

Southern African Power Pool

MONTHLY REPORT

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Energising the region for economic development

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Meetings, Workshops and Conferences

SAPP Markets and Energy Trading Training Workshop

The intra-day electricity market and the forward physical markets were implemented in SAPP in 2016, respectively. It was noted that training of System Controllers on the SAPP Market trading

platform (SAPP-MTP) was necessary. The SAPP thus secured funding from the European Union (EU) for delivery of a specialized training workshop for SAPP System Controllers on electricity markets. The training workshop was held from 12 to 14 September 2016 in Cape Town, Republic of South Africa. In this first stream, 2 System Controllers from each SAPP member utility were trained. The second stream will be held in October 2016.



Some SAPP System Controllers at the Training Workshop in cape Town

SAPP MSC Study Tour to Germany, Europe

The SAPP Markets Sub Committee (MSC) had a study tour to Europe from 26-30 September 2016 on electricity markets mainly focusing on balancing markets.

The study tour was sponsored by the European Union (EU) and covered the following companies in Europe:

- Austrian Power Exchange (EXXA)
- 50 Hetz, a Germany Transmission System Operator (TSO)
- Elia Grid International EGI (TSO)
- Coreso, Brussels, company responsible for TSO coordination for some TSOs in Europe.



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MSC members pose for a photo at EXXA offices in Vienna, Austria

The study tour covered a number of areas that EU system balancing framework, including balancing responsibility, the available balancing markets, balancing with increased renewable energy penetration, TSO coordination mechanisms and online system operations, the proposed Grid Control Cooperation and system reserves (GCC), cross border trading, transmission congestion management mechanisms such as flow based and capacity auctions, TSO roles etc. A total of 21 participants attended from 11 SADC countries.



MSC members pose for a photo at 50 Hertz offices in Berlin, Germany



MSC members pose for a photo at CORESO offices in Brussels, Belgium

SADC Thematic Group Meeting, Gaborone, Botswana

The SADC Energy Thematic Group meeting was held in Gaborone, Botswana. The meeting was attended by various international cooperating partners. SAPP presented on the status of the competitive market, generation and transmission projects and the operational model of the Project Advisory Unit.

Hosting the African Development Bank NEPAD IPPF

An appraisal visit for the AfDB was arranged in Zambia and Mozambique. The objective was to assist in the preparation of information memorandums on the Solwezi-Kolwezi Transmission project and the Zambia-Mozambique Interconnector.



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Continental Regulatory Framework for Energy Market

From 27 to 29 September 2016 the African Union Commission held a workshop on continental regulatory framework for energy market in Cairo, Egypt. The main objective of this workshop was to validate the strategy document and action plans of the final report on harmonised regulatory framework in the African energy sector, focusing on the electricity sector. SAPP, other power pools, national and regional energy regulators, regional economic communities, and other key stakeholders in the energy sector participated in the workshop. The workshop priority areas and action items for intervention to enhance harmonisation of regulatory frameworks at the regional and continental levels. The southern African region and SAPP in particular were hailed for having made great progress in harmonisation and implementation of regional energy markets.

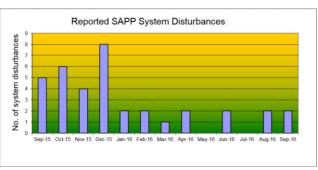


Delegates at the Cairo Regulatory Framework Workshop organised by the AU Commission

System Operations

System Disturbances

Two system disturbances were reported in the month of September 2016. The first one emanated from the 533 kV HVDC line between Mozambique and South Africa. A transient line fault led to splitting of the HVDC and AC bus bar loads at Songo in Mozambique. Later, on the same day, the interconnection between Zambia and Zimbabwe tripped but was returned to service within 30 minutes. Refer to figure below for an outlook of reported SAPP system disturbances.



Reported SAPP System Disturbances

Update on SAPP Projects

MOZISA Transmission Project

Technical workshops were held on the project. The detailed status of the project on the technical, environmental and commercial arrangements were discussed at the Project Management Committee meeting held on 28 September 2016 in Johannesburg, South Africa.

BOSA Transmission Project

This is the review of the feasibility of the transmission interconnector between Botswana and South Africa. The review and amendment of the draft terms of reference for phase 2 of the project, which includes a bankable feasibility study were done.

Luapula Hydro Project

The expression of interest of the technical feasibility was prepared and circulated for comments. The facility agreement between SAPP and DBSA is also being finalised. The next stage is the advanced procurement for the technical feasibility studies.







Solwezi - Kolwezi and Mozambique - Zambia Interconnector

Discussions were undertaken with the Ministry of Energy and Water development, Ministry of Finance and the Regulator in Zambia.

In Mozambique, discussions were held with the Minister of Minerals Resources and Energy, the Ministry of Finance and EDM.

The SAPP-PAU is currently finalising the arrangements with the utilities for being mandated as an Implementing Agent for the projects.

Technical

SAPP Pool Plan Update

The draft load forecast report was delivered by the consultants for comments. Some delays have been experienced in filling some of the data gaps.

SAPP – EAPP Transmission Integration Studies

The technical evaluation of the tenders was done and the adjudication is still in progress for the SAPP - EAPP Transmission Integration Studies.

Electricity Trading

Energy Traded

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 7.4% to 109,612 MWh in the month of September 2016, from the August figure of 118,411 MWh. Below is the overview of volumes traded in DAM, IDM, FPM-M and FPM-W for the month of September 2016.



Traded Volumes in MWh in DAM, IDM, FPM-W and FPM-M for the month of September 2016.

Market Clearing Prices

FPM Monthly Prices

Non off-peak prices declined by 29.4% from 15.134 USc/KWh in August 2016 to 10.689 USc/KWh in September 2016. Off Peak prices declined by 32.9% from 5.795 USc/KWh in August 2016 to 3.889 USc/KWh in September 2016

FPM Weekly Prices

The average price for the Peak period was slightly higher by 5.7% at 18.466USc/KWh in September 2016 from the August average peak price of 17.472 USc/KWh. Standard period average prices marginally decreased from the August average prices of 11.201USc/KWh to 10.830 USc/KWh. The average Off—Peak price increased by 15.8% from 4.614 USc/KWh to 5.343 USc/KWh.

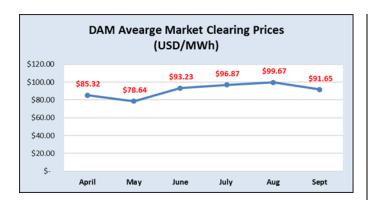
Day Ahead Market Prices

The average monthly market clearing price (MCP) was slightly lower during the month of September 2016 at 9.165 USc/KWh when compared to the 9.967 USc/KWh recorded in August 2016.









Daily Average MCP prices April 2016 to September 2016.

Market Revenues

A total of **USD 10,155,198.92** was exchanged on the DAM, IDM, FPM-W and FPM-M market during the month of September 2016 when compared to a total of **USD 10,496,190.38** exchanged in August 2016. The decline is mainly attributed to the decrease in traded volumes.

Environmental Corner

Environmental and Social Management Framework (ESMF) Study

A workshop to present the final draft report to the Environmental Sub-Committee (ESC) members was held in Johannesburg on 21 to 22 September, 2016. The consultant, SRK presented the report which covered;

- Identification and Assessment
- Management of potential environmental and social risks and impacts
- · Specialist study and
- Management Plans.

The next and final phase of the study will see the consultant, and SAPP undertaking in-country disclosure meetings to present findings of the ESMF report to utilities and key government ministries to facilitate input on issues or concerns regarding the ESMF report.

SAPP - African Development Bank (AfDB) meeting on Energy Infrastructure Climate Resiliency

A meeting was held between the SAPP and a representative from the AfDB on Energy Infrastructure Climate Resiliency. The AfDB now requires Energy Infrastructure planning to take into account Climate resiliency and are planning training workshops for SAPP members and other stakeholders on "climate proof" projects.

Upcoming Events

DATE	EVENT
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5 – 6 Oct 2016	Alaska – Sherwood Tender Evaluation, Johannesburg, South Africa
5 – 6 Oct 2016	First Workshop on drafting of the SADC Renewable Energy and Energy Efficiency Strategy and Action Plan (REEESAP) Johannesburg, South Africa
6 Oct 2016	JICA Power Engineering Seminar, Harare, Zimbabwe
6 – 7 Oct 2016	UNEP PCB Phase-out Workshop, Pretoria, South Africa
10 Oct 2016	JICA Power Engineering Seminar, Pretoria, South Africa
12 Oct 2016	SAPP Executive Committee Workshop, Windhoek, Namibia
13 Oct 2016	41st SAPP Executive Committee Meeting, Malawi
19 - 20 Oct 2016	SAPP Energy Traders and System Controllers Forum, Zambia
20 Oct 2016	Environmental and Social Management Framework(ESMF) Disclosure Meetings, Dar es Salaam, Tanzania







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20 – 21 Oct 2016	Legal Task Team - SAPP CC Constitution Review, Livingstone, Zambia
26 – 27 Oct 2016	RNT Visit to SAPP on Power Markets, Harare, Zimbabwe
31 Oct – 2 Nov 2016	Controllers Training on SAP Trading Platform, Johannesburg, South Africa
31 Oct – 11 Nov 2016	SAPP visit – Data Collection Survey, Tokyo, Japan
1 -2 Nov 2016	AfDB Training Conference on Energy Infrastructure Climate Resiliency, Lusaka, Zambia
11 Nov 2016	Environmental and Social Management (ESMF) Disclosure Meetings, Gaborone, Botswana
14 Nov 2016	Environmental and Social Management (ESMF) Disclosure Meetings, Johannesburg, South Africa
14 -19 Nov 2016	ZTK Draft Report Presentation, Lusaka, Zambia
21 – 25 Nov 2016	PIDA Week, Abidjan, Cote D'Voire
November 2016	Traders and Controllers Study Visit of European Electricity Market Operators and Power Transmission System Operators, Europe
November 2016	Environmental and Social Management (ESMF) Disclosure Meetings, Madrid, Spain
November 2016	FWG Meeting, Harare, Zimbabwe
November 2016	HRWG Meeting, Lusaka, Zambia
5 - 9 Dec 2016	Workshop on Transfer Limits, Eskom Control Area, Harare, Zimbabwe
12 – 16 Dec 2016	Workshop on Transfer Limits, ZESA & ZESCO Control Area



