

# WEST AFRICAN POWER POOL

SYSTÈME D'ÉCHANGES D'ÉNERGIE ÉLECTRIQUE OUEST AFRICAIN



ANNUAL REPORT | 2019  
RAPPORT ANNUEL

[www.ecowapp.org](http://www.ecowapp.org)

# **SUMMARY**

	<b>Page</b>
List of acronyms	3
1. Overview of WAPP Organisation	4
• Vision, mission	4
• Members, governance structure	5
• Diagrammatic representation of WAPP member	6
• WAPP organizational structure	7
• Members of the Executive Board	8
2. Keys Developments	11
3. Message from the Chairman of the Executive Board	13
4. Message from the Secretary General	15
5. Status of implementation of priority projects	17
6. Establishment of the Regional Electricity Market	22
7. Administrative and Financial Management	28
8. WAPP statutory meetings	32
9. Statistics from WAPP	34
10. Conclusion and outlook for 2020	35
Appendix 1	36

## LIST OF ACRONYMS

AFC	Africa Finance Corporation
AFD	Agence Française de Développement
AfDB	African Development Bank
AKSA	AKSA Energy Company Limited
CEB	Communauté Electrique du Bénin
CEET	Compagnie Energie Electrique du Togo
CIE	Compagnie Ivoirienne d'Electricité
CI-ENERGIES	Côte d'Ivoire Energies
CLSG	Côte d'Ivoire-Liberia-Sierra Leone-Guinea Interconnection Project
EAGB	Empressa Publica de Electricidad e Agua de Guinée Bissau
ECG	Electricity Company of Ghana
ECOWAS	Economic Community of West African States
EDG -SA	Electricité de Guinée
EDM-SA	Energie du Mali
EDSA	Electricity Distribution Supply Authority
EIB	European Investment Bank
EMS	Energy Management System
ESIA	Environmental and Social Impact Assessment Study
EU	European Union
FAT	Factory Acceptance Test
GRIDCo	Ghana Grid Company
ICC	Information and Coordination Centre
IsDB	Islamic Development Bank
JIC	(Project) Joint Implementation Committee
LEC	Liberia Electricity Corporation
MMS	Market Management System
NAWEC	National Water and Electricity Company Ltd of Gambia
NEPAD-IPPF	New Partnership for Africa Development / Infrastructure Project Preparatory Facility
NIGELEC	Société Nigérienne d'Electricité
OJT	On the Job Training
OMVG	Organisation pour la Mise en Valeur du fleuve Gambie
OMVS	Organisation pour la Mise en Valeur du fleuve Sénégal
PIPES	Planning, Investment Programming and Environmental Safeguard PIU Project Implementation Unit
PMU	Phasor Measurement Unit
SBEE	Société Béninoise d'Energie Electrique
Senelec	Société Nationale d'Electricité du Sénégal
SOGEM	Société de Gestion de l'Energie de Manantali
SONABEL	Société Nationale d'Electricité du Burkina
SPS	Special Protection Scheme
S/T	Show and Tell
SVC	Static Var Compensator
TCN	Transmission Company of Nigeria
TFP	Technical and Financial Partners UEMOA/WAEMU West African Economic and Monetary Union
USAID	United States Agency for International Development
VRA	Volta River Authority
WAMS	Wide Area Measurement system
WAPP	West African Power Pool
WB	World Bank



## 1. OVERVIEW OF WAPP ORGANISATION

The West African Power Pool (WAPP) was created by Decision A/DEC.5/12/99 of the 22<sup>nd</sup> Summit of the Authority of ECOWAS Heads of State and Government.





































The Articles of Agreement for the establishment and functioning of WAPP was adopted by Decision A/DEC.18/01/06 of the 29<sup>th</sup> Summit of the Authority of ECOWAS Heads of State and Government held in Niamey, which also granted the WAPP Secretariat the status of a Specialized Institution of ECOWAS through Decision A/DEC.20/01/06.

A Headquarters Agreement was signed between WAPP and the Government of the Republic of Benin on the 5<sup>th</sup> of July 2006, conferring on WAPP the diplomatic privileges and immunities required to operate effectively. The headquarters of WAPP Secretariat is presently located at PK6, Zone des Ambassades, Akpakpa, Cotonou, in Republic of Benin.

**WAPP VISION:** To integrate the operations of national power systems into a unified regional electricity market, which will, over the medium to long term, ensure the citizens of ECOWAS Member States with a stable and reliable electricity supply at competitive costs.

**WAPP MISSION:** To promote and develop infrastructure for power generation and transmission, as well as, to assure the coordination of electric power exchanges between ECOWAS Member States.

**MEMBERS:** since the General Assembly held on November 08, 2019 in Abuja (Nigeria), the WAPP has 36 members including one observer member.

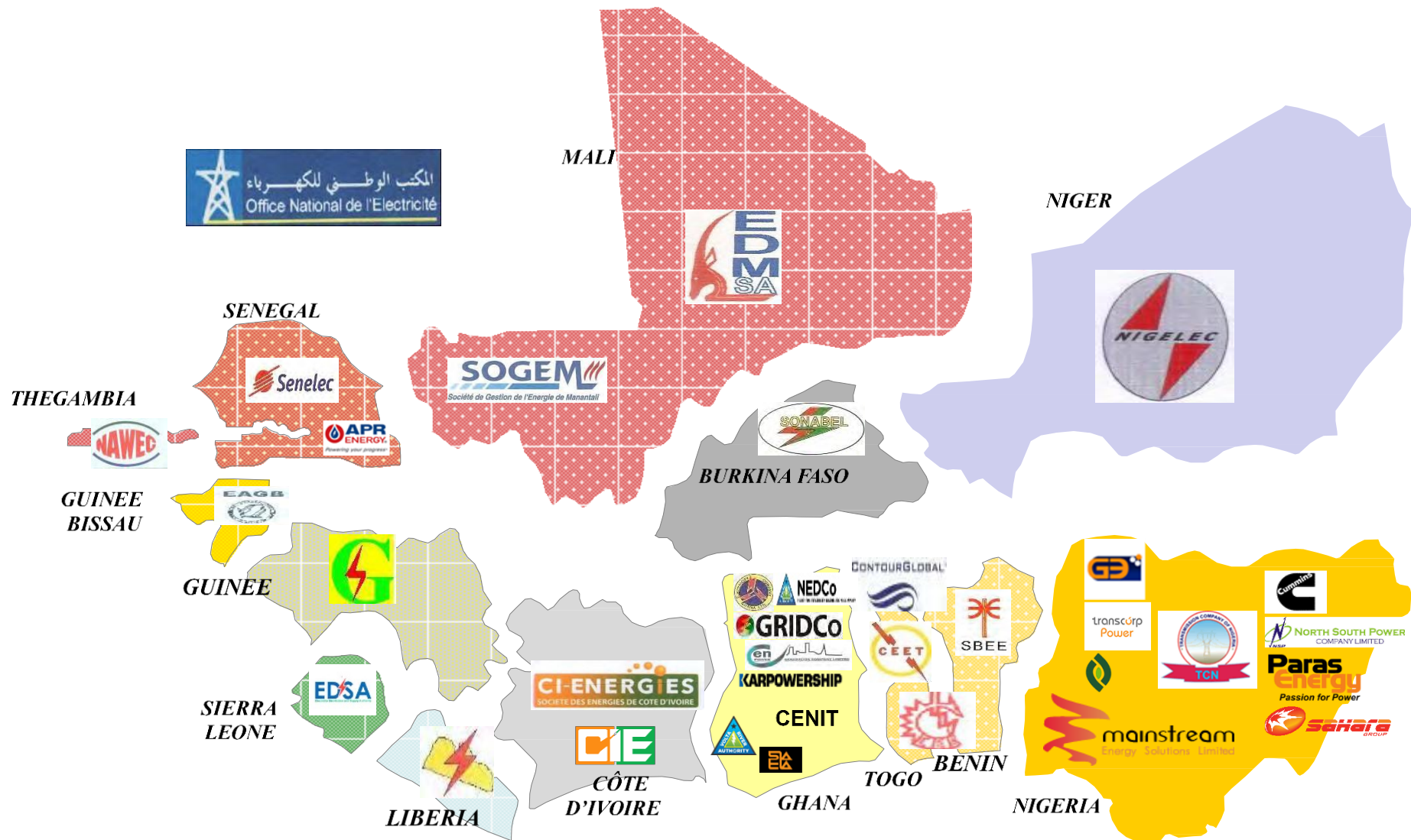
<b>WAPP Member Utilities as at 31 December 2019</b>					
1		Aksa Energy Company Ghana Ltd (Ghana)	19		Mainstream Energy Solutions Limited (Nigeria)
2		APR Energy (Senegal)	20		National Water and Electricity Company Limited (The Gambia)
3		CENIT Energy Limited (Ghana)	21		North South Power Company Ltd (Nigeria)
4		CenPOWER Generation Company Limited (Ghana)	22		Northern Electricity Distribution Company Ltd (Ghana)
5		Communauté Électrique du Bénin (Togo, Benin)	23		*Office National de l'Electricité et de l'Eau Potable du Maroc (Morocco)
6		Compagnie Energie Electrique de Togo (Togo)	24		Pacific Energy Company Limited (Nigeria)
7		Compagnie Ivoirienne d'Electricité (Côte d'Ivoire)	25		Paras Energy and Natural Resources Development Ltd (Nigeria)
8		Contour Global (Togo)	26		Sahara Power Group Ltd (Nigeria)
9		Côte d'Ivoire Energies (Côte d'Ivoire)	27		SAPELE Power PLC (Nigeria)
10		Cummins Power Generation Ltd (Nigeria)	28		Société Béninoise d'Énergie Electrique (Benin)
11		Empressa Publica de Electricidade e Agua de Guine-Bissau (Guinea Bissau)	29		Société de Gestion de l'Energie de Manantali (Mali, Senegal, Mauritania, Guinea)
12		Electricité de Guinée (Guinea)	30		Société Nationale d'Electricité du Burkina (Burkina)
13		Electricity Company of Ghana (Ghana)	31		Société Nationale d'Electricité du Sénégal (Senegal)
14		Electricity Distribution and Supply Company (Sierra Leone)	32		Société Nigérienne d'Electricité (Niger)
15		Energie du Mali-SA (Mali)	33		Sunon Asogli Power (Ghana) Ltd. (Ghana)
16		Ghana Grid Company (Ghana)	34		Transcorp Power (Nigeria)
17		Karpowership Ghana Company Ltd (Ghana)	35		Transmission Company of Nigeria (Nigeria)
18		Liberia Electricity Corporation (Liberia)	36		Volta River Authority Ghana)

\*Observer member

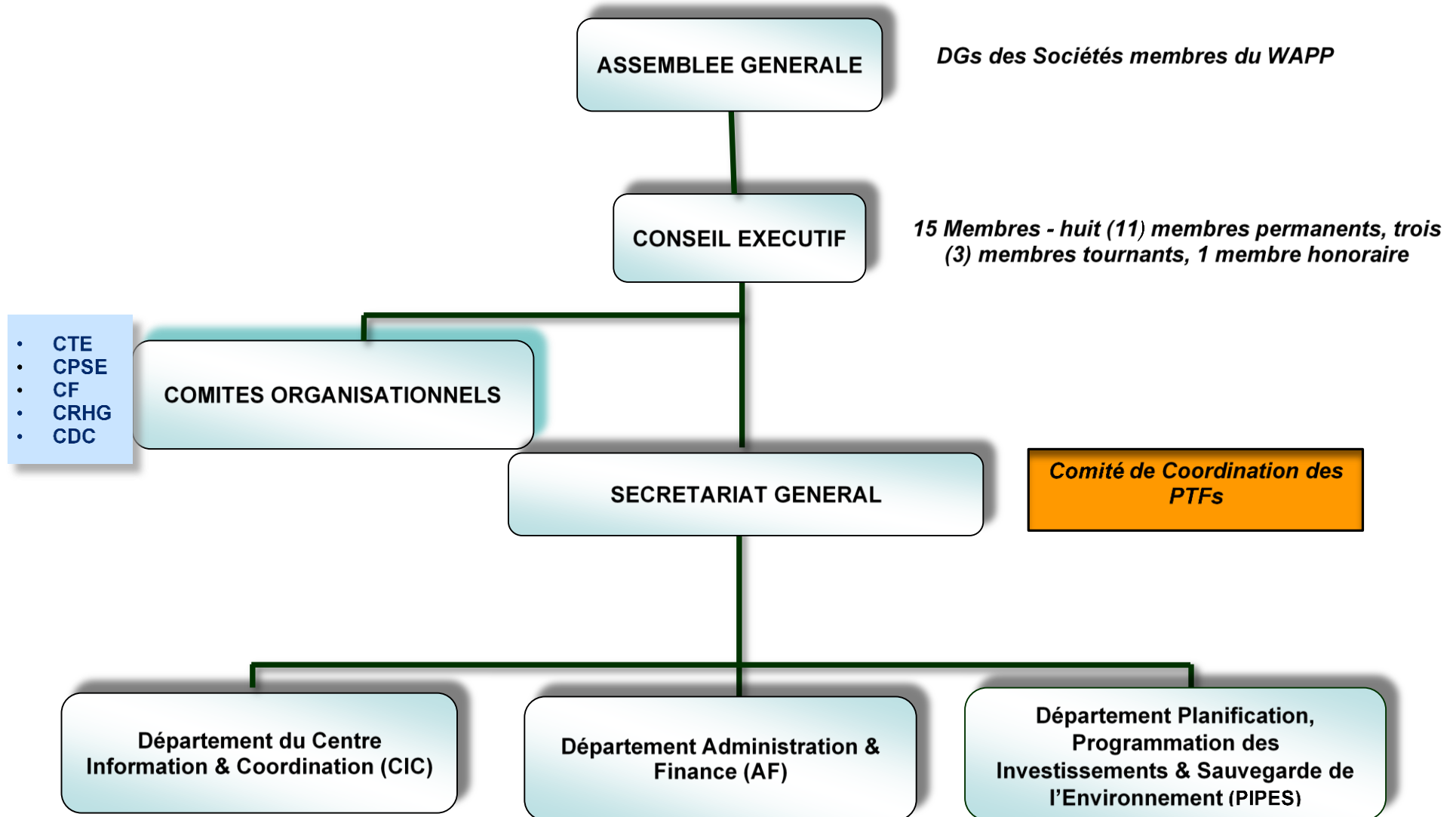
**WAPP GOVERNANCE STRUCTURES:** WAPP is made up of a total of four (4) governance structures: the General Assembly, the Executive Board, the Organisational Committees and the WAPP Secretariat.



## DIAGRAMMATIC REPRESENTATION OF WAPP MEMBERS



## WAPP ORGANISATIONAL STRUCTURE



**MEMBERS OF THE WAPP EXECUTIVE BOARD:** The Executive Board consists of 15 Members - eleven (11) permanent members, three (3) rotating members and 1 honorary member.

**Permanent Members:**

- TCN: Chairperson
- CI-ENERGIES: Vice-Chairperson
- WAPP Secretary General: Member
- CEB: Member
- EDG: Member
- GRIDCO: Member
- SBEE: Member
- Senelec: Member
- SOGEM: Member
- SONABEL: Member
- VRA: Member

**Rotating Members:**

- EDM – SA: Member
- Mainstream: Member
- NEDCO: Member

**Honorary Member:**

- Mr. Joseph MAKOJU



**Chairperson of the Executive Board**



Mr. Usman Gur MOHAMMED, CEO et MD TCN

**Vice-Chairperson of the Executive Board**



Mr. Amidou TRAORE, DG CI-ENERGIES

**Permanent Members**



Mr. Siengui A. KI, SG EEEOA



Mr. Karimou CHABI SIKA, DG CEB



Mr. Bangaly KONATE, DG EDG



Mr. J. AMOAKO-BAAH, CEO GRIDCO



Mr. Jacques Paradis, DG SBEE



Mr. Pape Mademba BITEYE, DG Senelec



Mr. Tamsir NDIAYE, DG SOGEM



Mr. Baba Ahmed COULIBALY, DG SONABEL



Mr. Emmanuel ANTWI-DARKWA, CEO VRA

### Rotating Members



Mr. Boubacar KEITA, CEO EDM – SA



Mr. Lamu AUDU, CEO Mainstream



Mr. Osmani Aliduba AYUBA, MD NEDCO

### Honorary Member



Mr. Joseph MAKOJU

## **2. KEY DEVELOPMENTS**

### **2.1. Presentation of the updated ECOWAS Master Plan for the Development of Regional Power Generation and Transmission Infrastructure to the Technical and Financial Partners**

The updated ECOWAS Master Plan for the Development of Regional Power Generation and Transmission Infrastructure was officially adopted by the Session of the ECOWAS Authority of Heads of State and Government held on 22nd December 2018 in Abuja, Nigeria.

Following its adoption, the WAPP Secretariat embarked on a tour to present the Plan to its Technical and Financial Partners (TFPs) and to request for their continued support. In this vein, the WAPP Secretariat conducted a mission, between February and April 2019, to the European Union Delegation in Cotonou, then to the IsDB, AfDB, AFD, EIB, KfW, World Bank and EBID at their respective headquarters.

During the TFP Coordination Meeting held in Cotonou on 26th April 2019, the Plan was presented again to afford those who were unable to receive the WAPP mission the opportunity to take full cognizance of the said Plan.

### **2.2. Installation of the North Core Project Implementation Unit in Abuja**

Following the recruitment of its Director in 2018 and its key staff by the end of the first quarter of 2019, the PIU, which falls under the authority of the WAPP Secretariat in accordance with the established North Core Project implementation plan, was installed in May 2019 in its permanent premises in Abuja, Nigeria. From there, it shall work with the support of the Owners' Engineer to finalize the bidding documents for the works, recruit contractors, monitor the implementation of the conclusions of the environmental and social impact assessment study and ensure follow-up on the works. It shall have representations in the various project beneficiary countries.

### **2.3. Adoption of the 2020 – 2023 WAPP Business Plan**

The Business Plan is a four-year tool developed by WAPP for the implementation of the ECOWAS Master Plan. Following the adoption of the new Master Plan in December 2018, it became essential to formulate a new Business Plan, since the current one (2016 - 2019) was drawing to an end.

The new Business Plan covering the period 2020-2023, prepared by the WAPP Secretariat, was considered by the Strategic Planning and Environmental Committee during its meeting held on 28<sup>th</sup> September 2019, in Cotonou. At this meeting, the Business Plan was endorsed by the SPEC which in turn recommended it to the Executive Board for approval. The Business Plan was adopted by the Executive Board during its meeting held on 5<sup>th</sup> October 2019, and upon onward submission, approved by the WAPP General Assembly at its session held in Abuja on 8<sup>th</sup> November 2019. The Plan, which is valued at a total implementation budget of US\$19,753,673,567, is predicated on 5 objectives as follows:

- OBJECTIVE 1: Develop WAPP Priority Projects
- OBJECTIVE 2: Operationalize the Regional Electricity Market
- OBJECTIVE 3: Restructure WAPP Secretariat
- OBJECTIVE 4: Implement WAPP Dark Fibre Project
- OBJECTIVE 5: Reinforce Capacity of WAPP

### **2.4. Kick-off of the Technical Assistance to the WAPP ICC**

The European Union and World Bank, the two TFPs that are supporting WAPP towards the implementation of the Regional Electricity Market, have funded technical assistance programs to assist in the transformation of the ICC Department into the System and Market Operator (SMO) including its initial operationalization. The RTE International technical assistance, provided by a 4-member on-site team was officially launched on 20<sup>th</sup> May, 2019. This assistance is intended to assist the ICC Department in organizing itself adequately enough to assume its new responsibilities under the Regional Market, in training the ICC staff, in operating the WAPP interconnected power system control equipment and administering the Regional Market. The assistance of the

AETS Bureau consists of a one-man crew dispatched to Cotonou. Whereas the World Bank-funded technical assistance is provided by an Individual Consultant.

## **2.5. Admission of new members into WAPP**

At the 14<sup>th</sup> WAPP General Assembly Session held on 8<sup>th</sup> November 2019 in Abuja, Nigeria, 4 new members were admitted into the WAPP Organization. Namely:

- APR Energy (Senegal);
- Cummins Power Generation Ltd (Nigeria);
- SAPELE Power PLC (Nigeria);
- Transcorp Power (Nigeria).

Regrettably, 3 member utilities (GTS, GTG and NBET) that were no longer fulfilling their membership obligations to WAPP were stripped of their membership status during the same meeting.

Accordingly, WAPP membership progressed from 35 to 36 members.



### 3. MESSAGE FROM WAPP EXECUTIVE BOARD CHAIRMAN



Mr. Usman Gur MOHAMMED,  
Executive Board Chairman

It gives me great pleasure to take stock of our Institution's report on activities achieved over the just concluded year 2019, the 20<sup>th</sup> since its creation in 1999. It gives me even greater joy because this year, we are going to edit and publish our Annual Report for the first time.

We can boldly state with a sense of pride that it has been a year with a record of successes that draw us closer to the objectives set by the ECOWAS Heads of State and Government at the creation of the Institution.

Thusly, following the adoption on 21<sup>st</sup> December 2018 of the new ECOWAS Master Plan for the Development of Regional Power Generation and Transmission Infrastructure for the period 2019 - 2033, we pitched it to our Technical and Financial Partners. To this end, the General Secretariat visited the TFPs' respective headquarters to present the Plan to them and solicit their support.

In its quest for solutions to ensure the establishment of an effective and efficient electricity market, WAPP has pursued its discussions with the World Bank, which financed the study that led to the drafting of the Directive on Securitization of Cross-Border Power Trade for implementation within the framework of the Regional Electricity Market. Said discussions naturally involve state actors whose role is primordial in the implementation of this Directive that is geared at establishing a set of rules aimed at enhancing the viability and sustainability of

cross-border electricity supplies and payments through secure payment guarantees. We are confident that in the year 2020, pragmatic solutions will be found towards the implementation of this Directive.

Overall, the priority projects are progressing steadily, as evidenced from the status of implementation of priority projects. However, certain delays have been observed, as in the case of the ICC project earmarked for the construction of the centre from which the ECOWAS interconnected power system will be coordinated and the Regional Electricity Market will be managed. An audit conducted by the end of 2018 paved way for the adoption of measures that have somewhat reduced said delay, which suggests that all works scheduled for the year should be completed in 2020.

I equally express satisfaction over the functioning of the organisation at the institutional level. All the organs are functioning normally.

The Executive Board held all the ordinary meetings planned for the year (4 in number), including those scheduled for the adoption of the 2018 Financial Statements and the 2020 Budget. These meetings enabled, among others, the adoption of amendments to the WAPP Secretariat's Staff Regulations, the Organisational Structure & Staffing Plan of the ICC, the establishment of the CIGRE West Africa National Committee, and the 2020 – 2023 WAPP Business Plan.

The various Organisational Committees and Task Forces thereof also held their statutory meetings, thus enabling them to support the Executive Board with their valuable advice. It is noteworthy to mention that the bulk of documents adopted by the Executive Board were duly reviewed/forwarded by the Organisational Committees.

The General Assembly Session was held from 4<sup>th</sup> to 8<sup>th</sup> November 2019 and welcomed 4 new members thus boosting WAPP membership to 36 members, while 3 other members not up-to-date with their obligations were stripped of their membership status.

The year 2020 looks auspicious and is likely to ensure the completion of certain priority projects under implementation, which augurs well for the kick-off of the competitive phase of the Regional

Electricity Market and commencement of construction works on certain projects under preparation, notably the North Core and the Guinea-Mali Interconnection Projects.

**Usman Gur MOHAMMED**



## 4. MESSAGE FROM THE SECRETARY GENERAL



**Siengui A. Kl,**  
WAPP Secretary General

Striving with determination and enthusiasm since its inception, WAPP has yet again this year remained steadfast in the pursuit of achieving its mission. We have focused our efforts on the implementation of activities that should culminate before long in the implementation of a Competitive Regional Electricity Market.

In this vein, during the first quarter of 2019, the WAPP Secretariat had set out to present the new 2019 – 2033 ECOWAS Master Plan for the Development of Regional Electric Power Generation and Transmission Infrastructure to its TFPs and to seek their continued support for this Plan that was adopted by the ECOWAS Authority of Heads of State and Government in December 2018 in Abuja, Nigeria.

With respect to the Directive on Securitization of Cross-Border Power Trade (adopted by the ECOWAS Council of Ministers in Abuja in December 2018 and) aimed at ensuring the establishment of a viable and sustainable Regional Electricity Market, WAPP has pursued discussions with the World Bank, which had assisted in the elaboration of the said Directive. Said discussions are geared towards the field implementation of the Directive, notably with regard to the establishment of financial guarantees. This directive is expected to facilitate the transformation of our member utilities

into financially solvent structures that are mature enough to participate in an efficient market.

The 2020 – 2023 Business Plan, adopted by the 14<sup>th</sup> Session of our General Assembly, outlines the main objectives set by our Institution for the next four years. It shall constitute the working and steering instrument of the WAPP Secretariat in its stride towards the realization of the Market.

Among the latest achievements of our Institution, the year 2019 has heralded in good news for the Coastal Transmission Backbone Project: which is the inauguration in April of the 330 kV Davié Substation in Togo. Thanks to the commissioning of this substation, the 330 kV line segment between Tema in Ghana and Davié shall also be energized. The remaining section between Davié and Sakété in Benin is expected to be commissioned in the first quarter of 2020.

Ongoing works on the CLSG Project and the OMVG Loop, the two construction works that shall ensure the electrical interconnection of the continental states of ECOWAS, are progressing steadily albeit certain difficulties observed and expected to be completed in the course of the year 2020. These aforementioned two projects coupled with the ongoing works on the WAPP Information and Coordination Centre (ICC) constitute the three projects that will indeed enable the effective kick-off of the competitive phase of the Regional Electricity Market. In 2018, the ICC civil engineering works had encountered difficulties that have been relatively well remedied and said works, including the ICC equipment, are expected to be completed in the course of the year 2020.

The WAPP Power System Synchronization Project entered its implementation phase this year with the design and manufacture of equipment to be installed on the WAPP interconnected power system by the company awarded the equipment supply contract. Whilst the calibration of the main power generators is equally expected to commence soon.

Works on the WAPP North Core Project are progressing satisfactorily. The Project Management Unit has been installed in its premises in Abuja, Nigeria, since May 2019. The Owners' Engineer has

formally taken up his functions in September 2019 with the launching of a Request for Expressions of Interest from construction companies. Similar progress has also been made with regard to the Guinea-Mali Interconnection Project, whose Owners' Engineer had also officially assumed duties in September 2019.

Power generation projects, particularly construction works on solar power plants, are also making good progress. In this respect, the feasibility studies for the 150 MW Solar Power Plants in Burkina Faso and Mali were launched in March 2019. The environmental and social impact assessment studies for these power plants were launched in October & November respectively for Burkina Faso & Mali, and two contracts were signed in September 2019 for the organization of auctions following competitive biddings by IPPs for the construction of these plants. Whereas, the feasibility studies for The Gambia, Niger and Côte d'Ivoire line segments are expected to commence very shortly. The study on the optimization of hydropower generation on the Saint Paul River in Liberia was launched in February 2019.

In terms of mobilization of new fundings, continued efforts have been deployed by the WAPP Secretariat to mobilise funding from its Technical and Financial Partners, who today give much credit to our Institution.

Following the adoption of the new Master Plan in December 2018 by the ECOWAS Authority of Heads of State and Government, the WAPP Secretariat organized an official tour to acquaint our

Institution's key Technical and Financial Partners with this new Plan. The first Donors' (TFP) Coordination Meeting, which was held last April 2019 in Cotonou, also helped to acquaint all our partners with the Plan. As a result of which, till date, funding is currently being finalized for the update of the Ghana – Burkina Faso - Mali Interconnection Study; while funding sought for the study on the WAPP Median Core Project envisaged to link Nigeria, Benin, Togo, Ghana and Côte d'Ivoire has been sourced and the recruitment process for the feasibility study consultant is underway.

I would like to seize this opportunity to express once again my satisfaction and sincere appreciation to the Technical and Financial Partners (TFPs) without whose support the progress achieved would not have been possible.

I extend my profound gratitude to the ECOWAS Commission, the WAPP Executive Board, the WAPP Member Utilities, as well as the WAPP Secretariat Staff for all the sacrifices and efforts deployed that have enabled WAPP today to achieve the results attained so far and of which we can all be proud.

I entreat you to an insightful perusal of this 2019 Annual Report.

**Siengui A. KI**

## 5. STATUS OF IMPLEMENTATION OF PRIORITY PROJECTS

The priority projects concerned are those contained in the **ECOWAS Master Plan for the Development of Regional Power Generation and Transmission Infrastructure**. This Plan is the planning tool for the implementation of large-scale power transmission and interconnection lines of ECOWAS Member States as well as major power generation plants, made available to WAPP by the ECOWAS Heads of State and Government.

Most of the activities related to priority projects are carried out by the PIPES Department.

### 5.1. Resources Mobilisation & Projects Preparation

Resource mobilisation is an important step in the preparation and implementation of the WAPP Priority Investment Programme and constitutes a key activity of the WAPP Secretariat.

#### 5.1.1. Presentation of New Master Plan to TFPs

Following the adoption of the updated 2019-2033 ECOWAS Master Plan for the Development of Regional Power Generation and Transmission Infrastructure by the ECOWAS Authorities, the WAPP Secretariat undertook visits to present the Plan to its partners and solicit their support for its implementation. A mission led by the WAPP Secretary General successively visited the IsDB in Jeddah from 20<sup>th</sup> – 21<sup>st</sup> February 2019, the AfDB in Abidjan on 28<sup>th</sup> February 2019, the AFD in Paris on 4<sup>th</sup> March 2019, the EIB in Luxembourg on 7<sup>th</sup> March 2019, the KfW in Frankfurt on 8<sup>th</sup> March 2019, the World Bank in Washington on 1<sup>st</sup> April 2019 and the EBID in Lomé on 18<sup>th</sup> April 2019.



*The WAPP SG with the EU Ambassador*

#### 5.1.2. WAPP Donors' (PTF) Coordination Meetings

As part of WAPP's regular consultations with its Technical and Financial Partners, the Secretariat held the 33<sup>rd</sup> and 34<sup>th</sup> Coordination Meetings with its TFPs, respectively on 26<sup>th</sup> April 2019 in Cotonou and on 7<sup>th</sup> November 2019 during the 14<sup>th</sup> WAPP General Assembly Session in Abuja (Nigeria). These meetings constituted an opportunity for the WAPP Secretariat to present to these partners the

progress made in the implementation of WAPP Priority Projects, the Regional Electricity Market and the Capacity Building Programme designed for the WAPP Secretariat and its Member Utilities. These meetings also afforded the opportunity to present to the Partners, the Institution's funding requirements for the implementation of its priority projects.



*Group photo of the meeting from 26 April 2019*

#### 5.1.3. Development of the 2020 - 2023 WAPP Business Plan

The 2020-2023 Business Plan was drafted by the WAPP Secretariat and reviewed by the Strategic Planning and Environmental Committee during its meeting held on 28<sup>th</sup> September 2019 in Cotonou. During the meeting, the SPEC endorsed the Business Plan and recommended it to the Executive Board for approval. The Business Plan was adopted by the Executive Board at its meeting of 05<sup>th</sup> October 2019 and submitted to the WAPP General Assembly who approved it at the session held in Abuja on 07<sup>th</sup> November 2019. It is based on 5 objectives for a total implementation budget of US\$ 19,753,673,567. The objectives are:

- OBJECTIVE 1: Develop WAPP Priority Projects
- OBJECTIVE 2: Operationalize Regional Electricity Market
- OBJECTIVE 3: Restructure WAPP Secretariat

- OBJECTIVE 4: Implement WAPP Dark Fiber Project - OBJECTIVE 5: Reinforce Capacity of WAPP

#### **5.1.4. 330 kV Côte d'Ivoire - Ghana Interconnection Reinforcement Project**

- Feasibility & ESIA Studies and Bidding Documents finalized with EU funding;
- Length: 296 km;
- Cost of works: 180.4 million Euros;
- KfW and EIB interested in financing the project;
- Change of priorities on the Ghanaian side resulting in postponement of project implementation;
- Expected commissioning: 2029.

#### **5.1.5. 330 kV Nigeria - Benin Interconnection Reinforcement Project**

- Feasibility, ESIA & Line Route Studies underway with funding from NEPAD-IPPF, USAID, GIZ and beneficiary utilities;
- Estimated cost of works: 87.6 million Euros;
- Expected commissioning: 2023.

#### **5.1.6. 225 kV Côte d'Ivoire - Liberia Interconnection Reinforcement Project**

- Sourcing of funding for pre-investment studies: US\$ 3.43 million;
- Funding solicited from NEPAD-IPPF and USTDA;
- Approval of a donation of US\$ 1.79 million by NEPAD-IPPF for partial financing of studies;
- Financing gap of US\$ 1.31 million;
- Expected commissioning: 2024.

#### **5.1.7. 330 kV Ghana - Burkina - Mali Interconnection Project**

- Sourcing of funding for update of the Technical Feasibility & ESIA Studies following among other things, changes in environmental protection legislation in the project countries and the voltage level of 330 kV recommended by the new master plan;

- World Bank, AFD and MCC expressed interest in jointly funding the update of the studies for an amount of 4.7 million USD;

- Withdrawal of MCC from project funding and resumption of discussions between the WB, AFD and the WAPP General Secretariat to adopt a financing plan for the studies;

- Approval of a donation of US\$ 0.58 million by NEPAD-IPPF for partial financing of studies;

- Due diligence procedure underway for recruitment of Consultant in charge of the Study;

- Recommendation to explore the proper voltage level between 330 kV and 400 kV;

- Length: about 600 km of line between Bolgatanga (Ghana) - Bobo Dioulasso (Burkina) - Sikasso (Mali);

- Expected commissioning: 2024.

#### **5.1.8. 330 kV WAPP North Core Interconnection Project**

- Interconnection linking Nigeria, Niger, Benin and Burkina Faso;

- Pre-investment studies completed;

- Total length: 875 km;

- Project cost: US\$ 697.7 million including RE;

- Financing: World Bank, AfDB, AFD, EBID and EU;

- Recruitment of the PIU Director and key staff completed;

- Installation of the PIU in Abuja since May 2019;

- Recruitment of Owners' Engineer completed and latter's activities launched in September 2019;

- Launch of prequalification documents for the recruitment of construction companies in September 2019 and no-objection notice expected from TFP;

- Expected commissioning: 2023.

#### **5.1.9. 330 kV WAPP Median Backbone Interconnection Project**

This entails the first segment of the WAPP Median Backbone Project. It links Nigeria, Benin, Togo, Ghana and Côte d'Ivoire.

- Cost of pre-investment studies: US\$ 3 million provided by the World Bank;
- TOR of studies currently being finalized;
- Evaluation of EOIs for recruitment of Consultants in charge of studies underway;
- Expected commissioning: 2025.

#### **5.1.10. Optimal Development Plan for the St. Paul River Waterfall in Liberia and Feasibility Study for the priority project selected**

This is a multi-phase project funded by the World Bank and coordinated by the WAPP Secretariat. It was launched in 2017 and the activities carried out over the year 2019 are as follows:

- Launch of the Optimal Development Study for the St. Paul River Waterfall in May;
- Validation of the Market Survey Report in July;
- Review of the Interim Report on Power Generation Options;
- Approval of the Waterfall Development Plan in September;
- Establishment of a Panel of Experts for the St. Paul Hydroelectric Project in Liberia and future WAPP hydropower projects underway;
- Ongoing recruitment of the Phase 2 Technical Assistance Consultant.

#### **5.1.11. Côte d'Ivoire – Guinea Interconnection Project**

- Sourcing of funding for pre-investment studies: US\$ 3.26 million;
- Funding solicited from TFPs;
- Expected commissioning: 2024.

#### **5.1.12. 150 MW Regional Solar Parks in Burkina Faso and Mali**

These are two projects involving the construction of 150 MW regional solar parks in Burkina Faso and Mali respectively.

- Pre-investment studies under way with World Bank funding;
- Multi-site and multiphase approach adopted for solar park construction;

- "Plug and Play" concept applied: energy evacuation facilities are built through public funding and the solar park developer is selected via tender calls;
- Recruitment of Transaction Advisors finalised and contracts signed.

#### **5.1.13. 450 MW Maria Gléta (Benin) and Aboadze (Ghana) Regional Thermal Generation Facility Projects**

The preparation of these regional generation projects is underway within the framework of a Public Private Partnership (PPP) with Africa Finance Corporation (AFC).

- Maria Gléta Thermal Generation Facility:
  - Capacity: 450 MW;
  - Feasibility study completed;
  - Commercial framework to govern the project under discussion between AFC and the power utilities/countries involved in the project;
  - The African Legal Support Facility (ALSF), at the request of the WAPP Secretariat, agreed to provide utilities concerned with a Commercial Transactions Advisor. Recruitment of the latter is in progress;
  - Recent difficulties encountered on the Maria Gléta site could jeopardize the use of this site for the construction of the plant; this will have some repercussions on the project.
- Aboadze Thermal Generation Facility:
  - Capacity: 450 MW;
  - Awaiting validation of site; the initial site – Domunli - has been changed by the Ghanaian Authorities to Aboadze and the choice of this new site must be validated and the site declared as a free zone.

## **5.2. Projects Coordination & Monitoring**

The WAPP Secretariat ensured the coordination and monitoring of the implementation of the following projects:

### 5.2.1. 330 kV Aboadze-Prestea-Kumasi-Bolgatanga Transmission Line in Ghana

The project involves the reinforcement of Ghana's internal grid to ensure greater power transit capacity to the northern part of the country.

- Length: 798 km split into 3 segments:
  - Aboadze – Prestea funded by Armandi;
  - Prestea – Kumasi funded by Korea Exim Bank;
  - Kumasi – Bolgatanga via Kintampo & Tamale funded by AFD.
- Works kick-off: 2015;
- Aboadze – Prestea & Prestea – Kumasi segments already commissioned;
- Delays in works on Kumasi – Bolgatanga segment; works still in progress.

### 5.2.2. 330 kV Volta (Ghana) – Lomé “C” (Togo) – Sakété (Benin) Interconnection Project

This is a segment of the WAPP Coastal Transmission Backbone interconnection line from Ghana to Benin where it interlinks with the Nigeria - Benin segment.

- Length: 350 km;
- Financing: AfDB, BM, KfW and BOAD;
- Works kick-off: 2013;
- Completion of works in Ghana: 2015;
- Completion of works on the Ghana / Togo border - Davié substation segment and commissioning of segment in April 2019;
- Remaining Davié - Sakété segment expected to be completed in 1<sup>st</sup> Quarter of 2020.

### 5.2.3. 225 kV Côte d'Ivoire – Liberia - Sierra Leone – Guinea (CLSG) Interconnection Project

- Length: 1,349 km;
- Financing: BM, AfDB, EIB and KfW;
- Works kick-off: 2017;
- Implementation progress: about 66%;
- Commencement of sequential commissioning of works in March 2020 and completion of works in 2020.

### 5.2.4. OMVG Energy Project (Senegal, Gambia, Guinea & Guinea-Bissau)



*View of the destruction of obstacles in the corridor of the OMGV loop line*

The project consists of 3 components:

- Kaleta Hydropower Facility (240 MW), operational since 2015:
  - Capacity: 240 MW.
- 225 kV Interconnection Loop interlinking the four countries concerned:
  - Length: 1,677 km;
  - Financing: AfDB, WB, EIB, AFD, BOAD, KfW, IsDB and Kuwait Fund;
  - Works kick-off: 2017;
  - Works progressing steadily despite difficulties in clearance of right-of-way;
  - Completion of works: 2020.
- 128 MW de Sambangalou Hydropower Facility:
  - Partnership Agreement between the OMVG and VINCI Group for execution of works;
  - Commencement of works: end 2019;
  - Completion of works: 2023.

### 5.2.5. Adjarala Hydropower Project

This involves a dam located along the Togo/Benin border.

- Capacity: 147 MW;
- Financing: initial agreement between China Exim Bank and the Beninese & Togolese Governments; however, difficulties encountered during the implementation of said agreement has compelled both governments to source for new partners.



### 5.2.6. Souapiti & Amaria Hydropower Projects in Guinea

#### ❖ Souapiti

- Capacity: 450 MW;
- Financing: Exim Bank China and the Government of Guinea;
- Implementation rate: about 50%;
- Commencement of filling of the dam in July 2019;
- Completion of works: 2020.

#### ❖ Amaria

- Capacity: 300 MW;
- Financing: Agreement between the Government of Guinea and TBEA (China) for the development of the project;
- Cancellation of WB funding granted to the WAPP Secretariat for the pre-investment studies.
- Commencement of the project implementation phase for a duration of 4 years.

### 5.2.7. Gouina Hydropower Project

The project comprises 2 components:

#### ❖ Construction of the Gouina Hydropower Dam

- Capacity: 140 MW;
- Financing: China Exim Bank;
- Implementation rate: about 55%;
- Completion of works: 2020.

#### ❖ 225 kV Manatali – Kita – Bamako Line

- Length: 317 km;
- Financing: AFD, EU and SOGEM;
- Owners' Engineer already recruited;
- Ongoing selection of construction companies;
- Completion of works: 2021.

### 5.2.8. 225 kV Guinea – Mali Interconnection Project



*Group photo of the kick-off meeting Guinea- Mali*

- Pre-investment studies completed with AfDB financing;
- Length of Nzerekore - Fomi – Bamako line: 714 km;
- Cost: 361.32 million Euros (288.09 million Euros for Guinea and 73.23 million Euros for Mali);
- Financing: World Bank, AfDB, EIB, EBID, EU and BOAD;
- Recruitment of Owners' Engineer completed and latter's activities launched in September 2019;
- Expected commissioning: 2023;
- Pre-investment studies completed for the Linsan - Fomi segment in Guinea designed to improve power grid efficiency:
  - Length of Linsan - Fomi segment: 350 km;
  - Cost: 118.15 million Euros;
  - Financing: Government of Guinea and China Exim Bank.

## 6. ESTABLISHMENT OF THE REGIONAL ELECTRICITY MARKET

The establishment of a competitive Regional Electricity Market is the ultimate goal set for WAPP by the ECOWAS Heads of State.

The ICC, a Department within the WAPP Secretariat, is in charge of activities related to the Regional Electricity Market. In its effort to implement the regional electricity market, the ICC Department undertook various activities primarily focused on the following strategic projects:

- Implementation of the WAPP ICC Project;
- Implementation of WAPP Market Road Map;
- Implementation of Synchronization Project;
- Distribution utilities performance improvement (distribution loss reduction project).

### 6.1. Implementation of ICC Project



*Meeting to Launch Network Equipment Settings Contract in Abuja in the presence of the Chairman of WAPP*

The WAPP Information and Coordination Centre (ICC) Project is a European Union funded project which involves the construction of the ICC building at Calavi, supply/installation of SCADA/EMS/MMS/WAMS System for Power System and Electricity Market Management.

The Objectives of the ICC Project are as follows:

- ❖ Enable ICC to fully assume its role of interconnected power system Operator and Operator of the West African Regional Electricity Market;
- ❖ Put in place the infrastructure, technical equipment, organization and the required capacity building.

The WAPP Secretariat carried out the following activities within the framework of the project:

- Organized an MMS Billing and Settlement OJT training session in Massy-France from 23<sup>rd</sup> March to 17<sup>th</sup> April 2019.
- Organized S/T MMS Session in France from 15<sup>th</sup> to 16<sup>th</sup> April 2019.

- Organized an MMS Billing and Settlement FAT (Phase 2) session in Massy-France from 13<sup>th</sup> to 17<sup>th</sup> May 2019.
- ICC SCADA Taskforce Meeting was held in Cotonou from 24<sup>th</sup> to 25<sup>th</sup> July 2019.
- PMU, Meters and Telecommunications Equipment have been deployed in the following countries: Benin, Burkina FASO, Cote d'Ivoire, Guinea, Niger, Nigeria, Senegal and Togo. The ICC participated in these activities.
- In September 2019, Grid Solutions SAS started the ICCP Link for information exchange between ICC and CIE, Sonabel and will continue for GRIDCo, Senelec and CEB.
- One (1) Satellite System VSAT Configuration training session held in Massy-France in September 2019. One (1) SDH.PBX Telecommunications Configuration training session held in Massy-France in October 2019.

The status of implementation of ICC infrastructure is as follows:

- The percentage completion for the ICC Building is estimated at 75%.
- The percentage completion for Equipment at Calavi is estimated at 59%.
- The overall percentage completion of the ICC project till date is estimated at 67%.
- The following are key estimated ICC project milestones:
  - The WAPP ICC Building A (Technical Building) is expected to be completed by January 2020.

- The WAPP ICC Building B (Administrative Building) is expected to be completed by June 2020.
- SCADA/EMS/MMS/WAMS installations are expected to be completed by October 2020.
- Site Acceptance Tests (SAT) and entire project is to be completed by December 2020.

## 6.2. Establishment of the Regional Electricity Market



*Launch of the 1st phase of the ECOWAS Regional Electricity Market, Cotonou, June 29, 2018, View of the stakeholders with the Inaugural plaque.*

The objective of ECOWAS Regional Electricity Market is to establish a technical, organizational, legal and commercial environment to sell and purchase electricity transparently at competitive costs in the sub-region for the benefit of West Africa's population.

Following the official launch of the Regional Electricity Market in 2018, the activities carried out in 2019 are as follows:

- Following the 12<sup>th</sup> to 13<sup>th</sup> July 2019 and 30<sup>th</sup> September to 1<sup>st</sup> October 2019 joint Finance and Engineering & Operating Committee Market Taskforce Meetings, the Settlement Bank Agreement, the WAPP Day Ahead Market Book of Rules were drafted and validated. They were approved by WAPP Executive Board on 05<sup>th</sup> October 2019.
- The 9<sup>th</sup> WAPP and ERERA Technical Working Group Meeting were held in from 25<sup>th</sup> to 26<sup>th</sup> April 2019 in Cotonou.
- During an WAPP-EOC Ad Hoc Taskforce Meeting held from 3<sup>rd</sup> to 4<sup>th</sup> October 2019 the following documents were adopted and

submitted to WAPP Executive Board that approved them:

- ICC Organization and Staffing;
- ICC Staffing Planning.

## 6.3. Synchronization of WAPP Interconnected System Project



*Project Synchronization: Negotiations team of the Network Equipment Settings Contract*

The WAPP ICC is currently implementing Phase II of the Synchronization Project.

Phase II of the project has two contracts:

- ❖ Contract #1: "Design, Supply and installation of Static Var Compensators (SVC), Phasor Measurement Units (PMU) and Special Protection Scheme (SPS) relays".
- ❖ Contract #2: "Power System Stabilizer Tuning, Measurement campaign and Testing of Governors, Change of Settings and Performing Synchronization Test".

The following activities were carried out under Contract #1:

- In collaboration with the Contractor recipient of the contract, a kick-off meeting was organized from 6<sup>th</sup> - 8<sup>th</sup> March 2019 in Dakar to commence project execution.
- The Contractor undertook site visits to locations for SVC (Matam substation) and PMU installations (interconnection substations) during the month of March 2019.
- In collaboration with the Owners' Engineer, the WAPP ICC coordinated and reviewed the contractor site visit reports, project time schedule, FAT plan, training schedule, design submittals on SVC, SPS and PMU in collaboration with Owners Engineer and experts of Utilities from April to July 2019.



- Together with the Owners' Engineer, participated in a Factory Acceptance Testing (FAT) of SPS and PMU at the offices of the Contractor, NR Electric in China from 24<sup>th</sup> to 31<sup>st</sup> August 2019.
- A training on SPS and PMU was organized from 9<sup>th</sup> to 27<sup>th</sup> September 2019.

The following activities were carried out under Contract #2:

- After receiving the World Bank's no-objection on the bid evaluation submitted by the WAPP, the WAPP ICC organized a contract negotiation meeting in Cotonou from 12<sup>th</sup> -13<sup>th</sup> June 2019.
- In collaboration with the Contractor recipient of the contract, the WAPP ICC organized a kick- off meeting in Abuja from 3<sup>rd</sup> to 5<sup>th</sup> September 2019.
- The WAPP ICC in collaboration with the Contractor undertook site visits and data collection missions to all power plants involved in Contract #2 from 16<sup>th</sup> September to 4<sup>th</sup> November 2019.

The status of implementation of the Synchronization Project contracts are as follows:

- The percentage completion for the component related to SPS (70% completed) and PMU (50% completed) is estimated at 60%.
- The percentage completion for the component related to SVC installation at Matam substation is estimated at 15%.
- The overall percentage completion for Contract #1 ("Design, Supply and installation of Static Var Compensators (SVC), Phasor Measurement Units (PMU) and Special Protection Scheme (SPS) relays") is estimated at 12%.
- The percentage completion for Contract #2 ("Power System Stabilizer Tuning, Testing of Governors, Change of Settings and Performing Synchronization Test") is estimated at 0.1%.

#### 6.4. Technical Working Group Activities



*Frequency Adjustment Technical Working Group, April 2019 meeting in Lomé*

To implement recommendations related to system operations and planning operations, Three EOC Technical Working Groups (Load Frequency Control and Compliance Working Group, System Reliability Assessment Working Group, System Protection Coordination Working Group) were created. They were required to define and take appropriate actions and measures recommended in the study report related to operations, operational planning, system protection and coordination, to ensure a safe and reliable operation of interconnected power systems. This is to ensure successful and sustainable synchronization of the WAPP Interconnected System.

The output of activities carried out by the working groups are the following:

- The System Reliability Assessment Working Group in collaboration with the Technical Assistance to Technical Working Groups has developed a 2018 WAPP Interconnected Network Model. The WAPP ICC organized a System Reliability Assessment Working Group meeting from 13<sup>th</sup> – 15<sup>th</sup> March 2019 and coordinated online network model update exchanges as part of the model development process.
- The System Protection and Coordination Working Group analyzed and validated distance protection settings for WAPP Interconnection Lines at their 2<sup>nd</sup> Working Group meeting held in Cotonou from 26<sup>th</sup> – 28<sup>th</sup> June 2019. Recommended distance protection settings were adopted for implementation on the 225 kV Zagatouli – Bolgatanga line and 330 kV Dawa – Davie line.
- The Load Frequency Control and Compliance Monitoring Working Group met in Lomé from 23<sup>rd</sup> – 25<sup>th</sup> April 2019 and in

Dakar from 25<sup>th</sup> – 27<sup>th</sup> November 2019 to assess the performance of utilities compared to the requirements incumbent to operators to ensure the success of synchronization.

- A joint technical meeting between CIE-GRIDCo-SONABEL-EDM was held in Accra from 11<sup>th</sup> – 12<sup>th</sup> March 2019 with the participation of the Technical Assistance to Technical Working Groups to discuss power transfer issues between CIE-GRIDCo – SONABEL following completion of the Ghana – Burkina Faso Interconnection line. The meeting discussed and proffered preliminary measures to address the problem and recommended the need for detailed studies to proffer appropriate solutions to resolve loop flow related problems within the WAPP Interconnected Network.



*Technical Working Group «Network Reliability Assessment», March 2019 meeting in Accra*

### 6.5. WAPP Regional Transmission Pricing Model

With the support of the World Bank under Component 2B of Technical Assistance and Integration of WAPP Network Project, a Consultant (CESI SpA) have been engaged to assist in the facilitation of the process to finalize and adopt the Regional Transmission Pricing Model developed by WAPP based on the Regional Transmission Pricing Methodology approved by ERERA.

The following activities were carried out:

- A kick-off meeting to commence the project execution was organized from 25<sup>th</sup> – 26<sup>th</sup> July 2019.
- A data collection mission was undertaken in TCN from 23<sup>rd</sup> – 24<sup>th</sup> September 2019;

- A data collection mission was undertaken in ERERA from 26<sup>th</sup> – 27<sup>th</sup> September 2019;
- The dissemination of the finalized model with the support of the Consultant for the benefit of stakeholders took place in Ghana (20<sup>th</sup> – 22<sup>nd</sup> November 2019), in Senegal (27<sup>th</sup> – 29<sup>th</sup> November 2019) and in Côte d'Ivoire (02<sup>nd</sup> to 04<sup>th</sup> December 2019);
- The meeting to adopt the final report on the tariff model will be organized in April 2020.

### 6.6. Continental Electricity Transmission Pricing Methodology for AU

- The ICC participated in a technical meeting on the Harmonization of the Regulatory Framework of the Electricity Markets in Africa organized by the African Union Commission from 02<sup>nd</sup> to 04<sup>th</sup> October 2019 in Addis Ababa;
- The ICC participated in a training organized by the African Union on the implementation of the pricing methodology for electricity transmission for the benefit of thirty (30) participants (transmission system operators and regulators) from 16<sup>th</sup> – 20<sup>th</sup> December 2019 in Lomé.

### 6.7. Technical Assistance to the WAPP ICC



*Technical Assistance Group to the WAPP ICC family picture*

Funding from the World Bank and European Union (EU) were used to engage the services of the following to provide technical assistance to the WAPP ICC:

- ❖ **Power Pool Advisor:** A Senior International Power Pool Advisor was engaged on a 1-year contract to assist WAPP in the transition of the ICC to a Regional System Market Operator (RSMO). The responsibility of the Senior International Power Pool Advisor includes:

- Technical assistance to the WAPP ICC Director on organizational strategies and changes to achieve the vision of establishing a WAPP Regional Market as well as changes to be carried out in ECOWAS countries;
  - Guidance in developing, communicating and implementing effective strategies that support the creation and operation of a Power Pool and a successful transition of the current WAPP Information and Coordination Center (WAPP ICC) into a Regional System Market Operator as outlined in the WAPP Market Roadmap;
  - Technical guidance to the WAPP ICC in the performance of its reliability coordination (real-time and operation planning) and market operation functions as a RSMO.
- ❖ Technical Assistance for the operationalization of ICC
- RTE International has been engaged on a 35 - month Technical Assistance contract to support the initial operationalization of the ICC. The inception meeting for the Technical Assistance was held in May 2019.
  - During the 35-month period, the Technical Assistance during the Phase I of the project would assist/support the ICC in the following:
    - Review ICC and WAPP System Situation;
    - Support in finalizing the ICC Organizational Structure;
    - Training ICC Operation Staff;
    - Review and Update WAPP Operation Manual;
    - Set up a Digital Document Management System;
    - Assistance to WAPP member companies.
  - In Phase II, the Technical Assistance would provide Operations support to ICC in the following:
    - Operations of ICC;
    - Market Planning;
    - Real-time network supervision;

- Ex-post analysis;
- Electricity Market Management;
- Performance Monitoring and Evaluation;
- ICC Equipment Maintenance and Repair;
- WAPP staff training and capacity building.

The Technical Assistance has delivered an Inception Report.

❖ Technical Assistance AGoSE

- AETS has been engaged on a 9-month Technical Assistance contract to assist in monitoring ICC project implementation and assist in preparations towards the operation of the ICC. The Technical Assistance commenced in February.

**6.8. Distribution utilities performance improvement (Distribution loss reduction Project)**



*Distribution Loss Reduction Program Forum in the ECOWAS Region*

The Distribution Loss Reduction Project is one of the initiatives aimed at improving the performance of distribution utilities. The project is part of the program “Promoting a Climate Friendly Electricity Market in ECOWAS” (ProCEM) which is being supported by GIZ.

- The ICC coordinated the working visit of the consultant hired by GIZ to support WAPP to CIE, EDM-SA, NEDCo and SONABEL from 8<sup>th</sup> April to 3<sup>rd</sup> May, 2019 and to SBEE, Abuja EDC and Kaduna EDC from 23<sup>rd</sup>



September to 13<sup>th</sup> October 2019 to finalize their distribution loss reduction projects that were submitted by WAPP during the November 2019 Donor Meeting.

- A training course on Distribution Technical Losses calculation was organized for the benefit of ECOWAS Francophone and Anglophone Distribution Utilities at Centre des Métiers d'Electricité de Bingerville (Côte d'Ivoire) from 15<sup>th</sup> – 19<sup>th</sup> July 2019 and at Akuse Training Centre (Ghana) from 22<sup>nd</sup> – 26<sup>th</sup> July 2019. In order to enable the Centre of Excellence to continue to provide the Training on the Calculation of Distribution Technical Losses, a training of trainers from the Centers of Excellence

took place at Centre des Métiers d'Electricité de Bingerville from 17<sup>th</sup> – 21<sup>st</sup> June 2019 for Francophones and at Akuse Training Center from 24<sup>th</sup> – 28<sup>th</sup> June 2019 for Anglophones. At the end of the Training, the Twenty-two (22) distribution Utilities received the NEPLAN Software procured with the support of GIZ.

- The second Forum on Distribution Loss Reduction Program took place from 16<sup>th</sup> – 20<sup>th</sup> September 2019 in Cotonou and brought together twenty-five (25) ECOWAS Distribution Utilities on the theme « Non-Technical Distribution Loss Reduction».

## 7. ADMINISTRATIVE AND FINANCIAL MANAGEMENT

The management of human, material and financial resources is core to the performance of any institution. Accordingly, during the period under review, the WAPP Secretariat continued to ensure sound administrative and financial management with a view to optimizing its performance and achieving its priority objectives.

The activities related to the management of human, administrative and financial resources carried out during the period are as follows:

### 7.1. Recruitments

Within the framework of the reinforcement of its workforce, the WAPP Secretariat organized and completed recruitment processes for the following positions:

- 1 Procurement Officer for the Procurement Unit;
- 1 Contract Assistant Secretary to support the Personal Assistant to the Secretary General;
- 1 Budget Officer for the Administration and Finance Department;
- 5 Contract Drivers to beef up the Institution's pool of drivers;
- 1 Bilingual Assistant to the Director, Planning, Investment Programming and Environmental Safeguards (PIPES);
- 1 Project Coordinator to support the PIPES Department;
- 1 Contract Account Assistant to reinforce the accounting and finance team.

In collaboration with the Recruitment Firm "BluePrint Consult", eight (8) Consultants were recruited for the WAPP North Core Project Management Unit responsible for the interconnection between Nigeria, Niger, Burkina Faso, Togo and Benin. These include:

- A Senior Technical Project Coordinator;
- An Environmental, Health and Safety Expert;
- A Social Safeguard Expert;
- A Procurement Specialist;
- A Financial Specialist;
- A Monitoring and Evaluation Specialist;
- A Procurement Officer;
- A Senior Account Officer.

### 7.2. Capacity Building

The WAPP Secretariat organized and participated in training and exchange programmes, in accordance with the Staff Training Plan and work programmes contained in the technical assistance agreements concluded with its Technical and Financial Partners, as summarized below:

#### 7.2.1. On WAPP's own funds

- Training of the Director of WAPP Information and Coordination Centre on the "Principles of Economic Regulation and Electricity Tariffs", in February 2019, in Muscad, Oman.
- Training of the Internal Auditor on "Accounting, Auditing and Insolvency" within the framework of Continuing Career Development, in April 2019, in Abuja, Nigeria.
- Training of Electrical Engineers from WAPP Information and Coordination Centre on "Power System Planning", in May 2019 in Korea, with the support of the World Bank.
- Training of the Budget Officer on "Capital Management" within the framework of Continuing Career Development, in June 2019, in Accra, Ghana.
- In-house training of all WAPP Secretariat staff on "Utilization of Human Resources Management Software". The training focused on the self-service device: "individual access to personal payroll". Said training was provided by the IT and Human Resources Divisions in May 2019 within the premises of the WAPP Secretariat in Cotonou, Benin.
- Training for the benefit of the WAPP Secretary General and Internal Auditor on "Management and Leadership, Negotiation within International Organizations" in August 2019 at the ILI in Washington DC, USA.
- Participation of the Internal Auditor at the Annual Accountants' Conference, within

the framework of Continuing Career Development, in September 2019, in Abuja, Nigeria.

- Training of the Budget Officer on "IPSAS Update" within the framework of Continuing Career Development, in August 2019, in Accra, Ghana.

### 7.2.2. On TFP funding to the WAPP Secretariat



*Management of Electrical Power Industry for technical Training*

#### ❖ **World Bank:** as part of its technical assistance program to the WAPP Secretariat:

- Second Training Session for the benefit of WAPP Secretariat Directors, Professional Staff and General Services Staff on "Utilization of TOMPRO Project Management Software", in February 2019 in Cotonou, Benin;
- Training of Electrical Engineers from WAPP Information and Coordination Centre on "Power System Planning" in May 2019 in Korea;
- Training of the Director of Administration and Finance and 03 executives (Legal Advisor, Human Resources Officer and Administration Officer) on Drafting Strategy for Terms of Reference, Contracts and efficient Negotiation strategies, in December 2019 in London.

#### ❖ **European Union:**

- Training of Electrical Engineers (Planning) and SCADA Engineers from WAPP Information and Coordination Centre on "OJT MMS" in April 2019 in Massy, France;
- Training of the Assistant to the Director of WAPP Information and Coordination Centre on "Advanced Program for Management Assistantship: Operational Management" in May 2019 in Dubai.

#### ❖ **BAD :**

- Training for the benefit of the WAPP Secretary General and Internal Auditor on «Management and Leadership, Negotiation within International Organizations» in August 2019 at the ILI in Washington DC, USA.

### 7.2.3. Activities / Trainings undertaken on TFP funding for WAPP member utilities

#### ❖ **World Bank :**

- **Training Program and Certification of operators of the regional interconnected Assistance Program (ITAP):** An International Consulting Firm has been recruited to develop the Regional Interconnected System Operator Training and Certification Program. The study will consist in taking stock of existing training and certification courses within the various WAPP transmission and system operators, as well as the pedagogical and logistical capabilities of the Regional Centres of Excellence. Based on this inventory, a training and certification course will be proposed by the Consultant. The meeting to review and adopt the interim report was held in November 2019. The implementation of the certification program should start in 2020.
- **Skills review in the electricity sub-sector in West Africa / Integration and Technical Assistance Program (ITAP):** The purpose of the study is to conduct a skills review of the electricity sub-sector in West Africa to identify and fill the gaps in this sub-sector. The WAPP Secretariat contributed to the development of the terms of reference and tender documents for the recruitment of a consulting firm. The contract was signed in August 2019 and the consultant commenced working on September 25, 2019.
- **Training and Certification Program of 100 Agents / Solar Energy Technicians / Solar Development Project in Sub-Saharan Africa - Phase 1 (Sahel):** The WAPP Secretariat has drafted the concept note for the program. The next phase will be the assessment of the pedagogical capabilities of the Training Centres for the implementation of the training sessions

which should start in early 2020. These trainings will be carried out in collaboration with CIGRE, the Universities of Technology of host countries, in partnership with GIZ and IRENA.

- **Establishment of the CIGRE West Africa National Committee / Solar Development Project in Sub-Saharan Africa - Phase 1 (Sahel):** The WAPP Secretariat organized three (3) meetings for the consideration and adoption of the Statutes and Rules of Procedure of the CIGRE West Africa National Committee. Further to the approval of these documents by the WAPP Executive Board, the CIGRE West Africa National Committee was set up during the WAPP General Assembly held in November 2019.
- **Procurement and installation of financial management modules: acquisition, monitoring and assessment of the TOMPRO integrated software** earmarked for the fiduciary management of WAPP projects and programmes.

#### ❖ AfDB

The power sector stakeholders (Power Utilities, Ministries in charge of Energy, Implementation Units) from the CLSG Project beneficiary countries and the WAPP Secretariat benefited from this programme. The WAPP Secretariat organized specialized training for the staff members of the power utilities and Ministries in charge of the CLSG Project beneficiary countries.

- **Training for the benefit of 80 employees of the Liberia Electricity Corporation (LEC)** at NAPTIN's training facilities in Kainji and Lagos, Nigeria. The training modules focused, among others, on Planning and Management of Power Infrastructure Projects; Operation and Maintenance of Power Generation Plants; Maintenance of Transmission Networks and Source Substations; Construction and Maintenance of Power Distribution Networks; including Commercial and Power Grid Loss Management.
- **Training for benefit of 81 agents of Sierra Leone's national power utilities,** "Electricity Distribution and Supply Authority (EDSA)" and "Electricity

Generation and Transmission Company (EGTC)" at the VRA Academy in Akuse, Ghana. The training modules covered, among other, Planning and Management of Power Infrastructure Projects; Operation and Maintenance of Power Generation Plants; Maintenance of Transmission Networks and Source Substations; Construction and Maintenance of Power Distribution Networks; including Commercial and Power Grid Loss Management.

- **Six (6) training sessions for the benefit of 78 agents, comprising 60 employees of CI-ENERGIES (Côte d'Ivoire) and 12 employees of the Guinean National Directorate for Energy (DNE).** These trainings were organized at the CME in Bingerville, Côte d'Ivoire, and focused on Management of Power Infrastructure Projects and Issues pertaining to Financial Structuring of PPP Projects, including Calculation of Power Network Losses.
- ❖ **GIZ: "Promotion of a Climate-Friendly Electricity Market (ProMERC/ProCFEM)" project:**
  - Regional training on "Calculation Distribution Network Losses using NEPLAN Software". This training was conducted in two workshop sessions held respectively from 15<sup>th</sup> – 19<sup>th</sup> July in Abidjan, Côte d'Ivoire, for French-speaking and Portuguese-speaking trainees and from 22<sup>nd</sup> – 26<sup>th</sup> July 2019 in Akusé, Ghana, for the English-speaking trainees. About 40 power transmission officers and operators from WAPP member utilities and representatives of the WAPP Secretariat benefited from this training;
  - Training for the benefit of representatives of the WAPP Secretariat and its member utilities on "Wind Power Project Development" within the framework of the West African Clean Energy Corridor Initiative (WACEC) in March 2019, in Abidjan, Côte d'Ivoire.
- ❖ **USAID**
  - Organization for the benefit of WAPP Executive Board Members, of a study tour to Power Pools in the US, in July 2018 and

March 2019, respectively. These study tours made it possible to meet the key stakeholders in the US power industry and learn about the legal, regulatory, technical, commercial and financial issues pertaining to the North American regional power market.



*Hydro Power & Plant system health safety group*

### 7.3. WAPP Regional Centres of Excellence (RCE) Development Project

The Business Plans for the Abomey-Calavi (Benin), Cap-des-Biches (Senegal) and Kainji (Nigeria) Regional Centers of Excellence funded by USAID and GIZ, have been finalized and presented to the WAPP TFPs to mobilize funding for the implementation of the said Centres. The WAPP Secretariat organized in November 2019, the first meeting of Heads of the Centres of Excellence. The meeting was seeking to establish a formal framework for cooperation and information exchange between WAPP and the Centres of Excellence.

### 7.4. WAPP Financial Management



*2019 VRA Academy's visit to Akosombo DAM*

The Financial Statements of the WAPP Secretariat for the 2018 financial year have been prepared and audited by the International Audit Firm, PricewaterhouseCoopers (PwC), Ghana.

The audit report indicates that the Financial Statements of the WAPP Secretariat portrayed a true and fair view of the financial position of the Institution and that the financial performance of the WAPP and its cash flows for the period from 1<sup>st</sup> January to 31<sup>st</sup> December 2018 were consistent with the International Public Sector Accounting Standards (IPSAS / NICSP).

The audit report was thus validated by the Finance Committee and approved by the WAPP Executive Board. These Financial Statements show a surplus of UA 8,851 over that fiscal year, primarily due to the increase in payment of contribution arrears by WAPP member utilities in 2018. This surplus is salutary as it will positively impact the financial situation and performance of the Institution.

PwC Ghana has also audited the financial statements of the WAPP Integration and Technical Assistance Project (ITAP) in accordance with the requirements of World Bank (WB), the Technical and Financial Partner. The audit report was transmitted within the prescribed deadline to the concerned donor (WB) and was deemed compliant by the latter.

The USAID Regional Office for West Africa undertook a mission to appraise the financial situation of the WAPP Institution in general and more specifically the status of the USAID Assistance to WAPP for the period 2014-2018.



*Power Transmission Network Operations & Maintenance*



## 8. WAPP STATUTORY MEETINGS

In accordance with the statutes governing the Institution, WAPP ensures the organization of its annual statutory meetings. Summarized hereafter is an overview of the meetings held during the year 2018.

### 8.1. 13<sup>th</sup> WAPP General Assembly Session



Group photo

The WAPP Secretariat, in collaboration with the Beninese Ministry of Energy and the *Société Béninoise d'Énergie Electrique*, organized the 13<sup>th</sup> WAPP General Assembly Session held from 5<sup>th</sup> – 9<sup>th</sup> November 2018 at the Marina Hotel in Cotonou, Benin. The General Assembly afforded the WAPP Secretariat an opportunity to keep its member utilities and Technical & Financial Partners abreast of the progress achieved and to proffer recommendations for the development of the Institution and West African electricity sector. This General Assembly was an opportunity for the admission of five (5) new members: (i) AKSA Energy Company Limited (Ghana), (ii) North South Power Company (Nigeria), (iii) Pacific Energy Company Limited (Nigeria), (iv) Paras Energy & Natural Resources Development Limited (Nigeria), (v) Sahara Power Group Limited (Nigeria).



Presidium at the 2018 WAPP GA opening ceremony

### 8.2. WAPP Executive Board Meetings



Group photo

The Executive Board held the following meetings:

- **41<sup>st</sup> Meeting** held on 27<sup>th</sup> April 2019 in Cotonou, which endorsed the proposed exceptional contribution of the Nigerian member utilities to the WAPP budget, thus bringing all contributions by the Nigerian utilities to 50% of the operating budget of the WAPP Secretariat.
- **42<sup>nd</sup> Meeting** held on 27<sup>th</sup> July 2019 in Cotonou, which adopted the Financial Statements of the WAPP Secretariat, including the amendments to the Staff Regulations and Code of Conduct of the WAPP Secretariat.
- **43<sup>rd</sup> Meeting** held on 5<sup>th</sup> October 2019 in Cotonou, which considered the Work Programme & Associated Budget of the WAPP Secretariat. The budget was balanced in income and expenditure amounting to **UA 39,930,322**. The operating budget, borne by member utilities' contributions, amounted to **UA 5,119,346**. The Board also adopted (i) the Settlement Bank Agreement and the Day Ahead Market Book of Rules for the Regional Electricity Market, (ii) the 2020-2023 WAPP Business Plan, (iii) the CIC Organizational Structure and (iv) the establishment of the CIGRE West Africa National Committee.
- **44<sup>th</sup> Meeting** was held on 7<sup>th</sup> November 2019 in Abuja as a prelude to the General Assembly. Among others, it allowed to appoint three (03) rotating members of the Executive Board, to propose the exclusion



of three (03) non-active members and to finalize the General Assembly agenda.

### 8.3. Activities of the Organisational Committees

#### 8.3.1. Strategic Planning and Environmental Committee (SPEC)

The SPEC members participated in the capacity building program earmarked for Master Plan Study from 21<sup>st</sup> – 25<sup>th</sup> January 2019, in Brussels. The WAPP Secretariat also organized a meeting of the SPEC in Cotonou from 2<sup>nd</sup> – 3<sup>rd</sup> July 2019, to review the report of the World Bank-sponsored study on Battery Storage Applications on WAPP Power System; on 4<sup>th</sup> July 2019, a meeting for the review of the terms of reference for gauging of solar resources within the continental States of ECOWAS and on 5<sup>th</sup> July 2019, a consultation meeting with the World Bank and the West African Climate Alliance on Carbon Market Mechanisms and Climate Finance.

The WAPP General Secretariat organized a meeting of the Strategic Planning and Environmental Committee (SPEC) on 28th September 2018 in Cotonou to review and adopt the WAPP draft Business Plan 2020-2023. The Business Plan was submitted to the Executive Council (EC) meeting of 5th October 2019. It was validated by the EC and recommended for approval by the General Assembly (GA) scheduled for November 2019 in Abuja – Nigeria.

#### 8.3.2. Finance Committee (FC)

Two Finance Committee meetings were respectively held in July and October 2019 in Cotonou to consider the WAPP Financial Statements for the year 2018 and the 2020 WAPP Secretariat Work Programme and Associated Budget.

The Finance Committee members participated in the Joint Task Force Meeting with the EOC for the review of the WAPP Power Exchange Rules.

In addition, the meeting of the Working Group on Securitization of the Cross-Border Power

Exchanges of the ECOWAS Regional Electricity Market was held in October 2019.

#### 8.3.3. Human Resources and Governance Committee (HRGC)

The HRGC met in Dakar in March 2019 and Cotonou in July 2019 to consider the amendments to the Staff Regulations and Code of Conduct of the WAPP Secretariat.



*Group photo of the Human Resources and Governance Committee*



*Presidium*



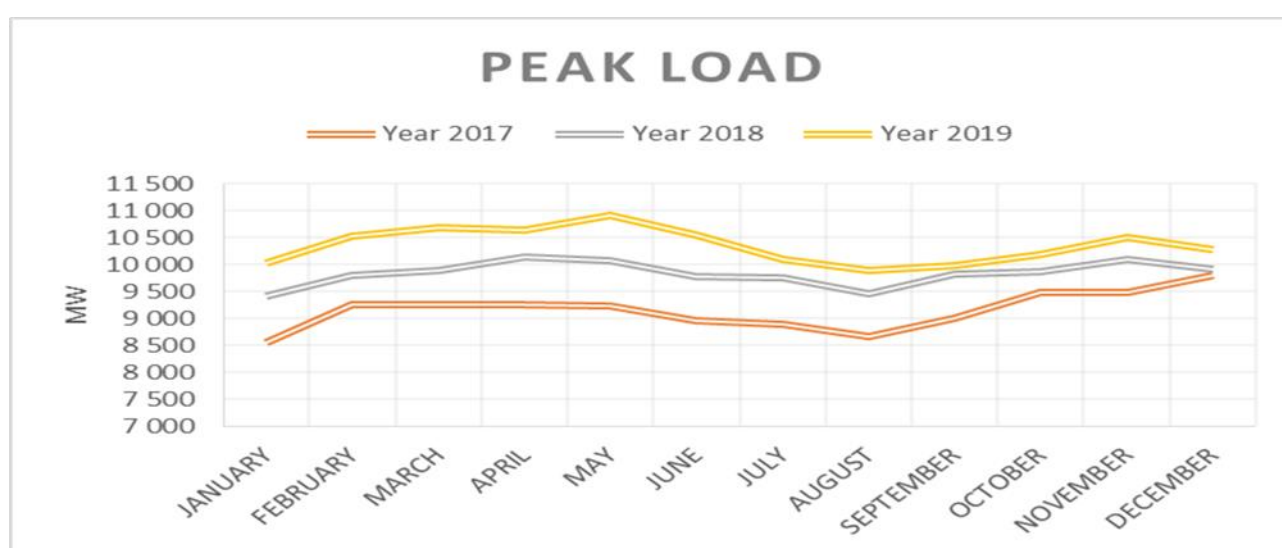
*Working group*

## 9. OPERATING STATISTICS OF WAPP INTERCONNECTED POWER SYSTEM

### - Current WAPP Interconnected Power System Characteristic Data

	Year 2017	Year 2018	Year 2019	Ratio 2018 vs 2019
Installed Capacity	22,0	22,5	23,0	2,2
Available Capacity	14,3	14,9	13,4	-10,1
Peak Load	9,8	10,2	10,9	6,9
Energy Generated	62,4	67,5	69,7	3,3
Energy Exchanged	5,1	5,8	6,1	5,2
Ratio Energy Exchanged vs Generated	8,2	8,6	8,8	

### - Monthly Peak Load (MW)



### - Energy Exchange per Country

	Import 2017	Export 2017	Import 2018	Export 2018	Import 2019	Export 2019
Nigeria	0,0	-2 397,0	0,0	-3 002,6	0,0	-2 327,2
Côte d'Ivoire	16,4	-1 205,5	77,6	-1 138,6	76,6	-1 234,8
Ghana	328,3	-282,2	143,8	-636,4	136,7	-1 103,3
Senegal	508,4	-85,5	338,2	-2,1	468,4	0,0
Burkina Faso	583,3	-0,1	783,4	-0,3	1 024,7	-0,2
Niger	801,3	0,0	984,2	0,0	1 048,8	0,0
Mali	998,5	0,0	1 186,0	0,0	1 302,2	0,0
CEB*	1 855,3	0,0	2 307,4	0,0	1 992,9	0,0
SOGEM**	0,0	-1 103,5	0,0	-1 128,9	0,0	-1 057,2
EEEOA	5 091,5	-5 073,8	5 820,6	-5 908,9	6 050,3	-5 722,7

\* CEB is a utility (belonging to Benin and Togo) and not a country

\*\* SOGEM is a utility (belonging to the OMVS countries) and not a country

## 10. CONCLUSION AND OUTLOOK FOR 2020

Over the past 12 months, the WAPP Secretariat has been selflessly and enthusiastically committed to achieving the missions assigned to it and we are proud to affirm that great strides have been made. Noteworthy among said strides are: the adoption - by the Heads of State and Government - of the updated ECOWAS Master Plan for the Development of Regional Power Generation and Transmission Infrastructure, the adoption - by the ECOWAS Council of Ministers - of the Directive on the Securitization of Cross-Border Power Trade and the Formulation of the WAPP 2020-2023 Business Plan. We can equally cite the progress made on certain priority projects' sites: e.g. the WAPP Interconnected Power System Synchronization Project, ICC Project and CLSG Project.

This performance is attributable to all stakeholders involved in the development of WAPP and the West African power sector, notably the Technical and Financial Partners (TFPs), the ECOWAS Commission, the WAPP member utilities which have, despite their difficult financial situation, continued to support the WAPP Secretariat by ensuring regular payment of their contributions. Credit should also be given to all the staff members of the WAPP Secretariat who have spared no efforts in carrying out the daily tasks.

In the year 2020, the WAPP Secretariat will continue to deploy, with the support of the abovementioned stakeholders, every necessary effort towards the effective implementation of WAPP priority projects and activities contributing towards the furtherance and efficient operation of the Competitive Regional Electricity Market, and those geared at enhancing the technical, managerial and financial performance of WAPP member utilities.

Accordingly, in 2020, the WAPP Secretariat shall ensure, among others, the achievement of the following main specific objectives:

- ⇒ Follow-up on the mobilization of funding for the implementation of pre-investment studies and priority projects;
- ⇒ Prepare pre-investment studies for priority projects;
- ⇒ Organize a WAPP Investors Forum to facilitate the implementation of priority projects;
- ⇒ Follow-up on the implementation of the ICC Project in Calavi, Benin;
- ⇒ Coordinate and monitor the implementation of the Synchronization of WAPP Interconnected System;
- ⇒ Follow-up on the implementation of the Roadmap for the Regional Electricity Market;
- ⇒ Develop a Regional Network Code;
- ⇒ Organize a Forum on Power Distribution Loss Reduction and select bankable projects on reduction of distribution losses;
- ⇒ Strengthen the capacities of WAPP member utilities and WAPP Secretariat staff;
- ⇒ Ensure the coordination of Technical and Financial Partners' interventions;
- ⇒ Strengthen cooperation with the ECOWAS Commission;
- ⇒ Enhance technical cooperation and strengthen exchange programs with stakeholders, regional and international institutions.

## **APPENDIX 1**

### **2018 WAPP Financial Statements**

**WEST AFRICAN POWER POOL (WAPP)**

**FINANCIAL STATEMENTS  
FOR THE YEAR ENDED 31 DECEMBER 2018**





**WEST AFRICAN POWER POOL**  
*For the year ended 31 December 2018*

---

<b>Contents</b>	<b>Page</b>
General information	1
Report of the Executive Board	2
Independent auditor's report on financial statements	3 - 5
Financial statements:	
Statement of financial performance	6
Statement of financial position	7
Statement of changes in net assets	8
Statement of cash flow	9
Notes	10-25
Presentation of budget information in financial statements	26 - 28

**WEST AFRICAN POWER POOL**  
*For the year ended 31 December 2018*

---

**GENERAL INFORMATION**

<b>Executive Board Members</b>	Mohammed Gur USMAN	Chairman
	Amidou TRAORE	Vice-Chairman
	Siengui A. Ki	Secretary General
	Karimou CHABI SIKA	Member
	Abdenbi ATTOU	Member
	Jonathan AMOAKO-BAAH	Member
	Laurent TOSSOU	Member
	Papa Mademba BITEYE	Member
	Tamsir NDIAYE	Member
	Ahmed COULIBALY	Member
	Emmanuel ANTWI-DARKWA	Member
	Mawussi KAKATSI	Member
	Victor ONOJA	Member
	Joe Lahai SORMANA	Member
Joseph MAKOJU	Honorary Member	

**WAPP Secretariat**  
West African Power Pool  
06 BP 2907 Cotonou  
République du Benin

**Auditor**  
PricewaterhouseCoopers  
Chartered Accountants  
No. 12 Airport City  
Una Home 3<sup>rd</sup> Floor  
PMB CT 42  
Cantonments  
Accra

**Bankers**  
NSIA Bank, Benin  
Ecobank, Benin

**WEST AFRICAN POWER POOL**  
**Annual Report**  
*For the year ended 31 December 2018*

---

**REPORT OF THE EXECUTIVE BOARD**

The Executive Board has the pleasure in submitting its report and the audited financial statements of the West African Power Pool (WAPP) for the year ended 31 December 2018.

**Statement of Executive Board's responsibilities**

The Executive Board is responsible for the preparation of financial statements for each financial year which gives a true and fair view of the state of affairs of the Organisation and of the surplus or deficit and cash flows for that year. In preparing these financial statements, the Executive Board has selected suitable accounting policies and then applied them consistently, made judgements and estimates that are reasonable and prudent and followed International Public Sector Accounting Standards (IPSAS).

The Executive Board is responsible for ensuring that the Organisation keeps proper accounting records that disclose with reasonable accuracy at any time the financial position of the Organisation. The Executive Board is also responsible for safeguarding the assets of the Organisation and taking reasonable steps for the prevention and detection of fraud and other irregularities.

**Going Concern**

The Executive Board has made an assessment of the Organisation's ability to continue as a going concern and have no reason to believe the Organisation will not be a going concern.

**Principal activities**

The principal activities of the Organisation are stated on page 10 of this report.

**Financial results**

The Statement of Financial Performance on page 6 shows a surplus of UA 8,851 (2017: UA 1,081,406 deficit) which has been transferred to accumulated fund.

**Auditor**

The auditor, PricewaterhouseCoopers has expressed willingness to continue in office as auditor of the Organisation.

BY ORDER OF THE EXECUTIVE BOARD:

Name: S. A. Ky

Position: S. G.

Signature: 

.....2019

USMAN GUR MOHAMMED

Name:

CHAIRMAN

Position:

Signature: 

.....2019

**INDEPENDENT AUDITOR'S REPORT  
TO THE EXECUTIVE BOARD OF THE WEST AFRICAN POWER POOL**

**REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS**

---

**Our opinion**

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the West African Power Pool (WAPP) as at 31 December 2018 and of its financial performance and its cash flows for the year then ended in accordance with International Public Sector Accounting Standards.

*What we have audited*

We have audited the financial statements of the West African Power Pool (the "Organisation") for the year ended 31 December 2018.

The financial statements on pages 6 to 25 comprise:

- the statement of financial performance for the year ended 31 December 2018
- the statement of financial position as at 31 December 2018;
- the statement of changes in net assets for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies.

---

**Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

*Independence*

We are independent of the Organisation in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code). We have fulfilled our other ethical responsibilities in accordance with the IESBA Code.

---

**Other information**

The Executive Board is responsible for the other information. The other information comprises the Report of the Executive Board but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

**INDEPENDENT AUDITOR'S REPORT  
TO THE EXECUTIVE BOARD OF THE WEST AFRICAN POWER POOL**

**REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)**

---

**Other information**

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed on the other information, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

---

**Responsibilities of the Executive Board for the financial statements**

The Executive Board is responsible for the preparation of financial statements that give a true and fair view in accordance with International Public Sector Accounting Standards (IPSAS) and for such internal control as the Executive Board determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Executive Board is responsible for assessing the Organisation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Executive Board intends to cease operations, or have no realistic alternative but to do so.

The Executive Board is responsible for overseeing the financial reporting process.

---

**Auditor's responsibilities for the audit of the financial statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;



**INDEPENDENT AUDITOR'S REPORT  
TO THE EXECUTIVE BOARD OF THE WEST AFRICAN POWER POOL  
REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)**

---

**Auditor's responsibilities for the audit of the financial statements (continued)**

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Executive Board;
- Conclude on the appropriateness of the Executive Board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Organisation to cease to continue as a going concern; and
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Executive Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Executive Board with a statement that we have complied with relevant ethical requirements regarding independence, and have communicated with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

---

The engagement partner on the audit resulting in this independent auditor's report is Hayfron Aboagye (ICAG/P/1502).

  
PricewaterhouseCoopers (ICAG/F/2019/028)  
Chartered Accountants  
Accra, Ghana  
7 October 2019



**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

**STATEMENT OF FINANCIAL PERFORMANCE**

(All amounts are expressed in UA unless otherwise stated)

	Note	<u>Year ended 31 December</u>	
		2018	2017
<b>Revenue</b>			
Revenue from exchange transactions	3	<b>4,740,713</b>	4,615,569
Revenue from non-exchange transactions	4	<u>163,055</u>	<u>145,873</u>
<b>Total Revenue</b>		<b><u>4,903,768</u></b>	<b><u>4,761,442</u></b>
<b>Expenses</b>			
Personnel expenses	5	<b>2,342,584</b>	2,380,749
General expenses	6	<b>423,733</b>	434,634
Administrative expenses	7	<b>803,709</b>	967,773
Executive Board and Committee Meetings	8	<u>619,169</u>	<u>608,804</u>
<b>Expenses before depreciation, capital grants and impairment charge</b>		<b><u>4,189,195</u></b>	<b><u>4,391,960</u></b>
Add: depreciation charge for the period	9a	<b>53,393</b>	117,625
Less capital grants	9c	-	(10,181)
Add Impairment charge	10	<u>241,937</u>	<u>1,054,429</u>
		<b><u>295,330</u></b>	<b><u>1,161,874</u></b>
<b>Total expenses</b>		<b><u>4,484,525</u></b>	<b><u>5,553,833</u></b>
<b>Net finance expense</b>	11	<b><u>410,392</u></b>	<b><u>289,015</u></b>
<b>Surplus/(deficit) for the year transferred to accumulated fund</b>		<b><u>8,851</u></b>	<b><u>(1,081,406)</u></b>

The notes on pages 10-25 are an integral part of these financial statements.


**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*


**STATEMENT OF FINANCIAL POSITION**

(All amounts are expressed in UA unless otherwise stated)

		<u>At 31 December</u>	
	Note	2018	2017
<b>Non current assets</b>			
Property, plant and equipment	9a	343,113	423,856
Intangible assets	9b	<u>16,916</u>	<u>16,916</u>
		<u>360,029</u>	<u>440,772</u>
<b>Current assets</b>			
Cash and bank balances	12	926,145	1,096,510
Receivables from exchange transactions	13	164,909	278,395
Recoverable from non-exchange transactions	14	491,806	258,342
Prepayments	15	<u>31,721</u>	<u>46,957</u>
		<u>1,614,581</u>	<u>1,680,204</u>
<b>Total assets</b>		<u>1,974,610</u>	<u>2,120,976</u>
<b>Current Liabilities</b>			
Accounts payable	16	<u>298,373</u>	<u>480,159</u>
<b>Non current liabilities</b>			
Separation provision	17	<u>82,268</u>	<u>55,697</u>
<b>Total liabilities</b>		<u>380,641</u>	<u>535,856</u>
<b>Net assets</b>		<u>1,593,969</u>	<u>1,585,118</u>
<b>Represented by:</b>			
<b>Accumulated Fund</b>		<u>1,593,969</u>	<u>1,585,118</u>

The financial statements on pages 6 to 25 were approved by the Executive Board on .....2019 and signed on their behalf by:

Name: S. A. KI  
 Position: S. G.  
 Signature:   
 .....2019

Name: USMAN GUR MOHAMMED  
 Position: CHAIRMAN  
 Signature:   
 .....2019

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

---

**STATEMENT OF CHANGES IN NET ASSETS**

(All amounts are expressed in UA unless otherwise stated)

**Year ended December 31, 2018**

	<b>Accumulated fund</b>
Balance at January 1, 2018	1,585,118
Surplus for the year	<u>8,851</u>
<b>Balance at December 31, 2018</b>	<b><u>1,593,969</u></b>

**Year ended December 31, 2017**

	Accumulated fund
Balance at January 1, 2017	2,666,524
Deficit for the year	<u>(1,081,406)</u>
<b>Balance at December 31, 2017</b>	<b><u>1,585,118</u></b>

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

---

**STATEMENT OF CASH FLOWS**

(All amounts are expressed in UA unless otherwise stated)

		<b>Year ended 31 December</b>	
	Note	2018	2017
<b>Cash flows from operating activities</b>			
Cash used in/(generated from) operations	18	<u>(170,365)</u>	<u>20,616</u>
<b>Cash flows from investing activities</b>			
Purchase of property, plant and equipment	9a	<u>-</u>	<u>(135,578)</u>
<b>Net cash used in investing activities</b>		<u>-</u>	<u>(135,578)</u>
<b>Decrease in cash and cash equivalents</b>		<u>(170,365)</u>	<u>(114,962)</u>
<b>Movement in cash and cash equivalents</b>			
Balance at beginning of year		1,096,510	1,211,472
Decrease in the year		<u>(170,365)</u>	<u>(114,962)</u>
<b>Balance at end of year</b>	12	<u>926,145</u>	<u>1,096,510</u>



## **NOTES**

### **1. General information – Background**

The West African Power Pool is a specialised institution of ECOWAS headquartered in the Republic of Benin.

The West African Power Pool (WAPP) was created by Decision A/DEC.5/12/99 during the 22nd Summit of the Authority of ECOWAS Heads of State and Government in order to address the issue of power supply deficiency within West Africa. The 29th Summit of the Authority of ECOWAS Heads of State and Government held in Niamey January 2006, adopted the Articles of Agreement establishing the new WAPP Organisation by Decision A/DEC.18/01/06. The new Organisation began actual operations in July 2006.

WAPP's mandate is to ensure the establishment of a Regional Electricity Market in West Africa in order to provide the citizens of the Community with increased access to stable and reliable electricity supply at competitive costs.

### **2. Summary of significant accounting policies**

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

#### **2.1 Basis of preparation**

The financial statements have been prepared under the historical cost convention and in accordance with International Public Sector Accounting Standards (IPSAS).

In the absence of an International Public Sector Accounting Standard that specifically applies to a transaction, other event or condition, management uses its judgement in developing and applying an accounting policy that results in information that is relevant to the decision-making needs of users that the financial statements:

- (i) represent faithfully the financial position, financial performance and cash flows of the entity;
- (ii) reflect the economic substance of transactions, other events and conditions and not merely the legal form;
- (iii) are neutral, i.e., free from bias;
- (iv) are prudent; and
- (v) are complete in all material respects.

The policies set out below have been consistently applied to all years presented.

#### **Changes in accounting policy and disclosures**

- (i) *New and amended standards that are not yet effective and have not been adopted by the Organisation*

Certain new IPSASs and interpretations have been published that are not mandatory for 31 December 2018 reporting periods and have not been early adopted by the Organisation in preparing these financial statements. These are set out as follows:

**NOTES (CONTINUED)**

**2. Summary of significant accounting policies (continued)**

**2.1 Basis of preparation (continued)**

**Changes in accounting policy and disclosures (continued)**

*(i) New and amended standards that are not yet effective and have not been adopted by the Organisation (continued)*

**IPSAS 41 – Financial instruments**

IPSAS 41, 'Financial instruments' was issued by the International Public Sector Accounting Standards Board (IPSASB) in August 2018. IPSAS 41, Financial Instruments, establishes new requirements for classifying, recognizing and measuring financial instruments to replace those in IPSAS 29, Financial Instruments: Recognition and Measurement. The objective of IPSAS 41 is to establish principles for the reporting of financial assets and financial liabilities that will present relevant and useful information to users of financial statements for their assessment of the amounts, timing and uncertainty of an entity's future cash flows.

IPSAS 41 provides more useful information by:

- Applying a single classification and measurement model for financial assets that considers the characteristics of the asset's cash flows and the objective for which the asset is held;
- Applying a single forward-looking expected credit loss model that is applicable to all financial instruments subject to impairment testing; and
- Applying an improved hedge accounting model that broadens the hedging arrangements in scope of the guidance. The model develops a strong link between an entity's risk management strategies and the accounting treatment for instruments held as part of the risk management strategy.

The new Financial Instruments standard is effective for periods beginning on or after January 1, 2022 with earlier adoption encouraged. IPSAS 41 is applied retrospectively in accordance with IPSAS 3, Accounting Policies, Change in Accounting Estimates and Errors unless specific conditions are met.

This standard has not been applied by the Organisation in preparing its IPSAS financial statements for the year ended 31 December 2018.

**IPSAS 42 – Social benefits**

IPSAS 42, Social Benefits, was issued by the International Public Sector Accounting Standards Board (IPSASB) in January 2019. The standard provides guidance on accounting for social benefits expenditure. It defines social benefits as cash transfers paid to specific individuals and/or households to mitigate the effect of social risk.

**NOTES (CONTINUED)**

**2. Summary of significant accounting policies (continued)**

**2.1 Basis of preparation (continued)**

**Changes in accounting policy and disclosures (continued)**

*(i) New and amended standards that are not yet effective and have not been adopted by the Organisation (continued)*

**IPSAS 42 – Social benefits (continued)**

Examples of social benefits include state retirement benefits, disability benefits, income support and unemployment benefits. IPSAS 42 seeks to improve the relevance, faithful representativeness and comparability of the information that a reporting entity provides in its financial statements about social benefits.

The standard requires an entity to recognize an expense and a liability for the next social benefit payment. IPSAS 42 establishes the principles and requirements for the recognition and measurement of expense and liability for social payments and the presentation and disclosure requirements. This standard is effective for financial statements beginning on or after 1 January 2022. Early adoption is permitted.

This standard is however not relevant to the operations and activities of the Organisation and have not been applied by the Organisation in preparing its financial statements for the year ended 31 December 2018.

The Executive Board is yet to assess the full impact of the above standards on the organisation's financial reporting.

There are no other IPSAS interpretations that are not yet effective that would be expected to have a material impact on the organisation.

**2.2 Foreign currencies translation**

**(a) Functional and presentation currency**

Items included in the financial statements are measured using the currency of the primary economic environment in which the Organisation operates (the functional currency which is FCFA). The financial statements are presented in Unit of Account (UA) which is the presentation currency of WAPP.

**(b) Transactions and balances**

Transactions during the period are translated into the presentation currency, Unit of Account (UA) using rates at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated into UA at the rates of exchange ruling at that date. Gains or losses realised or incurred are recognised in the statement of financial performance.

**NOTES (CONTINUED)**

**2. Summary of significant accounting policies (continued)**

**2.3 Financial instruments**

Financial assets and liabilities are recognized by WAPP when the Organisation becomes a party to the contractual provisions of the instrument. Financial assets are derecognized when the rights to receive cash flows from the assets have expired, have been waived or have been transferred and the Organisation has transferred substantially all risks and rewards of ownership. Financial liabilities are derecognized when the obligation specified in the contract is discharged, waived, cancelled or expired. Financial assets and financial liabilities are initially recognised at fair value.

*(i) Classification*

Financial assets and liabilities have been recognised in the statement of financial position and measured in accordance with their classification. The classification of financial instruments at initial recognition depends on the purpose for which the financial instruments were acquired and their characteristics. At initial recognition, the Organisation classifies its financial instruments in the following categories:

***Financial assets***

*Financial assets held at amortised costs:* These are assets measured at fair value at initial recognition less principal repayments plus accrued interest, net of any impairment loss. WAPP's financial assets comprise cash at bank, receivables from exchange transactions, recoverable from non-exchange transactions and prepayments and are included in current assets due to their short-term nature. These assets are initially recognized at fair value (the amount expected to be received) plus any transaction cost, and subsequently measured at amortized cost using the effective interest method less any provision for impairment.

***Financial liabilities***

WAPP's financial liabilities represent mainly account payables and separation provision. These are initially recognised at fair value (the amount at which the obligation is expected to be settled) including any direct transaction cost and subsequently measured at amortised cost using the effective interest method. WAPP's financial liabilities are classified as current liabilities if payment is within twelve months. Otherwise, they are presented as non-current liabilities.

*(ii) Offsetting financial instruments*

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

*(iii) Fair value*

As at 31 December 2018, the carrying amounts of financial assets and liabilities held by WAPP approximate their fair values.

**NOTES (CONTINUED)**

**2. Summary of significant accounting policies (continued)**

**2.4 Property, Plant and Equipment**

Property, plant and equipment (PPE) are stated at acquisition cost less accumulated depreciation and accumulated impairment losses.

Depreciation is calculated on the straight-line basis at rates estimated to write off the cost of each item over the estimated term of its useful life. A full year's depreciation is charged in the year of acquisition. No depreciation is charged in the year of disposal. The annual rates used for this purpose are as follows:

Computers	25%
Equipment	14.20%
Furniture and Fixtures:	
Residence	33.33%
Office	25%
Vehicles	20%
Building	2.86%

**Impairment**

The carrying values of PPE are reviewed for impairment if events or changes in circumstances indicate that they may not be recoverable. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Any provision for impairment is charged against the Statement of Financial Performance in the year in which the impairment is identified.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are included in profit or loss.

**2.5 Intangible assets**

Intangible assets mainly comprise of patented and non-patented technology, know-how and software.

Intangible assets acquired separately are measured on initial recognition at cost.

Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

The carrying values of intangible assets are reviewed for indications of impairment annually, or the events or changes in circumstances indicate the carrying value may not be recoverable. If any such indication exists and where the carrying values exceed the estimated recoverable amounts, the assets are written down to their recovery amount.



**NOTES (CONTINUED)**

**2. Summary of significant accounting policies (continued)**

**2.5 Intangible assets (continued)**

An intangible asset is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the intangible asset (calculated as the difference between the net disposal proceeds and the carrying amount of the intangible asset) is included in surplus or deficit when the intangible asset is derecognised.

Intangible assets with finite lives are amortised over the useful economic life. Useful lives and methods of amortizations are reviewed, adjusted if appropriate, at each financial year-end. The annual rate used for this purpose is as follows:

Software	25%
----------	-----

**2.6 Accounts receivables from exchange transactions**

Receivables are stated at their nominal value as reduced by appropriate allowances for estimated irrecoverable amounts or losses. Allowance for loss is established based on a review of outstanding amounts at the reporting date in accordance with the below policy developed by the Finance Committee and approved by the Executive Board.

*Provision for doubtful debts*

Evaluation of the financial situation of all members before setting the applicable percentages below:

- 100% provision for the category of members in financial difficulty with claims (receivables) of two or more years.
- 40% provision for the category of members who have one year old receivables.
- 20% provision for regular members in the payment of their arrears.

**2.7 Recoverable from non-exchange transactions**

Recoverable from non-exchange transactions are recognized at fair value (the amount expected to be received) less any provision for impairment.

**2.8 Cash and cash equivalents**

For the purposes of the cash flow statement, cash and cash equivalents include cash in hand and deposits held at call with banks.

**NOTES (CONTINUED)**

**2. Summary of significant accounting policies (continued)**

**2.9 Employee benefits**

WAPP's contribution to staff (except the Secretary General) retirement benefit schemes are recognised in the statement of financial performance as the obligation falls due. The scheme consists of a monthly contribution of 17% of employees' basic salary as pension fund by the employer.

WAPP sets aside 25% of the Secretary General's annual salary to cater for his separation payment at the end of his service period. This is recognised in the statements of financial performance annually.

**2.10 Provision**

Provision for liabilities and charges are recognised when WAPP has a present legal or constructive obligation as a result of a past event, and it is probable that WAPP will be required to settle the obligation. Provisions are measured at managements' best estimate of the expenditure required to settle the obligation at the date of the Statement of Financial Position.

**2.11 Leases**

Assets leased to or from third parties under agreements, which do not transfer substantially all the risks and rewards of ownership, are classified as operating leases. The Organisation is only involved in operating lease arrangements where it leases its assets to third parties or leases assets from third parties. Rental expense from leased assets of third parties are recognised in the statement of financial performance on a straight-line basis over the period of the lease.

**2.12 Revenue recognition**

*Revenue from exchange transactions*

Contributions from member utilities

Assessed contributions from member utilities are recognised when they are approved by the Executive Board. Unpaid contributions during the period are recognised as receivables after netting off any provisions.

*Revenue from non - exchange transactions*

Grants from donors

Donor grants are recognized as revenue to the extent they are used to meet expenditures in the reporting period. Unused grant income is recorded as liability (deferred income). Cash donations are recognised as income in the statement of financial performance when received.

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

---

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

**2. Summary of significant accounting policies (continued)**

**2.13 Expenses**

Expenses are recognised when the transaction or event causing the expense occurs. The Organisation's expenses consist of personnel expenses, general expenses, administrative expense and executive board and committee meetings expenses.

**3. Revenue from exchange transactions**

Contributions from members

This represents assessed contributions from member utilities approved by the Executive Board. An amount of UA4,740,713 was recognized at the year ended 31 December 2018 (2017:UA 4,615,569).

**4. Revenue from non- exchange transactions**

Grants from donors

This represents financial assistance received from donors in cash to support WAPP Secretariat during the year. An amount of UA 163,055 was recognized at the year ended 31 December 2018 (2017:UA145,873).

**5. Personnel expenses**

	<b>2018</b>	2017
Staff salaries	<b>1,053,349</b>	1,047,464
Salary for contractors and temporary staff	<b>290,169</b>	264,020
Initial travel and accommodation	<b>42,386</b>	8,113
Refund of school fees	<b>220,517</b>	253,206
Other expenses	<b>483,391</b>	512,731
Pension fund contributions and contractors' gratuity	<b>193,342</b>	165,097
Separation provision for SG	<b>20,135</b>	20,135
Medical expenses	<b>25,463</b>	34,711
Training Costs	<b>13,832</b>	75,272
	<b><u>2,342,584</u></b>	<u>2,380,749</u>

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

**6. General expenses**

	<b>2018</b>	<b>2017</b>
Administration Expenses	<b>95,343</b>	75,581
Repairs and Maintenance	<b>73,222</b>	96,661
Utility Expenses	<b>17,617</b>	22,162
Rent	<b>35,028</b>	23,313
Transportation	<b>87,720</b>	70,871
Audit Fees and expenses	<b>25,049</b>	21,954
Legal fees	<b>12,631</b>	37,579
Consultancy services	<b>22,764</b>	37,773
Software licenses	<b>27,009</b>	15,319
Loss on Disposal of Non-current Asset	<b><u>27,350</u></b>	<u>33,421</u>
	<b><u>423,733</u></b>	<u>434,634</u>

**7. Administrative expenses**

Public Relations, Publicity and Adverts	<b>71,996</b>	159,236
Postages and Communications	<b>74,830</b>	71,896
Official Missions	<b>491,308</b>	585,332
Conference materials	<b>943</b>	3,888
Linguistic Services	<b>40,391</b>	49,007
Entertainment/ reception/ retreats	<b>103,364</b>	69,681
Recruitment	<b>630</b>	2,141
Technical Coop with International Organizations	<b><u>20,247</u></b>	<u>26,592</u>
	<b><u>803,709</u></b>	<u>967,773</u>

**8. Executive Board and Committee expenses**

Executive Board Meetings	<b>163,453</b>	179,688
Engineering and Operating Committee Meetings	<b>117,925</b>	77,381
Strategic Planning and Environmental Committee Meetings	<b>183,342</b>	211,619
Finance Committee Meetings	<b>118,483</b>	34,712
Human Resources and Governance Committee Meetings	<b>22,843</b>	26,882
Distribution and Commercial Committee	<b>13,123</b>	15,777
Vehicles purchased for Executive board	<b><u>-</u></b>	<u>62,745</u>
	<b><u>619,169</u></b>	<u>608,804</u>

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

9. a. **Property, plant and equipment**

Year ended 31 December 2018	Computers	Equipment and Furniture	Motor Vehicles	Buildings	Total
<b>Cost</b>					
At 1 January	216,772	108,462	573,646	335,161	1,234,041
Disposals	—	—	(45,584)	—	(45,584)
At 31 December	<u>216,772</u>	<u>108,462</u>	<u>528,062</u>	<u>335,161</u>	<u>1,188,457</u>
<b>Accumulated depreciation</b>					
At 1 January	206,409	82,323	454,420	67,032	810,184
Charge for the year	10,363	6,536	26,919	9,575	53,393
Disposals	—	—	(18,233)	—	(18,233)
At 31 December	<u>216,772</u>	<u>88,859</u>	<u>463,106</u>	<u>76,607</u>	<u>845,344</u>
<b>Net book amount at 31 December 2018</b>	<u>—</u>	<u>19,603</u>	<u>64,956</u>	<u>258,554</u>	<u>343,113</u>

Year ended 31 December 2017	Computers	Equipment and Furniture	Motor Vehicles	Buildings	Total
<b>Cost</b>					
At 1 January	216,772	108,462	479,844	335,161	1,140,239
Additions	—	—	135,578	—	135,578
Disposals	—	—	(41,776)	—	(41,776)
At 31 December	<u>216,772</u>	<u>108,462</u>	<u>573,646</u>	<u>335,161</u>	<u>1,234,041</u>
<b>Accumulated depreciation</b>					
At 1 January	196,046	75,788	389,456	57,456	718,746
Charge for the year	10,363	6,535	73,319	9,576	99,793
Disposals	—	—	(8,355)	—	(8,355)
At 31 December	<u>206,409</u>	<u>82,323</u>	<u>454,420</u>	<u>67,032</u>	<u>810,184</u>
<b>Net book amount at 31 December 2017</b>	<u>10,363</u>	<u>26,139</u>	<u>119,226</u>	<u>268,128</u>	<u>423,856</u>



**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

---

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

**b. Intangible Assets**

As at the year ended 31 December 2018, the intangible assets were fully amortised. The amount of UA 16,916 recognised relates to capital work in progress in respect to the partial installation of an electronic filing system and Sunsystems upgrade for WAPP. This is not amortised, as asset is not yet ready for use.

**c. Capital Grants**

The capital grants have been fully amortised over the useful life of the related assets in the year 2018. (2017 :UA10,180 was the remaining balance amortised).

**10. Impairment charge**

This represents provision for member contribution receivables as at each year end. An amount of UA (241,937) was recognized at the year ended 31 December 2018 (2017:UA(1,054,429)).

**11. Net finance expense**

	<b>2018</b>	2017
Bank Interest*	<b>(18,606)</b>	(24,586)
Bank charges	<b>2,312</b>	1,704
Exchange rate differences (losses)	<b><u>426,686</u></b>	<u>311,897</u>
	<b><u>410,392</u></b>	<u>289,015</u>

\* *Bank interest* : This relates to interest earned on the accounts created for the fixed deposits of the Secretary General's separation payment at the end of his service period as well as fixed deposit for payment of staff salaries.

**12. Cash and bank balances**

Cash at bank	<b>920,233</b>	1,095,735
Cash on hand	<b><u>5,912</u></b>	<u>775</u>
	<b><u>926,145</u></b>	<u>1,096,510</u>

**13. Receivables from exchange transactions**

Members' contribution receivable	<b>2,688,665</b>	2,565,588
Provision for doubtful debts	<b><u>(2,561,029)</u></b>	<u>(2,319,092)</u>
	<b><u>127,636</u></b>	<u>246,496</u>
Staff advances	<b><u>37,273</u></b>	<u>31,899</u>
	<b><u>164,909</u></b>	<u>278,395</u>

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

**14. Recoverable from non - exchange transactions**

These are expenses incurred on various donor funded projects which are yet to be refunded to WAPP.

	<b>2018</b>	2017
Ecowas Guinea Bissau Project	<b>5,256</b>	5,375
Ecowas Guinea Conakry Project	<b>11,013</b>	11,261
World Bank Projects	<b>31,704</b>	27,304
North Core	<b>11,659</b>	11,922
Other Projects	<b><u>432,174</u></b>	<u>202,480</u>
	<b><u>491,806</u></b>	<u>258,342</u>

**15. Prepayment**

Insurance	<b>3,210</b>	9,693
Rent	<b>12,480</b>	12,378
Internet	<b><u>16,031</u></b>	<u>24,886</u>
	<b><u>31,721</u></b>	<u>46,957</u>

**16. Accounts payables**

Auditors Remuneration	<b>16,455</b>	8,055
Others*	<b><u>281,918</u></b>	<u>472,104</u>
	<b><u>298,373</u></b>	<u>480,159</u>

\* Others: this includes payables to Benin telecom, sylversys consulting, omed voyage, afrivol among others for various services rendered to WAPP.

**17. Separation provision**

Balance as at January 1	<b>55,697</b>	30,766
Charge and interest for the year	<b><u>26,571</u></b>	<u>24,931</u>
Balance as at 31 December	<b><u>82,268</u></b>	<u>55,697</u>

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

**18. Cash generated from operations**

	Note	2018	2017
Net surplus/(deficit) for the year		8,851	(1,081,406)
<b>Adjustments for non-cash items:</b>			
Depreciation of tangible assets and amortisation of intangible assets	9a and 9b	53,393	117,625
Amortisation of capital grant	9c	-	(10,180)
Loss on disposal of fixed assets		27,350	33,421
<b>Changes in working capital:</b>			
Decrease/ (increase) in Receivables from exchange transactions		113,486	999,254
Decrease/ (increase) in Recoverable from non-exchange transactions		(233,464)	128,535
Decrease/ (increase) in Prepayments		15,236	(7,797)
Decrease in accounts payables		(181,788)	(183,768)
Increase in separation provision		<u>26,571</u>	<u>24,932</u>
<b>Cash used in/(generated from) operations</b>		<u>(170,365)</u>	<u>20,616</u>

**19. Related party transactions**

**a. Directors remuneration**

Those in charge of governance for West African Power Pool (WAPP) is the Executive Board as indicated on page 1. Members of the board are entitled to payment of honoraria and other travel related expenses when participating in WAPP meetings or any other WAPP business.

**b. Remuneration of key management personnel**

Except the Secretary General who is remunerated by the organisation, no other board member received any remuneration or loans other than the above entitlements during the year under review. For the year under review, the Secretary General's total emolument was UA 91,192 (2017: UA 91,197)

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

---

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

**20. Financial risk management**

The Organisation's activities expose it to a variety of financial risks: credit risk, liquidity risk and market risk.

The Organisation's overall risk management programme focuses on minimising the potential adverse effects on its financial performance. Financial risk management is overseen by the Finance Committee. The Organisation does not hedge any of its risk exposures.

**20.1 Credit risk**

Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions as well as credit exposures to customers, including outstanding receivables and committed transactions. Credit risk is the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Organisation.

The Organisation's maximum exposure to credit risk at the end of the reporting date is as follows:

	<b>31 December 2018</b>	<b>31 December 2017</b>
	<b>UA</b>	<b>UA</b>
Cash and bank balances	<b>926,145</b>	1,096,511
Receivables from exchange transactions	<b>164,909</b>	278,395
Recoverable from non-exchange transactions	<b>491,806</b>	258,342
Prepayments	<b><u>31,721</u></b>	<u>46,957</u>
	<b><u>1,614,581</u></b>	<u>1,680,204</u>

WAPP manages its exposure to credit risk by:

- Holding bank balances and short-term deposits (demand deposits) with reputable banking institutions registered in The Republic of Benin; and
- Maintaining credit control procedures over accounts receivable.

The Organisation has no credit risk exposures relating to off balance sheet items.

WAPP does not require any collateral or security to support financial instruments and other receivables it holds due to the low risk associated with the realisation of these instruments.

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

**20.2 Liquidity risk**

Liquidity risk is the risk that the Organisation will not be able to meet its financial obligations as they fall due. The Organisation manages liquidity risk by maintaining adequate cash reserves.

**20.3 Market risk**

The Organisation takes on exposure to market risks, which is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risks arise from open positions in interest rate, currency and equity products, all of which are exposed to general and specific market movements and changes in the level of volatility of market rates or prices such as interest rates, foreign exchange rates and equity prices. The objective of market risk measurement is to manage and control market risk exposures within acceptable limits while optimising the return on risk. The management is responsible for the development of detailed risk management policies and for day-to-day implementation of those policies.

**20.3.1 Foreign exchange risk**

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The positions of currencies held are monitored on a regular basis. The objective of monitoring the position in foreign currency is to manage foreign exchange risk due to movements in rates.

WAPP operates separate bank accounts in CFA and US\$ currencies. WAPP incurs currency risk as a result of the conversion of foreign currency balances held in these bank accounts to UA at period end. The currency risk associated with this balance is considered minimal and therefore WAPP does not hedge its foreign currency exposure. Foreign currency transactions are translated to UA at exchange rates at the dates of the transactions.

**20.3.2 Interest rate risk**

Interest rate risk is the exposure of current and future earnings to adverse changes in the level of interest rates. The Organisation does not hold any financial instrument subject to interest rate risk.

**20.3.3 Price risk**

The Organisation does not hold any financial instrument subject to price risk.



**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

---

**NOTES (CONTINUED)**

(All amounts are expressed in UA unless otherwise stated)

**21. Capital commitments**

There were no capital commitments at 31 December 2018 (2017: nil).

**22. Contingent liabilities**

The following ongoing legal cases have been disclosed as contingent liabilities at 31 December 2018 (2017: not disclosed).

Legal Case	Possible financial impact
<p><b>Case 1</b></p> <p>This case was requested on 23 January 2018 by a former staff against WAPP for alleged wrongful dismissal. He requested to be paid numerous rights and damages for alleged unfair dismissal.</p> <p>After a court hearing on 18 May 2019, this case has been put under deliberation for a decision to be made on 30 October 2019.</p>	<p>US\$2,109,038</p>
<p><b>Case 2</b></p> <p>A former Administrative Assistant at the WAPP General Secretariat, dismissed for gross professional misconduct, brought his former employer WAPP before the Court of Justice of the Economic Community of West African States (ECOWAS) in Abuja, in order to be instructed to pay him various fees and damages.</p>	<p>FCFCA 142,165,130</p>

## **Presentation of Budget Information in Financial Statements**

### **Basis of reparation**

The budget information has been prepared on a cash basis since it is the policy of WAPP to apply the cash basis of accounting for its budgets during the fiscal year.

On the other hand, the financial statements have been prepared on accrual basis of accounting. The accrual basis of accounting is one under which transactions, other events and conditions are recognised when they occur (and not only when cash or its equivalent is received or paid). Therefore, the concept recognises revenue when earned and expenses when incurred.

### **Key assumptions include:**

- Funding available throughout the periods
- Member utilities will pay their contributions regularly

### **Budget Approval**

WAPP's highest decision making body is the General Assembly which provides the overall strategic direction of the institution and adoption of Executive Board's reports.

The functioning of WAPP is entrusted to the Executive Board whose functions include: "Examination and recommendation to the General Assembly, the entry, exit and re-entry of Members to the Pool, authorisation of major contracts, Approval or revision of the operating and capital budgets and any additional expenditure and approval of audit reports among others. The Executive Board reviews, approves or disapproves actions of the various Organisational Committees of WAPP.

The approval of the Budget by the Executive Board and its adoption at the General Assembly empowers the Secretariat (through the Secretary General), subject to any special conditions to:

- Commit and authorise expenditure and to make all payments to be borne by the Organisation, for the purposes assigned and within the limits of the appropriations and the commitment authority, as the case may be; and
- Provide the Executive Board with monthly budget and variance for review and approval.

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

**Comparison of budget and actual – WAAP as at 31 December 2018**

**Introduction**

WAPP's financial statements are prepared on accrual basis whilst the budget is on cash basis. The Statement of Financial Position, Statement of Financial Performance, Statement of Changes in Net Assets and Statement of Cash Flow Statements are prepared on a full accrual basis. The financial statements and the budget are therefore prepared using different basis.

To enable users and funders derive the needed benefit and make this presentation useful, management has decided to present a budget/actual comparison. This form of presentation as indicated is to ensure management achieves the reporting requirement of IPSAS 24 and also meet the needs of stakeholders within the Pool for effective decision making.

The approved budget for the expense categories outlined below covers the fiscal period 1 January to 31 December 2018.

**Budget/ Actual analysis for the year under review**

The budget and actual analysis of WAPP is presented below.

DESCRIPTION	BUDGET	ACTUAL	VARIANCE	VARIANCE	COMMENTS (for budget overruns or non-budgeted)
	UA (1)	UA (2)	UA (3)=(1)-(2)	% (4)=(3)/ (1)	
<b>Operating Revenue</b>					
Contribution from members	4,718,862	4,740,713	(21,851)	(0.5)%	Excess of UA22k contribution earned than budgeted.
Grants	-	163,055	(163,055)	-	<b>A</b>
<b>Operating Expenses</b>					
Personnel Expenses	2,613,383	2,342,584	270,799	10%	N/A, expenditure within budget
General Expenses	436,097	423,733	12,364	3%	N/A, expenditure within budget

**WEST AFRICAN POWER POOL**  
*Financial Statements*  
*For the year ended 31 December 2018*

DESCRIPTION	BUDGET	ACTUAL	VARIANCE	VARIANCE	COMMENTS (for budget overruns or non-budgeted)
	UA (1)	UA (2)	UA (3)=(1)-(2)	% (4)=(3)/ (1)	
Administrative Expenses	715,554	803,709	(88,155)	(12)%	B
Executive Board/Committee Meetings	783,644	619,169	164,475	21%	N/A, expenditure within budget
CAPEX	170,184	-	170,184	100%	N/A, no capital expenditure incurred
<b>TOTAL OPERATING AND CAPITAL EXPENSES</b>	<b>4,718,862</b>	<b>4,189,195</b>	<b>529,667</b>	<b>11%</b>	Overall 89% of the budgeted expenditure was actually incurred.

**Explanations of significant deviations**

A - Grant income from prior years earned.

B - Increase in administrative expenses was a result of additional activities in respect the finalisation of ECOWAS Master Plan for the development of regional power generation and transmission infrastructure 2019-2033, intensified awareness creation among Member Utilities and other stakeholders of the newly launched WAPP Electricity Market, and increase in capacity building of the Information and Coordination Center Department towards the operationalisation of the WAPP regional electricity market.