



## Market Highlights<sup>1</sup> (January 9–January 22)

- The average DLAP price in the integrated forward market was \$40.98. The maximum and minimum DLAP prices were \$76.25 and \$5.90, respectively. The maximum and minimum PNode prices in the integrated forward market were \$259.64 and -\$93.00 respectively.
- The top two interties congested in the integrated forward market were PALOVRDE\_ITC and NOB\_ITC. Congestion rents in these two weeks totaled \$9,681,585.17.
- The average day-ahead ancillary service prices were between \$0.00 and \$46.00.
- Approximately 96.43 percent of the RUC requirements were met from RA units.
- The average real-time FMM DLAP price was \$40.33, with a maximum price of \$248.72 and a minimum price of \$2.03. The maximum and minimum PNode prices in the FMM were \$361.35 and -\$180.05, 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, 33 intervals saw ELAP prices above \$250 And 11 intervals saw ELAP prices below -\$150.
- The average real-time FMM ELAP price was \$32.27, with a maximum price of \$1,009.94 and a minimum price of -\$159.36.
- The average real-time RTD DLAP price was \$42.68, with a maximum price of \$1,061.30 and a minimum price of -\$3.03. The maximum and minimum PNode prices in the RTD were \$1,064.02 and -\$163.85, respectively.
- Out of the total 4,032 RTD intervals, 44 intervals saw DLAP prices above \$250 and 0 interval saw DLAP prices below -\$150.
- Out of the total 4,032 RTD intervals, 129 intervals saw ELAP prices above \$250 and 45 intervals saw ELAP prices below -\$150. The average real-time RTD ELAP price was \$33.42, with a maximum price of \$1,018.86 and a minimum price of -\$187.65.
- Root causes for daily high price events are noted in Tables 1 and 2.

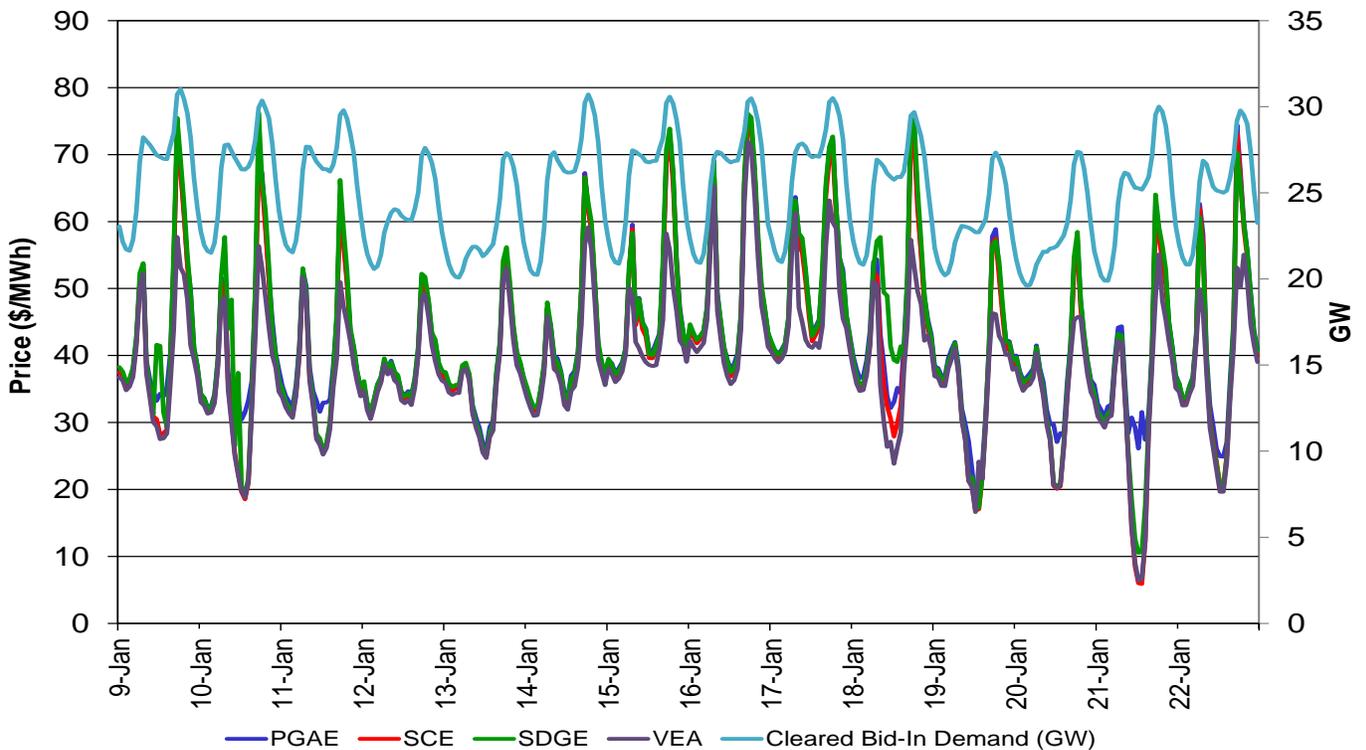
Table 1 FMM Intervals	
Trade Date	Root Cause
	None

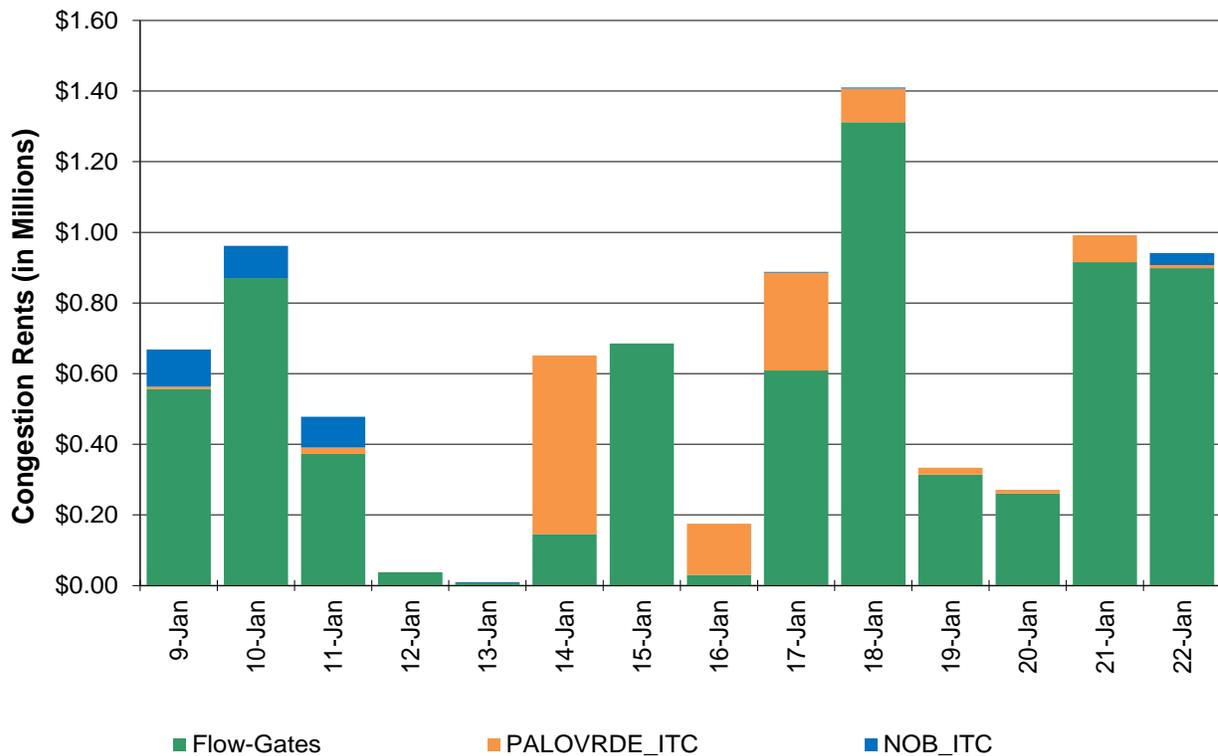
<sup>1</sup> A description of the metrics presented in this report is available at <http://www.caiso.com/Documents/WeeklyPerformanceReportMetricsKey.pdf>



Table 2 RTD Intervals	
Trade Date	Root Cause
RTD Jan 11 HE 13; Jan 15 HE 10; Jan 16 HE 21, Jan 17 HE 15	Congestion on 7820_TL 230S_OVERLOAD_NG.
RTD Jan 12 HE 17	Changes in load forecast.
RTD Jan 12 HE 20	Load changes and re-dispatch of resources.
RTD Jan 12 HE 21; Jan 13 HE 16; Jan 14 HE 8, 9, 11; Jan 15 HE 9, 14; Jan 21 HE 7, HE 8, HE 9	Load changes and renewable deviation.
RTD Jan 12 HE 22; Jan 15 HE 20, HE 21	Load changes and reduction of net imports.

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	\$ 3,461,579.70
OMS_6773765_TL23054_NG	\$ 496,104.54
OMS_5413443_LOSBNS_MDWY2	\$ 368,625.35
7750_D-ECASCO_OOS_CP6_NG	\$ 346,304.40
30765_LOSBANOS_230_30790_PANOCHÉ_230_BR_2_1	\$ 251,481.25
34418_KINGSBRG_115_34405_FRWT TAP_115_BR_1_1	\$ 170,051.80
24036_EAGLROCK_230_24059_GOULD_230_BR_1_1	\$ 115,761.10
7820_TL23040_IV_SPS_NG	\$ 81,156.11
30885_MUSTANGS_230_30900_GATES_230_BR_1_1	\$ 65,636.68
33530_KASSONJ2_115_33548_TRACY_115_BR_1_1	\$ 55,834.94
22372_KEARNY_69.0_22496_MISSION_69.0_BR_1_1	\$ 53,375.28
30056_GATES2_500_30060_MIDWAY_500_BR_2_3	\$ 33,127.82
33558_LCKFRDJB_115_33562_BELLOTA_115_BR_1_1	\$ 31,048.15
31461_JESSTAP_115_31464_COTWDPGE_115_BR_1_1	\$ 27,500.18
22136_CLAIRMNT_69.0_22140_CLARMTTP_69.0_BR_1_1	\$ 26,751.85
HUMBOLDT_IMP_NG	\$ 21,419.19
22592_OLD TOWN_69.0_22873_VINE SUB_69.0_BR_1_1	\$ 20,175.32
34540_HENRITTA_70.0_30881_HENRIETA_230_XF_2	\$ 7,605.32
34582_ARCO_70.0_34942_LST HILLS_70.0_BR_1_1	\$ 3,891.23
30881_HENRIETA_230_34430_HENRETTA_115_XF_3	\$ 2,675.41

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

Transmission Constraint	Congestion Rent
BLYTHE_BG	\$ 2,567.88
30055_GATES1_500_30900_GATES_230_XF_11_S	\$ 1,904.02
34474_HELM_70.0_34556_STRD JCT_70.0_BR_1_1	\$ 1,679.38
31090_HMBLT BY_60.0_31100_EEL RIVR_60.0_BR_1_1	\$ 973.00
31000_HUMBOLDT_115_31015_BRDGVLE_115_BR_1_1	\$ 730.37
34556_STRD JCT_70.0_34562_SCHLNDR_70.0_BR_1_1	\$ 594.01
22604_OTAY_69.0_22616_OTAYLKTP_69.0_BR_1_1	\$ 560.94
34471_SNJQJCT_70.0_34469_GFFNJCT_70.0_BR_1_1	\$ 375.42
31000_HUMBOLDT_115_31452_TRINITY_115_BR_1_1	\$ 240.89
34405_FRWT TAP_115_34420_CORCORAN_115_BR_1_1	\$ 157.19
<b>Totals</b>	<b>\$ 5,649,888.72</b>

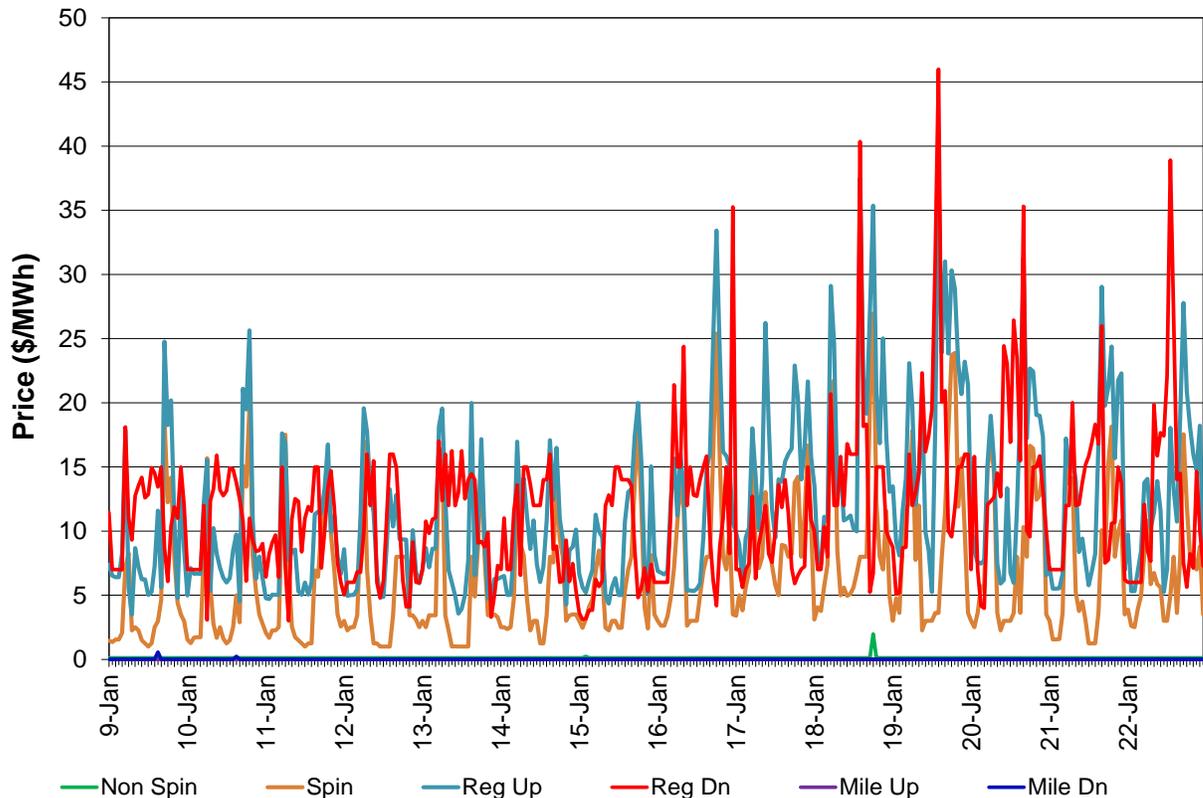
**Figure 4: Day-Ahead (IFM) Average A/S Price**




Figure 5: Day-Ahead Average RUC Price

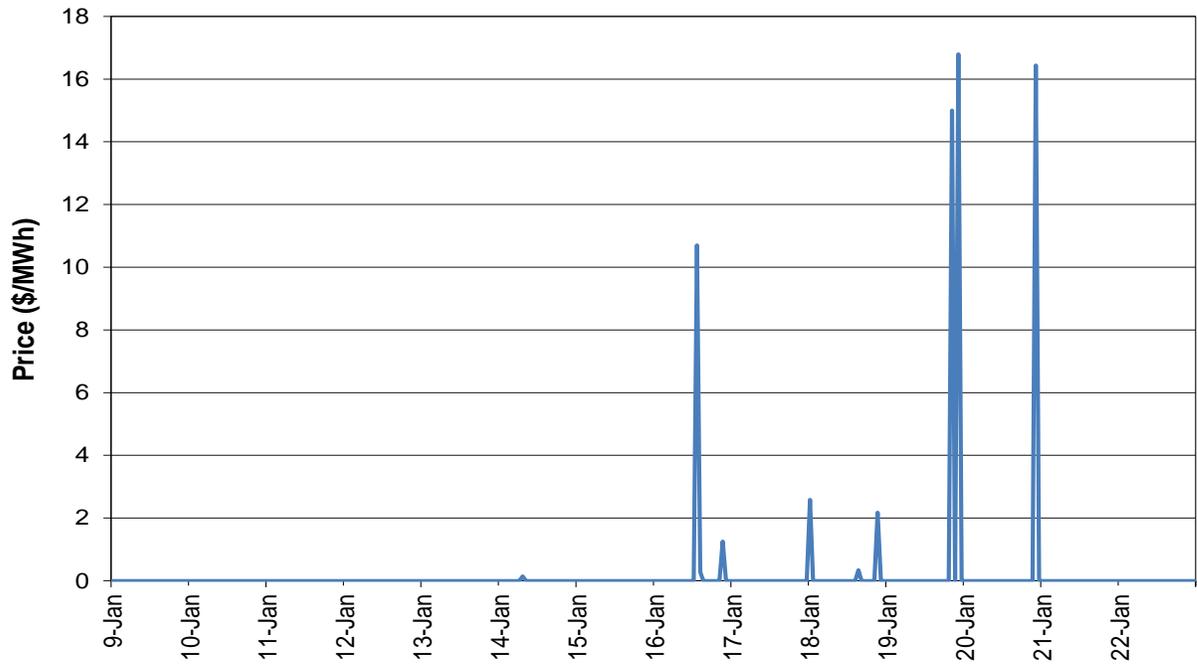
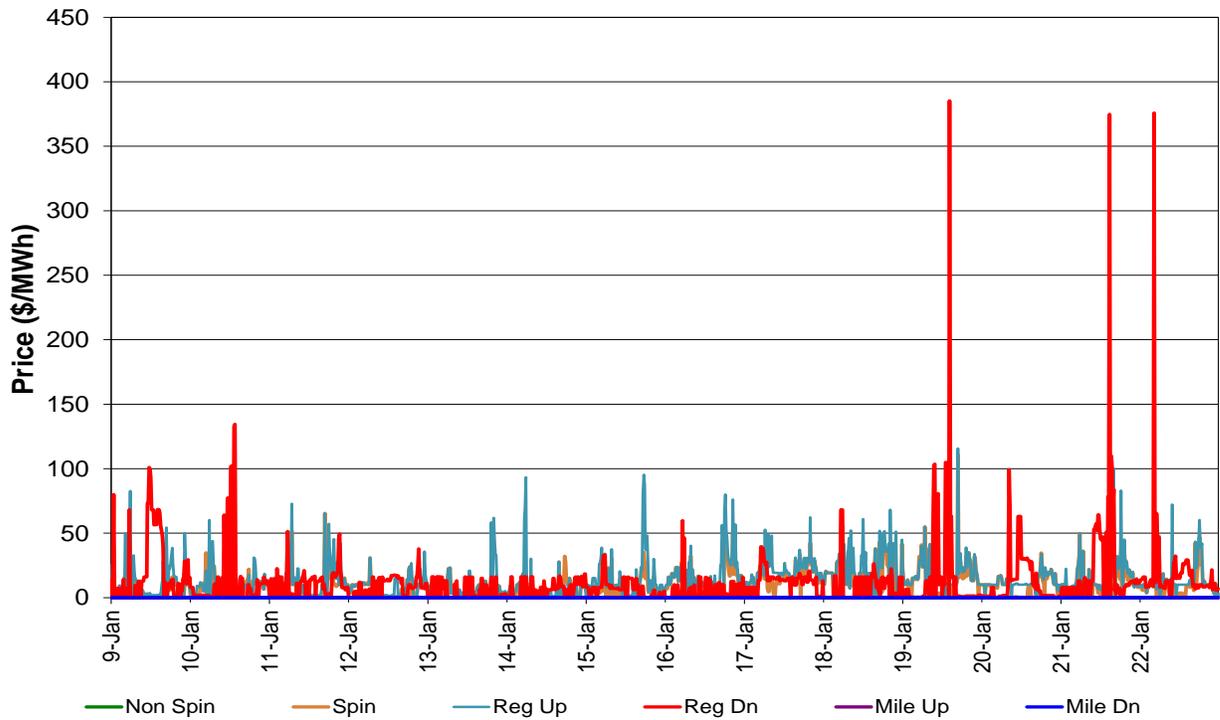
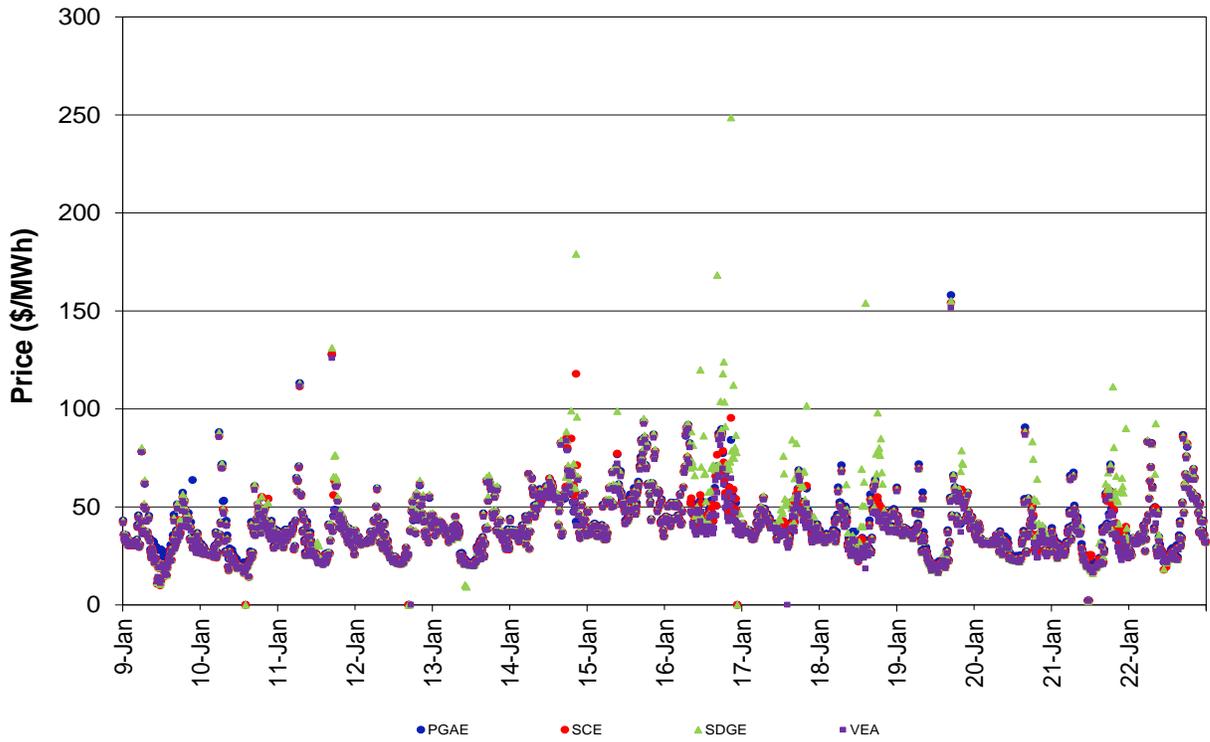


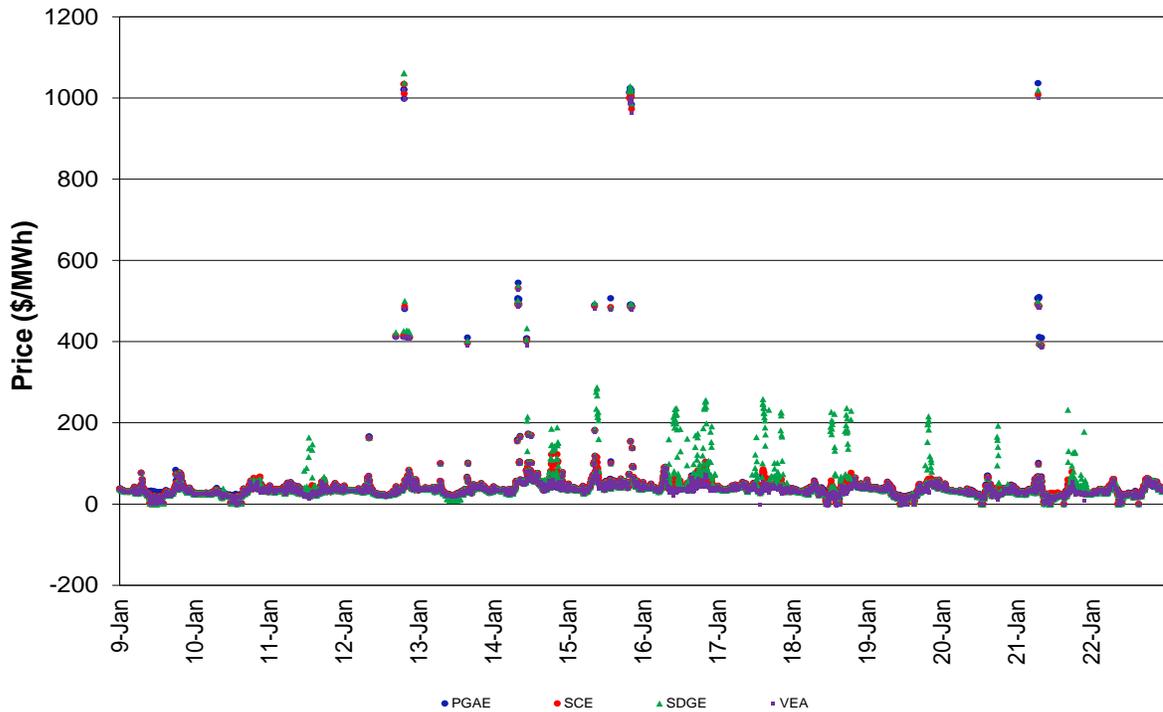
Figure 6: Real-Time FMM Average A/S Price



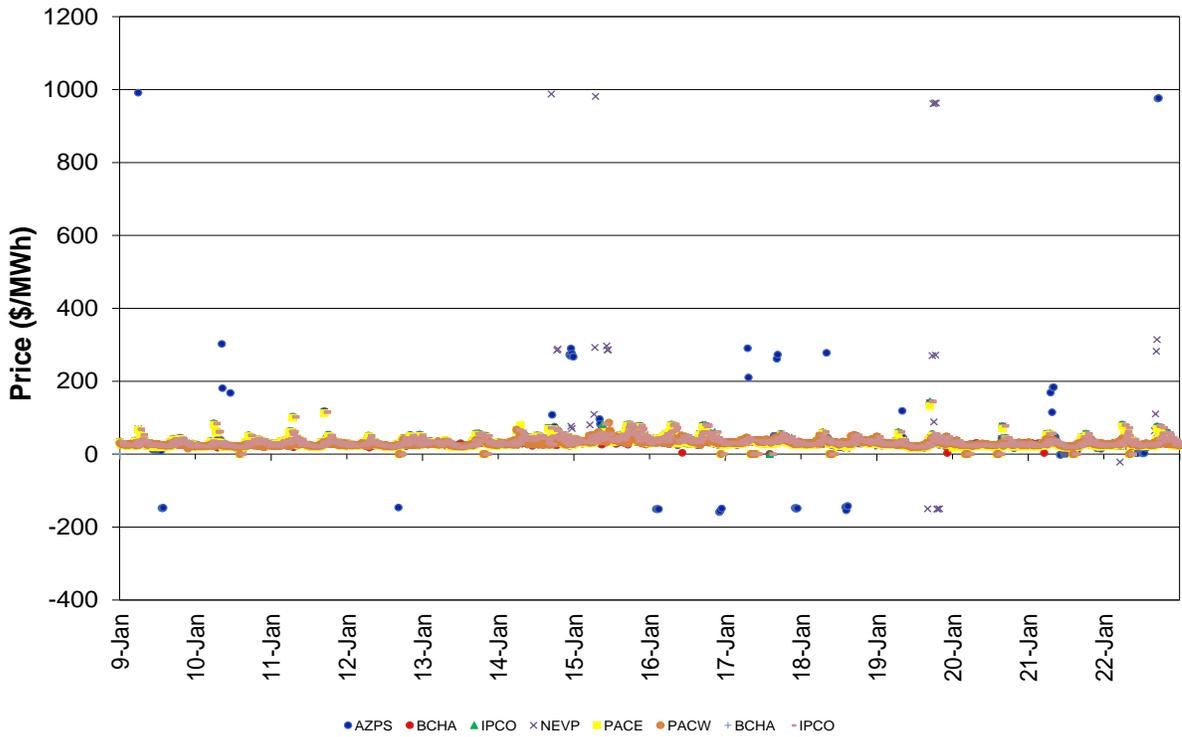
**Figure 7: Real-Time FMM DLAP LMP**



**Figure 8: Real-Time RTD DLAP LMP**



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



**Figure 10: Real-Time RTD ELAP LMP**

