

Southern African Power Pool

MONTHLY REPORT

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Energising the region for economic developmen

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Meetings, Workshops and Conferences

Traders SAPP -MTP Certification Training

A certification training for traders on the SAPP Market Trading Platform bidding strategies was held on 7-9 March 2017 in Johannesburg, South Africa. The training covered the following:

- Operation of the day ahead market (DAM)
- Operation of the intraday market (IDM)
- Operation of the forward physical markets (month and week ahead markets) – FPM-M and FPM-W
- Operation of the bilateral wheeling and losses settlement modules

A total of 23 participants from the SAPP attended the training.



Delegates who attended SAPP-MTP Certification course in Johannesburg

42nd SAPP Executive Committee Meeting

The 42nd SAPP Executive Committee meeting was held in Maseru, Lesotho. The meetings were Officially opened by the Minister of Energy and Meteorology. The generation surplus capacity in South Africa was noted and bilateral discussions are to be done for new power supply agreements.

SADC Energy Thematic Group Meeting

The SADC Energy Thematic Group was held in Gaborone, Botswana where international cooperating partners looked at areas of cooperation in the energy sector.

AFSEC Workshop and Power and Electricity World Africa Conference

AFSEC is the African Electrotechnical Standardization Commission. On 27 March 2017 AFSEC organised a workshop to improve the synergy among key role players in meeting the needs of African power utilities and regulators for implementing standards in the African power sector. Representatives from power utilities, energy regulators, power pools and rural







electrification agencies, and equipment suppliers attended the workshop. SAPP presented on the role of power pools in standardisation. Under the auspices of AFSEC, delegates also attended the Power and Electricity World Africa conference which was held at the same venue in Sandton, South Africa, from 28 to 29 March 2017.

Training on use of CRIDF SAPP Climate Resilient Scenario Planning Tool

The first training session for the planning tool was convened by CRIDF in March 2017. Thirty-five representatives attended from the Southern African Power Pool (SAPP), its utilities and from the Regional Electricity Regulators Association of Southern Africa (RERA).

Over a period of two days the delegates were introduced to the background of climate modelling, given an intuitive feel for how the impacts were estimated, led through how to evaluate scenarios (climate, trading etc.), and how to evaluate sensitivity of their existing supply plans. The CRIDF climate change tool was developed by EOH (Energy Systems and Analytics), South Africa for CRIDF and is based on IRENA-SPLAT, the System Planning Test Model developed jointly by IRENA and SAPP.

Climate Change Technology Centre Network

The UN Environment, the Climate Technology Centre Network (CTCN) and the SAPP Demand Side Management (DSM) Working Group jointly hosted a 2-day workshop to advance a regional action plan for the SAPP region to leapfrog to efficient lighting, appliances and equipment. The countries National Designated Entities (NDEs) in Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland Tanzania, Zimbabwe, Zambia and International Organizations, Manufacturers of energy efficient equipment participated at the workshop. The proposed areas of technical assistance that were addressed at the workshop are as follows:

Work Package 1 – Regional Market Assistance, which involves conducting a market assessment in each country and across the region for five-priority areas which, are:

- Lighting
- Residential Refrigerators
- Room Air Conditioners
- Electric motors
- Distribution Transformers

Work Package 2 – Development of Regional policy roadmap based on Market Assessment Work package 3 – Funder engagement based on the Regional Policy Roadmap and Market Assessment.

Participants will re-convene in November 2017 to validate the Regional Market Assessment.

System Operations

System Disturbances

In the month of March 2017, four SAPP system disturbances were reported as follows:

- The 400 kV South Africa Botswana interconnector tripped due to a transient fault;
- One generator tripped in Mozambique due to failure of auxiliary supplies and affected power interchange to Zimbabwe;
- The 220 kV Zambia DR Congo line no. 2 tripped due to lightning and adverse weather conditions; and,
- The 400 kV South Africa Botswana interconnector tripped due to a faulty current transformer.

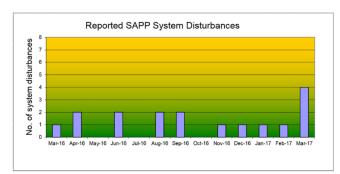
Refer to figure below for the general outlook of reported SAPP system disturbances.



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Reported SAPP System Disturbances

Electricity Trading

Energy Traded

Trading in the market was significantly lower during the month of March 2017 when compared to February 2017. Total traded volumes on the Day Ahead market (DAM), intra-day market (IDM), Forward Physical Market Monthly (FPM-M) and Forward Physical Market Weekly (FPM-W) decreased by 9.3% to 74,880 MWh in the month of March 2017, from the February 2017 figure of 82,535.70 MWh. Below is the overview of volumes traded in DAM, IDM, FPM-M and FPM-W for the month of March 2017.



Traded Volumes in MWh in DAM, IDM, FPM-W and FPM-M for the month of March 2017.

Market Clearing Prices

FPM Monthly Prices

Non off-peak prices decreased by 19.1% from 9.862 USc/KWh in February 2017 to 7.979

USc/KWh in March 2017. Off Peak prices marginally decreased by 0.6% from 3.886 USc/KWh in February 2017 to 3.862 USc/KWh in March 2017.

FPM Weekly Prices

The average price for the Peak period was slightly lower by 12.3% at 9.2127USc/KWh in March 2017 from the February average peak price of 10.509USc/KWh. Standard period average prices marginally decreased from the February 2017 average prices of 7.454 USc/KWh to 5.978 USc/KWh. The average Off–Peak price also marginally decreased by 7% from 3.004 USc/KWh in February 2017 to 2.7924 USc/KWh in March 2017.

Day Ahead Market

The monthly average Day Ahead market clearing price (MCP) was slightly lower during the month of March 2017 at 3.783USc/KWh when compared to the 4.736USc/KWh recorded in February 2017. Below is a summary of the daily average MCPs for the month of March 2017.



Daily Average MCP prices April 2016 to March 2017.

Market Revenues

A total of **USD 2,707,863.49** was exchanged on the DAM, IDM, FPM-W and FPM-M market during the month of March 2017 when compared to a total of **USD 3,814,856.94** exchanged in February 2017. The decrease is mainly attributed to the decrease in traded volumes.



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Update on SAPP Projects

Angola- Namibia Interconnector

The SAPP secured funding from DBSA and Government of Norway and Sida for Transaction Advisory Services for the project scoping and preparation of the Angola - Namibia Interconnector. AURECON has now been appointed as the Transaction Advisors.

Environmental Corner

Earth Hour, 2017

Earth hour 2017 was observed on Saturday, 25 March 2017 from 20:30 to 21:30 Hours. The World celebrated 10 years of Earth Hour observations. The SAPP-CC is compiling saving realised from the 2017 Earth Hour.

Standardised Baseline for SAPP Grid Emission Factor (GEF)

The Government of Germany provided funding for the updating of the SAPP Grid Emission Factor for calculating Carbon Credits for SAPP projects. Apart from calculating carbon credits, the SAPP GEF allows the development of carbon finance approaches. The study is being conducted by a consultant, GFA. Validation of the data used in the development of the GEF is currently underway.

Capacity Building - ESC Visit to Finland

The Environmental Sub-Committee members undertook a capacity building exchange visit to Fortum, a leading power utility in Finland and Europe. The Participants were exposed to some of the best management practices in Integrated Management Systems including Environmental Management Systems, Continuous Performance

Improvement, Environmental Management around the construction, and operation of Transmission lines and Emissions handling and treatment. The team also managed to embark on visits to Suomenoja Combined Heat and Power Plants, where best practices in Energy Efficiency and CO2 reduction during thermal generation were demponstrated. A visit to Fortum Riihmaki also exposed participants to the most modern ways of waste treatment and Hazardous waste handling. This linked theory to real world practical solution to Environmental Challenges.



ESC members at Fortum Headquarters during the Exchange visit to Finland



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Upcoming Events

DATE	EVENT
11 April 2017	ZIZABONA MANCO Meeting , Sandton, South Africa
12 – 15 April 2017	2017 Interpower Games Preparatory Meeting & Games Windhoek, Namibia
24 April 2017	Joint Markets and Operating Sub Committee Meeting, Johannesburg, South Africa
25 – 26 April 2017	Markets Sub Committee Meeting/ Operating Sub Committee Meeting, Johannesburg, South Africa
25 – 26 April 2017	HRWG Meeting, Harare, Zimbabwe
25 - 28 April 2017	APUA Meetings, Sandton, South Africa
3 – 4 May 2017	Project Development Readiness Assessment Mission, Maputo , Mozambique
9 – 11 May 2017	2017 World Hydro Congress, Addis Ababa, Ethiopia
16 -18 May 2017	Africa Utility Week , Cape Town, South Africa
16 -18 May 2017	Power Transfer Limit Studies Workshop, Kitwe , Zambia
23 May 2017	SAPP – NORAD – Sida Annual Meeting, Harare, Zimbabwe
30 May – 1 June 2017	SAPP Transmission Pricing Task Team Meeting, Harare, Zimbabwe

7 – 9 June 2017	Africa Energy Forum, Copenhagen, Denmark
4 – 8 Sept	SAPP Management Committee
2017	Meetings, South Africa
October	SAPP Executive Committee
2017	Meeting, Malawi





