

Southern African Power Pool

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Meetings, Workshops and Conferences

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Africa Climate Resilient Investment Facility (AFRI-RES) Workshop

To develop Africa's capacity to systematically integrate climate change considerations into the planning and design of long-lived investments, the World Bank, the Africa Union Commission, the United Nations Commission for Africa (UNECA), and the AfDB have teamed up to develop the Africa Climate Resilient Investment Facility (AFRI-RES). The overall objective of the initiative is to strengthen the capacity of African institutions (including national governments, river basin organizations, regional economic communities, power pools, and others) to plan,

design and implement investment resilient to climate variability and change in climate vulnerable sectors such as energy, transport, water and others. A central function of AFRI-RES will be to facilitate interaction between financiers, project developers, and scientific and engineering experts in order to develop and mainstream new practices that deliver climate resilient infrastructure in Africa. A workshop to validate the launch of AFRI-RES was convened in Abidian. Côte d'Ivoire, on 21 November, 2016. The SAPP Environmental Officer, Mr. Johnson Maviya, represented the SAPP at the workshop

Human Resources Working Group Meeting

The Human Resources Working Group met in Lusaka, Zambia from 14 to 15 November 2016. The meeting deliberated on the following items for the SAPP Coordination Centre staff: Group Life Cover, Funeral Assistance, Capacity Building, and Succession Planning.

PIDA Week

The Programme for Infrastructure Development in Africa (PIDA) organized a PIDA week from 21 to 25 November 2016 in Abidjan, Côte d'Ivoire. The meetings discussed, among other issues, progress report on the implementation of the PIDA projects, planned projects and resource requirements. The meetings were hosted by the African Development Bank and were attended by the African Union (AU), Regional Economic Communities (RECs), Regional Organizations such as Power Pools, NEPAD, and Financing Institutions. SAPP was represented by Mr. Musara Beta, the SAPP Chief Market Analyst.

Training Workshop on Aspects of the ZTK Project

RICARDO, a consulting firm, organised a training workshop on electricity markets, system operations, system studies and transmission pricing aspects of the Zambia-Tanzania-Kenya



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interconnector project (the ZTK Project). The training workshop was held in Johannesburg, South Africa, from 14 to 18 November 2016. RICARDO invited engineers from Eastern Africa Power Pool (EAPP), Southern African Power Pool (SAPP), Ministry of Energy in Zambia, Kenya and Tanzania, KETRACO, ZESCO and TANESCO. This training workshop was one of the activities lined up in preparation for the interconnection between SAPP and EAPP.



Some participants and trainers at the training workshop

UNECA Expert Group Meeting on Infrastructure Development

The Macroeconomic Policy Division of the United Economic Commission for Africa (UNECA) convened an Ad-hoc Expert Group Meeting at their offices in Addis Ababa, Ethiopia, on 10 November 2016. UNECA invited experts from all power pools in Africa, some regional economic communities like COMESA, EAC and ECOWAS and regional regulatory associations in East and West Africa. The objective of the ad-hoc expert group meeting (AEGM) was to review a study report drafted by UNECA. The report was entitled: "Study on Effective Regulatory Systems for Service and Structural Delivery Transformation in Africa: Infrastructure Development and the case of Power Pools". SAPP was identified as a key resource person. This was because in Africa SAPP has the most developed cross-border interconnections and also the most developed electricity market. UNECA was due to incorporate comments from participants and finalise the report.



Some participants at the expert group workshop

SAPP Energy Traders and System Controllers Study Visit to Europe



Some SAPP Energy Traders and System Controllers at CORESO in Brussels with their hosts

In the last week of November 2016 the first group of the SAPP Energy Traders and System Controllers carried out a study visit of the European interconnected electric power system organisations. They visited CORESO and ENTSO-E in Brussels, Belgium, and the French Transmission System Operator, RTE, in Paris, France. During the visit, participants were given a lot of expert presentations on electricity markets and interconnected power system operations. After returning from the visit participants were expected to recommend items which can be adopted and implemented in SAPP so as to improve electricity market and power system operations. The second and last group was scheduled to carry out the same study visit in the second week of December 2016. The study visits sponsored by the European Union were Commission (EU) through the **Technical**



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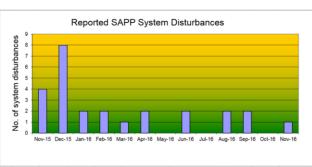
Assistance Facility for the Sustainable Energy for All (SE4ALL) initiative.



Some SAPP Energy Traders and System Controllers at RTE in Paris with their hosts

System Operations

System Disturbances



Reported SAPP System Disturbances In the month of November 2016 one system disturbance was reported on the interconnected power system. After a perturbation, heavy interarea power oscillations in the region of 200 MW were triggered between Eskom and ZESA and between ZESA and ZESCO Control Areas. These power oscillations were un-damped and they were sustained for a long duration. As a result, in the central corridor, in the ZESA Control Area, a number of power generation units, internal transmission lines and interconnectors tripped due to various protection schemes. Preliminary information attributed the trigger of the oscillation to generator tests that were underway in Eskom. Investigations have not yet been concluded.

Figure above gives a general outlook of reported SAPP system disturbances.

Electricity Trading

Energy Traded

Trading in the SAPP electricity market was higher during the month of November 2016 when compared to October 2016. 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 6.6% to 140,179.2 MWh in the month of November 2016, from the October figure of 131,520.7 MWh. Below is the overview of volumes traded in DAM, IDM, FPM-M and FPM-W for the month of November 2016.



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

Market Clearing Prices

FPM Monthly Prices

Non off-peak prices increased by 0.7% from 11.921 USc/KWh in October 2016 to 12.008 USc/KWh in November 2016. Off Peak prices increased by 5.9% from 3.601 USc/KWh in October 2016 to 3.812 USc/KWh in November 2016.

FPM Weekly Prices

The average price for the Peak period was lower by 17% at 12.818USc/KWh in November 2016 from the October average peak price of 15.441



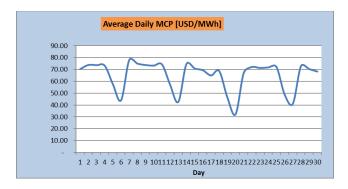
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USc/KWh. Standard period average prices marginally decreased from the October figure of 9.462 USc/KWh to 8.466 USc/KWh in November 2016. The average Off–Peak price also marginally decreased by 3.7% from 4.807 USc/KWh to 4.628 USc/KWh in November 2016.

Day Ahead Market

The average monthly market clearing price (MCP) was slightly higher during the month of November 2016 at 6.501 USc/KWh when compared to the 6.305 USc/KWh recorded in October 2016. Below is a summary of the daily average MCPs for the month of October 2016.



Market Revenues

A total of **USD 11,227,322.92** was exchanged on the DAM, IDM, FPM-W and FPM-M markets during the month of November 2016 when compared to a total of **USD 10,290,241.62** exchanged in October 2016. The Increase is mainly attributed to the increase in traded volumes.

Environmental Corner

Environmental and Social Management Framework for SAPP (ESMF) Disclosure Meetings

In-country Disclosure workshops for the Environmental and Social Management framework for the SAPP were held in Swaziland, Mozambique, Namibia Botswana, South Africa and Tanzania where stakeholders gave their

input to the draft final report. The final report has since been completed and submitted to the SAPP by the consultant. The Final reports can now be accessed on the SAPP Website.

Climate Vulnerability, Impacts and Adaptation options for SAPP Study Proposal

A draft study on Vulnerability, impacts of climate change and Adaptation options SAPP utility member companies has been developed. This will be presented to various Cooperating Partners for funding.

Upcoming Events

DATE	EVENT	
26 – 3 Dec 2016	Traders and Controllers Study Visit of European Electricity Market Operators and Power Transmission System Operators, Group A, Europe	
5 – 6 Dec 2016	FWG Meeting, Harare, Zimbabwe	
5 - 6 Dec 2016	Workshop on Transfer Limits, Eskom Control Area, Germiston, South Africa	
6 – 7 December 2016	Lusaka, Zambia, Climate Resiliency for Energy Projects Training Conference, Lusaka, Zambia	
7 – 8 Dec 2016	Workshop on SAPP Pool Plan, Johannesburg, South Africa	
10 -17 Dec 2016	Traders and Controllers Study Tour, Group B, Europe	
12 – 13 December 2016	Investors/Developers Renewable Energy Round Table, Dakar, Senegal	
13 – 16 Dec 2016	Workshop on Transfer Limits, ZESA & ZESCO Control Area, Harare, Zimbabwe	





