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Meetings, Workshops and Conferences

Finance Working Group Meeting

The SAPP Finance Working Group Members held a virtual meeting on 04 December 2020 to review the SAPP audited financial statements for the year ending March 2020.

45th SAPP CC Board Meeting

The 45th SAPP Coordination Centre Board meeting was held virtually on 15 December 2020. The meeting among other things approved the SAPP Audited Financial statements for the period 2019/20.

SAPP Annual General Meeting

The SAPP Annual Meeting meeting was held virtually on 15 December 2020. The meeting accepted and approved the SAPP Annual Reports for the period 2019/20.

System Planning

Review of SAPP Load Forecasting Methodology

The major milestone for this project for the period under review was the issuing of the Inception Report. The Inception report was issued on the 30 December 2020 and it had incorporated all the comments received from the Inception workshop which was held virtually on the 1 December 2020. The main purpose of the Inception workshop was to present the Inception Report to the SAPP members and solicit further inputs, ideas, or issues of common interest from the delegates.

This project aims to align the load forecasting techniques used by the SAPP members. For regional generation and transmission planning purposes it is paramount that a uniform load forecasting methodology be developed as credible long-term electricity demand forecasts are essential for the strategic planning of the electricity sector across the generation, transmission, and distribution sectors. The forecasts are intended to reasonably reflect the electricity demand required to support and underpin the economic growth targets of the region and



are used in the planning process to determine the sizing, timing and type of electricity infrastructure investment required to meet the electricity demand. Demand forecasts that do not reasonably reflect the future demand in the economy can have significant consequences for the economy of a country or region as it may result in over or under-investment in the sector.

Impact of the Integration of Renewable Energy Technologies on SAPP Grid – Part 2

The major milestone for the project: “Assessment of the Impact of Renewable Energy Technologies on the Operations in the Southern African Power Pool: Part 2” for the period under review, December 2020 was the submission of the Draft Final Report. The Final Workshop was held virtually on the 10 December 2020. The main objective of the workshop was to present the results of the study.

The final report was issued and circulated to members for comments.

Setting up SAPP Data Management System

In the month under review, the first draft of the Data Management System (DMS) Specifications report was issued. The report included functional domain descriptions on the business, stakeholder requirements, functional, and non-functional requirements, and their related priority. The document also includes draft terms of reference addressing the foreseen implementation of the DMS Set Up in a format that can be included within a Request for Proposals document.

The following is the progress to date:

- Inception Report – completed, 21 September 2020,
- DMS Recommendations Report – completed, 15 November 2020,

- DMS Specifications Report – completed, 7 December 2020.

The next deliverables are the completion of the “DMS Standard Operating Procedure” document and the Final Report.

Update on SAPP Projects

Angola – Namibia Interconnector Project

In the month under review, on 14 December 2020, the SAPP PAU, EIB, DBSA, RNT-EP, NamPower and ZUTARI, held a scheduled ANNA Project Management Committee meeting. The project status and progress on contracted deliverables was discussed, in view of the project approaching the end.

(a) Project overview and progress:

The following have been completed:

- Legal and governance requirements.
- Preferred commercial structure.
- Business case.
- Detailed market analysis.
- Preliminary design.
- Detailed network analysis.

The following are in progress:

- Draft Feasibility Study report preparation is on-going. ZUTARI reported that the final Feasibility Study report shall be completed in early 2021.
- Technical and commercial inputs were completed.
- Legal inputs are pending.
- On the Namibian side, NamPower reported that procurement of demining services is in progress for the 400kV transmission corridor from Kunene substation to the border with Angola.
- On the Angolan side, RNT reported that the Huambo-Lubango 400kV transmission corridor, EPC contractor on site, construction is on-going with funding from DBSA, line commissioning date is 2023.
- Risk register is partially completed.



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- Feasibility Study report preparation is on-going.
- ESIA and resettlement plans preparation are on-going.
- For Namibia, the environmental clearance certificate was issued on 30 September 2020.
- For Angolan side, the ESIA is still pending, hence provisional license issued for the period ending January 2021.
- Currently ongoing is Joint Development Agreement framework preparation and harmonisation with IUMOU, with the view to motivating commitment toward development of the ANNA interconnector by the project sponsors NamPower and RNT.

Baynes Hydro-Power Plant Project

In the month under review, on 8 December 2020, the SAPP PAU held a meeting with SwedFund to review the comments on the ESIA TORs.

SAPP reported that AfDB is funding the technical studies and conceptual designs, and that SAPP was willing to share the technical feasibility study findings.

SwedFund recommended the unified approach for the coordination and implementation of the technical and ESIA studies to ensure close collaboration and congruence of findings and recommendations, especially at line route selection stage.

The plan is to finalise the ESIA TORS before the end of 2020 so that Procurement process can start in early 2021.

Kolwezi – Solwezi Interconnector Project

In the month under review, performance, and progress on the ESIA studies result areas are as follows:

- Draft ESIA report for selected ZESCO transmission corridor was submitted in December 2020.
- The RCAP report for the selected ZESCO transmission corridor was submitted.
- Public disclosure meeting for the selected SNEL transmission corridor have been completed.
- The RCAP for the selected ZESCO transmission corridor will be released in conjunction with the SNEL transmission corridor public disclosure meetings report.

Inga-Soyo Interconnector Project

On 9 December 2020, SAPP PAU, the World Bank, SNEL and RNT-EP held a project preparatory meeting. Recommendations and outcome of the meeting included the following:

- Procurement of Technical and ESIA consultants be done at the same time to avert delays.
- Development of Technical and ESIA TORs could incorporate lessons and experiences from the Kolwezi-Solwezi Interconnector project.
- Other challenges to manage include project implementation in a Covid-19 susceptible work environment and language translation between English, Portuguese and French respectively.
- Development of corridor options and scenarios be jointly done by the Technical and ESIA consultants so that a route selection report is produced early in the project life cycle.
- Prefeasibility and Feasibility Studies be done at the same time as discussed and agreed with the two utilities.
- Higher in-country presence of Technical and ESIA consultants in the face of the Covid-19 pandemic.
- The project sponsors and financiers could capitalise on several lessons from the



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Kolwezi-Solwezi power interconnector project.

Luapula Hydro Power Plant Project

In the month under review, on 18 December 2020, DBSA submitted to the SADC PPDF the Luapula Hydropower Project interim progress report, motivating the following action items:

- Review the outcomes of the Pre-feasibility Studies completed;
- Provide options going forward given the outcomes of the Pre-feasibility Studies, and highlight the outstanding work needed to prove the project feasibility and consequently availability of funding.

Furthermore, SAPP, SNEL and ZESCO have resolved to pursue other sources of funding for the stalled project, in order to progress and undertake the feasibility study for the selected hydropower sites.

Mozambique – Zambia Interconnector Project

In the month under review, the following was the performance on this project:

Technical studies:

- The Geotechnical consultant commenced drilling 19 boreholes along the transmission corridor in Zambia.
- SAPP PAU has requested SADC to facilitate negotiation on VAT exemption for CONTROLAB Zambia on Geo-Technical services
- The project is funded by a grant facility from the World Bank and NEPAD IPPF and has experienced delays on progress due to delayed tax refund claims, hence the need to establish a fast-track approach to managing tax issues with

facilitation from the Ministries of Energy and Finance respectively going forward.

ESIA Studies:

(a) Site investigations in Zambia:

- Field work has been completed; results report awaited.

(b) Site investigations in Mozambique:

- Works planned to commence in January 2021.

Zambia – Tanzania Interconnector Project

In the month under review, performance updates on the Zambia -Tanzania interconnector project include the following:

- The project workplan has been submitted to ZESCO to support discussions with the World Bank regarding the cost structure of substations and lines components.
- Line survey and translation for the Kasama and Nakonde corridor has been completed and results are acceptable.
- Geotechnical studies and laboratory testing completed, results report is expected to be ready by 8 January 2021.
- Substations scoping completed and preliminary report approved by ZESCO.
- Line design report awaiting formal approval by ZESCO.
- Preparation of tender documentation and packaging is ongoing.
- Technical studies completion has been approved for extension to April 2021.

Regional Transmission Infrastructure Financing Facility (RTIFF)

The 4th meeting on Coordination of Regional Project Preparation, Financing, and Implementation Initiatives was hosted virtually by the SADC Secretariat on 8 December 2020.



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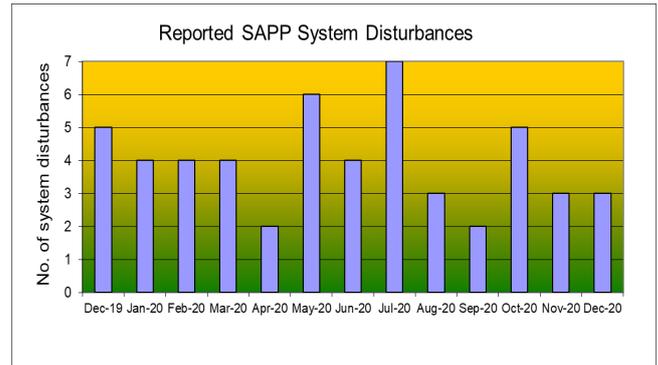
The objective of the 4th Coordination meeting was to update the SADC and the members of the forum on the progress made on the tasks undertaken related to assignment on development of RTIFF since the previous meeting of 21 October 2020. The meeting was also convened to review the decisions and the directives on RTIFF from the joint virtual meeting of Ministers responsible for Energy and for Water on 30 October 2020.

The presentations and discussions were based on the Analytical Note on RTIFF Enabling Factors Report and an overview of the factors that would constitute a financing model for RTIFF which is expected to be completed by April 2021.

System Operations

SAPP System Disturbances

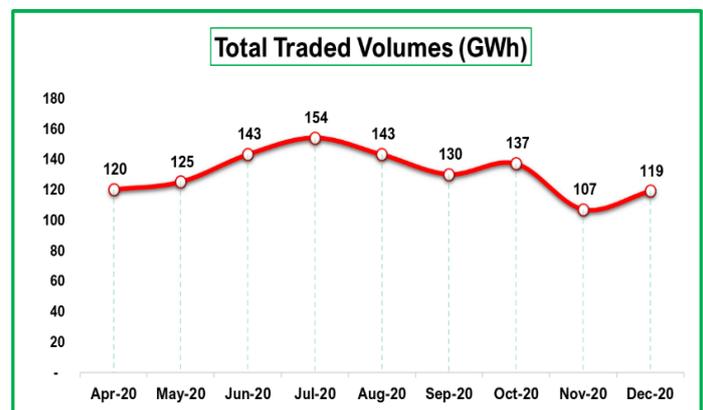
In the month of December 2020, three SAPP system disturbances were reported on the interconnected power system. In the first one, the 330 kV Lumwana - Kansanshi line tripped on over-voltage. In Zambia, a total load of 172 MW was lost. On the tie line with Zimbabwe, Zambia's import of around 90 MW reversed to export of about 120 MW. The cause of overvoltage is still under investigation. In the second disturbance, one generator in South Africa tripped while supplying 728 MW due to low insulation resistance on brush-gear. As a result, the power system frequency fell from 49.832 Hz to 49.421 Hz. In the third one, the 220 kV Likasi - Fungulume line in DR Congo tripped. This triggered power swings on the Zambia - DR Congo interconnector. Subsequently, the 330 kV Lumwana - Kalumbila line in Zambia tripped on distance protection. A total load of 306 MW was also lost in Zambia due to voltage fluctuations. Refer to figure below for a general outlook of reported SAPP system disturbances in the last 12 months.



Electricity Trading

Traded Volumes

Trading on the market was higher during the month of December 2020 when compared to November 2020. 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 119 GWh in the month of December 2020, from the November 2020 volume of 107 GWh.



Monthly Traded Volumes (GWh) in DAM, IDM, FPM-W and FPM-M (April 2020 to December 2020)

Market Energy Prices

FPM Monthly Prices

The December 2020 market clearing prices for the non-off peak was 10 USc/kWh, down from the November 2020 figure of 12 USc/kWh. The price for the off-peak period



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increased from the November 2020 figure of 3.0 USc/kWh to 4.5 USc/kWh in December 2020.

FPM Weekly Prices

The average market clearing price for the peak period was lower by 6% at 18.5 USc/kWh in December 2020 from the November 2020 figure of 19.6 USc/kWh. Standard period average market clearing prices increased from the November 2020 figure of 8.7 USc/kWh to 10.5 USc/kWh in December 2020. The average off-peak market clearing price increased from 3.8 USc/kWh in November 2020 to 4.4 USc/kWh in December 2020.

Day Ahead Market

The monthly average DAM market clearing price (MCP) was lower by 16% during the month of December 2020 at 8.8 USc/kWh when compared to 10.5 USc/kWh recorded in November 2020.

Intra Day Ahead Market (IDM)

The average IDM price for the peak period for the month of December 2020 was 8.2 USc/kWh, down from the November 2020 figure of 10 USc/kWh. The average IDM price for the standard period decreased to 6.2 USc/kWh in December from the November 2020 figure of 8.1 USc/kWh. The average off-peak period price recorded for December 2020 was 3.5 USc/kWh, down from the November figure of 3.8 USc/kWh.

Market Revenues

A total of USD 9.8 million was exchanged on the competitive market during the month of December 2020 when compared to USD 9.9 million exchanged in November 2020. The change is mainly attributed to changes in traded volumes and prices. USD 14.9 million was exchanged on the competitive market during the month of December in 2019.

Environmental Corner

Carbon Markets and Instruments for Southern Africa

The consultants engaged to conduct a study on regional opportunities for coordinating actions related to climate markets capacity support requirements convened the second meeting with SAPP and SADC on 15 December 2020. This study is being conducted under the auspices of the Partnership for Market Readiness (PMR), that in general aims to create an enabling environment for a regional climate market (e.g. instruments such as carbon tax, or how an additional revenue stream could be structured on a regional level for promoting renewable energy (RE) projects). This meeting delved into the potential delineation of SAPP climate market following a scoping exercise conducted; exploring the potential support needs for climate market instruments in the SADC both at national and regional levels focusing on the power sector.

SAPP ESC Virtual Training Programme on World Bank Social Safeguards

The ESC and Environmental and Social staff of utilities participated in a World Bank virtual Workshop focused on Operationalizing Stakeholder Engagement Plans and Grievance Redress Mechanisms (GRM). The Workshop was held on 3rd, 4th, 10th and 11th of December 2020, addressing the following broad topics:

- Conceptual and operational approaches to GRMs - including Sexual Exploitation and Abuse (SEA) and Harassment/Stakeholder (SH) requirements
- Identification, assessment and use of referral pathways in project design



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- Integration of GRM into and institutional Environmental and Social Management System
- Stakeholder Engagement - identification, analysis and development of a Stakeholder Engagement Plan.

Training needs for 2021 were also discussed to allow for continuous capacity building initiatives.

SADC PCB Elimination Project

The 5th Project Steering Committee Meeting was held virtually on 3rd and 4th of December 2020. The meeting discussions addressed, among others, the following aspects:

- Country presentations on Project Progress to date (2020 Work Plan) - Overall outlook on activity progress and financial report
- Outstanding activities and expected outputs
- National work plans for 2021
- Regional Work Plan for 2021: Regional 2021 Activities, Budgets and Disbursements

Upcoming Events

DATE	EVENT
11-16 January 2021	ESKOM Control Area, Power Transfer Limits Workshop, Virtual
18 -21 January 2021	6 th PIDA Week, Virtual
18 -21 January 2021	11 th IRENA Assembly, Virtual
19 January 2021	SAPP OSC Meeting, Virtual

18 January 2020	SAPP Power Quality Working Group Meeting, Virtual
21 January 2021	SAPP Crime Prevention Working Group Meeting, Virtual
28 January 2020	Energy Efficient Lighting & Appliances in East and Southern Africa (EELA), Virtual
28 January 2020	SAPP Finance Working Group Meeting, Virtual
25 – 29 January 2021	ZESA and ZESCO Control Area Power Transfer Limits Workshop, Virtual
7 th April 2021	Workshop 2 – Load Forecasting Methodology, TBC



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