



CONTENTS

April 2019	1
Meetings, Workshops and Conferences ..	1
Water Storage and Hydropower Conference	1
World Bank Spring Meetings	1
Human Resources Working Group	1
Energy Thematic Group Meetings, Gaborone	2
SADC Infrastructure Directorate Planning Retreat	2
System Planning	2
Assessment of the Impact of Renewable Energy Technologies on SAPP – Part 1	2
Transmission Pricing Model Validation	2
SAPP Case File Management	2
System Operations	2
System Disturbances	2
State of the Interconnection	2
Electricity Trading	3
Traded Volumes	3
Market Clearing Prices	3
Market Revenues	4
Update on SAPP Projects	4
Angola - Namibia (ANNA) Interconnector Project	4
Luapula Hydro-Electric Power Scheme Project	4
Mozambique - Malawi Interconnector Project	4
Environmental Corner	5
Earth Hour Events in SAPP	5
Upcoming Events	6

World Bank Spring Meetings

The SAPP, SADC and RERA attended the World Bank Spring Meetings held in Washington DC, USA where various presentations were made. A side meeting was held where SAPP presented the current state of regional integration in the Southern African Power sector identifying the challenges and opportunities. The meeting provided an opportunity to discuss potential strategic areas of engagement with the World Bank.

Human Resources Working Group

The Human Resources Working Group met in Livingstone, Zambia from 24 to 25 April 2019. The main focus of the discussions were the SAPP CC Job Evaluation Report, review of Human Resources Policies and SAPP CC Management.



Members of the HWRG

Meetings, Workshops and Conferences

Water Storage and Hydropower Conference

The SAPP CC Manager attended the Storage and Hydropower Africa 2019 Conference organised by Hydropower and Dams in Windhoek, Namibia from 2 to 4 April 2019. He made opening remarks and co-chaired a panel discussing cross-border projects.



Energy Thematic Group Meetings, Gaborone

The SADC Energy Thematic Group meeting was held in Gaborone, Botswana on 16 April 2019 and was attended by various International Cooperating Partners (ICPs). The ICPs shared the various programs they are coordinating in the energy sector in the SADC region.

SADC Infrastructure Directorate Planning Retreat

SAPP CC participated in part of the SADC Infrastructure Directorate Retreat held in Kasane, Botswana from 26 to 28 April. The retreat discussed the review of the SADC Regional Infrastructure Development Master Plan among other things.

System Planning

Assessment of the Impact of Renewable Energy Technologies on SAPP – Part 1

The SAPP negotiated the contract with the successful Consultant on the assessment of the Impact of Renewable Energy Technologies for part 1. The contract was awarded to Ricardo Energy and Environment for a period of six months.

Transmission Pricing Model Validation

The SAPP has engaged a Consultant for the Transmission Pricing Model validation. The work involves the review of the Transmission Pricing Work done by the SAPP Transmission Pricing Task Team.

SAPP Case File Management

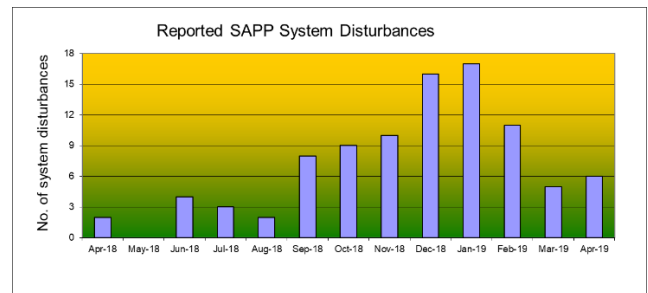
The SAPP is in the process of updating the SAPP casefiles for power system studies and

the SAPP Casefile Management Procedure. The procedure need to be harmonised to avoid conflicts. Casefile co-ordinators have been appointed within utilities. A draft report highlighting progress in implementing the SAPP Case File Management Procedure will be delivered in August 2019.

System Operations

System Disturbances

In the month of April 2019, six (6) SAPP system disturbances were reported. The 220 kV Zambia - DR Congo interconnectors tripped twice on directional over-power protection due to loss of HVDC incomer from Inga in DR Congo Katanga province. In the southern island, three low power frequency excursion incidences were reported due to loss of generation in South Africa. Lastly, the Mozambique - Zimbabwe interconnector tripped once due to operation of over-excitation protection on the interconnection transformer in Mozambique. Refer to Figure below for the general outlook of reported SAPP system disturbances.



State of the Interconnection

In the month of April 2019, the SAPP interconnected power system operated in two islands. The open point was the interconnection between Botswana and Zimbabwe. This interconnection was left out of service following a few events of power



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 Website: www.sapp.co.zw

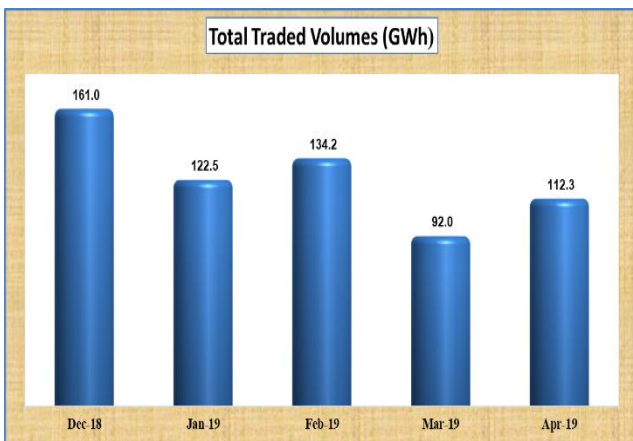


oscillations which occurred in March 2019 while one of the HVDC lines from Mozambique to South Africa, plus associated power line carrier (PLC) telecommunication facilities were out of service. Further, the Static Var Compensator (SVC) on the Botswana – Zimbabwe interconnection was out of service. Affected power utilities were undertaking various activities to restore the equipment.

Electricity Trading

Traded Volumes

Trading in the market was higher during the month of April 2019 when compared to March 2019. Total 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) increased by 22.1% to 112.3GWh in the month of April 2019, from the March 2019 volume of 92.0GWh. The April 2019 traded volume was lower by 11.4% when compared to April 2018 in which traded volumes were 126.8 GWh.



Market Clearing Prices

FPM Monthly Prices

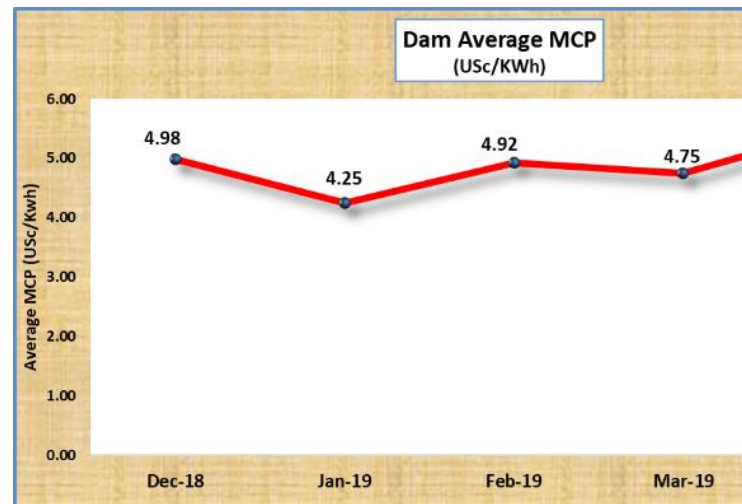
Non-off-peak prices decreased by 62.1% from 6.6USc/KWh in March 2019 to 2.5USc/KWh in April 2019. Off Peak prices increased by 8.7% from 2.3USc/KWh in March 2019 to 2.5USc/KWh in April 2019.

FPM Weekly Prices

The average price for the Peak period was lower by 15.6% at 8.6USc/KWh in April 2019 from the March 2019 figure of 10.1USc/KWh. Standard period average prices decreased from the March 2019 figure of 7.9USc/KWh to 6.35USc/KWh in April 2019. The average Off–Peak price increased from 2.3USc/KWh in March 2019 to 2.9USc/KWh in April 2019.

Day Ahead Market

The monthly average DAM market clearing price (MCP) was higher during the month of April 2019 at 5.6USc/KWh when compared to 4.8USc/KWh recorded in March 2019.



Daily Average MCP prices December 2018 to April 2019.

Intra Day Ahead Market (IDM)

The average peak period price for the IDM for the month of April 2019 was 9.93USc/KWh from the March 2019 figure of 6.12USc/KWh. The average spot price for the standard period for April 2019 was 7.42USc/KWh. The



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 Website: www.sapp.co.zw



average Off-Peak period price increased from 2.67USc/KWh in March 2019 to 4.07USc/KWh in April 2019.

Market Revenues

A total of USD 6.4 million was exchanged on the market during the month of April 2019 when compared to a total of USD 4.0 million exchanged in March 2019. The change is mainly attributed to increased traded volumes.

Update on SAPP Projects

Angola - Namibia (ANNA) Interconnector Project

The Business Cases development activities conducted during this period include the revision of the Financial and Economic Analysis to include inputs from the Financial and Economic workstreams. The Financial Analysis workstream is working on developing the financial model and economic workstream is developing the Economic Model.

A Functional Design Workshop, Business Case Workshop and Environmental Workshop was held on 31 March and 1 April respectively in Lubango, Angola. This was followed by a Project Progress Meeting and MANCO Meeting on the 2nd of April 2019. A Functional Design Report was submitted at the end of April 2019. The Draft Business Case Report was submitted by Mid-April 2019.

The dissemination of the Business Case is planned to take place between April and June 2019. The objective being to share and discuss the ANNA Business Case with a wider group of Stakeholders to ensure a broader understanding of the ANNA benefits as well as to obtain input to strengthen the

Business Case. The stakeholders identified to date include the Sponsor Utilities, Government departments, SAPP, relevant Regional organisations, DBSA and other Funders.

Luapula Hydro-Electric Power Scheme Project

Preparations for the second gauging campaign are in progress. This is also the last gauging campaign for the project where the Consultant will be doing a hand over to the ZESCO and SNEL teams. A Gauging Stations Installation and Gauging Report was submitted on 28 February 2019. The Technical Consultant planned and completed activities for April include:

- The Draft Options Selection Report was submitted on the 4th of April 2019;
- Options Selection Workshop was held in Johannesburg on the 9th of April 2019
- Preparation and execution of the gauging stations handing-over campaign (23 to 25 April 2019)
- Comments on the Options Selection Report were submitted.

Mozambique - Malawi Interconnector Project

Negotiations on the technical and commercial agreements were completed in December 2018. The agreements were submitted to the Regulator, MERA in Malawi, which provided its approval for ESCOM to sign the agreements with EDM on 5 February 2019. The official signing ceremony took place on 11 April 2019 in Lilongwe, Malawi.



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 Website: www.sapp.co.zw





Mozambique and Malawi officials signing technical and commercial agreements for the Mozambique-Malawi Interconnector

Environmental Corner

Earth Hour Events in SAPP

Earth Hour is an annual event, commemorated on the last Saturday of March, which fell on 30 March this year, 2019. Coordinated by World Wide Fund for Nature (WWF) and other volunteer organisations, Earth Hour’s greatest strength is the power of people. Starting as a symbolic lights out event in Sydney, Australia in 2007, Earth Hour is now the world’s largest grassroots movement for the environment, inspiring millions of people to take action for our planet and nature.

We are called to voluntarily switch off non-essential lights and appliances from 20:30 – 21:30 local time, as we #Connect2Earth, by reflecting and acknowledging nature and the provision of its resources to us. It promotes the sustainable utilisation of these resources, without diminishing their resourceful usefulness – the ethos of sustainable development. As accelerating climate change and staggering biodiversity loss threaten our planet, Earth Hour 2018-2020 endeavours to

spark never-before-had conversations on the loss of nature and the urgent need to protect it.

This year’s event was commemorated under the theme, “Reduce, Reuse, Change the Way We Live”. Botswana Power Corporation (BPC), Copperbelt Energy Corporation (CEC) and Eswatini Electricity Company (EEC) commemorated this Event by engaging in numerous activities with various stakeholders and the public to ensure concerted efforts in achieving the objective of Earth Hour. Activities included road shows, school visits, newspaper articles, radio shows, community sensitisation and distribution of materials, aerobics and health walks, panel discussions, social media engagements and actual switching off of non-essential lights and appliances during the Hour.

Energy savings submitted to SAPP from the utilities that participated in the Commemoration are as follows:

Botswana Power Corporation: 11 kW

Copperbelt Energy Corporation: 28.5 MW

Eswatini Electricity Company: 13.9 MW



Eswatini: From Left to right (Hon. Minister for Natural Resources: Peter Bhembe, Honourable Minister for Tourism and Environmental Affairs Hon: Moses Vilakati) and EEC MD Meshack Kunene during Symbolic Switch off at 8:30pm

	<p>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 Website: www.sapp.co.zw</p>	
--	--	--

Upcoming Events

DATE	EVENT
13-16 May	PowerGen Africa/Africa Utility Week, Cape Town, South Africa
14-16 May	World Hydropower Congress, Paris, France
20-24 May	SAPP Water and Energy Officials and Ministers Meeting, Windhoek, Namibia
28-29 May	SAPP System Disturbance Investigation Task Team Meeting, Johannesburg, South Africa
29 – 31 May	Coordination Meeting of the Forum of Regional African Power Pools and APUA Scientific Committee meetings, Livingstone, Zambia
30-31 May	SAPP Emergency Preparedness and Blackout Working Group Meeting, Johannesburg, South Africa
3-4 June	AfDB Mission
5-6 June	SAPP CC Board Meeting, Harare, Zimbabwe
10-14 June	Africa Energy Forum, Lisbon, Portugal
11-14 June	54 th Annual Meetings of AfDB, Malabo, Equatorial Guinea

24-29 June	53 rd Annual Meetings of APUA, Brazzaville, Congo
July	Finance Working Group Meeting, Maputo, Mozambique
5 August	IEEE Power & Energy Society (PES) General Meeting, Atlanta, Georgia, USA
20 – 23 August	IEEE Power Africa Conference, Abuja, Nigeria
2-5 September	53 rd SAPP Management Committee Meetings, Kinshasa, DR Congo



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 Website: www.sapp.co.zw

