Market Highlights[1] (February 7–February 20)

- The average DLAP price in the integrated forward market was $33.28. The maximum and minimum DLAP prices were $117.69 and -$0.53, respectively. The maximum and minimum PNode prices in the integrated forward market were $99.83 and -$4.86 respectively.

- The top two interties congested in the integrated forward market were NOB_ITC and MALIN500. Congestion rents in these two weeks totaled $28,356,194.32.

- The average day-ahead ancillary service prices were between $0.00 and $88.36.

- Approximately 95.61 percent of the RUC requirements were met from RA units.

- The average real-time FMM DLAP price was $40.69, with a maximum price of $1,313.22 and a minimum price of -$18.15. The maximum and minimum PNode prices in the FMM were $1,423.93 and -$312.88, respectively.

- Out of the total 1,344 FMM intervals, 23 intervals saw DLAP prices above $250, and 0 intervals saw DLAP prices below -$150.

- Out of the total 1,344 FMM intervals, 35 intervals saw ELAP prices above $250 and 4 intervals saw ELAP prices below -$150.

- The average real-time FMM ELAP price was $25.77, with a maximum price of $1,258.74 and a minimum price of -$157.77.

- The average real-time RTD DLAP price was $45.23, with a maximum price of $1,081.66 and a minimum price of -$18.59. The maximum and minimum PNode prices in the RTD were $1,630.59 and -$176.25, respectively.

- Out of the total 4,032 RTD intervals, 86 intervals saw DLAP prices above $250 and 0 interval saw DLAP prices below -$150.

- Out of the total 4,032 RTD intervals, 65 intervals saw ELAP prices above $250 and 25 intervals saw ELAP prices below -$150. The average real-time RTD ELAP price was $25.41, with a maximum price of $1,027.90 and a minimum price of -$158.16.

- Root cause for daily high price events are noted in Tables 1 and 2.

Table 1 FMM Intervals

Trade Date	Root Cause
FMM Feb 15 HE 19	Congestion on 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P
FMM Feb 17 HE 18,23	Reduction of net imports.
FMM Feb 17 HE 19,20	Generator outage and reduction of net imports.

[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 Feb 20 HE 7	Re-dispatch of resources.
FMM Feb 20 HE 8	Congestion on 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P and re-dispatch of resources.
FMM Feb 20 HE 9	Congestion on 24016_BARRE _230_24154_VILLA PK_230_BR_1 _1, 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P, and 22192_DOUBLTTP_138_22300_FRIARS _138_BR_1 _1
FMM Feb 20 HE 18, 19, 20	Load changes, congestion on 24016_BARRE _230_24154_VILLA PK_230_BR_1 _1, 24016_BARRE _230_25201_LEWIS _230_BR_1 _1, and 24021_CENTER S_230_24091_MESA CAL_230_BR_1 _1.

Table 2 RTD Intervals	
Trade Date	**Root Cause**
RTD Feb 8 HE 17	Renewable deviation and reduction of net imports.
RTD Feb 10 HE 22,23; Feb 17 HE 18, 19, 21	Reduction of net imports.
RTD Feb 11 HE 16; RTD Feb 14 HE 9	Load changes.
RTD Feb 12 HE 10,12,17; Feb 13 HE 17; Feb 16 HE 23; Feb 19 HE 17; Feb 20 HE 8	Load changes and renewable deviation.
RTD Feb 12 HE 18,19	Load changes and generator outage.
RTD Feb 12 HE 20; Feb 19 HE 20,22	Generator outage.
RTD Feb 12 HE 21	Load changes and re-dispatch of resources.
RTD Feb 13 HE 16	Congestion on 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P and load changes.
RTD Feb 14 HE 8	Congestion on 24138_SERRANO _500_24137_SERRANO _230_XF_1 _P and 7820_TL23040_IV_SPS_NG.
RTD Feb 16 HE 17; Feb 18 HE 19	Renewable deviation, load changes, and reduction of net imports.
RTD Feb 18 HE 1	Load changes and reduction of net imports.
RTD Feb 20 HE 18	Congestion on 24016_BARRE _230_24154_VILLA PK_230_BR_1 _1 and 24016_BARRE _230_25201_LEWIS _230_BR_1 _1
RTD Feb 20 HE 19	Congestion on 24016_BARRE _230_24154_VILLA PK_230_BR_1 _1, 24029_DELAMO _230_24021_CENTER S_230_BR_1 _1, 24016_BARRE _230_25201_LEWIS _230_BR_1 _1, and 24021_CENTER S_230_24091_MESA CAL_230_BR_1 _1.

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

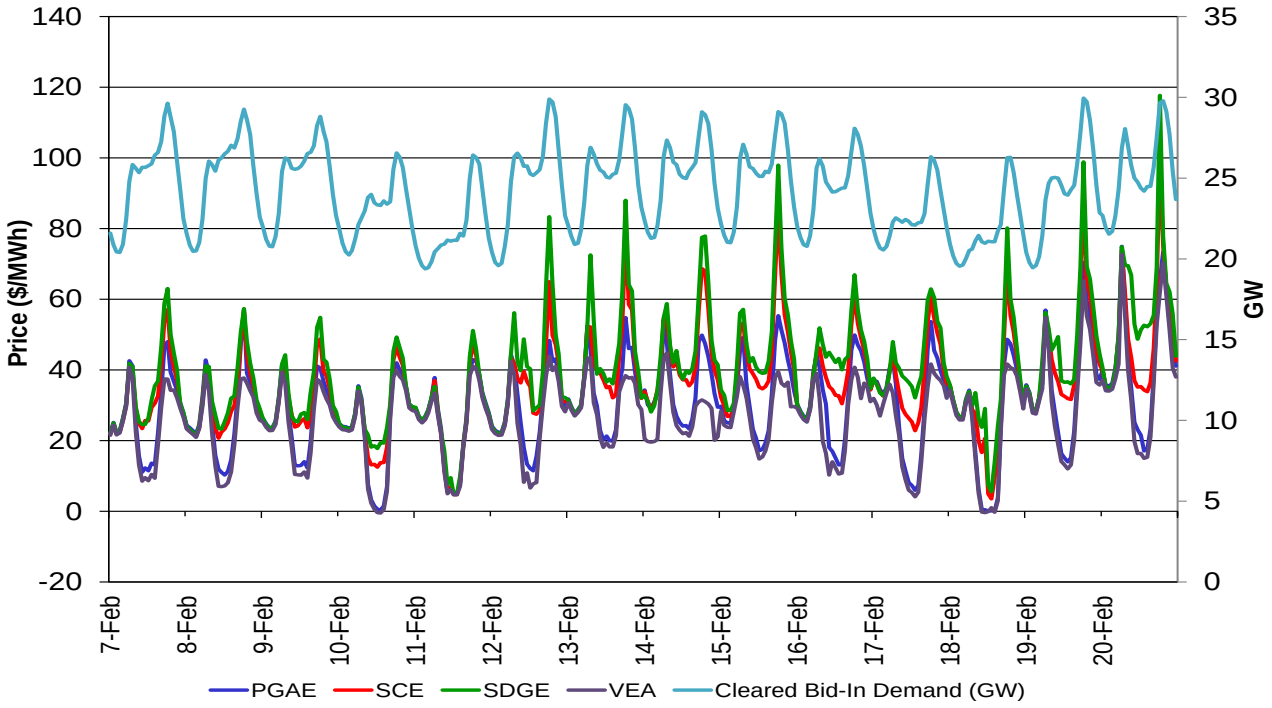

Figure 2: Day-Ahead Congestion Rents

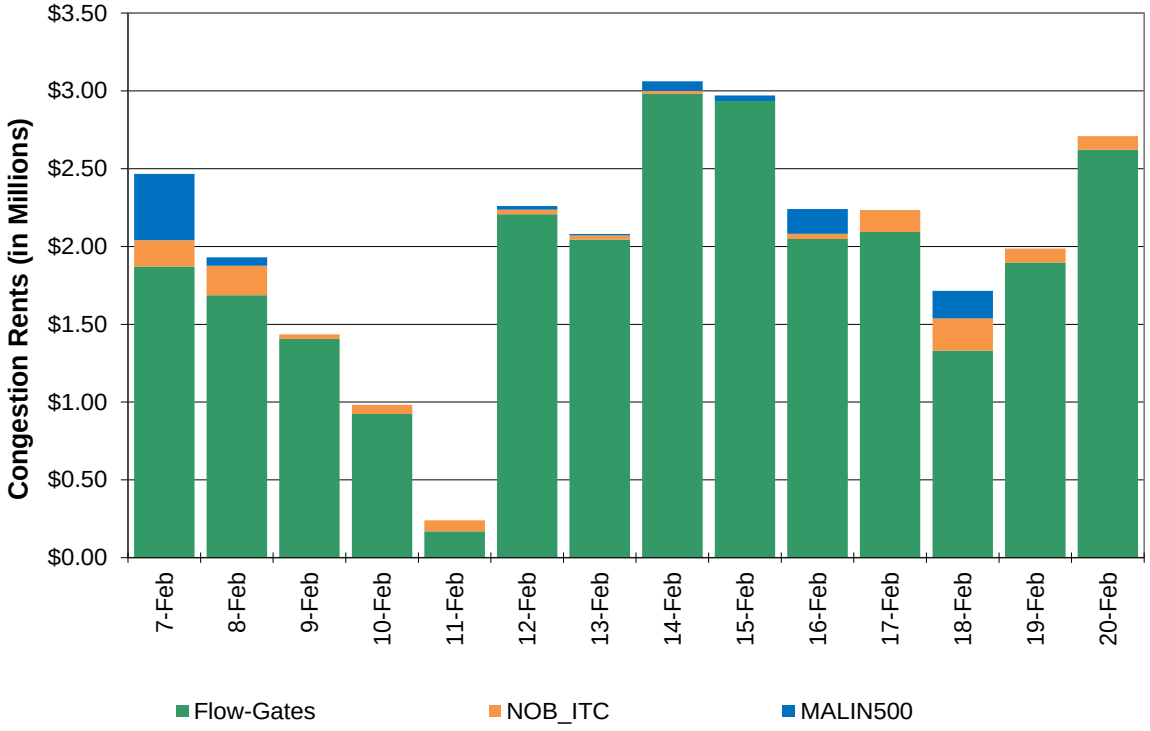

Figure 3: Day-Ahead Congestion Rents for Flow-Based Constraints

Transmission Constraint	Congestion Rent
24138_SERRANO _500_24137_SERRANO _230_XF_1 _P	$ 19,870,365.05
24086_LUGO _500_26105_VICTORVL_500_BR_1 _1	$ 3,222,973.62
22192_DOUBLTTP_138_22300_FRIARS _138_BR_1 _1	$ 1,214,617.05
22824_SWTWTRTP_69.0_22820_SWEETWTR_69.0_BR_1 _1	$ 761,912.14
24114_PARDEE _230_24147_SYLMAR S_230_BR_2 _1	$ 299,462.18
7820_TL23040_IV_SPS_NG	$ 192,015.22
31336_HPLND JT_60.0_31206_HPLND JT_115_XF_2	$ 131,210.34
OMS_5554630_GATES_BNK_11	$ 106,022.12
30523_CC SUB _230_30525_C.COSTA _230_BR_1 _1	$ 79,578.47
30055_GATES1 _500_30060_MIDWAY _500_BR_1 _3	$ 63,229.26
33020_MORAGA _115_30550_MORAGA _230_XF_3 _P	$ 50,145.98
99254_J.HINDS2_230_24806_MIRAGE _230_BR_1 _1	$ 41,552.91
7820_TL 230S_OVERLOAD_NG	$ 39,897.60
31214_GEYERS56_115_31220_EGLE RCK_115_BR_1 _1	$ 21,884.04
35612_TRIMBLE _115_35616_SNJOSEB _115_BR_1 _1	$ 21,181.47
24402_ANTELOPE_66.0_24420_NEENACH _66.0_BR_1 _1	$ 20,882.41
30056_GATES2 _500_30060_MIDWAY _500_BR_2 _3	$ 20,763.93
22480_MIRAMAR _69.0_22756_SCRIPPS _69.0_BR_1 _1	$ 14,978.44
31808_CARABOU _11.5_31690_CARIBOU _60.0_XF_1	$ 12,685.16
OMS 5263011 Gregg_Herndon	$ 9,596.51
31566_KESWICK _60.0_31582_STLLWATR_60.0_BR_1 _1	$ 8,244.15
HUMBOLDT_IMP_NG	$ 5,155.80
31227_HGHLNDJ2_115_31950_CORTINA _115_BR_1 _1	$ 3,617.61
6410_CP7_NG	$ 1,762.27
31080_HUMBOLDT_60.0_31088_HMBLT JT_60.0_BR_1 _1	$ 906.48
22040_BARRETT _69.0_22416_LOVELAND_69.0_BR_1 _1	$ 681.08
31464_COTWDPGE_115_30105_COTTNWD _230_XF_1	$ 624.26
22200_DUNHILTP_69.0_22196_DUNHILL _69.0_BR_1 _1	$ 464.58
22603_LKHODGES_69.0_22060_BERNDOTP_69.0_BR_1 _1	$ 87.78
Total	**$ 26,216,497.91**

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

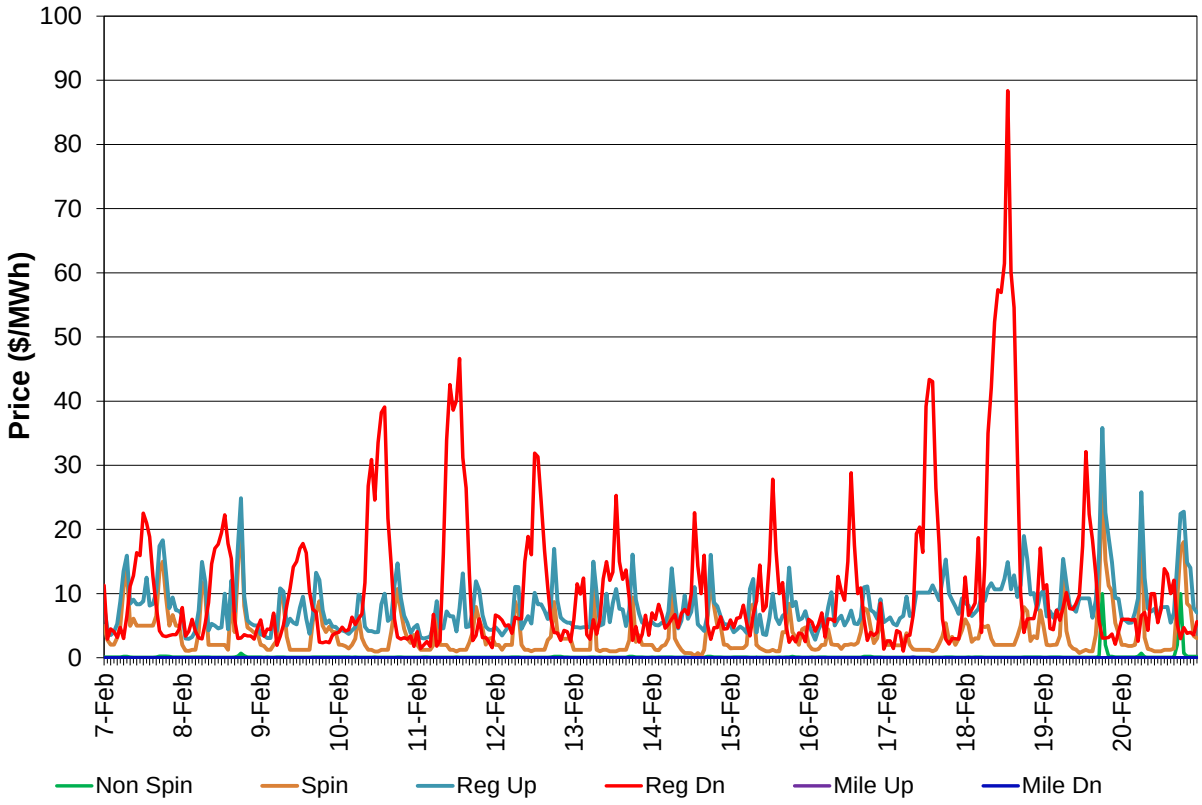

Figure 5: Day-Ahead Average RUC Price

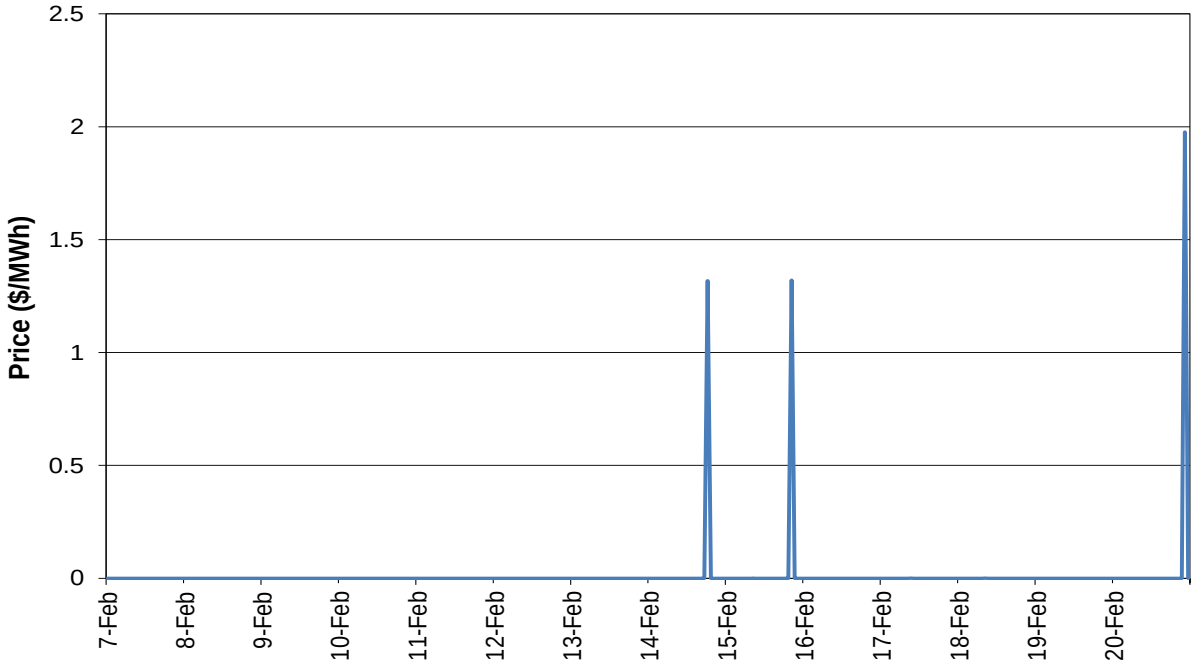

Figure 6: Real-Time FMM Average A/S Price

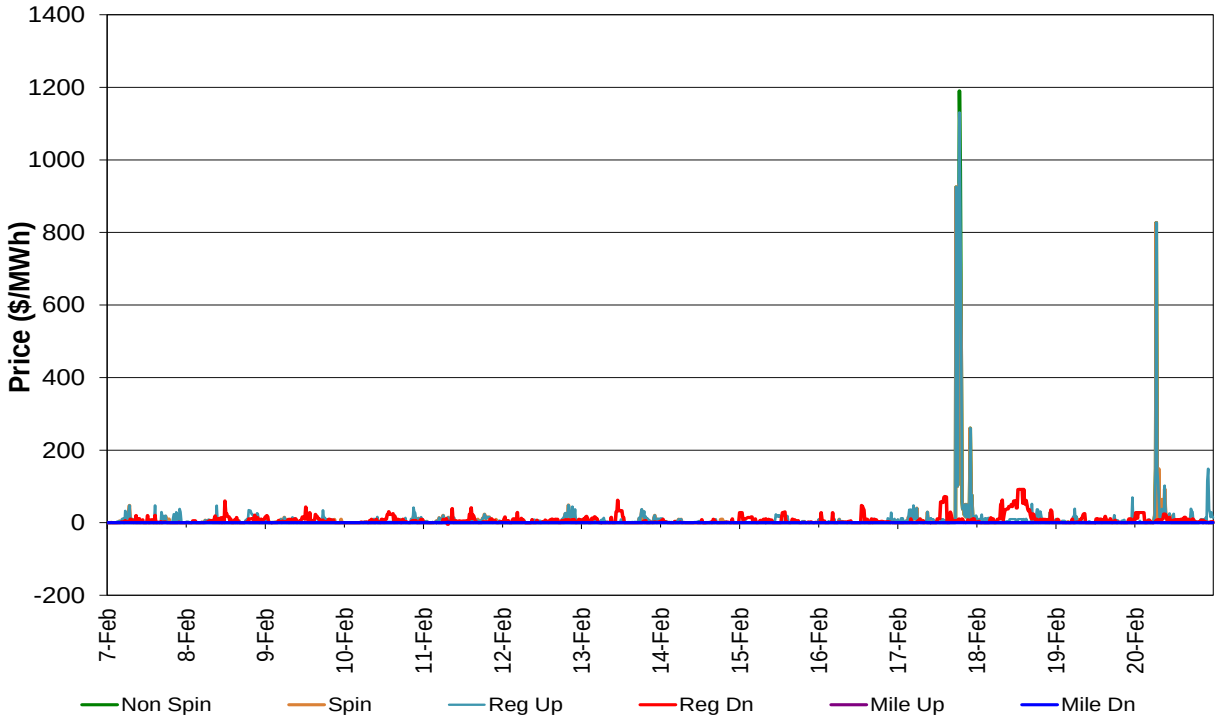

Figure 7: Real-Time FMM DLAP LMP

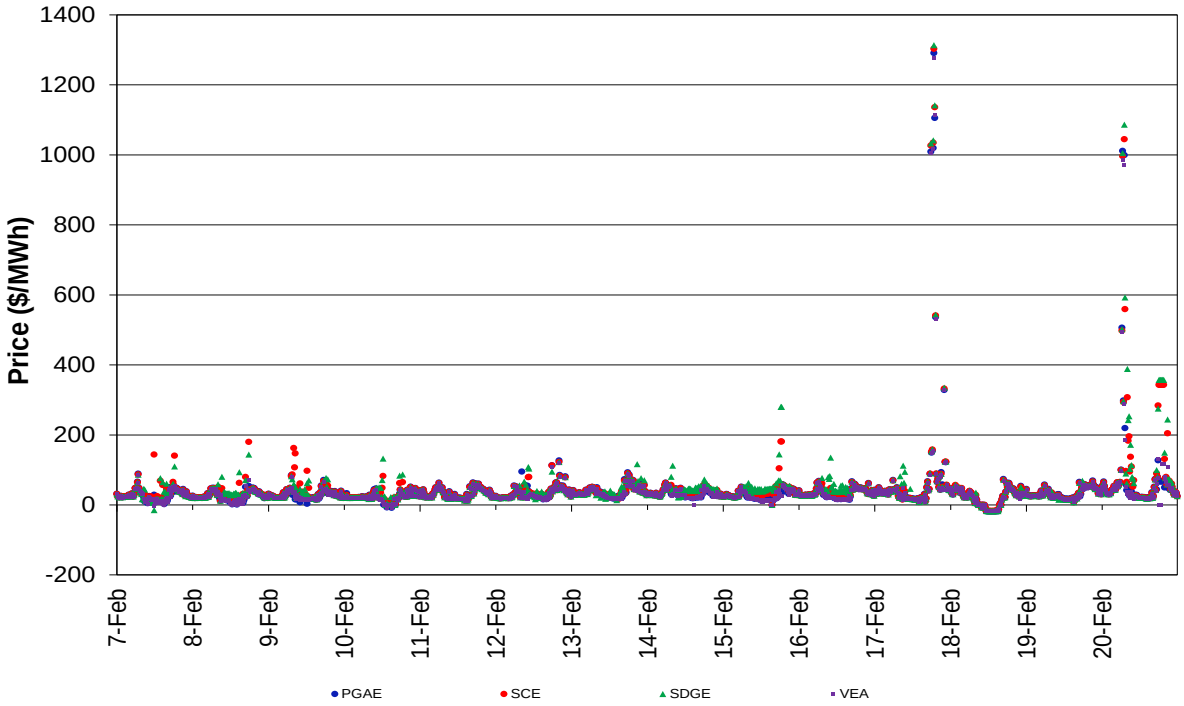

Figure 8: Real-Time RTD DLAP LMP

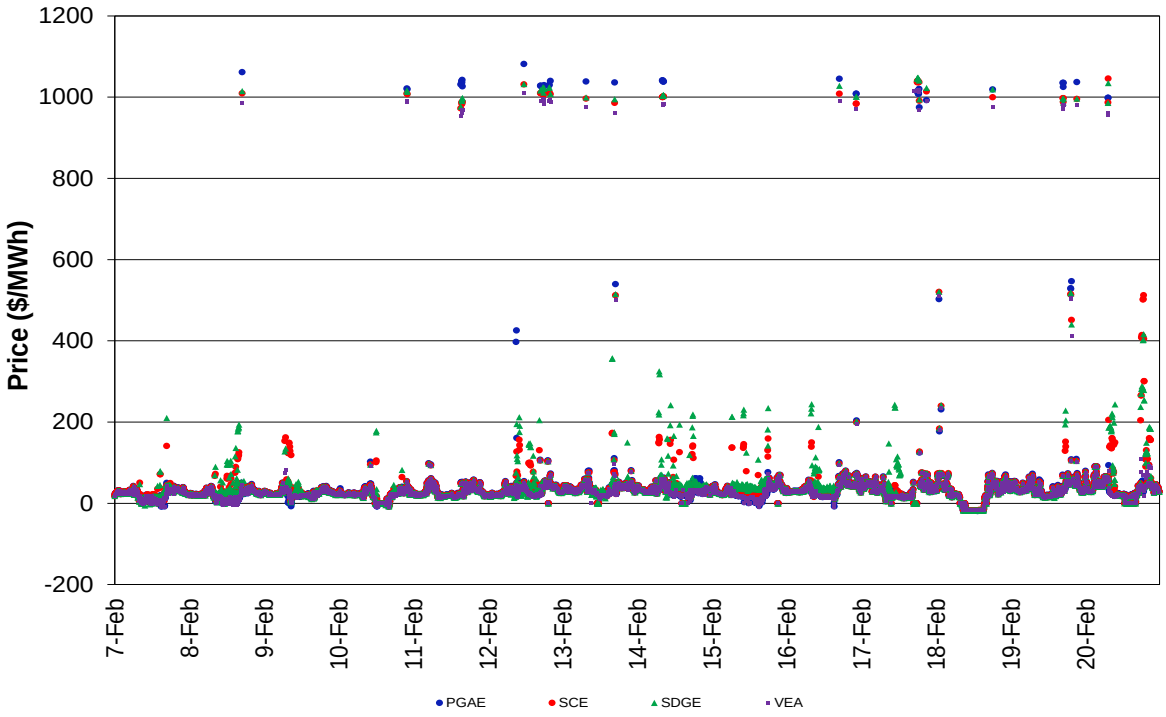

Figure 9: Real-Time FMM ELAP LMP

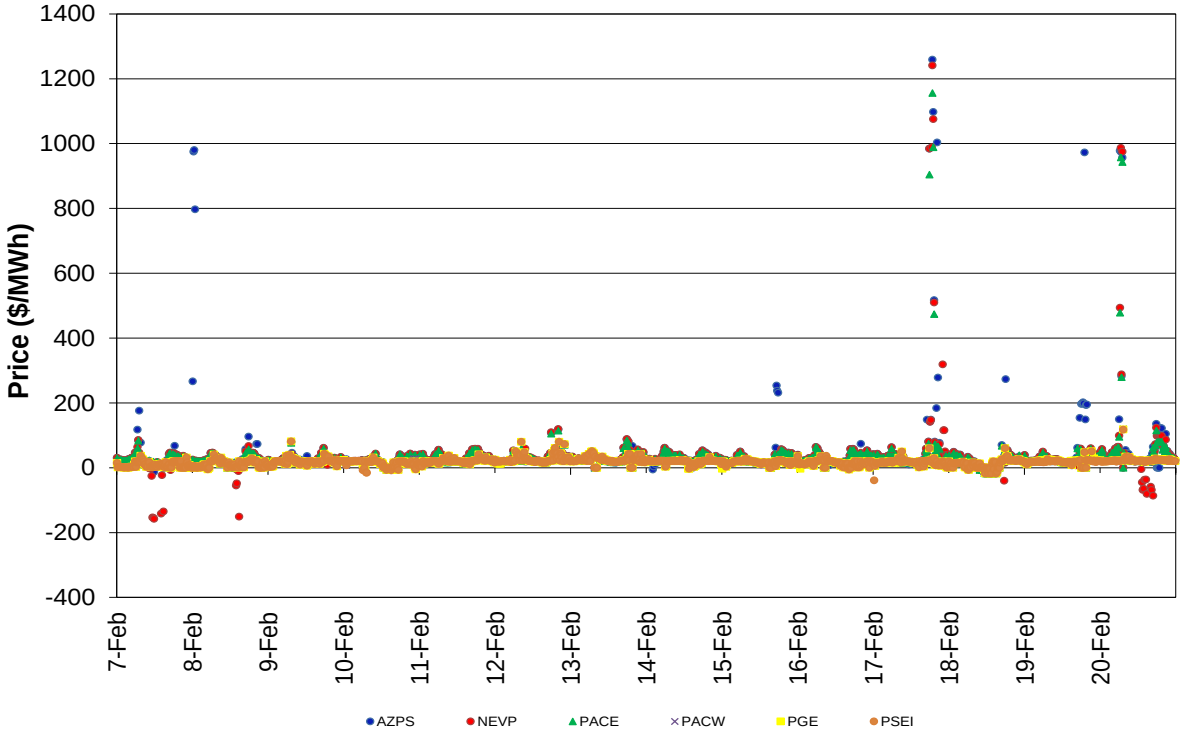

Figure 10: Real-Time RTD ELAP LMP