



WEST AFRICAN POWER POOL
SYSTEME D'ECHANGES D'ENERGIE ELECTRIQUE OUEST AFRICAIN
General Secretariat / Secrétariat Général

**Report on 13th Meeting of Engineering and
Operating Committee**

(EOC)

Cotonou, 3rd - 5th October, 2016

FINAL REPORT

I. INTRODUCTION

1. The West African Power Pool (WAPP) General Secretariat organised the thirteenth meeting of the Engineering and Operating Committee (EOC) of the WAPP at Cotonou, Benin from 3rd to 5th of October 2016.
2. The purpose of the meeting was as follows :
 - General Overview of WAPP ICC Activities
 - Status of Implementation of Regional Electricity Market Road Map
 - Status of Conditions Precedent for Implementation of Phase 1 of Regional Electricity Market
 - Update on WAPP ICC Project
 - Update on WAPP Synchronization Project
 - Update on WAPP GIS Project
 - Review and Adoption of Market Participant Agreement
 - Review and Adoption of Market Participant Application Form
3. There were two speeches during the opening ceremony which were given by, Mr. Babatunde ADEYEMO, Director of WAPP Information and Coordination Center (ICC) and Mr. Bile TANOE, Chairman of the Engineering and Operating Committee.
4. Mr. Babatunde ADEYEMO, the Director of WAPP ICC, on behalf of the General Secretary of WAPP welcomed participants to the meeting and wished the meeting fruitful deliberations.
5. Mr. Bile TANOE, Chairman of the EOC, thanked WAPP EOC members present and urged all participants to actively participate in discussions of the meeting.

II. PARTICIPANTS

6. The Members of the Engineering and Operating Committee that were present at the meeting included:
 - Communauté Electrique du Benin (CEB, TOGO/BENIN) ;
 - Compagnie Ivoirienne d'Electricité (CIE, CÔTE D'IVOIRE);
 - ContourGlobal (TOGO);
 - Electricité De Guinée (EDG, GUINEE) ;
 - Electricity Company of Ghana (ECG, GHANA)
 - Empresa Publica de Electricidade e Agua de Guine-Bissau (EAGB, GUINEE BISSAU);
 - Energie Du Mali (EDM-SA, MALI);
 - Ghana Grid Company Limited (GRIDCo, GHANA);
 - National Water And Electricity Company Ltd (NAWEC, GAMBIE);
 - Société des Energies de Côte d'Ivoire (CI-ENERGIES, CÔTE D'IVOIRE)
 - Société de Gestion de l'Energie de Manantali (SOGEM);
 - Société Nigérienne d'Electricité (NIGELEC, NIGER);
 - Société Nationale d'Electricité du Burkina (SONABEL, BURKINA FASO);
 - Société Nationale d'Electricité du Sénégal (Senelec, SENEGAL);
 - Volta River Authority (VRA, Ghana);

7. The list of WAPP EOC Members that were absent are as follows:

- CENIT Energy (GHANA)
- Compagnie Energie Electrique du Togo (CEET, TOGO),
- Electricity Distribution and Supply Authority (EDSA, SIERRA LEONE);
- Liberia Electricity Corporation (LEC, LIBERIA),
- Mainstream Energy Solution (NIGERIA)
- Société Béninoise d'Energie Electrique (SBEE, BENIN);
- Transmission Company of Nigeria (TCN, NIGERIA);

8. The list of participants is hereby attached as Annex A.

III. NOMINATION OF RAPPORTEURS

9. The following were nominated as rapporteurs

Mr. Abdul Noor WAHAB VRA, English Rapporteur
Mr. Ousmane COULIBALY EDM-SA, French Rapporteur

IV. OUTCOME OF THE MEETING

10. The meeting reviewed, amended and adopted the agenda for the meeting, which is attached in Annex B.

V. CONSIDERATION AND DISCUSSION

Item A: *General Overview of WAPP ICC Activities*

11. The Director of WAPP ICC (DICC), Mr. ADEYEMO enumerated the status and preparation for the Regional Electricity Market as follows:

- WAPP Operations Manual has been developed by a Consultant in collaboration with WAPP Utility experts. The Operation Manual was adopted by the Executive Board, the General Assembly and approved by the Regional Regulator (ERERA). The Operations Manual will be implemented in three phases. The status of the synchronization project will be presented during the meeting.
- Regional Market Rules and Implementation Road Map which was developed by a Consultant in collaboration with WAPP Utility experts was adopted by the Executive Board, the General Assembly and approved by ERERA. The Market Implementation Road Map is in three phases. The status of the Implementation Road Map will be presented during the meeting.
- The Monitoring & Evaluation (M&E) system has been put in place to collect operational data from National Control Centres. In view of this development, the WAPP-ICC has started to produce the Monthly and Quarterly Reports. The first annual WAPP Operations Report is expected to be published at the end of this year.

- Also the Network Model for the WAPP is available in two network planning tools, namely: PSSE and DigSilent
 - The WAPP is at point for the transition of ICC to the Regional System Market Operator, since the major documents for the governance of the market has been approved by the Regional Regulator (ERERA). The strategy for the implementation is to submit a Supplementary Act and Regulation for the establishment of the Regional System Market Operator.
12. After the speech of the DICC, the meeting requested for a presentation on Review of the Roadmap and Organization of WAPP Regional Market in order to clarify the strategy for the implementation of the Regional System Market Operator

Item B: ***Review of the Roadmap and Organization of WAPP Regional Market***

13. The Market Operation Program Officer introduced his communication by defining the regional market. The ongoing electric power exchanges are mostly of bilateral nature, between neighboring countries. The objective of the regional market is to allow exchanges through the whole ECOWAS region. He then mentioned the four reasons justifying the institutionalization of the regional market and outlined the principles that have been considered in the design of the market.
14. He presented the various phases of the market as follows :
- **Phase 1:** by 2018, the hardware and software required for market operations will be ready and most of the regional transmission infrastructure will be commissioned;
 - **Phase 2:** consideration of transits through third countries and short-term exchanges with Day Ahead market, with respect to the regional transmission pricing approved by ERERA ;
 - **Phase 3:** long-term vision of the market to be determined according to financial liquidity in the market and availability of sufficient transmission capacity.
15. For each phase, he detailed the prerequisites, the market participants, the transactions on the market, the role of the System Market Operator (SMO) and National Transmission System Operators, the regional transmission network and the Day Ahead market.
16. He presented the market governance structure, the role of the Independent System Market Operator and rules of the regional market.

Item C: ***Presentation on WAPP Market Implementation***

17. A presentation was made on all the conditions that have to be fulfilled prior to the implementation of the Phase 1 of the regional electricity market and the status of the achievement of the various conditions.
18. The meeting concluded that not all the conditions precedent for implementation of the Phase 1 of the Market have been fulfilled:

- a. The conditions that have to be met by WAPP are as follows:
 - i. Development of Market Participant Agreement
 - ii. Development of Market Participant Application Form
 - iii. Development of Contract Approval Procedure
 - iv. Development of Agreement on Technical Regional Standards with a plan to meet those standards and Compliance Monitoring Procedures
- b. The conditions that have to be met by ERERA are as follows:
 - i. Development of Dispute Resolution Procedure
 - ii. Approval of Transmission Pricing Methodology
 - iii. Procedure to Access and Use the WAPP Interconnected Network
 - iv. Approval of Contract Template
 - v. Approval of Market Participant Agreement
 - vi. Approval of Market Participant Application Form
 - vii. Approval of Contract Approval Procedure

Item D: ***Presentation on Update of the WAPP ICC Project***

19. The WAPP Secretariat presented an update of the WAPP ICC project. The meeting was informed that a contract for the construction of the building has been awarded at a cost of Euros 9.478 Million. The whole building is expected to be completed within 24 months, however the technical building is expected to be handed over in 18 months.
20. The bidding process for the equipment is ongoing. The contract is expected to be signed in October 2016
21. The meeting was also informed that an estimated Euros 5 million additional funds is required for the building of the back-up center to be set-up in Ikeja, Nigeria.

Item E: ***Presentation on the WAPP Synchronization Project***

22. The WAPP System Operation Programme Officer delivered a presentation on the WAPP synchronization project. The presentation provided an update on the synchronization project, indicating completed and ongoing activities. The presentation also provided details of the Project Schedule and Milestones (Tasks and Dates of Completion per phase)
23. The presentation also anticipated the coordination of activities and schedules between and within countries as a challenge to the WAPP Synchronization project.

Item F: ***Review and Adoption of Participation Agreement for the Regional Electricity Market***

24. The Market Operation Program Officer delivered a power point presentation on the Participation Agreement for the Regional Electricity Market. The presentation highlighted the following aspects of the Agreement:

- Definitions and interpretation
- Scope of the agreement
- Duration of agreement
- Variations to the agreement
- Obligations of the market operator and market participant
- Rights of the market operator
- Representations and warranties
- Termination
- Dispute resolution
- Other provisions

25. The meeting reviewed and adopted the document subject to the following modifications to the document:

- i. **Dispute Resolution:** The document states that the Governing Law will be the Law of Benin. The document however makes allowance for any of the parties to go to any court within the ECOWAS countries for dispute resolution. This the meeting found to be an inconsistency.

The meeting therefore recommended that, under this section, in case of a dispute, it should be referred to ERERA for settlement. ERERA will settle the issue based on the WAPP Electricity Market Rules. In the event that the parties are not satisfied with ERERA's decision or ERERA is unable to settle the matter, the case should be referred to the ECOWAS Court of Justice for settlement.

- ii. **Rights of Participant:** The document only highlights the rights of the Market Operator, but does not highlight the rights of the Market Participant. This makes the document unbalanced, and therefore the WAPP secretariat should include in the document the Rights of the Market Participant

26. The meeting also discussed the phases of the market and noted that the WAPP Regional Electricity Market makes provision for bilateral markets in Phases 1, 2 and 3. The meeting noted that when a Bilateral Contract expires, both parties are not under obligation to use the new Template for Bilateral Contracts developed by WAPP for the renewal of the Bilateral Contract.

27. The meeting observed that over the years members have lost touch with the WAPP Market Rules. The meeting therefore advised that the WAPP Secretariat should disseminate the Regional Electricity Market Rules to members again.

Item G: *Presentation on Update of WAPP GIS Project*

28. There was a presentation by the Technical Assistant of WAPP which provided an update of the WAPP GIS Project. The presentation also made a demonstration of how the GIS software works and its usefulness.

29. The meeting was informed that five (5) training workshops have been planned taking the various languages and ease of travelling within the West African sub-region into consideration.

30. The meeting was informed that the procedure for adding a new network to the GIS Software will be taken into account during the training workshops.

Item H: ***Review and Adoption of Market Participant Application Form***

31. The WAPP Market Participant application form was presented.
32. The meeting adopted the document after some clarifications on the document.

Item I: ***Recommendations***

33. The Engineering and Operating Committee hereby make the following recommendations:
1. With respect to the implementation of the Phase 1 of the road map of WAPP Regional Electricity Market and the Decision WAPP/45/DEC.02/11/12 of the WAPP 7th Session of the General Assembly, the WAPP Secretariat should prepare and submit for EOC's adoption, a text for the modification of the Articles of Agreement of WAPP for the transformation of the WAPP ICC into the Regional System Market Operator.
 2. Concerning the possible transformation of the ICC into an Independent Regional System Market Operator, the issue will be addressed when the regional electricity market is ready to enter into Phase 2.
 3. For a successful implementation of the WAPP ICC Project
 - i. WAPP Secretariat should make all the necessary effort to raise the additional funds for the construction of the building for the back-up center at Ikeja, Nigeria
 - ii. WAPP Secretariat should do a lot of sensitization programmes for all key stakeholders (Ministers, Regulators and other Energy Actors) to obtain the involvement and cooperation of all the stakeholders during the implementation of the WAPP ICC Project, in particular for the requisite tax exemptions for the equipment
 4. For successful synchronization it is recommended that:
 - Establish a dedicated taskforce with the stakeholders in each Member State to implement the recommended actions to comply with the WAPP Operation Manual policies and required investments for synchronization (WAPP Operations Manual Compliance Survey Taskforce and Investments Implementation Taskforce)
 - Establish specific taskforces for overseeing the implementation of specific policies of the WAPP Operation Manual (Load Frequency Control, Interchange Scheduling and Accounting, Operational Security, Operational Planning, Emergency Procedures, Communication, Information Exchange between Systems, Operator Personnel and Training)

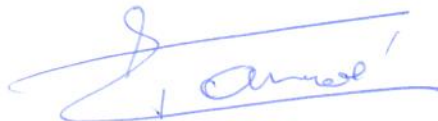
- The WAPP utility members should facilitate the work of Consultants, Contractors and Task forces working on the synchronization project to have easy access to their facilities to enable them fulfill their assignments with respect to the project
 - WAPP Secretariat should re-activate the System Study Task force to periodically update network models and carry out system analysis, etc. The System Study Taskforce and other working groups to be formed must meet at least three times in a year.
 - WAPP Secretariat should arrange to make presentations to the management of the utilities involved, in their home countries to get them on board and improve cooperation from the utilities
 - Nigeria stakeholders (TCN, ISO, Energy Ministry, other relevant actors) should be requested by WAPP Secretariat to do what is required to ensure that the synchronization works, since Nigeria plays a key role towards the achievement of the objectives of the synchronization.
5. The WAPP Secretariat should disseminate the Regional Electricity Market Rules to members again, as it has been observed that over the years members have lost touch with the Market Rules

Item J: *Vote of Thanks*

34. The EOC Members extend their sincere and profound gratitude to His Excellency Patrice TALON, the President of Benin and the entire citizens of Benin for their warm reception accorded to the members since their arrival in the Country.
35. The EOC Members also expressed their most sincere gratitude to Mr. Siengui A. KI, the Secretary General of WAPP for his continuous support to the EOC. The EOC thanks the entire personnel of WAPP for hosting and all facilities put in place for an organized and fruitful meeting.

Done in Cotonou, this day, 5th October 2016.

The Chairman



Bile TANOE