Market Highlights[1] (January 23–February 5)

- The average DLAP price in the integrated forward market was $40.30. The maximum and minimum DLAP prices were $91.05 and $10.25, respectively. The maximum and minimum PNode prices in the integrated forward market were $450.00 and -$54.60 respectively.

- The top two interties congested in the integrated forward market were IPPDCADLN_ITC and PALOVRDE_ITC. Congestion rents in these two weeks totaled $6,742,084.18.

- The average day-ahead ancillary service prices were between $0.00 and $65.40.

- Approximately 95.13 percent of the RUC requirements were met from RA units.

- The average real-time FMM DLAP price was $40.40, with a maximum price of $273.49 and a minimum price of -$34.35. The maximum and minimum PNode prices in the FMM were $1,038.14 and -$252.93, respectively.

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

- Out of the total 1,344 FMM intervals, 15 intervals saw ELAP prices above $250 And 2 intervals saw ELAP prices below -$150.

- The average real-time FMM ELAP price was $33.06, with a maximum price of $408.86 and a minimum price of -$150.96.

- The average real-time RTD DLAP price was $39.35, with a maximum price of $1,042.13 and a minimum price of -$255.74. The maximum and minimum PNode prices in the RTD were $1,052.50 and -$430.32, respectively.

- Out of the total 4,032 RTD intervals, 18 intervals saw DLAP prices above $250 and 1 interval saw DLAP prices below -$150.

- Out of the total 4,032 RTD intervals, 57 intervals saw ELAP prices above $250 and 11 intervals saw ELAP prices below -$150. The average real-time RTD ELAP price was $32.75, with a maximum price of $1,000.40 and a minimum price of -$163.54.

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

Table 1 FMM Intervals	
Trade Date	**Root Cause**
FMM Feb 5 HE 18	Load changes and change in renewable forecast.

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[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 Jan 25 HE 23	Reduction of net imports and resource re-dispatch of resources.
RTD Jan 28 HE 6	Load changes.
RTD Jan 28 HE 16; Jan 29 HE 16; Feb 2 HE 9	Load change and renewable deviation.
RTD Jan 28 HE 23	Load changes and reduction of net imports
RTD Jan 29 HE 19	Renewable deviation.
RTD Feb 1 HE 16	Renewable deviation and re-dispatch of resources.
RTD Feb 4 HE 12	Load changes, renewable deviation, and re-dispatch of resources.

Figure 1: Day-Ahead (IFM) LAP LMP and Cleared Bid-In Demand
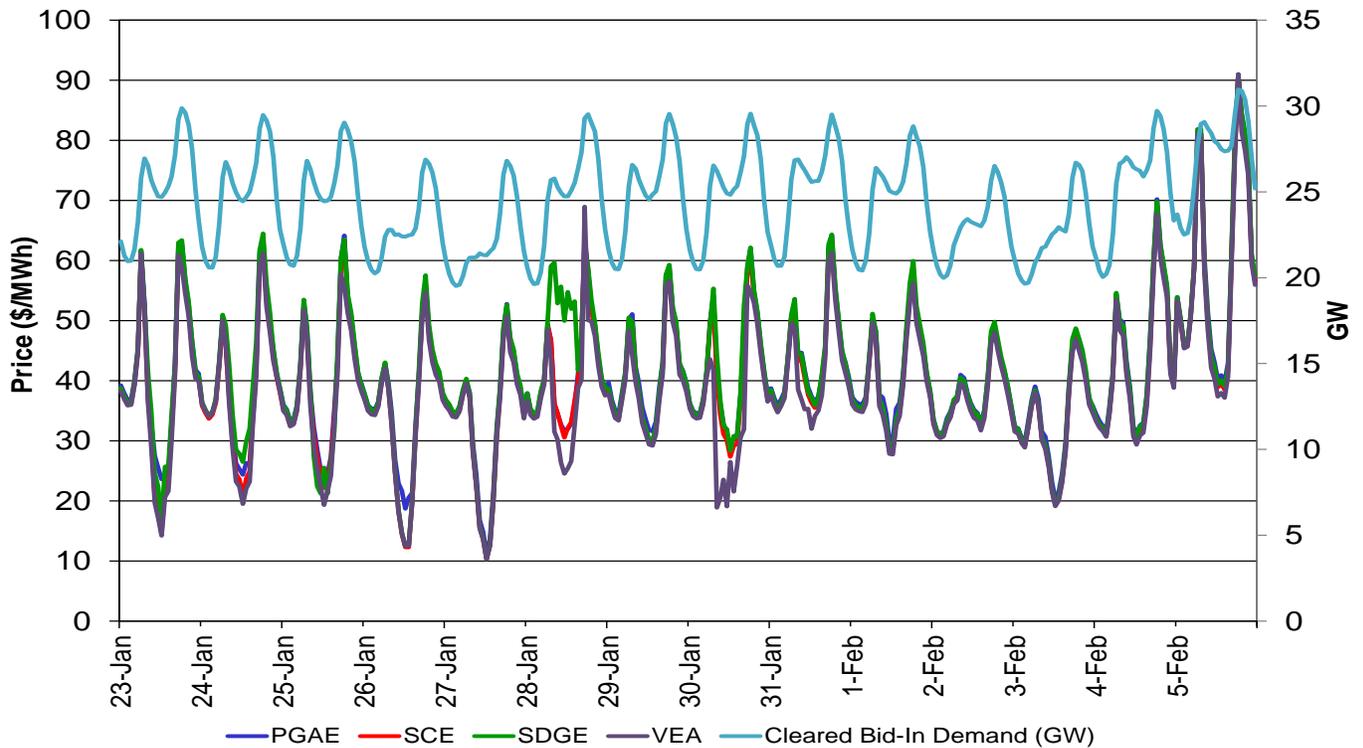
Figure 2: Day-Ahead Congestion Rents
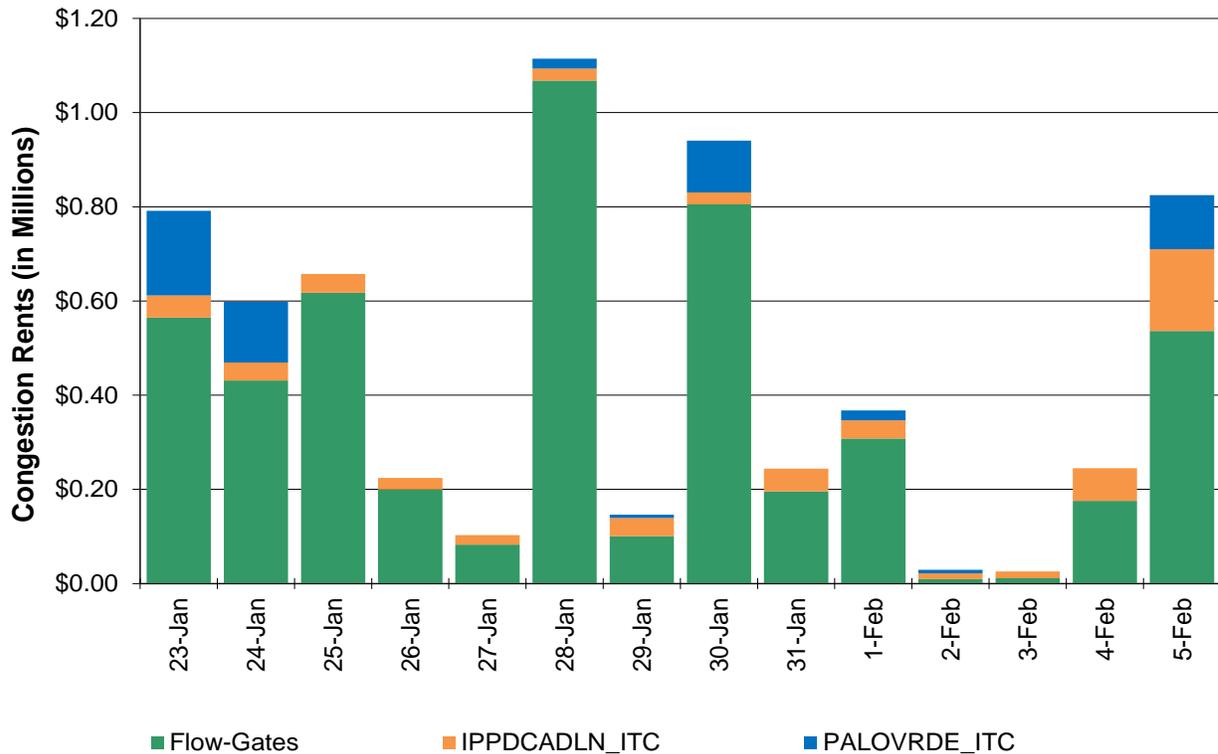
Figure 3: Day-Ahead Congestion Rents for Flow-Based Constraints

Transmission Constraint	Congestion Rent
24086_LUGO _500_26105_VICTORVL_500_BR_1 _1	$ 940,164.81
7750_D-ECASCO_OOS_CP6_NG	$ 914,096.07
MIGUEL_BKs_MXFLW_NG	$ 358,402.77
OMS 6791208_TL23054_55_NG	$ 344,986.25
22192_DOUBLTTP_138_22300_FRIARS _138_BR_1 _1	$ 337,707.93
OMS 6771357_PAS-BAI_OOS_NG	$ 288,316.68
7820_TL 230S_OVERLOAD_NG	$ 286,874.57
30056_GATES2 _500_30060_MIDWAY _500_BR_2 _3	$ 269,335.03
34418_KINGSBRG_115_34405_FRWT TAP_115_BR_1 _1	$ 262,681.91
OMS 5601922_DV_RDBLF1	$ 224,749.85
32973_LAKEWOOD_115_99108_LAK-MOR1_115_BR_1 _1	$ 208,537.11
7510-PAS-BAI-PAR-OOS_NG	$ 169,486.87
36851_NORTHERN_115_36852_SCOTT _115_BR_1 _1	$ 142,012.89
24036_EAGLROCK_230_24059_GOULD _230_BR_1 _1	$ 123,472.89
30765_LOSBANOS_230_30790_PANOCHE _230_BR_2 _1	$ 94,627.72
OP-6610_ELD-LUGO	$ 50,877.07
22372_KEARNY _69.0_22496_MISSION _69.0_BR_1 _1	$ 31,357.20
BLYTHE_BG	$ 11,855.90
30885_MUSTANGS_230_30900_GATES _230_BR_1 _1	$ 9,444.92

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

| Transmission Constraint	Congestion Rent
22604_OTAY _69.0_22616_OTAYLKTP_69.0_BR_1 _1	$ 8,506.63
34405_FRWT TAP_115_34420_CORCORAN_115_BR_1 _1	$ 8,392.63
31566_KESWICK _60.0_31582_STLLWATR_60.0_BR_1 _1	$ 2,904.34
34548_KETTLEMN_70.0_34552_GATES _70.0_BR_1 _1	$ 2,902.76
22136_CLAIRMNT_69.0_22140_CLARMTTP_69.0_BR_1 _1	$ 2,839.02
31000_HUMBOLDT_115_31015_BRDGVLLE_115_BR_1 _1	$ 2,663.70
32225_BRNSWKT1_115_32222_DTCH2TAP_115_BR_1 _1	$ 1,628.30
HUMBOLDT_IMP_NG	$ 1,459.65
33016_ALHAMTP2_115_32754_OLEUM _115_BR_1 _1	$ 1,450.83
OMS 6642295 JHINDS-MIRAGE_NG	$ 892.18
22644_PENSQTOS_69.0_22856_TOREYPNS_69.0_BR_1 _1	$ 816.11
31080_HUMBOLDT_60.0_31092_MPLE CRK_60.0_BR_1 _1	$ 814.64
22331_MIRASNTO_69.0_22644_PENSQTOS_69.0_BR_1 _1	$ 552.00
33543_AEC_TP2 _115_33540_TESLA _115_BR_1 _1	$ 481.06
22372_KEARNY _69.0_22140_CLARMTTP_69.0_BR_1 _1	$ 439.50
22444_MESA RIM_69.0_22480_MIRAMAR _69.0_BR_1 _1	$ 97.68
31555_MSS TAP2_60.0_31553_BIG BAR _60.0_BR_1 _1	$ 1.78
Totals	**$ 5,105,831.27**

Figure 4: Day-Ahead (IFM) Average A/S Price
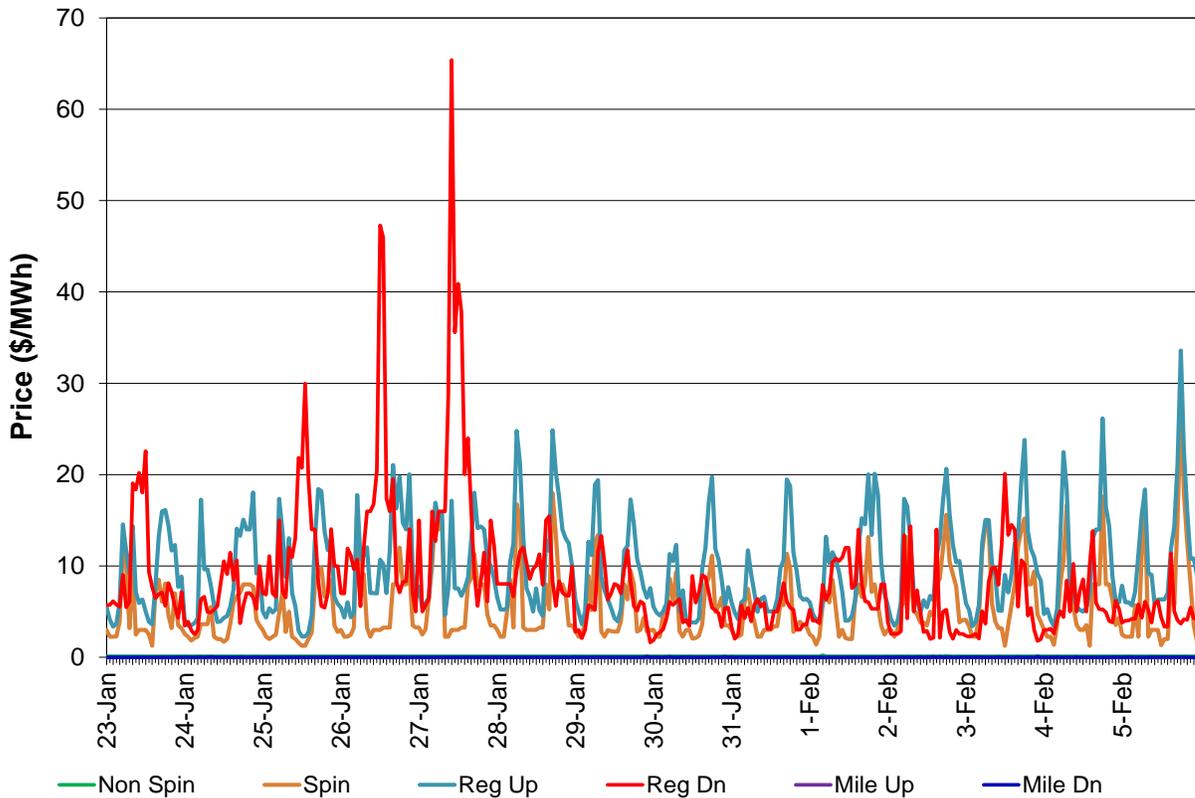
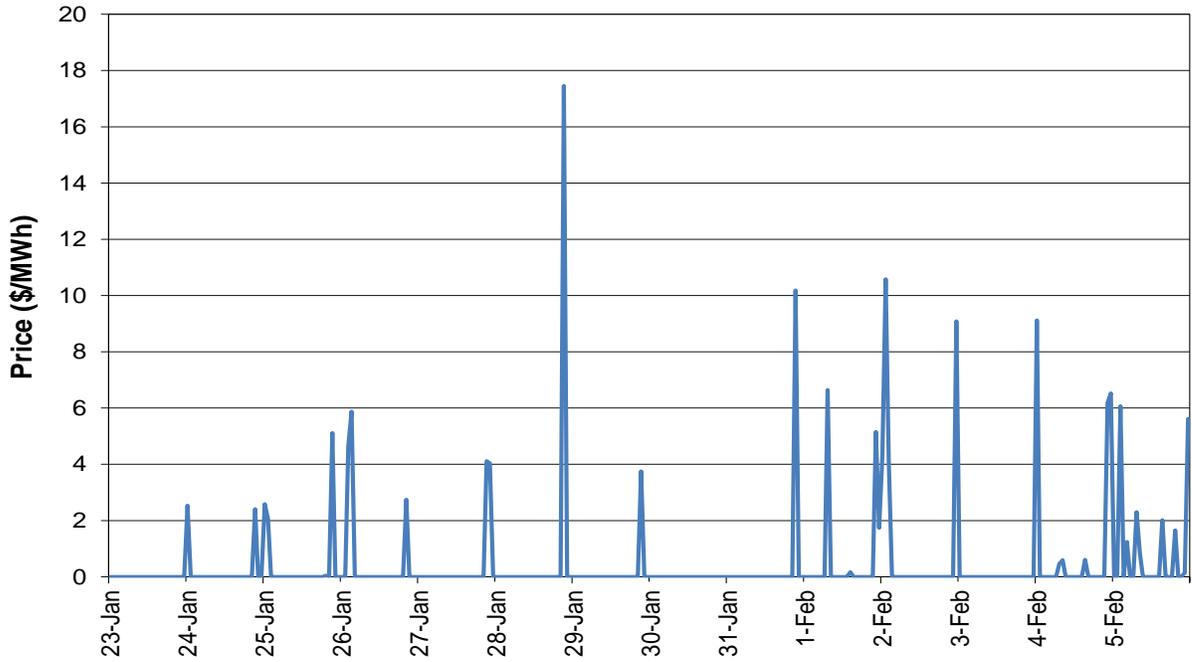**Figure 5: Day-Ahead Average RUC Price**
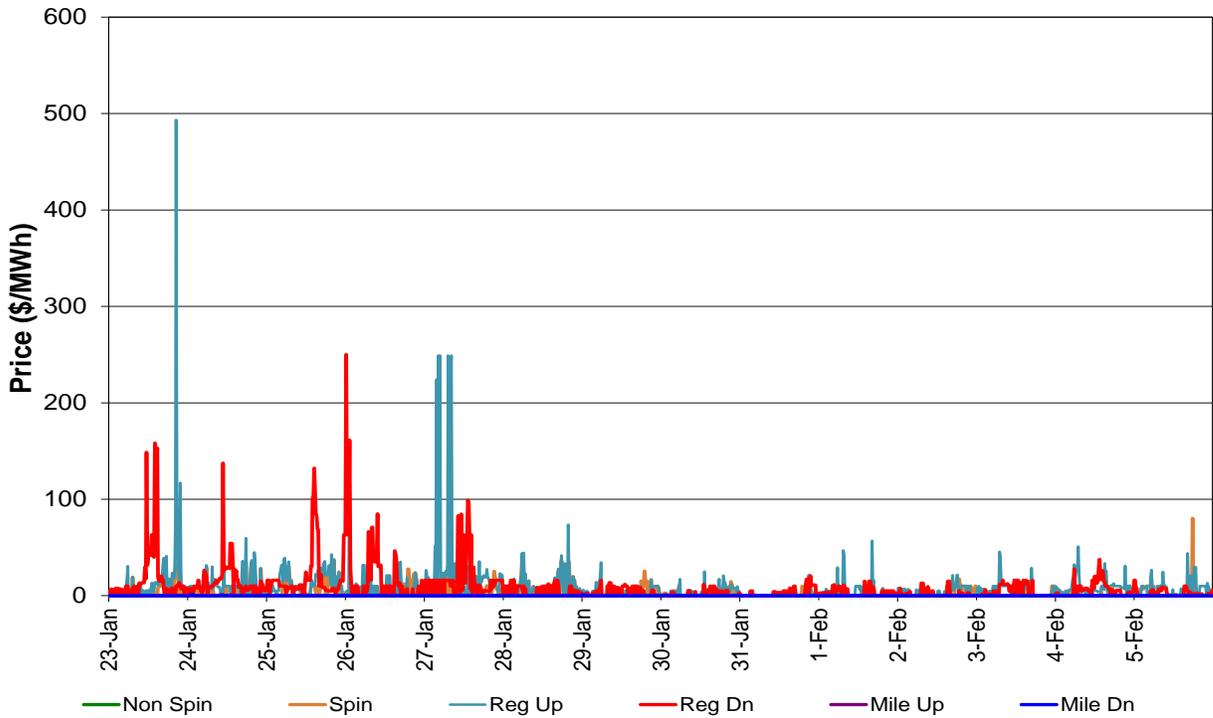

Figure 6: Real-Time FMM Average A/S Price
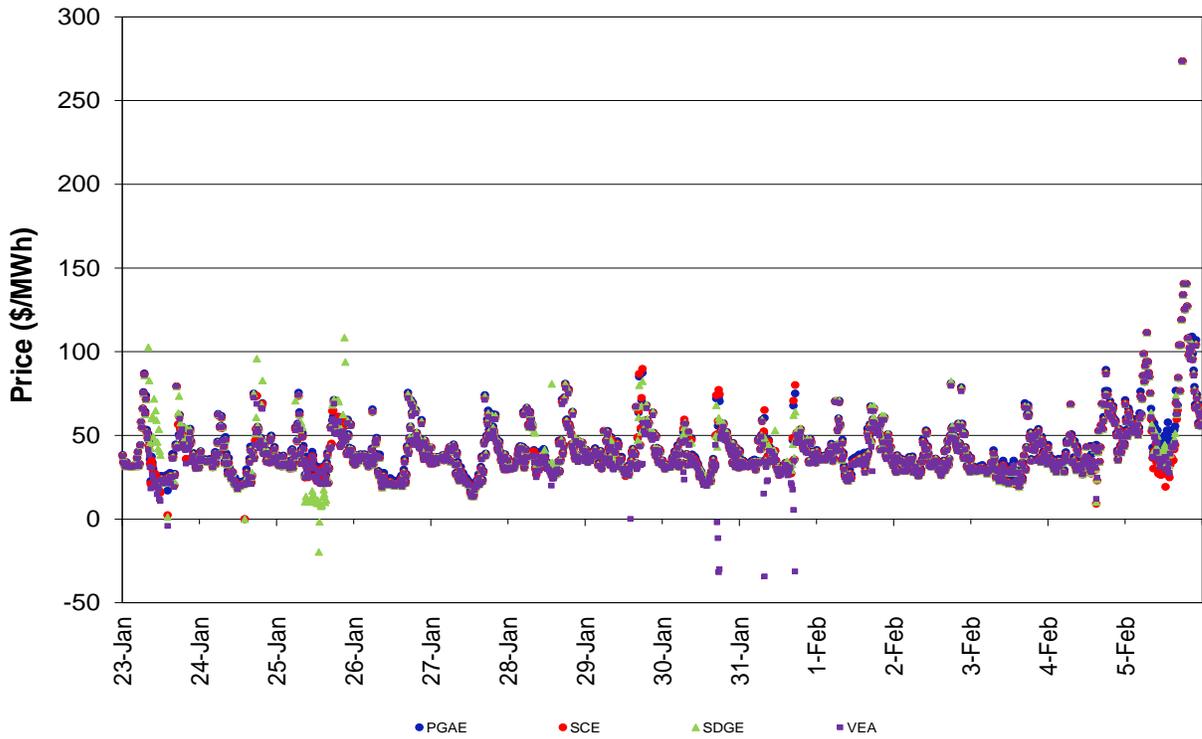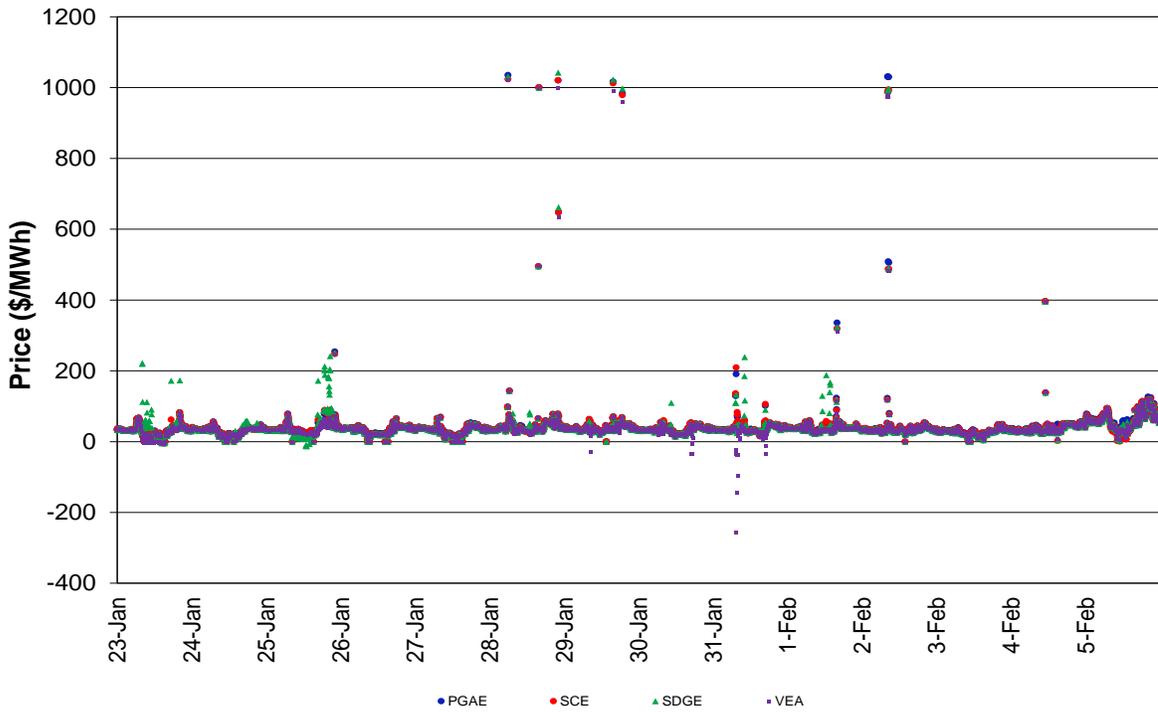
Figure 7: Real-Time FMM DLAP LMP

Figure 8: Real-Time RTD DLAP LMP

Figure 9: Real-Time FMM ELAP LMP
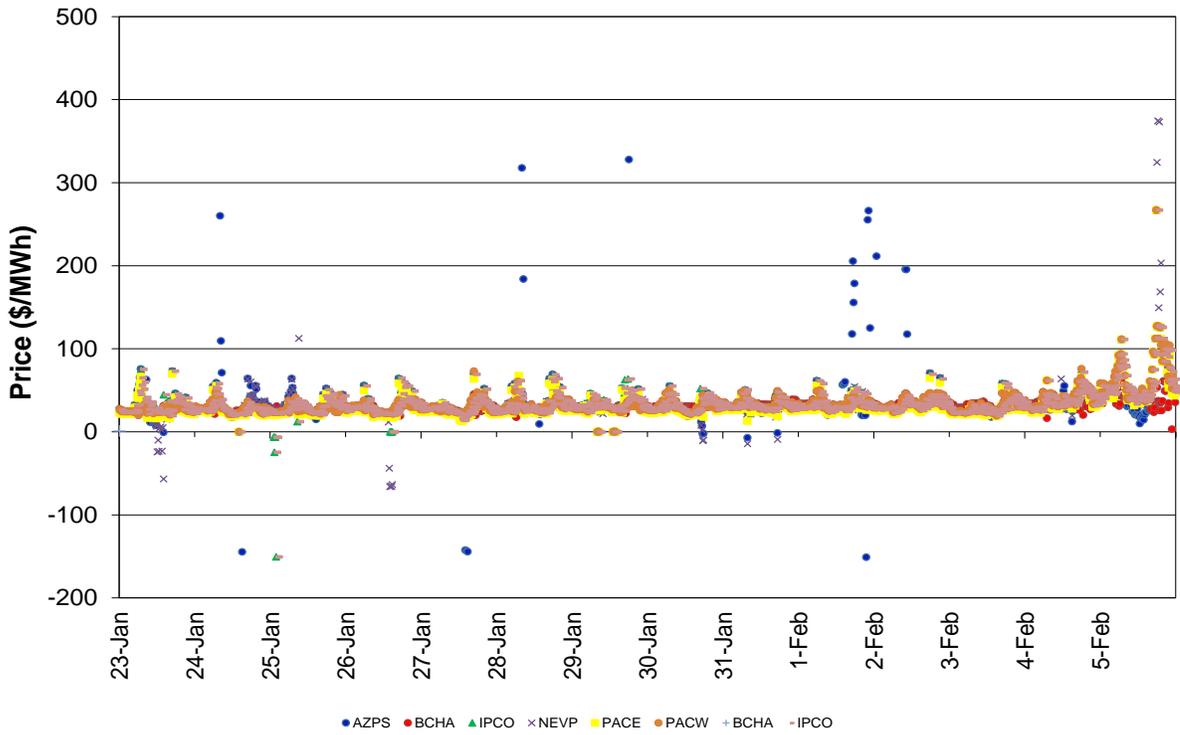

AZPS ● BCHA ● IPCO ▲ NEVP × PACE ■ PACW ● BCHA + IPCO –

Figure 10: Real-Time RTD ELAP LMP

AZPS ● BCHA ● IPCO ▲ NEVP × PACE ■ PACW ● PGE + PSEI –