ECOWAS MEMBER STATES COMPLIANCE WITH THE DIRECTIVE ON SECURITIZATION OF CROSS BORDER POWER TRADE

REPORT 2021
DRAFT REPORT 2021

COMPLIANCE OF SIX MEMBER STATES WITH THE ECOWAS DIRECTIVE ON SECURITIZATION OF CROSS BORDER POWER TRADE

Accra, October 2022
Disclaimer

The contents of this publication are the sole responsibility of ERERA and can in no way be taken to reflect the views of the partners and ECOWAS Commission.

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I would like to express my sincere gratitude to all the stakeholders of the World Bank’s Development Policy Financing Programme for the West African Regional Energy Market (DPF-1) and those who contributed to the successful completion of this Report.

ERERA would like to thank its core partners for supporting the Power Market surveillance and monitoring process in the ECOWAS Region. Special mention must be made of USAID, the European Union Technical Assistance Facility (EU-TAF), Toni Blair Institute (TBI), and the German Cooperation (GIZ) for their support in the development of the regional electricity market in the ECOWAS Member States.

This is the first report on the status of compliance with the Directive on the Securitization of the Cross-Border Power Trade Under the Regional Electricity Market concerning six (6) participating countries of the DPF 1: Burkina Faso, Côte d’Ivoire, Guinea, Liberia, Mali, and Sierra Leone. Subsequently, a complete report on all the participating countries would be published following the Directive.

We remain grateful to the ECOWAS Member States and our partners for the great collaboration and progress made in the ECOWAS Regional Electricity Market Development.

I sincerely hope this Report and its findings will strengthen our collective pursuit to improve the financial sustainability and the competitiveness of the regional electricity market.

Ing. Kocou Laurent R. TOSSOU
Chairman
Acknowledgments

ERERA would like to express gratitude to all the stakeholders of the World Bank’s Development Policy Financing Programme for the West African Regional Energy Market (DPF-1) and all those who contributed to the successful completion of this Report. Special thanks to all the focal points of the World Bank DPF-1 who assisted in data collection from their respective member states.

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NATIONAL FOCAL POINTS:
We want to thank all National focal points of the DPF 1 programme and those from all national regulatory authorities.
Executive summary


ERERA gathered data from the Ministries in charge of Energy, Ministries in charge of Economy and Finance, National regulatory bodies, Utilities, and WAPP-ICC between December 2021 and March 2022 about their tasks stipulated in Article 5 of the Directive. Data from focal points who had completed and submitted the questionnaire to ERERA as of April 30, 2022, were used for the analysis. By this time, the questionnaire had received responses from 50% of the focal points.

The findings indicated that the six (6) member states have implemented certain reforms and measures in response to the assigned task in the Directive. According to each stakeholder, the implementation of the Directive has progressed as follows:

- The Ministries in charge of Economy and Finance (MoF) established several directives and initiatives to guarantee that all public sector institutions pay their electricity bills. Other “informal” measures also have been taken to budget for and transfer any compensatory fiscal subsidies, as well as to establish a system for recording, monitoring, and making proper fiscal provisions for contingent liabilities related to the energy sector.
- The Ministries in charge of Energy (MoE) developed and implemented a Least-Cost Generation Development Plan, procurement plan, and other measures for ensuring that the sector meets its revenue requirement, primarily through tariff adjustments or by an equivalent mix of tariff adjustments and compensatory subsidies.
- The two utilities (EDMSA and LEC) that responded to the questionnaire have adopted measures to improve revenue collection from customers billed for electricity consumption and to reduce technical and non-technical losses on the transmission and distribution systems.
- The National Regulatory Authorities have received the mandate to approve the level of the revenue requirements of the power utilities and determine the combination of tariffs and compensatory subsidies needed to cover these requirements.
- The WAPP-ICC performed its duty of monitoring the exchange of electricity and associated payments between the Member States as per their respective bilateral contracts. Since 2018, it has published an annual report on the regional electricity market (REM).

The Directive on the Securitization of the Cross-Border Power Trade Under the Regional Electricity Market is being implemented with considerable success. The Six DPF 1 member nations and WAPP-ICC have noticeably achieved different degrees of compliance with the Directive in the period under review.
Compliance of Six Member States with the ECOWAS Directive on securitization of Cross-Border power trade – 2021 Report

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<th>Full Form</th>
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<tr>
<td>ANARE CI</td>
<td>Autorité Nationale de Régulation de l’Electricité Côte d’Ivoire</td>
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<tr>
<td>AREE</td>
<td>Autorité de Régulation de l’Electricité et de l’Eau</td>
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<td>ARSE BF</td>
<td>Autorité de Régulation du Secteur de l’Energie Burkina Faso</td>
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<tr>
<td>CREE</td>
<td>Commission de Régulation de l’Electricité et de l’Eau</td>
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<td>DPF</td>
<td>Development Policy Financing Program</td>
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<td>ECOWAS</td>
<td>Economic Community of West African States</td>
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<td>EDMSA</td>
<td>Energie Du Mali-SA</td>
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<td>ERERA</td>
<td>ECOWAS Regional Electricity Regulatory Authority</td>
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<td>EWRC</td>
<td>The Electricity and Water Regulatory Commission</td>
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<tr>
<td>ICC</td>
<td>Information and Coordination Center</td>
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<td>LEC</td>
<td>Liberia Electricity Corporation</td>
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<td>MoE</td>
<td>Ministry in charge of Energy</td>
</tr>
<tr>
<td>MoF</td>
<td>Ministry in charge of Economy and Finance</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>NRA</td>
<td>National Regulatory Authority</td>
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<td>PA</td>
<td>Prior Action</td>
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<tr>
<td>PPA</td>
<td>Power Purchase Agreement</td>
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<td>TFP</td>
<td>Technical and Financial Partners</td>
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<td>WAPP</td>
<td>West Africa Power Pool</td>
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<td>WB</td>
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1. Introduction

Achieving universal access to electricity in West Africa will require the region to develop a regional market for electricity that advance the efficient and effective use of energy resources in the region and overcome the existing fragmented approach. In the present approach, there is a clear lack of harmony of policy, legal and regulatory frameworks, which are needed to have an effective and efficient regional electricity market.

Faced with these issues, conscious of the need to establish an attractive environment for investors and to develop cross-border power exchanges within the ECOWAS power sector, WAPP set up a task force to better understand the factors hindering the development of the existing electricity trade between WAPP Member countries.

The West Africa Power Pool (WAPP) set up a task force to address recurring issues of non-payment for power by importers and non-delivery of power by exporters which has begun to undermine confidence in the regional power market. The task force identified several underlying factors which included but were not limited to the following:

1. deficiencies in the legal contracts;
2. the lack of formal mechanisms for prioritizing payment of import contracts in situations of weak cash-flow;
3. the lack of mechanisms to reinstate supply in the event of non-delivery;
4. the presumption of implicit sovereign guarantees for power trade, which weaken payment discipline on the part of the utilities and leave Ministries of Finance exposed to unanticipated liabilities; and the unwillingness to apply standard commercial disciplines for non-payment and non-delivery due to the delicate political context of power trade.

To overcome the aforementioned challenges and to sustain the regional electricity market, there is the need to provide an attractive environment for investors, develop cross-border power exchanges within the ECOWAS power sector and recognize, among other things, the proper functioning of the regional electricity market is dependent on the payment of electricity bills and unrestricted access to transmission network.

The Eighty-First Ordinary Session of the Council of Ministers adopted measures set out in the ECOWAS Directive C/DIR/2/12/18 on the Securitization of the Cross-Border Power Trade Under the Regional Electricity Market in December 2018. The Directive establishes rules to enhance the security of cross-border power trading within the WAPP through guaranteed supply and payments. The measures include

1. backing imports and exports with commercial bank guarantees,
2. ensuring utilities have sufficient revenues,
3. adopting escrow accounts and cash waterfalls that prioritize electricity creditors, and
4. complying with the terms of the ERERA bilateral contract templates for imports and exports of electrical power.

The Directive also aimed at supporting reforms to improve the financial viability of utilities and strengthen the market. It is anchored on four major pillars (see appendix 1). It identifies and allocates responsibilities to all stakeholders such as utilities, government ministries responsible for Economy and Finance, government ministries in charge of the electricity sector, and regional
bodies such as WAPP and ERERA. It also aims to restore confidence in trade and develop the regional market.

In 2020, the World Bank developed a programme called Development Policy Financings (DPFs) to support the operationalization at the national level of the ECOWAS Directive on the Securitization of the Cross-Border Power Trade under the Regional Electricity Market. It focuses on the governments’ efforts to adopt the reforms and policy actions to ensure the implementation of the Directive. The DPF initially targets six countries: Côte d’Ivoire as an electricity exporter, Guinea as both importer and future exporter, and Burkina Faso, Mali, Liberia, and Sierra Leone as importers. They were selected based on having new or existing physical interconnections necessary to increase trade and readiness for reforms. By supporting the implementation of key reforms at the national level focusing on regional integration, the DPF is expected to have spillover effects as all ECOWAS member states will see the benefit of the full implementation and operationalization of the Directive. More countries may join the regional DPF subsequently.

Under the World Bank West African regional energy market policy-financing program (DPF), the Ministers in charge of Energy and Finance of the six (6) DPF participating member states (Burkina Faso; Republic of Côte d’Ivoire; Republic of Guinea; Republic of Liberia; Republic of Mali; Republic of Sierra Leone) adopted the instruments in March 2020 in Bamako to support the implementation of the ECOWAS Directive on the securitization of cross-border power trade. These are

(i) budget support with five prior actions (Reforms) and
(ii) the principle of setting up the Liquidity Enhancing Revolving Support Fund (LERF) aimed at securing trade under power purchase agreements established in the context of electricity imports and exports.

Under the budget support initiative, the six (6) ECOWAS Member States involved have benefited from Three Hundred Million United States Dollars ($300 million) in budget support from the World Bank. Since August 2020, the States have had access to the fund, which total One Hundred and Twenty Seven Million Five Hundred Thousand United States Dollars (US$127.5 million) in grants and One Hundred and Seventy Two Million Five Hundred Thousand United States Dollars US$172.5 million in loans. The participating Member States are required to undertake some of the reforms outlined in the five aforementioned acts in exchange for this support (see appendix 2). The implementation status of the reforms and the initiatives that are still in progress were submitted by Member States during the technical meeting on March 23–24, 2021.

In line with the Directive, the monitoring of Member States’ compliance with the Directive is to be done by ERERA following the Monitoring framework developed by ERERA and adopted during a technical meeting held in Abidjan in October 2021. According to this framework, ERERA is responsible for monitoring the compliance of ECOWAS Member States with the ECOWAS Directive, and ERERA is tasked with producing an annual compliance report. The Six DPF 1 participating nations are the first ECOWAS Member States to benefit from the World Bank’s support and set up some reforms to implement the Directive. In this regard, the six (6) DPF1 participating nations are the focus of this first report on ECOWAS Member States’ compliance with the Directive, which details their level of compliance as of 2021. The subsequent reports will be produced for all ECOWAS Member States.
2. **ECOWAS Directive on Securitization of Cross-Border Power Trade Monitoring System**

2.1. **Background**

The ECOWAS Directive C/DIR/2/12/18 on the Securitization of the Cross-Border Power Trade Under the Regional Electricity Market was adopted by the Eighty-First (81st) Ordinary Session of the Council of Ministers in December 2018 and came into force in January 2020. It established rules to enhance the security of cross-border power trade within the West Africa Power Pool (WAPP) through secured supplies and payments (Article 2).

The Directive also aimed at supporting reforms to improve the financial viability of utilities and strengthen the regional electricity market. These supporting reforms concern, among others, three categories of actors: Ministries in charge of Energy, Ministries in charge of Finance, and the Utilities.

1. **Under the Directives, Ministries of Energy are expected to reduce power generation costs by adopting least-cost planning, competitive procurement, energy security cost ceiling, and tariff/subsidy regulations**

2. **For the Ministries of Finance, the Directive aimed at ensuring adequate utilities’ revenues through payment of public power sector bills, adopting cash waterfall, timely approval of tariffs, subsidies and transfer and transfer of compensating subsidies, accounting and monitoring energy-related contingent liabilities, and payment guarantees**

3. **Concerning the Utilities, the Directive aimed at improving and sustaining performance through improvement of revenue collection, reduction of distribution losses, and adoption of the ERERA standard bilateral contract template.**

Through Article 4, the Directive aims to improve the financial sustainability of the regional electricity market. For that, attention shall be focused on the power utilities’ solvency while guaranteeing the support of the Ministries in charge of Energy and Finance.

The Directive specifies the roles of each stakeholder in the regional electricity market.

2.2. **Stakeholders’ role**

Through Article 5, the Directive itemized the stakeholder roles to reach the financial sustainability of the regional electricity market. The roles are as follows:

**A. Ministries in charge of Economy and Finance (MoF)**

The main role of the Ministry in charge of Economy and Finance is to ensure that power utilities receive the necessary revenues required to deliver on their service obligations by taking the following actions:

i. **Ensuring that all public sector institutions’ electricity bills are paid promptly and regularly, through making appropriate budgetary provisions for them and (if deemed necessary) adopting prepayment mechanisms to support payment.**
ii. Adopting escrow accounts that ring-fence utility revenues, accompanied with ‘cascade of waterfall’ payment mechanisms that clarify the priority of payment of electricity creditors in situations of cash shortfall.

iii. Promptly budgeting and transferring any compensatory fiscal subsidies that may be required to meet the revenue requirements of power utilities if electricity tariffs are not set at cost recovery levels.

iv. Introducing a mechanism of payment guarantees with the involvement of the Technical and Financial Partners (TFP) for the benefit of the electricity supplier.

v. Adopting a framework for recording, monitoring, and making adequate fiscal provisions for energy-related contingent liabilities, including those related to independent power projects and power imports.

B. Ministries in charge of Energy (MoE)

The main role of the Ministry in charge of Energy is to minimize power generation, transmission, and distribution costs, by taking the following actions:

i. Undertaking, publishing, and officially adopting sound least-cost power generation procurement plans that consider the availability of domestic and regional options for meeting national energy demands are regularly updated.

ii. Adopting and ensuring follow-up of an appropriate procurement framework for the regular, competitive, and timely implementation of domestic power generation, transmission, distribution projects, and power imports linked to the national least-cost power generation plan.

iii. Adopting a transparent policy concerning domestic energy security considerations to cap the domestic energy security premium at a reasonable level.

iv. Establishing a sound regulatory framework for the regular revision of the revenue requirement of the power utility based on evolving costs.

v. Ensuring that the revenue requirement of the sector is met primarily through tariff adjustments or by an equivalent combination of tariff adjustments and compensatory subsidies.

C. Power utilities providing service to the public

The main role of power utilities providing service to the public is, inter alia, to maximize the efficiency of power distribution, by taking the following actions:

i. Adopting measures to enhance the full recovery of revenues from customers billed for electricity consumption (such as application of sanctions for non-payment, improved accountability, and incentives for commercial staff, etc.).

ii. Adopting measures to reduce technical and non-technical losses on the transmission and distribution systems (such as installation of prepayment meters for small customers, installation of advanced meters for large customers, improved monitoring of power flows through the distribution network, improved customer cadastre and controls, refurbishment of distribution infrastructure, etc.).

iii. Complying with the terms of bilateral contracts for cross-border power trade, whether as importers or exporters, following the requirements established by the ECOWAS Regional Electricity Regulatory Authority (ERERA).
D. National Regulatory Authority (NRA)

The main role of the National Power Sector Regulatory Authority is to ensure the required level of the revenue requirements of the power utilities and determine the combination of tariffs and compensatory subsidies needed to cover these requirements.

E. ERERA and WAPP

The main role of ERERA and WAPP is, inter alia, to provide support to the exchange of electricity among Member States by taking the following actions:

i. Providing and enforcing a contractual template for the bilateral exchange of electricity between Member States that defines the conditions of power supply (firm, semi-firm or interruptible), incorporates suitable measures for sanctioning non-payment (through graduated disconnection) as well as non-delivery (through financial penalties that compensate the importer for back-up generation), and includes standard commercial bank guarantees backed-up by multilateral guarantees.

ii. Monitoring the exchange of electricity and associated payments between Member States against the terms of their respective bilateral contracts.

iii. Monitoring the compliance of Member States with the provisions of this Directive and regularly publishing information regarding the state of adoption of these measures.

2.3. Directive compliance review process

A. Stakeholders’ responsibilities in the monitoring of the compliance process

**ECOWAS Commission**

- According to Article 6 (iii) of the Directive on the Securitization of the Cross-Border Power Trade under the Regional Electricity Market, for monitoring purposes, all Member States have to communicate to the ECOWAS Commission all measures and provisions adopted for compliance with the Directive.
- In addition, in line with Article 6 (iv) Member States shall notify the ECOWAS Commission of any difficulties in the implementation of the Directive for the Council of Ministers to take appropriate measures for the effective implementation of the Directive.
- Consequently, ECOWAS Commission through Energy Department is expected to play an overall implementation monitoring role of the Directive.

**Members States**

- According to Article 5 (a)(b)(c)(d) and Article 6, Member States including their Utilities and Regulatory Authorities shall be responsible for developing and implementing all policies, regulations and actions aimed at ensuring the country's compliance with the Directive.
- They shall communicate with ECOWAS Energy Department and ERERA on the Directive compliance monitoring.

To carry out this task, Member States shall specifically:

1. Send to ECOWAS Commission (Energy Department) all information/documents necessary to determine compliance with the Directive
2. Notify the President of the ECOWAS commission of any challenges in the implementation of the Directive
3. Send to ERERA all information/documents necessary to enable her to carry out its monitoring functions as per the Directive
4. Allow ERERA to have access to any premises to verify compliance with the Directive

**National Regulatory Authority (NRA)**
According to Article 5 (d), NRAs have to ensure the level of the utilities' revenue requirements and determine the combination of tariffs and compensatory subsidies needed to cover these requirements.

To carry out this task, the NRAs shall be empowered to:

1. Approve the revenue requirements of the power utilities.
2. Approve the level of compensatory subsidies needed to fill the gap between the revenue requirement and the level of approved Tariff

Additionally, the NRAs may be requested to support ERERA by providing or collecting any information or document necessary for the compliance review directly from national stakeholders.

**WAPP**
According to Article 5(e)(ii), ERERA and WAPP are responsible for monitoring the compliance of Member States with provisions of the Directive and regularly publishing information regarding the state of adoption of compliance measures.

To carry out this task, WAPP shall:

1. Monitor the physical exchange of electricity and associated payments between the Member State in line with the bilateral contracts.
2. Facilitate the submission of information on compliance with the Directive by Utilities.

**ERERA**
According to Article 5(e)(iii), ERERA and WAPP are responsible for monitoring the compliance of Member States with provisions of the Directive and regularly publishing information regarding the state of adoption of compliance measures.

To carry out this task, ERERA shall:

1. Receive from each Member State all relevant documents required to determine the countries’ compliance
2. Request, if necessary, from each Member State all relevant documents or any additional documents required to determine the countries’ compliance
3. Review the country’s compliance with the documents submitted and publish a periodic report
4. Where necessary, carry out physical observation of the situation in the Member State
5. If necessary, request the ECOWAS Commission the assistance towards submission from the Member State or to have access to any necessary documents needed to review countries’ compliance with the Directive

The six DPF1 benefitting Member States have designated focal persons who are responsible for ensuring that adequate data is periodically provided to the World Bank team and ERERA for monitoring programme implementation and compliance with the ECOWAS Directive, respectively. In line with the Directive, ERERA has developed a monitoring framework that was presented,
considered, and agreed in a technical meeting with the meeting of the focal points in Abidjan, Ivory Coast, on October 26–27, 2021.

The monitoring framework is presented below:

**B. Member States’ compliance monitoring framework**

The Member State’s compliance with the Directive C/DIR/2/12/18 on the Securitization of the Cross-Border Power Trade Under the Regional Electricity Market is based on monitoring some parameters determined from the stakeholder’s role in article 5 of the Directive (See 2.2). ERERA sets up a series of monitoring parameters for each stakeholder and identifies the monitoring measures and documents or information needed for analysis. The monitoring framework is presented as a table per stakeholder.
### Ministries in charge of Economy and Finance - Article 5(A)

<table>
<thead>
<tr>
<th>ARTICLE 5(A) - MINISTRIES IN CHARGE OF ECONOMY AND FINANCE</th>
<th>DPF 1 PRIOR ACTION (PA) REFERENCE</th>
<th>MONITORING PARAMETERS</th>
<th>DOCUMENT/ INFORMATION NEEDED</th>
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</table>
| Ensuring that the electricity bills of all public sector institutions are paid in a timely manner and regularly, through making appropriate budgetary provisions for them and (if deemed necessary) adopting prepayment mechanisms to support payment | PA.5 | 1. National Budget providing for payment of public electricity bills.
2. Rate of bill payment by public sector institutions
3. Adoption of a prepayment mechanism for public sector institutions
4. Quarterly or half-yearly bill payment plan | 1. National Budget
2. Utilities’ report on bill payment
3. Budget Department Directive |
| Adopting escrow accounts that ring-fence utility revenues, accompanied with 'cascade or waterfall' payment mechanisms that clarify the priority of payment of electricity creditors in situations of cash shortfall | PA.2 & PA.5 | Directive from the Ministry in charge of Finance to utilities to implement escrow accounts and 'cascade or waterfall' payment mechanisms with a priority of payment for electricity creditors. | Directive from Ministry in charge of Finance |
| Promptly budgeting and transferring any compensatory fiscal subsidies that may be required to meet the revenue requirements of power utilities; if electricity tariffs are not set, cost recovery levels | | 1. The annual amount of compensatory subsidies set aside by the Government in the government budget bill, if necessary.
2. Regular payments (quarterly or half-yearly) of compensatory subsidies, if any. | 1. National Budget
2. Official document attesting to the regular payment of compensatory subsidies |
| Introducing a mechanism of payment guarantees with the involvement of the Technical and Financial Partners (TFP) for the benefit of the electricity supplier | PA.2 | Payments guarantees for electricity suppliers with the involvement of the Technical and Financial Partners (TFP) | Official document from the relevant authority |
| Adopting a framework for recording, monitoring, and making adequate fiscal provision for energy-related contingent liabilities, including those related to independent power projects and power imports | | 1. Register for all energy-related contingent liabilities
2. Provision for energy-related contingent liabilities in the annual Budget | Official documents from the relevant authority |
<table>
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<tr>
<th>Ministries in charge of Energy - Article 5(B)</th>
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<tr>
<td><strong>ARTICLE 5(B) - MINISTRIES IN CHARGE OF ENERGY</strong></td>
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<tr>
<td>Undertaking, publishing, and officially adopting sound least-cost power generation procurement plans that take into account the availability of domestic and regional options for meeting national energy demands and are updated regularly</td>
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<tr>
<td>Adopting and ensuring follow-up of an appropriate procurement framework for the regular, competitive, and timely implementation of domestic power generation, transmission, distribution projects, and power imports that is linked to the national least-cost power generation plan</td>
</tr>
<tr>
<td>Adopting a transparent policy concerning domestic energy security considerations that caps the domestic energy security premium at a reasonable level</td>
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<tr>
<td>Establishing a sound regulatory framework for the regular revision of the revenue requirement of the power utility based on evolving cost</td>
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<tr>
<td>Ensuring that the revenue requirement of the sector is met primarily through tariff adjustments or by an equivalent combination of tariff adjustments and compensatory subsidies.</td>
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<td>ARTICLE 5(C) - POWER UTILITIES</td>
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<tr>
<td>Adopting measures to enhance the full recovery of revenues from customers billed for electricity consumption (such as application of sanctions for non-payment, improved accountability and incentives for commercial staff, etc.)</td>
</tr>
<tr>
<td>Adopting measures to reduce technical and non-technical losses on the transmission and distribution systems (such as installation of prepayment meters for small customers, installation of advanced meters for large customers, improved monitoring of power flows through the distribution network, improved customer cadaster and controls, refurbishment of distribution infrastructure, etc.)</td>
</tr>
<tr>
<td>Complying with the terms of bilateral contracts for cross-border power trade, whether as importers or exporters, in accordance with the requirements established by the ECOWAS Regional Electricity Regulatory Authority (ERERA)</td>
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### National Regulatory Authority - Article 5(D)

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<tr>
<th>ARTICLE 5(D) - NATIONAL REGULATORY AUTHORITY</th>
<th>MONITORING PARAMETERS</th>
<th>DOCUMENT/ INFORMATION NEEDED</th>
</tr>
</thead>
</table>
| The main role of the National Power Sector Regulatory Authority is to ensure the level of the revenue requirements of the power utilities and determine the combination of tariffs and compensatory subsidies needed to cover these requirements. | 1. Mandate of the National Regulator to approve the revenue requirement  
2. Level of revenue requirement of the utilities  
3. Level of subsidy (% of Revenue Requirement)  
4. Level of Tariff (% of Revenue Requirement) | 1. Published Tariff Decision Report  
2. Utility’s Annual Report |

### ERERA and WAPP - Article 5(E)

<table>
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<tr>
<th>ARTICLE 5(E) - ERERA AND WAPP</th>
<th>MONITORING PARAMETERS</th>
<th>DOCUMENT/ INFORMATION NEEDED</th>
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</thead>
</table>
| Providing and enforcing a contractual template for the bilateral exchange of electricity between Member States that defines the conditions of power supply (firm, semi-firm or interruptible), incorporates suitable measures for sanctioning non-payment (through graduated disconnection) as well as non-delivery (through financial penalties that compensate the importer for back-up generation), and includes standard commercial bank guarantees back-up by multilateral guarantees | 1. Contract template from ERERA and WAPP which satisfies this Directive requirement.  
2. Regulation from ERERA making the use of contract templates compulsory in line with this directive. | 1. Contract template  
2. Regulation  
3. Executed contracts |
| Monitoring the exchange of electricity and associated payments between Member States against the terms of their respective bilateral contracts | WAPP reports on the physical exchange of electricity and payments | Annual reports from WAPP |
| Monitoring the compliance of Member States with the provisions of this Directive and regularly publishing information regarding the state of adoption of these measures | 1. Develop a monitoring template by ERERA  
2. Publication of Monitoring Report | Adopted Monitoring Template |
C. The Monitoring and document exchange process

The monitoring of the compliance with the Directive is done at two levels: national and regional levels.

- At the national level, the Member States, through designated focal points, exchange data and documents periodically to monitor progress on the implementation of the Directive’s measures and DPF 1 Prior actions.
- At the regional level, by the ECOWAS Department of Energy and Mines. It conducts an active dialogue to discuss with Member States the development of the regional electricity market. The ECOWAS Regional electricity regulatory Authority is the ECOWAS agency responsible for conducting monitoring activities and exchanging documents with relevant stakeholders.

To carry out this task, ERERA shall:

1. Receive from each Member State all relevant documents required to determine the country’s compliance.
2. Request, if necessary, from each Member State all relevant documents or any additional documents required to determine the countries’ compliance.
3. Review the country’s compliance from the documents submitted and publish a periodic report.
4. Where necessary, carry out physical observation of the situation in the Member State.
5. If necessary, request the ECOWAS Energy Department’s assistance towards submission from the Member State or to have access to any required documents needed to review countries’ compliance.
The process of exchanges of documents/information per Directive is as follows:

1. **ERERA**: Sends relevant documents to ECOWAS Commission & ERERA.

2. **ECOWAS Commission (Energy Department)**: Are relevant documents sent? (Y: Yes, N: No)

3. **ERERA**: Receives the documents

4. **Member States**: Content review of the documents

5. **ECOWAS Commission (Energy Department)**: Need further documents? (Y: Yes, N: No)

6. **Member States**: Requires additional documents/information

7. **ERERA**: Sends the additional documents/information

The flowchart shows the steps involved in the process:

- **ECOWAS Commission (Energy Department)** sends relevant documents to ERERA.
- ERERA receives the documents.
- ERERA content reviews the documents.
- If further documents are needed, ECOWAS Commission (Energy Department) sends additional documents/information.
- ERERA publishes the regulation report.
- The process ends.

**NRA**: National Regulatory Authority

**Y**: Yes

**N**: No
D. Data collection

To fulfil its mission, ERERA collects data and information using the monitoring framework and collected through focal points of all stakeholders mentioned in 2.2 (See the questionnaire as appendix 3).

From December 2021 to March 2022, ERERA sent questionnaires to every focal point from the six DPF 1 participating nations in order to collect the data. As of April 30, 2022, 50% of focal points completed and returned the questionnaire to ERERA. As a result, the information in this report is based on responses that were submitted by various respondents as of April 30, 2022. The breakdown of completed questionnaires is as shown in the figure below:

The distribution of filled questionnaires per Member State can be summarized in the table below:

<table>
<thead>
<tr>
<th>Country</th>
<th>MoE</th>
<th>MoF</th>
<th>Utilities</th>
<th>NRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Faso</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guinea</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mali</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Liberia</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sierra-Leone</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

3. Status of Member States’ compliance with the Directive in 2021

As we have earlier mentioned the main objective of the report is to provide statistics or records on the level of compliance with the Directive. This report is not intended to enquire why.

The analysis of Member State’s compliance is done by looking at what the stakeholder is supposed to do according to the Directive. Indeed, as it’s mentioned previously in 2.3.B, each stakeholder is responsible to undertake some actions which are assessed through the monitoring
parameters. The number of actions and monitoring parameters varies according to the stakeholder.

<table>
<thead>
<tr>
<th></th>
<th>Number of monitoring parameters</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry in charge of Economy and Finance</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Ministry in charge of Energy</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Power Utility</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>National Regulatory Authority</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30</strong></td>
<td></td>
</tr>
</tbody>
</table>

The assessment of the compliance of a stakeholder is done by asking the following question: has the stakeholder accomplished the requested action/measures required in the monitoring parameters?

If it is Yes, it complies and the correspondent cell is filled by correspondent color (see in previous table the correspondent color for each stakeholder) if not it is blank (white) as:

Each Member State is represented by a “rectangle” with 30 cells. Each cell represents a monitoring parameter of a stakeholder. Thus, the Ministry in charge of Finance represent 10 cells, the Ministry in charge of Energy represent 10 cells, the Power Utility represent 6 cells and the National regulatory authority represent 4 cells. The level of compliance of a Member State is the sum of the compliance of the different stakeholders of the country, this represents 30 cells.

So, for each Member State, we check the compliance of each stakeholder and fill the correspondent cell.

For instance, if a Member State complies with:

- four monitoring parameters for the Ministry in charge of Economy and Finance (Green), for the first ten cells, we fill four of the ten dedicated in green as:

- three monitoring parameters for the Ministry in charge of Energy (Red), for the next 10 cells, we fill three of the ten dedicated cells in red:

- two with monitoring parameters for Power Utility (Yellow), we fill two of the six dedicated cells in yellow:
3.1. BURKINA FASO

Burkina Faso's compliance with the Directive is assessed based on only two stakeholders who responded to the questionnaire. The compliance is represented in the following figure:

The analysis shows that the Ministry of Energy has adopted sound, least-cost power generation procurement plans and a power sector development plan in 2020. A Procurement framework for implementing the least-cost power generation plan is in development. Measures are being taken with regular meetings between relevant stakeholders (Ministry in charge of Finance, in charge of Energy and Utilities) on tariff adjustments in line with the revenue requirements and compensatory subsidies to fill the gap. The Ministry has compliance with seven of the ten (10) compliance parameters.

Concerning the National Regulatory Authority (ARSE-BF), it appears from the completed questionnaire that it has no mandate to approve the revenue requirement. Current regulations (texts) disregard both the issue of revenue requirement of the power utilities and the determination of the combination of tariffs and compensatory subsidies needed to cover these requirements. However, Government set up subsidies for the utility's fuel supply. ARSE-BF has compliance with one of the four compliance parameters.

3.2. CÔTE D'IVOIRE

No data has been received from Côte d'Ivoire in respect of the country's compliance with the Directive.
3.3. GUINEA

Guinea’s compliance with the Directive is assessed based on only one stakeholder who responded to the questionnaire. The compliance is represented in the following figure:

The analysis shows that the National Regulatory Authority (AREE) has the mandate to ensure the level of the revenue requirements of the power utilities and determine the combination of tariffs and compensatory subsidies needed to cover these requirements, according to articles 12 and 13 of law L/2017/050/AN of November 29, 2017; as well as article 37 of Decree D/2018/055/PRG/SGG of 02 May 2018. A study to determine the revenue requirement is being finalized. The AREE has compliance with all compliance parameters.

3.4. LIBERIA

Liberia's compliance with the Directive is assessed based on three stakeholders who responded to the questionnaire. The compliance level is represented in the following figure:

The analysis shows that the Ministry in charge of Economy and Finance has set up measures ensuring that all public sector institutions pay the electricity bills promptly and regularly. The national budget also prioritizes the payment of public electricity bills. The Ministry (MFDP) makes payments for electricity consumption on behalf of all public institutions based on a memorandum of understanding (MoU). There is no prepayment mechanism for public sector institutions because bill payments by public sector institutions in Liberia are based on a post-payment mechanism which allows Liberia Electricity Corporation (LEC) to send in a request for payment when the service period elapses. This payment request depends on LEC’s operational needs, which can be made monthly, quarterly, or anytime during the year. There is no Directive to utilities to implement escrow accounts and 'cascade or waterfall' payment mechanisms with a priority for electricity creditors. However, the Government has recently increased its commitment to pay utility bills by creating new budget lines for water and electricity arrears, as highlighted in the National Budget for the fiscal year 2022. A payment guarantee for electricity suppliers with the Technical and Financial Partners (TFP) does not exist. However, an MoU exists that allows the Ministry of Finance & Development Planning (MFDP) to pay electricity bills on behalf of all government entities during the execution of the national budget based on LEC’s payment request. Moreover, there is no budget for any compensatory fiscal subsidies. However, the Government often supports public projects undertaken by LEC and makes bill payments to support its operations and management. The Government makes bill payments to Liberia Electricity Corporation (LEC) through the National Budget and provides project support to LEC to implement public sector investment projects. However, there is no regular or specific subsidy for compensating LEC in the event of a revenue shortfall. The Government does not adopt a standard register for capturing contingent liabilities, but regular logs exist for capturing payments and arrears. In the 2022 national budget, the Government of Liberia precisely captures LEC arrears and other power projects, signifying its

1 Ministry of Finance and Development Planning (MFDP)
growing commitment to pay all forms of public electricity liabilities. The Ministry in charge of Finance has compliance with five of the ten compliance parameters.

Concerning the Ministry in charge of Energy, the analyses show that it has adopted a least-cost power generation plan using an optimization Study for the Development of Power Generation in Liberia in February 2020, but there is no implementation plan. The procurement framework for implementing this plan is currently under development. Regarding the adoption of a transparent policy for domestic energy security considerations, the 2009 National Energy Policy has been revised, but stakeholders’ consultations through the National Energy Stakeholders Forum (NESF) are still in progress. The LERC Tariff Regulations and Methodology ensure the regular revision of the revenue requirements of the power utility by an independent National Regulator. Directives have been set up concerning the Tariff adjustments in line with the revenue requirements and/or the compensatory subsidies. Subsidies are included in the tariff regime (Tariff 2022-2024) based on the consumer classes subsidization policy. The Ministry in charge of Energy has complied with six of the ten compliance parameters.

Concerning the National Regulatory Authority (LERC), under the 2015 Electricity Law of Liberia (ELL), LERC is empowered under Section 3.3 to set up Tariff regulations, and per Section 7(2) of the Electricity Tariff Regulations, LERC has the mandate to approve the revenue requirement. In 2021, the percentage of approved revenue requirement was 93.6%, and the level of Tariff (% of Total Revenue Requirement of the utilities) was 98.6% of the 93.6%. LERC has compliance with all compliance parameters.

Concerning the Utility (LEC), it should be noted that an action plan for complete recovery has been adopted, including (a) Disconnections for non-payment, (b) retrofitting of non-paying postpaid customers to prepaid/Debt Management, and (c) legal debt settlement actions. However, a framework for an incentive scheme for staff to improve bill collection is being finalized. In 2021, the energy bill rate was 41.5%, and 95% for the bill collection rate. LEC has adopted Action Plans for the reduction of technical and non-technical losses on the transmission and distribution systems; including (a) Roll out of prepayment meters for all customers at Low Voltage levels, (b) Installation of advanced/High-Security prepayment meters, (c) Installation of Feeder Metering and (d) Refurbishment of distribution infrastructure, etc. Concerning the compliance with the requirement for the adoption of ERERA's bilateral contracts templates, LEC does not have a signed contract that complies with ERERA's templates, but LEC is in the process of signing a PPA with CIE which conforms to ERERA's bilateral contracts templates. The LEC has compliance with five of the six compliance parameters.
3.5. MALI

Mali’s compliance with the Directive is assessed based on responses from only two stakeholders who responded to the questionnaire. The compliance level is represented in the following figure:

The analysis shows that according to Article 42 of Ordinance No. 19 of March 15, 2000, the organization of the electricity sector allowed the tariff principles based on a Cost Plus/Rate of return methodology. This methodology consists firstly of determining the revenue requirement by identifying the total costs and investments and secondly by assigning a rate of return. The National Regulatory Authority (CREE) is responsible for implementing this ordinance.

The methodology does not allow the calculation of an income required for the utility but that of remuneration of the assets up to the value of the Internal Rate of Return (IRR) of 10.23%. On this basis, arbitrations are made between the tariff variation and the granting of subsidies. CREE has compliance with all compliance parameters.

Concerning the Utility (Energie Du Mali-SA), it should be noted that an action plan for the full recovery of revenues from customers has been adopted, including clear sanctions for non-payment of bills and a financial incentive scheme to staff for improved collection of bills. So, in 2021 the billing rate was 78% and 95% for the Bill collection rate. EDMSA has adopted an action plan to reduce technical and non-technical losses on the transmission and distribution systems. Prepayment meters represent 70% of the meter fleet. In 2021, EDMSA started a smart meter installation project at a 30% execution level. The distribution infrastructure has seen a level of investment of around 20 billion FCFA (XOF) in 2021, and other structuring projects such as Mali Electricity Sector Improvement Project (PASEM) and the North Core Bamako also fall within this framework. The overall loss rate is 22%. Regarding compliance with the requirement for adopting ERERA’s bilateral contracts templates, EDMSA is working internally to adopt the templates. ENERGIE DU MALI-SA has compliance with five of the six compliance parameters.

3.6. SIERRA LEONE

Sierra Leone’s compliance with the Directive is assessed based on the response from two stakeholders who responded to the questionnaire. The compliance level is represented in the following figure:

The analysis shows that the Ministry in charge of Energy adopted a least-cost power generation plan for the Power grid in March 2020 with a periodicity of 5 years for the update. An implementation plan of the least-cost power generation procurement plan and a procurement framework for implementing the least-cost power generation plan was developed in December 2020 under Integrated Resource Plan 2020-2040. The Ministry in charge of Energy has compliance with five of the ten compliance parameters.

Concerning the Electricity and Water Regulatory Commission (EWRC), under the SLEWRC-ACT 2011, EWRC has the mandate to approve the revenue requirement. The commission usually accepts the entire Revenue Requirement (100%) submitted by the utility. This is because the Tariff
is not cost-reflective, and the objective of EWRC is to gradually increase the allowed revenue requirement and the tariff levels over several years to ensure affordability and acceptability by both the public and the Government. The subsidy was not factored in the recently approved Tariff. The subsidy provided by the Government is to supplement the payments for purchased energy from IPPs and the purchase of capital items like transformers for the transmission and distribution networks.

The tariff level and structure result from the allowed revenue requirement approved by the Commission. The latest approved tariff Level and Structure was in 2019, and EWRC has complied with all the parameters.

3.7. WAPP (ICC)

WAPP-ICC is responsible for monitoring the exchange of electricity and associated payments between the Member States against the terms of their respective bilateral contracts. WAPP 2018, 2019, and 2020 annual reports have been drafted, and the 2021 Annual Report is currently being finalized.

4. Conclusion

This is the first report on the state of compliance with the Directive on the Securitization of the Cross-Border Power Trade Under the Regional Electricity Market of six participating countries of the World Bank’s Program for financing the development of the West African Regional Energy Market (DPF-1): Burkina Faso, Côte d’Ivoire, Guinea, Liberia, Mali, and Sierra Leone. For the subsequent years, a complete report on the Compliance with the Directive on all ECOWAS Member States would be published following the Directive.

The report shows the state of the development and implementation of measures mentioned (asked) in the Directive for all stakeholders in each Member States: Ministry in charge of Energy, Ministry in charge of Economy and Finance, Utilities, and National Regulatory Authority. Moreover, it presents the compliance status of WAPP (ICC) regarding its role mentioned in Article 5 of the Directive.

The report itemize that the Six countries have made some progress in implementing the Directive’s measures on different sides. Most of the Ministries in charge of Economy and Finance (MoF) set up some policies and measures to ensure that all public sector institutions pay the electricity bills promptly and regularly. However, concerning the budgeting and transferring of any compensatory fiscal subsidies that may be required to meet the revenue requirements of power utilities; the framework for recording, monitoring, and making adequate fiscal provision for energy-related contingent liabilities or for introducing the mechanism of payments guarantees with the involvement of the Technical and Financial Partners (TFP); MOFs have not taken yet formal measures or Directives, but they have done it “informally.”

Most of the Ministries in charge of Energy (MoE) developed and implemented the Least-Cost Generation Development Plan and procurement plan. Concerning adopting a transparent policy regarding domestic energy security considerations and establishing a sound regulatory
framework for the regular revision of the revenue requirement of the power utility based on evolving costs, the MoEs have not yet taken formal measures or Directives. However, they have taken measures to ensure that the revenue requirement of the sector is met primarily through tariff adjustments or by an equivalent combination of tariff adjustments and compensatory subsidies.

The only Utility which responded to the questionnaire (EDMSA) has adopted measures to enhance the full recovery of revenues from customers billed for electricity consumption. Its billing rate was 78% and 98% for the Bill collection rate in 2021. With an overall loss rate of 22%, it adopted measures to reduce technical and non-technical losses on the transmission and distribution systems.

Most National Regulatory Authorities have the mandate to approve the level of the revenue requirements of the power utilities and determine the combination of tariffs and compensatory subsidies needed to cover these requirements.

Concerning WAPP-ICC, the analyses have shown that it is responsible for monitoring the exchange of electricity and associated payments between the Member States as per their respective bilateral contracts. WAPP-ICC has performed this activity and regularly publishes this in its annual report on the regional electricity market (REM) since 2018.

In conclusion, this first report shows some progress made by WAPP-ICC and by DPF 1 participating countries' stakeholders in the implementation of the Directive on the Securitization of the Cross-Border Power Trade Under the Regional Electricity Market, even though there are some challenges and measures to be accomplished.
Appendix 1: The Four pillars of the ECOWAS Directive C/DIR/2/12/18 on the Securitization of the Cross-Border Power Trade Under the Regional Electricity Market

1. Enhancing the creditworthiness of the power sector through a regional power sector policy pact by taking a systematic range of measures to minimize the cost of power generation, maximize the efficiency of power distribution, and provide a reliable revenue stream to the sector;

2. Strengthening contractual instruments used for bilateral exchanges to provide greater financial and legal protection so that importers will be reliably supplied with energy and exporters will be reliably paid for energy supplied;

3. Backing contracts with more solid, explicit, and symmetrical guarantees so that both importers and exporters benefit from: (a) effective commercial bank guarantees; or (b) effective commercial bank guarantees backed up with an explicit guarantee mechanism providing multilateral support, in the case of state-owned utilities that lack a sound track record in the market;

4. Strengthening the role of regional institutions in bilateral trade facilitation by having them, as a neutral third party, proactively monitoring the flow of electricity and related payments against contractual commitments among parties trading in the bilateral market.
## Appendix 2: List of Prior Actions

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PRIOR ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To strengthen the commercial basis for electricity trade, [the competent authority] in each Recipient has approved a [legal instrument] requiring the use of the principles inspired by ERERA models of contract template/framework for all future sale and purchase of cross-border electricity.</td>
</tr>
<tr>
<td>2</td>
<td>To build confidence in trade, and as part of a program that includes having fully paid any outstanding electricity trade arrears on behalf of the utility, each Recipient has put in place (i) cash waterfall arrangements to prioritize payments for imports and payment penalties for failure to supply exports (ii) a mechanism to proceed with a minimum of quarterly clearing up of trade arrears, and if necessary, (iii) a guarantee mechanism or a structure to ring-fence incoming revenues.</td>
</tr>
<tr>
<td>3</td>
<td>To minimize generation costs, promote the development of renewable energy, and the integration of national and regional power supply options, the Ministry of Energy of each Recipient has either: (a) published an up-to-date least-cost development plan for power generation supporting the scale-up of renewable generation and integrating national and regional power supply options, and adopted a transparent mechanism for regular updates and publication of such plans; (b) has demonstrably initiated preparation of the least cost plan and adopted [a mechanism to assess capacity expansion on an economic basis, including using regional options].</td>
</tr>
<tr>
<td>4</td>
<td>To facilitate regional energy trade and payments, the [competent authority] of each Recipient has approved a [legal instrument] requiring the use of regional regulations laid down by ERERA covering the interconnected power systems of the WAPP for: (i) the use of the West African Power Pool (WAPP) Operational Manual; and (ii) the tariff methodology for regional transmission.</td>
</tr>
<tr>
<td>5</td>
<td>To promote financial sustainability and avoid arrears accumulation, Cabinet of each Recipient have: (a) approved sector recovery or development plan that addresses (i) a shift in the energy mix to structurally reduce costs; (ii) the implementation of a revenue protection plan and further measures to increase revenues; (iii) measures to further decrease cost and (b) agreed to report to ERERA periodically information regarding approval of a sector recovery plan, including provisions to ensure ongoing timely payment of electricity bills by public institutions and provisions to ensure adequate utility revenues through a timely combination of tariff adjustments and (where appropriate) subsidy transfers.</td>
</tr>
</tbody>
</table>
Appendix 3: Questionnaires used for data collection

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DIR. REF.</th>
<th>ARTICLE S(B) - MINISTRIES IN CHARGE OF ENERGY</th>
<th>QUESTIONS ON MONITORING PARAMETERS</th>
<th>DOCUMENT/INFORMATION AVAILABILITY AND REFERENCE</th>
<th>DOCUMENTS ATTACHED AS EVIDENCE</th>
<th>REMARKS</th>
</tr>
</thead>
</table>
| 1        | 5.b) i    | Undertaking, publishing, and officially adopting sound least-cost power generation procurement plans that take into account the availability of domestic and regional options for meeting national energy demands and is updated regularly | 02Q1. Did your country adopt a Least-cost development plan?  
02Q2. If yes to the previous question, what is the periodic (in year) update of the least-cost power generation procurement plan?  
02Q3. What is the average generation cost of electricity? | If yes, provide evidence  
Provide evidence | 1. Least cost-power generation procurement plan  
2. Official document stating the methodology and periodicity for the update of the least-cost power generation procurement plan  
3. Others (specify): | |
| 2        | 5.b) ii   | Adopting and ensuring follow-up of an appropriate procurement framework for the regular, competitive, and timely implementation of domestic power generation, transmission, distribution projects, and power imports that is linked to the national least-cost power generation plan | 02Q4. Does an implementation plan of the least-cost power generation procurement plan exists?  
02Q5. Does a procurement framework for implementing the least-cost power generation plan develop? | If yes, provide evidence | 1. Procurement framework for the implementation of the least-cost power generation plan  
2. Annual Procurement Report  
3. Others (specify): | |
<table>
<thead>
<tr>
<th></th>
<th>5.b) iii</th>
<th>Adopting a transparent policy about domestic energy security considerations that caps the domestic energy security premium at a reasonable level</th>
<th>02Q6. Does an Energy security policy document that caps the domestic energy security premium adopt?</th>
<th>If yes, provide evidence</th>
<th>1. The energy security policy&lt;br&gt;2. Other official documents attesting that the policy is being developed (specify):</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5.b) iv</td>
<td>Establishing a sound regulatory framework for the regular revision of the revenue requirement of the power utility based on evolving cost</td>
<td>02Q7. Does a Regulatory framework ensure the regular revision of the revenue requirement of the power utility by an independent National Regulator adopted?</td>
<td>If yes, provide evidence</td>
<td>1. The Regulatory Framework for the regular revision of revenue requirement&lt;br&gt;2. Other official documents attesting the development of this regulatory framework (specify):</td>
</tr>
<tr>
<td></td>
<td>5.b) v</td>
<td>Ensuring that the revenue requirement of the sector is met primarily through tariff adjustments or by an equivalent combination of tariff adjustments and compensatory subsidies.</td>
<td>02Q8. Are Directives from the relevant authority concerning the following adopted?&lt;br&gt;a) The Tariff adjustments in line with the revenue requirements and/or&lt;br&gt;b) The Compensatory subsidies to fill the gap between the revenue requirements and revenue from the tariffs are developed</td>
<td>If yes, provide the reference of the Directive</td>
<td>1. Directive on revenue requirement recovery&lt;br&gt;2. Revenue requirement recovery gap report&lt;br&gt;3. Others (specify):</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02Q9. What is the percentage of revenue requirements which was recovered?</td>
<td>Provide the data reference</td>
<td>1. Directive on revenue requirement recovery&lt;br&gt;2. Revenue requirement recovery gap report&lt;br&gt;3. Others (specify):</td>
</tr>
<tr>
<td>ITEM NO.</td>
<td>DIR. REF.</td>
<td>ARTICLE 5(A) - MINISTRIES IN CHARGE OF FINANCE</td>
<td>QUESTIONS ON MONITORING PARAMETERS</td>
<td>DOCUMENT/ INFORMATION AVAILABILITY</td>
<td>DOCUMENTS ATTACHED AS EVIDENCE</td>
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</tr>
<tr>
<td>1</td>
<td>5.a) i</td>
<td>Ensuring that all public sector institutions pay the electricity bills promptly and regularly, through making appropriate budgetary provision for them, and (if deemed necessary) adopting prepayment mechanisms to support payment</td>
<td>01Q1. Does the National Budget provide payment of public electricity bills?</td>
<td>Is the national budget available for 2021?</td>
<td>Provide the data reference</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01Q2. What is the rate of bill payment by public sector institutions?</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>01Q3. Is a prepayment mechanism for public sector institutions adopted?</td>
<td>If yes, provide evidence</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>01Q4. Does a quarterly or half-yearly bill payment plan exist?</td>
<td>If yes, provide evidence</td>
<td></td>
</tr>
</tbody>
</table>

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| 2 | 5.a) ii | Adopting escrow accounts that ring-fence utility revenues, accompanied with 'cascade or waterfall' payment mechanisms that clarify the priority of payment of electricity creditors in situations of cash shortfall | 01Q5. Does a Directive exist for utilities to implement escrow accounts and 'cascade or waterfall' payment mechanisms with a priority for electricity creditors? | If yes, provide evidence | 1. Directive from Ministry in charge of Finance of other authority  
2. Others (specify): |
|---|---|---|---|---|---|
| 3 | 5.a) iii | Budgeting and transferring promptly any compensatory fiscal subsidies that may be required to meet the revenue requirements of power utilities, if electricity tariffs are not set at cost recovery levels | 01Q6. How much is the annual amount of compensatory subsidies set aside by the government in its budget bill, if necessary? | Provide evidence | 1. Relevant pages of the National Budget  
2. Official document attesting the regular payment of compensatory subsidies  
3. Others (specify): |
| 4 | 5.a) iv | Introducing mechanism of payments guarantees with the involvement of the Technical and Financial Partners (TFP) for the benefit of the electricity supplier | 01Q7. Does a regular payment (quarterly or half-yearly) of compensatory subsidies exist (or used)? | If yes, provide evidence | Specify the attached document: |
| 5 | 5.a) v | Adopting a framework for recording, monitoring, and making adequate fiscal provision for energy-related contingent liabilities, including those related to independent power projects and power imports | 01Q9. Does a register for all energy-related contingent liabilities exist (or used)? | If yes, provide evidence | Specify the attached document: |
| | | | 01Q10. Does a provision for energy-related contingent liabilities in the annual budget exist? | If yes, provide evidence | Specify the attached document: |
### POWER UTILITIES

**Country:**

<table>
<thead>
<tr>
<th>Utility's Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full name of respondent</td>
</tr>
<tr>
<td>Position</td>
</tr>
<tr>
<td>Department</td>
</tr>
<tr>
<td>Full contact (postal, phone, email, fax):</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DIR. REF.</th>
<th>ARTICLE 5(C) - POWER UTILITIES</th>
<th>QUESTIONS ON MONITORING PARAMETERS</th>
<th>DOCUMENT/ INFORMATION AVAILABILITY AND REFERENCE</th>
<th>DOCUMENTS ATTACHED AS EVIDENCE</th>
<th>REMARKS</th>
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</table>
| 1        | 5.c)i     | Adopting measures to enhance the full recovery of revenues from customers billed for electricity consumption (such as applying sanctions for non-payment, improved accountability, and incentives for commercial staff, etc.) | 03Q1. Have an action plan, for the full recovery of revenues from customers, been adopted, including:  
   a) Clear sanction for non-payment of bills ...  
   b) Financial incentive scheme to staff for improved collection of bills? ... | If yes, provide evidence | 1. Utility's Report  
2. Others (specify): | |
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<tr>
<td>2</td>
<td>5.c) ii</td>
<td>Adopting measures to reduce technical and non-technical losses on the transmission and distribution systems (such as installation of prepayment meters for small customers, installation of advanced meters for large customers, improved monitoring of power flows through the distribution network, improved customer cadastre, and controls, refurbishment of distribution infrastructure, etc.)</td>
<td>03Q4. Have an action plan, for the reduction of technical and non-technical losses on the transmission and distribution systems, adopted, including: a) Roll out of prepayment meters --- b) Installation of advanced prepayment meters --- c) Refurbishment of distribution infrastructure? ---</td>
<td>If yes, provide evidence</td>
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<td>3</td>
<td>5.c) iii</td>
<td>Complying with the terms of bilateral contracts for cross-border power trade, whether as importers or exporters, in accordance with the requirements established by the ECOWAS Regional Electricity Regulatory Authority (ERERA)</td>
<td>03Q6. Have you complied with the requirement for adoption with ERERA's bilateral contracts template? --- 03Q7. Do you have a signed contract which complies with ERERA's template? ---</td>
<td>If yes, provide evidence</td>
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### Compliance of Six Member States with the ECOWAS Directive on securitization of Cross-Border power trade – 2021 Report

#### NATIONAL REGULATORS AUTHORITY

**Country:**

<table>
<thead>
<tr>
<th>Full name of respondent</th>
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<tbody>
<tr>
<td>Position</td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td></td>
</tr>
<tr>
<td>Full contact (postal, phone, email, fax):</td>
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<table>
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<tr>
<td>1</td>
<td>5.d)</td>
<td>The main role of the National Power Sector Regulatory Authority is to ensure the level of the revenue requirements of the power utilities and determine the combination of tariffs and compensatory subsidies needed to cover these requirements.</td>
<td>04Q1. Does the National Regulator have the mandate to approve the revenue requirement?</td>
<td>If yes, provide evidence</td>
<td>1. Published Tariff Decision Report</td>
<td></td>
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<td></td>
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<td>04Q2. What is the percentage of the approved revenue requirement of the utilities?</td>
<td>Provide evidence</td>
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<td>04Q3. What is the level of subsidy (% of Revenue Requirement)?</td>
<td>Provide evidence</td>
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<td>04Q4. What is the level of tariff (% of Total Revenue Requirement of the utilities)?</td>
<td>Provide evidence</td>
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### Article 5(e) - ERERA and WAPP

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<tbody>
<tr>
<td>1</td>
<td>5.e) i</td>
<td>Monitoring the exchange of electricity and associated payments between the Member States against the terms of their respective bilateral contracts;</td>
<td>05Q2. Do reports exist on the physical sale of electricity and payments?</td>
<td>If yes, provide evidence</td>
<td>1. Annual reports from WAPP</td>
<td></td>
</tr>
</tbody>
</table>