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## Meetings, Workshops and Conferences

### World Bank/NORAD/Sida AREP MDTF Meetings

The SAPP – World Bank- NORAD and Sida held meetings virtually on 23 and 24 July 2021. The meetings focussed on the progress of the World Bank AREP and Multi Donor Trust Fund (MDTF) activities within SAPP and EAPP. During the meetings NORAD and SIDA congratulated SAPP for successfully completing the program funded under the Government of Norway and SIDA grant.

### Development of Regional Grid Code by RERA

SAPP - RERA and the recommended Consultant held a clarification and negotiation meeting on the project to develop a Regional Grid Code in the SADC region.

### International Workshop on bioenergy monitoring and reporting in Africa.

The AFREC hosted a workshop themed, “better understanding the bioenergy situation in Africa”. The workshop was held on 22 – 24 June 2021. The SAPP as a stakeholder attended the workshop.

### Study on Potential for Low Loss Distribution Transformers in Africa

The United Nations Environment Program-United for Efficiency Initiative (UNEP-U4E) and International Copper Association (ICA) are working on a Study on Potential for Low Loss Distribution Transformers in Africa.

A meeting was held on 15<sup>th</sup> June 2021 to discuss more on regional initiatives under this topic.



### **SADCSTAN Technical Committee on Energy (TC 16) Inception Meeting: Regional Project on Cooling Products in the SADC region**

A workshop was held on 9<sup>th</sup> June 2021 to kick-off the work of the SADCSTAN Technical Committee on Energy (TC 16) in the SADC region. This project aims to support the harmonization of Minimum Energy Performance Standards (MEPS) on room air conditioners and residential refrigerators (cooling products) in the Southern African Development Community (SADC) region.

Recently, a market assessment on cooling products was conducted in the region aiming to provide detailed information about the different market dynamics and trends. Based on the findings of the market assessment and previous studies conducted by U4E and other stakeholders, technical notes on both appliances had been developed by the Lawrence Berkeley National Laboratory (LBNL), which include recommendations for minimum energy performance standards (MEPS) and labels for both products.

The technical committee has been constituted to support harmonization of MEPS at the regional and national levels, and to further facilitate adoption of these at national level.

### **THIRD ORDINARY SESSION OF THE SPECIALIZED TECHNICAL COMMITTEE ON TRANSPORT, TRANSCONTINENTAL AND INTERREGIONAL INFRASTRUCTURE AND ENERGY (STC-TTIE)**

The African Union Commission convened the Third Ordinary session of the Specialised Technical Committee on Transport, Transcontinental and Interregional Infrastructure and Energy (SPC-TTIE) virtually from 28 to 30 June 2021 after it was

postponed from 1 to 3 June 2021. The aspects covered that included energy were:

- PIDA PAP2 Financing strategy;
- African Union Commission funded projects;
- AFREC Continental Energy Programmes and
- Energy Action Plan 2021-2023.

### **Africa Energy Series: Financing the Energy Transition across Sub-Saharan Africa**

SAPP attended the virtual Africa Energy Series conference from 16 to 18 June 2021. This was made up of panel discussions on Policy and regulatory frameworks, Financing the energy transition, Investing in sustainable and resilient infrastructure, Future of gas, Green hydrogen and Climate friendly mobility.

### **System Planning**

#### **Review of SAPP Load Forecasting Methodology**

The Consultant delivered the Draft Load Forecasting Model and Manual for review by the SAPP Members. The review by the members is in progress.

#### **Transmission Pricing Model Review**

The Consultant submitted the final Inception Report on the study on the Improvement of SAPP Transmission Pricing Methodology for Implementation. The comments from the members were incorporated.

#### **SAPP Generic Production Costing Model Training**

Training was organised for the SAPP Planning Sub-Committee Members on the use of the generation production costing model. The Production Optimization Training Model is intended to build the planning



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capability of the Southern African Power Pool members, towards enhancing regional harmonization and cross border trade. The program is being supported by the USAID Southern African Energy Program (SAEP).

## Update on SAPP Projects

### ANNA Project

A workshop, aimed at reviewing and harmonising the final feasibility study report took place on 28 June 2021. The meeting was attended virtually by the Consultant, Zutari and the SAPP PAU team, at which the consultants clarified observations and comments made by the SAPP PAU team.

The workshop resolved to hold the ANNA Project Management Committee meeting on 20 July 2021, to review, among other issues, advancement of the project to Phase 3 and validation of the PIM document.

### Baynes Hydro-Power Plant Project

#### Technical Studies:

The final Expression of Interest (EOI) bid report for the procurement of techno-economic study was finalised on 29 June 2021 and submitted to the AfDB for a "No objection" decision.

#### ESIA Studies:

- Consolidation of ESIA TORs and integration of Green House Gas (GHG) emissions TOR is ongoing. Work on the GHG is being done in collaboration with the NamPower Climate Change Expert.
- A meeting between SAPP and SwedFund was held to present and discuss the Request for Proposal (RFP) format.

## Kolwezi – Solwezi Interconnector Project

#### ESIA Studies:

The service contract for the ESIA Consultant is ending on 31 June 2021. However, since several planned tasks are not yet completed, the Consultant has applied for a time extension to closeout all tasks.

Progress on the project is as follows:

- Zambia side: The final ESIA report has been issued, in readiness for submission to ZEMA. The RCAP has been submitted to ZEMA for review and final approval.
- DRC side: SNEL sent the approbation document of ACE on the ESIA report.

The SAPP PAU on its part has started the compilation of the Project Closing Report (PCR), by assessing Techno-economic and ESIA results produced by the project.

## Malawi – Zambia Interconnector Project

The procurement short list report of EOI bids for Techno-economic and ESIA study consultants was concluded in the first week of June 2021.

Preparation of RFP bids for the Techno-economic and ESIA consultants started on 28 June 2021.

## Mozambique – Zambia Interconnector Project

#### Technical Studies:

The validation workshop to review and harmonise comments, recommendations and queries on the network study report was held on 8 June 2021. Comments and reviews focused on techno-economic findings and proposals. The consultant has since collected sufficient feedback from EDM, ZESCO, and SAPP regarding proposed enhancements to the report.



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#### Geotechnical Work:

- Zambia: The field work has been completed and the draft report has been completed.
- Zambia: The tax exemption issue is not yet resolved.

#### ESIA Studies:

On 11 June 2021, the Consultant WSP, issued draft reports to the Project Sponsors and SAPP for review and harmonisation.

The Project Sponsors and SAPP provided feedback comments by 25 June 2021, which the Consultant has since integrated into the draft final reports.

### Zambia – Tanzania Interconnector Project

#### Technical Studies:

The Consultant WSP issued to ZESCO the draft LOT 1 substation documentation on 5 June 2021. The documentation comprises Transmission substation designs, associated Bill of Quantities (BOQ), and Tender Documents, issued for review and harmonisation with ZESCO Transmission development standards and philosophy.

On 21 June 2021, ZESCO submitted a list of comments, recommendations, and queries to LOT 1 substations designs, BOQ and Tender Documents. A validation workshop has since been planned for early July 2021.

The Techno-economic study is due to close at the end of July 2021.

### Regional Transmission Infrastructure Financing Facility (RTIFF)

The SAPP is finalizing the procurement for the consultant of the second phase of the

RTIFF assignment. The second phase of the assignment will include the design, implementation, and operationalization of the facility. The process is expected to be completed by the end of July 2021 after consultations with the World Bank.

### System Operations

#### SAPP System Disturbances

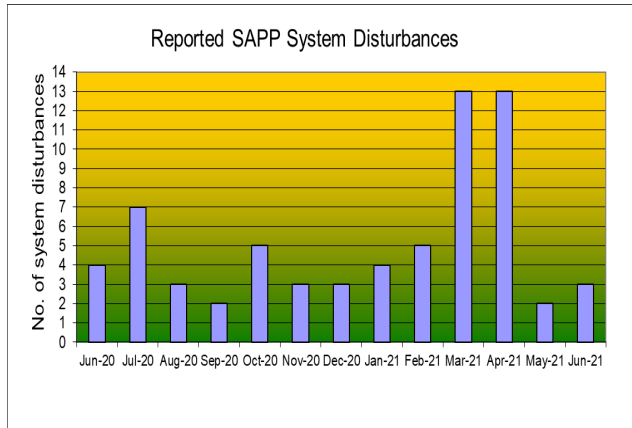
In the month of June 2021, three SAPP system disturbances were reported. In the first system disturbance, all generators on bars at a major power station in Zimbabwe tripped due to loss of auxiliary supplies. Subsequently, power oscillations were triggered in the central corridor and the 400 kV Zimbabwe - Botswana interconnector tripped. The root cause of the disturbance was a faulty low voltage circuit breaker for station supplies at the power station in Zimbabwe. In the second disturbance, the 400 kV Zimbabwe - Botswana interconnector tripped again due to undamped power oscillations. The trigger of the power oscillations has not yet been determined. The third system disturbance occurred in the middle of the night during off-peak hours. The interconnected power system experienced surplus generation and high power transfers from south to north in the central corridor. Then a tie circuit breaker in Mozambique North tripped on overfrequency protection, triggering undamped power oscillations in the central corridor. The 400 kV Zimbabwe - Botswana interconnector tripped, splitting the interconnected power system into two islands. The southern island experienced overfrequency, whereas the northern island experienced underfrequency, as the generation-load balance was disturbed in the islands. More interconnectors tripped on underfrequency protection in the northern island. The Zimbabwe, Mozambique North,



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and DR Congo South power systems subsequently collapsed. Restoration was done in phases but stable interconnected power system operations were re-established within five hours. Refer to figure below for an outlook of reported SAPP system disturbances in the last twelve months.



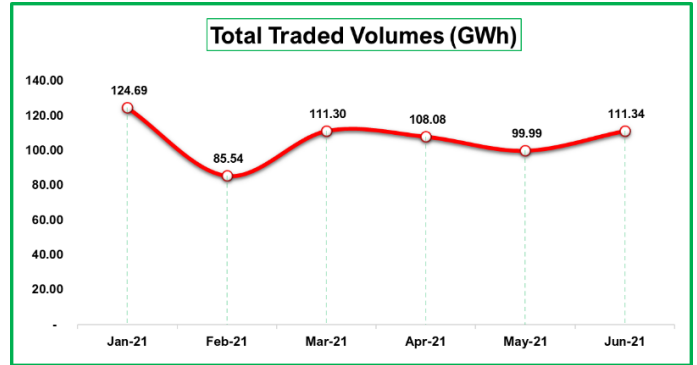
### SAPP SCADA System FAT

Factory Acceptance Tests (FAT) for the SAPP SCADA system (under development) were held between SAPP and the contractor (GE of France). The tests were observed online from 14 to 22 June 2021. All key components passed the tests. The contractor is now arranging to despatch the equipment to site.

### Electricity Trading

#### Traded Volumes

Trading on the market was higher during the month of June 2021 when compared to May 2021. 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 11% to 111.34 GWh in the month of June 2021, from the May 2021 volume of 99.99 GWh.



Monthly Traded Volumes (GWh) in DAM, IDM, FPM-W and FPM-M (January 2021 to June 2021).

### Market Energy Prices

#### FPM Monthly Prices

The June 2021 market clearing price for the non-off-peak period was 13.8 USc/kWh, up from the May 2021 figure of 10.0 USc/kWh. The price for the off-peak period decreased to 3.6 USc/kWh in June as compared to the May 2021 figure of 4.0 USc/kWh.

#### FPM Weekly Prices

The average market clearing price for the peak period was higher by 1% at 21.3 USc/kWh in June 2021 from the May 2021 figure of 21.1 USc/kWh. Standard period average market clearing prices increased from the May 2021 figure of 8.2 USc/kWh to 10.3 USc/kWh in June 2021. The average off-peak market clearing price for the month of June 2021 was 5.0 USc/kWh. During the month of May 2021, the average off-peak prices was at 3.8 USc/kWh.

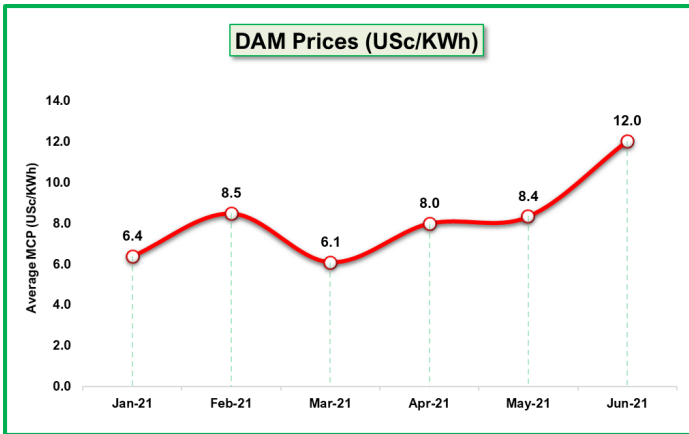
#### Day Ahead Market

The monthly average DAM market clearing price (MCP) was higher by 43% during the month of June 2021 at 12.0 USc/kWh when compared to 8.4 USc/kWh recorded in May 2021.



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Monthly Average Market Clearing Prices from January 2021 to June 2021.

### Intra Day Ahead Market (IDM)

The average IDM price for the peak period for the month of June 2021 was 14.8 USc/kWh, up from the May 2021 figure of 11.7 USc/kWh. The average IDM price for the standard period was 12.3 USc/kWh in June 2021, up from the figure of 7.7 USc/kWh recorded in May 2021. The average off-peak period price recorded for June 2021 was 7.8 USc/kWh, up from the May 2021 figure of 3.5 USc/kWh.

### Market Revenues

A total of USD 11.97 million was exchanged on the competitive market during the month of June 2021 when compared to USD 7.13 million exchanged in May 2021. The change is mainly attributed to changes in prices and traded volumes. USD 7.26 million was exchanged on the competitive market during the same month of June in 2020.

### Market Surveillance

#### Market Monitoring and Surveillance

During the month under review there were no observed cases of market manipulation or use of insider information. On the 5<sup>th</sup> of June 2021, the Market Surveillance unit observed IDM prices which were outside the monitoring

price ranges and information gathering is underway.

On year-on-year basis compared to June 2020, the Market Clearing Prices (MCPs) for June 2021 were relatively higher due to the easing of the COVID-19 lock-down restrictions within the SAPP region and due to the winter period.

Transmission capacity utilisation was deemed to be efficient according to the transmission capacity allocation rules.

The Market Surveillance Unit assessed and confirmed that the Market Operator observed their own processes and procedures during the month.

### Upcoming Events – 2021

DATE	EVENT
27 July 2021	47 <sup>th</sup> SAPP CC Board Meeting
7-9 September 2021	57 <sup>th</sup> SAPP Meetings
8 September 2021	48 <sup>th</sup> SAPP CC Board Meeting
28 October 2021	51 <sup>st</sup> SAPP Executive Committee Meeting and SAPP AGM
October/November 2021	SADC Energy Ministers Meetings
2 December 2021	49 <sup>th</sup> SAPP CC Board Meeting



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