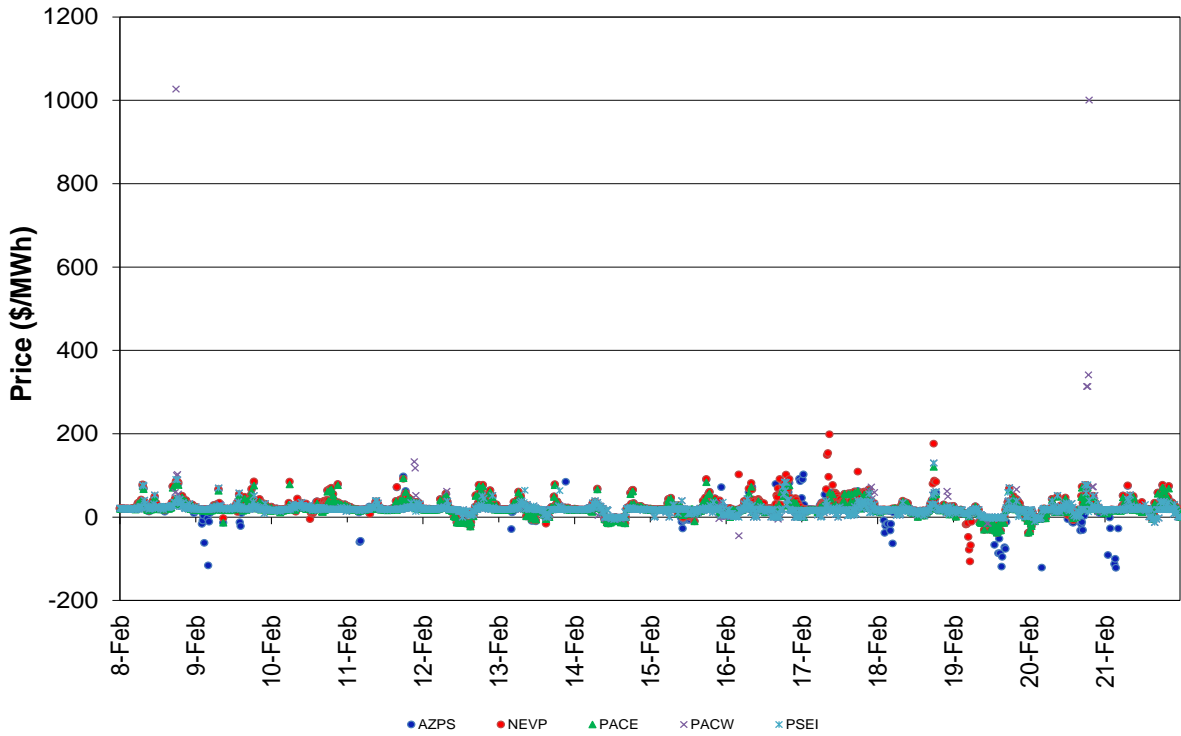**Figure 9: Real-Time FMM ELAP LMP**

Figure 10: Real-Time RTD ELAP LMP