

SAPP MARKET MONTHLY PERFORMANCE REPORT

January 2017

(In comparison to December 2016)

January 2017 Highlights

Total turnover (all markets)
Traded Volumes(All markets)
DAM Traded Volumes

FPM Monthly traded Volumes
FPM Weekly traded Volumes

IDM Traded Volumes

~	-\$2.1	78.6	25.89/	-29.4%
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▼ -24,196.4 MWh / -21.7%

▼ -21021.40 MWh / -23%

+ 40 MWh /+0.6%

+395 MWh / +4.4%

▼ -3,610 MWh /-93%

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Participation Levels

There were ten (10) active portfolios from seven (7) members during the month of January 2017. This was a marginal decrease when compared to the month of December 2016 in which there were eleven (11) active portfolios from eight (8) members.

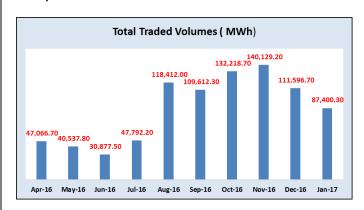
Market Liquidity

Trading in the market was lower during the month of January 2017 when compared to December 2016. Traded volumes on the Day Ahead market (DAM), intra-day market (IDM), Forward Physical Monthly Market (FPM-M) and Forward Physical Weekly Market (FPM-W) decreased by 21.7% to 87,400.30 MWh in the month of January 2017 when compared to December 2016 figure of 111,596 MWh. Below is a summary of share in volumes traded in DAM, IDM, FPM-M and FPM-W for the month of January 2017.

Fig 1.1: Traded Volumes in MWh in DAM, IDM, FPM-W and FPM-M for the month of January 2017.



Fig 1.2: Total Monthly Traded Volumes in MWh in DAM, IDM, FPM-W and FPM-M (April 2016 to January 2017)





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Forward Physical Monthly Market (FPM-M)

Total traded volumes on FPM-M were marginally higher in January 2017 at **7,180 MWh.** This figure represents a marginal increase of **0.6% or 40 MWh** from the December 2016 figure of 7,140 MWh. The total energy matched in the month of January 2017 in the FPM-M decreased by 33.3% or 7,440 MWh to 14,880 MWh from the December 2016 figure of 22,320 MWh.

Fig 2.1 FPM Monthly Market: Daily Traded Volumes for January 2017 (MWh)

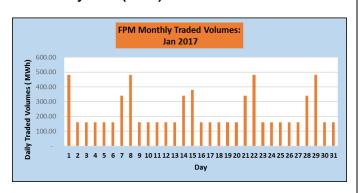
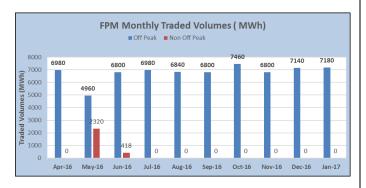


Fig 2.3 FPM Monthly Market: Traded Volumes(MWh) from April 2016 to January 2017 (MWh)



Forward Physical Weekly Market (FPM-W)

The total energy traded in FPM-W increased by **4.4% or 395 MWh to 9,380 MWh** in January 2017 when compared to December 2016 figure of **8,985 MWh.** The total volumes matched in the FPM-W market decreased by 51,470.7 MWh or 80.3% to 12,655 MWh in January 2017 from 64,125.7 MWh in December 2016.

Fig 3.1 FPM Weekly Market: Daily Traded Volumes for January 2017 (MWh)

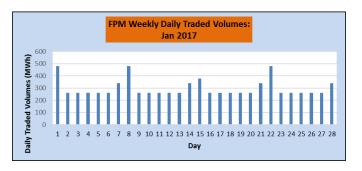
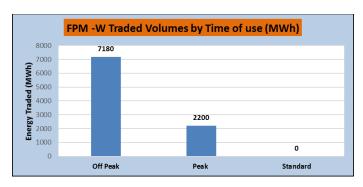
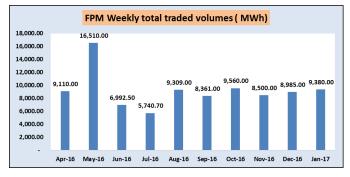


Fig 3.2 FPM Weekly Market: Traded Volumes by time of use for January 2017 (MWh)



76.5% of the energy traded in FPM-W (9,380 MWh) was traded during Off Peak period and the remainder was traded during Peak (23.5%) periods.

Fig 3.3 FPM Weekly Market: Traded Volumes (April 2016 to January 2017)



Day Ahead Market (DAM)

Total energy traded in DAM for the month of January 2017 was **70,568.3 MWh**, registering a **23% decrease** when compared to the December 2016 figure of **91,589.7** MWh. There were more sale offers than buy bids received in January 2017



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in the DAM trading platform. 531,064MWh Sale offers and 349,970 MWh Buy bids were received in January 2017. This was a decrease of 16,163 MWh or 3% in Sale offers when compared to December 2016 figure of 547,227 MWh. There was, however, an increase of 17,903 MWh or 5.4% in buy bids received in January 2017 when compared to December 2016 figure of 332,067MWh.

There was matching of bids in DAM for 31 days and 739 hours or 99.33% of the time during the month of January 2017 with trading occurring for 31 days and 733 hours or 98.52% of the time. In comparison, December 2016 had matching occurring for 31 days and 733 hours or 98.52% with trading occurring for 31 days and 733 hours or 98.52% of the time.

Fig 4.1: Traded volumes in DAM by time of use for January 2017

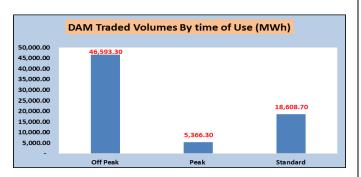
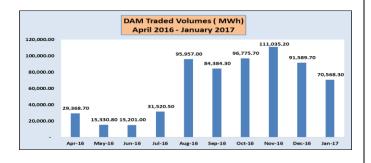


Fig 4.2: Total volumes traded in DAM (MWh) to date in 2016-17



Intra-day market (IDM)

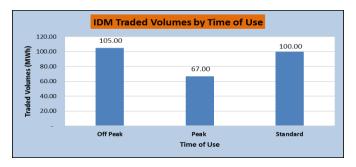
Trade in the IDM in January 2017 was significantly lower at only **272MWh** when compared to December 2016 figure of 3,882MWh, which is a **decline of 3,610 MWh or 93%.**

Buy bids in IDM increased by 1.6% or 397MWh from 24,953MWh in December 2016 to 25,350 MWh in January 2017. Sale offers decreased by 67.8% from 19,553 MWh in December 2016 to 6,290 MWh in January 2017. The main reason for reduced trading in IDM was mismatch of prices.

Fig 5.1: IDM Bids and Traded Volumes for January 2017 (MWh)

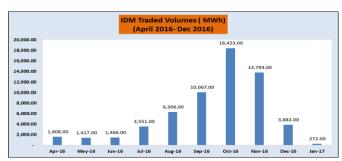


Fig 5.2: IDM Traded Volumes by time of use for December 2017 (MWh)



36.8% of the energy traded in IDM in January 2017 was during Standard period whilst the remainder was during Peak (24.6%) and Off Peak (38.6%) periods.

Fig 5.3: IDM Traded Volumes to date for 2016-17 (MWh)





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Impact of Transmission Constraints

There were transmission constraints for the competitive market in the month of January 2017 that resulted in **30%** of the energy matched in DAM failing to be traded. In comparison, the month of December 2016 had **33%** of the energy matched in DAM failing to be traded due to transmission constraints. In January 2017, 100,636.3MWh was matched in DAM and 70,568.30 MWh was traded. In December 2016, 136,416.2 MWh was matched in DAM with 91,589.7 MWh being traded.

Fig 6.1 Impact of Transmission Constraints on DAM Trading for 2016-17

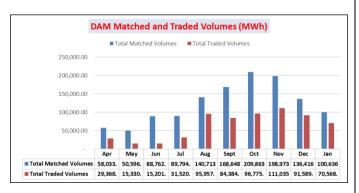
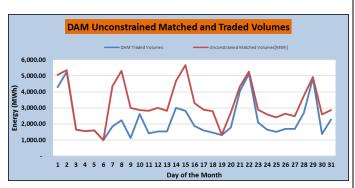
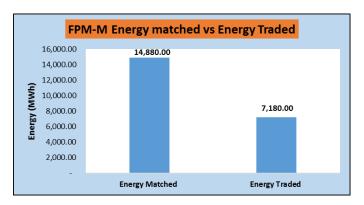


Fig 6.2 Impact of Transmission constraints in DAM for January 2017.



As shown above there was a difference between matched and traded volumes during the month of January 2017 due to transmission constraints for the competitive market.

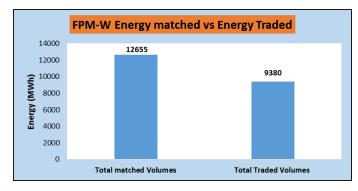
Fig 6.3: Impact of Transmission constraints in FPM Monthly trading platform for January 2017.



Energy matched in the FPM-M for the month of January 2017 but could not be traded due to transmission constraints was 7,700 MWh or 52% of the matched volume of 14,880 MWh. In comparison, December 2016 had 68% of the energy matched and was not traded due to transmission constraints.

In the FPM-W, 12,655 MWh was matched and 9,380 MWh was traded in January 2017. Consequently, 3,275 MWh (26% of matched volumes) was not traded due to transmission constraints.

Fig 6.4: Impact of transmission constraints in FPM Weekly for the month of January 2017.





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Market Clearing Prices

FPM Monthly Prices

Non off-peak prices decreased by 4.4% from 10.701 USc/KWh in December 2016 to 10.229 USc/KWh in January 2017. Off Peak prices also marginally decreased by 0.5% from 3.688 USc/KWh in December 2016 to 3.669 USc/KWh in January 2017.

Fig 7.1 FPM-M prices by time of Use for the month of January 2017.



FPM Weekly Prices

The average price for the Peak period was lower by 12.5% at 10.406USc/KWh in January 2017 from the December 2016 average of 11.89 USc/KWh. Standard period average prices decreased from the December 2016 average prices of 8.141 USc/KWh to 7.870 USc/KWh. The average Off–Peak price also decreased by 14.8% from 4.394 USc/KWh in December 2016 to 3.742 USc/KWh in January 2017.

Fig 7.2 FPM-W Average prices for the Month of January 2017.

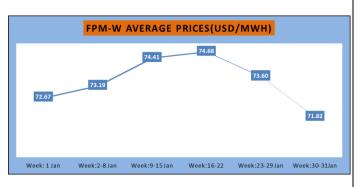
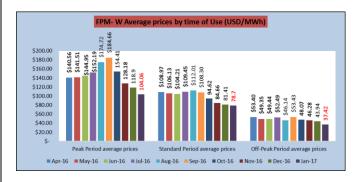


Fig 7.3 FPM-W average prices by time of use for the month of January 2017.



Day Ahead Market

The average monthly market clearing price (MCP) was slightly lower during the month of January 2017 at 5.337USc/KWh when compared to the 5.551 USc/KWh recorded in December 2016. Below is a summary of the daily average MCPs for the month of January 2017.

Fig 7.4 DAM Daily Average MCP prices for the month of January 2017.

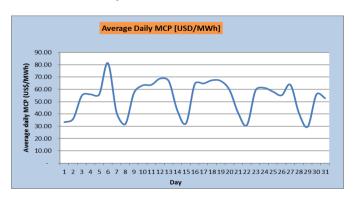
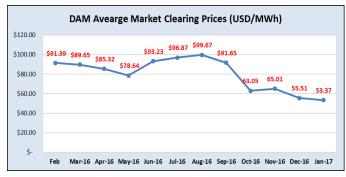


Fig 7.5 Monthly Average DAM MCP prices for period April 2016 to January 2017.





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Revenue Performances

A total of **USD 5,222,519.42** was exchanged on the DAM, IDM, FPM-W and FPM-M markets during the month of January 2017 when compared to a total of **USD 7,401,145.31** exchanged in December 2016. The decrease is mainly attributed to the decrease in traded volumes and the reduced prices on the markets.



