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## Meetings, Workshops and Conferences

### Quality of Supply Workshop, Lusaka, Zambia

Under the European Union Capacity Building Project for SAPP, the SAPP Quality of Supply (QOS) Training Workshop was held from 1 to 5 June 2015 in Lusaka, Zambia. Each SAPP Member utility sent two participants to the workshop, one responsible for maintenance of QOS facilities and the other responsible for

carrying out necessary intervention measures to ensure that customers are supplied with power of good quality. The workshop facilitators came from Europe but regional experts from the Energy Regulatory Board of Zambia (ERB) and the Regional Energy Regulatory Association (RERA) also made presentations at the workshop. Participants also carried out field visits to QOS facilities of the Zambian national power utility, ZESCO.



*SAPP QOS Workshop Participants*

### Second Workshop on IPP Framework, Cape Town, South Africa

Deloitte, in-conjunction with the SAPP-CC and the US Government convened the Energy Management and Independent Power Producers (IPP) Framework in Cape Town, RSA in June 2015. Participants were drawn from SAPP utilities, Southern African Development Community (SADC) Ministries of Energy and SADC Electricity Regulators. The objectives of the workshop were:

- to afford participants to present feedback on proposed SADC IPP Framework, and to agree on a way forward towards implementation, and
- To review and discuss some approaches to IPP program and power sector development that can be considered as part of the IPP Framework implementation.

Participants to the workshop noted and agreed that:

- IPPs should independently enter the Electricity Supply Industry (ESI) by



**Southern African Power Pool (SAPP)**  
24 Golden Stairs Road, P.O. Box EH52, Emerald Hill,  
Harare, Zimbabwe,  
Tel: +263-4-335517/335558 / 335468 Fax: +263-4-307023  
Email: [info@sapp.co.zw](mailto:info@sapp.co.zw) Website: [www.sapp.co.zw](http://www.sapp.co.zw)



complementing the National Power Utilities

- SAPP should act as the implementing agency in projects development,
- Regional Electricity Regulators Association (RERA) should in the long term be able to monitor and check for compliance for utility operations,
- Ministries of Energy should carry out security of supply studies,
- Capacity Procurement approach should use a competitive bidding process which is a successful model for setting tariff ranges. Competition leads to more realistic prices. Auction based mechanism is a successful approach,
- A framework for successful IPPs is needed,
- IPP market participation is vital to expanding regional supply. The risk allocation for IPPs is different,
- Sovereignty vs. Regional Regulation should be addressed in devising a successful Market Model,
- Countries that are ready, willing and able should be approached leading to a gradual roll out in the short , medium and long term,
- Enforcements will need to be done at National Level, and
- The development of Regional Acqui (Common Standards) is necessary.



*Participants at the IPP Framework Workshop in Cape Town, RSA*

### **Zambia International Mining & Energy Conference (ZIMEC), Lusaka, Zambia**

The 5<sup>th</sup> edition of the Zambia International Mining and Energy Conference (ZIMEC) was held on 18-19 June 2015 in Lusaka, Zambia. The conference covered among other topics, Zambia's mining and energy economy for the next 50 years, SADC electricity generation and transmission interconnections expansion plans, new technologies and solutions in the mining and energy sectors.

The conference was attended by various experts in mining and energy that included international, regional and Zambian delegates. The Hon. Minister Christopher Yaluma, Minister of Mines, Energy and Water Resources presented the official opening speech on behalf of His Excellency President Edgar Lungu, President of the Republic of Zambia. SAPP was represented by representatives from ZESCO, CEC and the SAPP CC.

### **ZIZABONA ESIA Classroom Training, Lusaka, Zambia**

SWECO conducted three day Classroom training for the ZESCO Environmental Department on Environmental and Social Impact Assessment in Lusaka Zambia from 24 to 26 April, 2015. Other three members from Zimbabwe, Botswana and Namibia could not participate due lack of funding.



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24 Golden Stairs Road, P.O. Box EH52, Emerald Hill,  
Harare, Zimbabwe,  
Tel: +263-4-335517/335558 / 335468 Fax: +263-4-307023  
Email: [info@sapp.co.zw](mailto:info@sapp.co.zw) Website: [www.sapp.co.zw](http://www.sapp.co.zw)



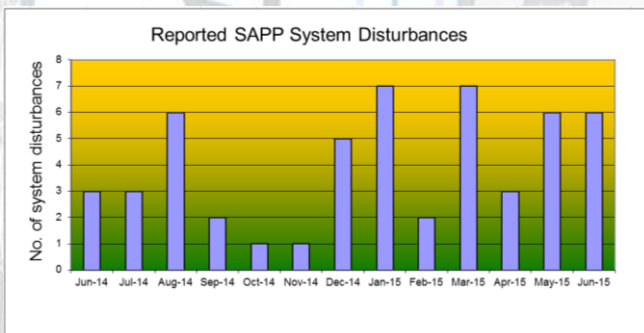
## MOZISA Workshop, Johannesburg, RSA

The Mozambique – Zimbabwe – South Africa (MOZISA) Transaction Advisory Services was awarded to KPMG following a competitive tendering process. The workshop for the stakeholders, EDM, Eskom and ZESA was held in Johannesburg on 24 June 2015. The objective of the workshop was to discuss the inception report on the project.

## System Operations

### System Disturbances

Six system disturbances were reported on the SAPP interconnected system in the month of June 2015. In the first one, four generation units tripped in Zambia leading to loss of about 600MW of generation. In the next four, power system frequency dropped to outside the normal control band because of loss of generation in South Africa and sudden reduction in the in-feed on the Mozambique-South Africa HVDC link, due to tripping of converter bridges. The drop in power system frequency was arrested by instantaneous demand response from contracted customers and load-shedding. In the last one, the 220kV interconnection between Zambia and DR Congo tripped on over-power protection due to loss of generation in the DR Congo. Figure below shows an outlook of reported SAPP system disturbances.



## Operating Sub-Committee Visit to Europe

From 22 to 26 June 2015 the SAPP Operating Sub-Committee (OSC) participated in a study visit of key Transmission System Operators (TSOs) in Europe and the headquarters of the European Network for Transmission System Operators for Electricity (ENTSO-E). The objective of the visit was to share knowledge on best practices in operation of interconnected power systems. The OSC learnt a lot from the visit, including administration of operation codes, what to do when operating a power system with considerable amount of renewable energy sources, how to share information among TSOs, and requirements for training and certification of power system controllers.



OSC Members at the National Control Centre of Belgium in Brussels

## Update on SAPP Projects

### SAPP Project Advisory Unit Establishment

Staff for the Project Advisory Unit (PAU) to be established in Johannesburg, South Africa is soon to be appointed following interviews held in Johannesburg in June, 2015. The posts to be filled include the Environmental Specialist, the Finance Specialist and Procurement Specialist. The advert for the Chief Transaction Advisor (CTA) has been placed in the Economist and on the SAPP website plus all other websites of SAPP Members. The closing date is the 4th of July 2015.



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 24 Golden Stairs Road, P.O. Box EH52, Emerald Hill,  
 Harare, Zimbabwe,  
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## ZIZABONA Project

The consultants for the project visited all the ZIZABONA project utilities and the SAPP-CC for consultations on technical reviews and financial modelling. The team is currently carrying out a load flow and dynamic studies to ascertain the maximum transfer capacity of the phase 1 project components including the 220kV line from Livingstone to Zambezi in Namibia. This phase should take into account the 80MW ZESA-NamPower Power Purchase Agreement (PPA), the existing contracts on the 220kV and any load growth in Zambia that would need to utilize the 220kV. The studies should show when and where reinforcements would be required. The SAPP expects consultants to present findings in a concise report by end of July, 2015. The team is also expected to come-up with cost estimates, draft wheeling agreements and financial modelling for Phase 1 Project components.

## MOZISA Project

The consultant has submitted an inception report for the project. The main purpose of this Inception Report is to highlight the status of the Project and define an approach to developing the Project. Specifically, the purposes of the Inception Report include:

- Provide an understanding of the assignment and deliverables based on information received from SAPP-CC and the Project Sponsors at the time of reporting,
- Provide indicative timelines of fulfilling the TA's mandate, that is, developing a bankable feasibility study and attracting financiers to fund the Project,
- Provide a high level risk analysis and mitigation steps to employ as the Project is developed,
- Align the expectations of SAPP-CC and the TA. All member utilities made comments on the report after which the consultant is expected to incorporate the comments made by member

utilities. A second workshop to discuss assumptions is due to be held during the last week of July, 2015

## CTC Project

Request for Proposals for carrying out a Detailed Feasibility studies for three Central Transmission Corridor project located in Zimbabwe were issued. The three lines, which comprise the CTC are:

- Orange Groove to Triangle line
- Alaska to Sherwood line and
- Bindura to Mutorashanga line

The closing date for submitting proposals was set at 7 July, 2015.

## Zambia-Tanzania-Kenya (ZTK) Interconnection Project

The ZTK project is implemented in phases.

### Phase 1: Kenya – Tanzania

Financial closure has been reached. The phase is going to be financed by JICA and African Development Bank (AfDB). TANESCO is currently working on compensation for acquiring wayleave. Procurement processes for engineering consultant and contractors are ongoing.

**Phase 2. Singida to Iringa section:** Construction of 400kV power transmission line is ongoing and is expected to be completed by June 2016.

**Phase 3. Iringa - Mbeya Section:** Feasibility studies and conceptual design as well as ESIA and Resettlement Action Plans (RAP) studies were completed.

**Phase 4. Mbeya to Zambia:** Feasibility studies, conceptual design, ESIA and RAP studies are underway.



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## Malawi-Tanzania Interconnection Project

Consultants to undertake feasibility studies and environmental and social impact studies have been selected and are expected to commence the assignment in September, 2015.

## Electricity Trading

### Energy Traded

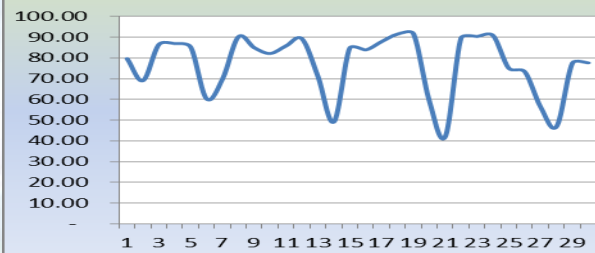
Trading in the market was slightly lower during the month of June 2015 when compared to May 2015. With regards to bids submitted, there were more buy bids than sale offers received in June 2015 in the day-ahead market. A total of 95,199 MWh Sale offers and a total of 261,327 MWh Buy bids were received in June 2015. There was a decrease of 5,934 MWh or 5.87% in Sale offers received and also a decrease of 44,526 MWh or 15% in Buy bids received in June 2015 when compared to May 2015 figures of 101,133 MWh Sale offers and 305,853 MWh Buy bids received.

Total traded volumes on DAM and PDAM in June 2015 was 68,528.70 MWh. Of this, 89% or 60,891.90 MWh was traded on DAM while 7,636.80 MWh or 11% was traded in PDAM. PDAM increased by 4,812.2MWh or 170% in June 2015 when compared to May 2015 where 2,824.60 MWh was traded in PDAM. On the other hand DAM traded volume decreased by 7,623.30 MWh or 11% from the 68,515.20 MWh recorded in May 2015.

### Market Clearing Prices

Prices were steady on the market for most of the days during the month of June 2015. The average monthly market clearing price (MCP) rose during the month of June 2015 to 7.446 USc/KWh when compared to the 6.391 USc/KWh recorded in May 2015. Below is a summary of the daily average MCPs for the month of June 2015.

Average Daily MCP [USD/MWh]



*Daily Average MCP prices for the Month of June 2015.*

### Market Revenues

A total of **USD 4,769,203.90** was exchanged on the DAM and PDAM market during the month of June 2015 when compared to a total of **USD 3,088,703.29** exchanged in May 2015. The increase is mainly attributed to the increase in traded volumes.

## Environmental Corner

### PCB Phase-out in the SAPP Region

A meeting on Regional PCB Phase-out project was held in Harare on 24 June, 2015 between the Africa Institute on PCBs and SAPP-CC. It noted that a Project Information Form (PIF) that was submitted to UNEP for release of funds had not been approved due to lack of information on specific quantities of PCBs at some utilities. This had hindered release of funds to collect, transport and dispose of PCBs in the region. As a way forward, Africa Institute will dispatch teams to visit utilities and collect missing information for submission to the UNEP by August, 2015.



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## World Environment Day - 5 June

The World Environment Day was commemorated on 5 June, 2015. Most SAPP utilities commemorated the day by engaging in a number of activities to raise environmental awareness. Some gave out t-shirts and caps while others convened road shows where fliers on environmental awareness were distributed to the public.

### Upcoming Events

DATE	EVENT
6 - 8 July 2015	Spain-Southern Africa Investment Forum Sandton, <b>South Africa.</b>
7 – 10 July 2015	Transmission Pricing Task Team Meeting, <b>Harare, Zimbabwe.</b>
8 July 2015	Visit by CEEPR, <b>Harare, Zimbabwe</b>
9-10 July 2015	Telecommunications Working Group Meeting, <b>Dar es Salaam, Tanzania.</b>
15-17 July 2015	Power Gen 2015 Africa, CTICC, <b>Cape Town, South Africa.</b>
20-24 July 2015	Attachment at SAPP under IS4D Project, <b>Harare, Zimbabwe.</b>
21-22 July 2015	EU MSC Workshop on Balancing Market Gap Analysis, <b>Johannesburg, South Africa.</b>
21-25 July 2015	SADC Energy Ministers Meeting, <b>Johannesburg, South Africa.</b>
21-24 July 2015	PSC Workshop – Water and Energy Nexus in Zambezi Basin and SAPP, <b>Cape Town, South Africa.</b>
23-24 July 2015	MSC - OSC Meetings On IDM And Energy Imbalance, <b>Johannesburg, RSA.</b>

29-30 July, 2015	Crime Prevention Working Group Meeting, <b>Blantyre, Malawi.</b>
30 July 2015	MOZISA Technical Assumptions Review Meeting, KPMG Offices, Johannesburg, <b>South Africa.</b>
July 2015	Human Resources Working Group Meeting, <b>Harare, Zimbabwe.</b>
1 - 2 Sept 2015	The Infrastructure Africa 2015, Sandton Convention Centre, <b>South Africa.</b>
1 - 3 Sept 2015	45th SAPP Management Committee Meetings, Gaborone, <b>Botswana.</b>
15 Sept 2015	ICP/ETG meeting, Gaborone, <b>Botswana.</b>
13 -15 Oct 2015	Traders and controllers Forum, <b>Lubumbashi, DR Congo.</b>
30 October 2015	39th SAPP Executive Committee Meeting, 20 <sup>th</sup> SAPP Anniversary Celebrations, <b>Lusaka, Zambia.</b>
26-30 Oct 2015	CIGRE Symposium, <b>Cape town, South Africa</b>



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