



SAPP MARKET MONTHLY PERFORMANCE REPORT

June 2014

Promoting a Regional Competitive Electricity Market

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1. Monthly Market Performance Highlights

1.1 Participation Levels

There were ten (10) active portfolios from eight (8) members during the month of June 2014, two more when compared to eight (8) portfolios from seven (7) members recorded in May 2014.

1.2 Market Liquidity

Trading in the market was higher during the month of June 2014 when compared to the month of May 2014. Trading volumes could have been higher were it not for transmission constraints encountered on the Insukamini-Phokoje corridor. With regards to bids submissions, there were more sell offers than buy bids received in June 2014 in the day ahead market trading platform. A total of **116,005 MWh Sale offers** and a total of **89,185 MWh Buy bids** were received in June 2014. There was a decrease of **38,094 MWh or 25%** in **Sale offers** received and an increase of **20,539 MWh or 29.9%** in **Buy bids** received in June 2014 when compared to May 2014 figures of **154,099 MWh Sale offers** and **68,646 MWh Buy bids** received.

Total traded volumes on DAM and PDAM was significantly high in June 2014 at **24,774.20 MWhr**. Of this, **94%** or **23,204.20 MWh** was traded on DAM while **1,570 MWh or 6%** was traded in PDAM. PDAM decreased by **62.4%** in June 2014 when compared to May 2014 where **2,513.70 MWhr**

were traded. On the other hand DAM trades increased significantly by **1,974.80 MWhr or 8.5%** from the **21,229.40 MWhr** traded in May 2014. It should be noted that total traded volumes on the market for the last three months (April -June 2014) is almost equal to total traded volumes for the year 2013-14 (i.e from Mar 2013 to April 2014) a sign that the volumes on the market for the year 2014-15 will significantly surpass previous years.

There was matching of bids in DAM for **28 days and 532 hours or 74%** of the time during the month of June 2014. However due to transmission constraints, trading occurred for **26 days and 439 hours or 61%** of the time. In comparison, matching occurred for **31 days and 455 hours or 61%** with trading occurring for **31 days and 385 hours or 5.75%** of the time during the month of May 2014. Below are summaries of market performance in terms of volumes traded, offers and bids received during the month of June 2014

Fig 1.1 Total Buy and Sale Bids Received Daily in June 2014 (MWh).

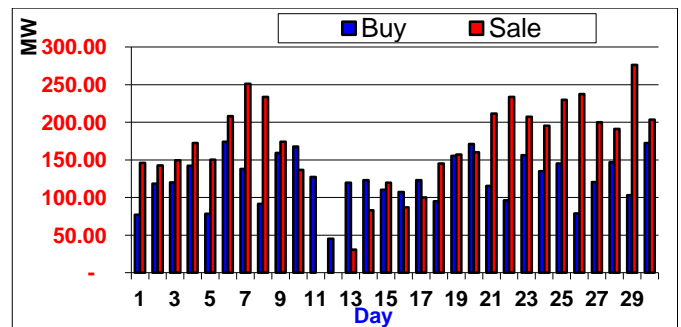
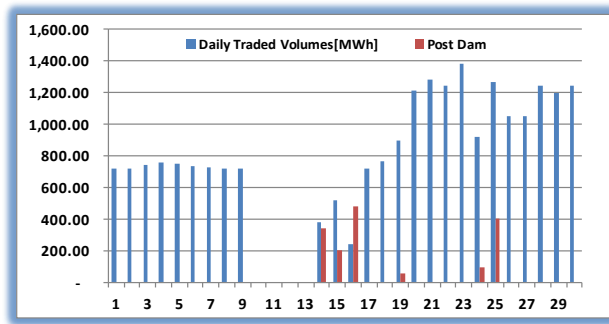


Fig 1.2 below gives a summary of the traded volumes in DAM and PDAM for the month of June 2014.

Fig1.2 DAM and PDAM trades for June 2014.



1.3 Impact of Transmission Constraints

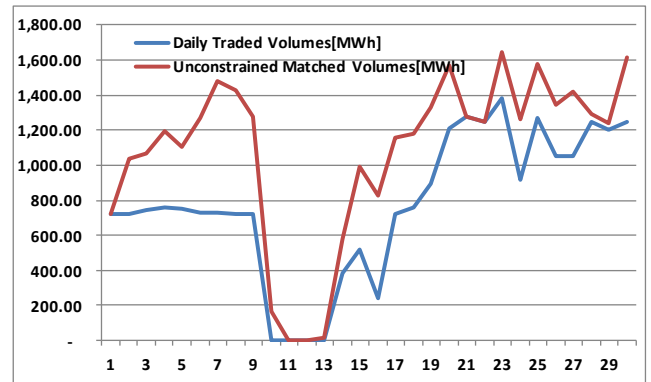
DAM continued to having access to transmission capacity on Zambian leg during the month for most of the time during the month except during evening peak periods. However on the Insukamini-Phokoje leg, DAM trades continued not to have access to transmission capacity. As a result of this, out of a total of **32,315 MWh** that were matched on the DAM trading platform only **23,204.20 MWh** was able to be traded during the month of June 2014 resulting in **9,111 MWh** or **28%** failing to go through in DAM due to transmission constraints.

The matched but not traded volume increased slightly in the month of June 2014 when compared to the month of May 2014 when a total of **28,122 MWh** was matched on DAM resulting in only **22,151.40 MWh** being traded and **5,970 MWh** or **21%** failing to be traded in DAM due to lack of transmission path as DAM trades did not get path on critical corridors.

The results for the month of June 2014 show that there is potential for increased trading in the SAPP competitive market if more players are active and if transmission capacity on critical corridors is made available for the market.

However, no congestion income was collected in June 2014. Similarly, there was no congestion income collected in May 2014. Below is a summary of impact of transmission constraints on DAM trades during the month of June 2014.

Fig1.3.1 Impact of Transmission Constraints on DAM Trading for the month of June 2014.



Impact of Transmission Constraints on DAM Trading for June 2014

Date	Matched in DAM (MWhr)	Traded in DAM (MWhr)	Matched in DAM BUT NOT Traded (%)	Traded in PDAM (MWhr)	Total Traded on Market (MWhr)
1	720.00	720.00	0%	-	720.00
2	1,040.00	720.00	31%	-	720.00
3	1,063.90	743.90	30%	-	743.90
4	1,196.20	756.20	37%	-	756.20
5	1,102.30	750.60	32%	-	750.60
6	1,267.90	732.20	42%	-	732.20
7	1,483.00	730.00	51%	-	730.00
8	1,426.00	720.00	50%	-	720.00
9	1,278.00	720.00	44%	-	720.00
10	166.00	-	100%	-	-
11	-	-	0%	-	-
12	-	-	0%	-	-
13	14.30	-	100%	-	-
14	575.00	380.00	34%	340.00	720.00
15	990.00	520.00	47%	200.00	720.00
16	823.60	240.00	71%	480.00	720.00
17	1,160.00	720.00	38%	-	720.00
18	1,182.30	761.60	36%	-	761.60
19	1,331.60	897.30	33%	52.00	949.30
20	1,566.00	1,210.00	23%	-	1,210.00
21	1,280.40	1,280.40	0%	-	1,280.40
22	1,247.00	1,247.00	0%	-	1,247.00
23	1,647.90	1,380.40	16%	-	1,380.40
24	1,260.90	917.20	27%	96.00	1,013.20
25	1,574.00	1,268.40	19%	402.00	1,670.40
26	1,342.90	1,049.00	22%	-	1,049.00
27	1,422.00	1,050.00	26%	-	1,050.00
28	1,294.00	1,244.00	4%	-	1,244.00
29	1,242.00	1,200.00	3%	-	1,200.00
30	1,618.00	1,246.00	23%	-	1,246.00
Totals	32,315.20	23,204.20	28%	1,570	24,774.20

As a result of transmission constraints, **7,541.00 MWh** that was matched in DAM during the month of June 2014 could not be traded resulting in the SAPP losing **USD 15,082** in potential revenues that could have gone a long way in supporting the market trading platform.

As can be seen from above graphs, in most instances, some of the the matched volumes could not go through due to transmission constraints. However there is significant improvement in terms of reduction of the matched but not traded volumes when compared to previous months.

Fig 1.3.2 Impact of Transmission Constraints on Bilateral trades for the month of June 2014 on SAPP critical corridors

IMPACT OF TRANSMISSION CONSTRAINTS ON BILATERAL TRADES ON CRITICAL LINES - JUNE 2014				
	Bilateral Volumes Requested MWh	Bilateral Volumes Granted MWh	Bilateral Volumes Not Traded Due Tx Constraints (MWh)	% of Volume Not traded
Insukamini-Matimba	252,000.00	29,857.00	222,143.00	88.15%
Bindura-Songo	1,880.00	1,482.00	398.00	21.17%
Totals	253,880.00	31,339.00	222,541.00	87.66%

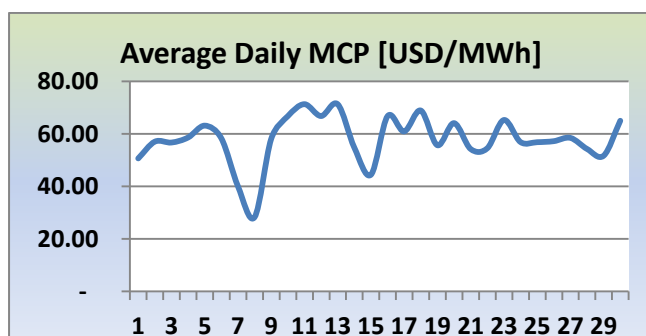
On the SAPP critical corridors and mainly on Insukamini-Phokoje interconnector and Songo-Bindura-Chikamba corridors, a total of **252,000 MWh** was requested with **29,857 MWh** being traded resulting in **222,143 MWh** or **88%** failing to go through due to lack of path during the month of June 2014.

The estimated lost wheeling revenue as a result of the above transmission constraints on bilateral trades alone for the month of June 2014 is around **USD484,813**. The total potential lost wheeling revenue during the month of June 2014 including DAM trades is estimated at **USD510,506**.

1.4 Market Clearing Prices (MCPs)

Prices were steady on the market for most of the days during the month of June 2014. The average monthly market clearing price (MCP) increased during the month of June 2014 to an average of **5.785 USc/KWh** when compared to the **5.5491 USc/KWh** recorded in May 2014. MCP prices have been averaging around **5.000 USc/KWh** in the previous months. Below is a summary of the daily average MCPs for the month of June 2014. The general increase in sale prices currently prevailing on the market often resulted in less matching of bids.

Fig 1.4.1 Daily Average MCP prices for the Month of June 2014.



1.5 Revenue Performances for June 2014

A total of **USD 1,493,959.02** was exchanged on the DAM and PDAM market during the month of June 2014. Of this, **USD 1,368,076.23** was exchanged between buyers and sellers, **USD 49,547.85** was collected as administration charges, **USD 66,987.58** was collected as wheeling revenue and **USD 9,347.36** was collected as losses. There was no congestion income collected. In comparison for the month of May 2014, a total of **USD 1,704,122.50** was exchanged of which **USD 1,580,361.63** was exchanged between buyers and sellers, **USD 47,486.93** was administration charges, **USD 66,955.63** was for wheeling, **USD 9,317.62** was collected as losses revenue. There was no congestion income collected.

Fig1.5.2 Total Revenues to Date from SAPP DAM Trading since market opening on 15 December 2009.

Revenues Performance (USD)						
Year	Traded Amount	Admin Fee	Wheeling Fees	Loss Fees	Congestion Income	Totals
2009-2010	25,802.05	1,090.00	1,373.41	1,546.52	-	29,811.98
2010-2011	757,767.33	54,792.62	69,873.32	15,682.98	77,738.96	975,855.20
2011-2012	534,049.49	20,817.20	27,281.45	13,827.95	21,551.69	617,527.78
2012-2013	1,096,013.26	47,607.36	66,677.60	17,732.27	34,907.33	1,262,937.82
2013-2014	4,270,131.85	167,377.91	203,494.90	28,216.52	113,725.68	4,782,946.86
2014-2015	4,823,767.76	162,905.40	229,421.14	43,528.67	3,385.25	5,263,008.22
Totals	11,507,531.74	454,590.49	598,121.82	120,534.91	251,308.91	12,932,087.86