

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA5469

Project Name	Power Sector Recovery Project (P146696)
Region	AFRICA
Country	Guinea
Sector(s)	Thermal Power Generation (100%)
Theme(s)	Infrastructure services for private sector development (100%)
Lending Instrument	Investment Project Financing
Project ID	P146696
Borrower(s)	Ministry of Finance
Implementing Agency	Ministry of Energy and Hydraulics
Environmental Category	B-Partial Assessment
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Decision	

I. Project Context

Country Context

The Republic of Guinea is located on the West coast of Africa and is bordered by Guinea-Bissau, Senegal and Mali to the North, Liberia and Sierra Leone to the South, and Côte d'Ivoire to the East. The country is relatively small, with a landmass comparable to that of the United Kingdom or Uganda. Population density is low: in 2012, it stood at 46 inhabitants per square kilometer, with the population estimated at 11.4 million. The Guinean population is young (45 percent of Guineans are aged between 15 and 19) and the current growth rate is 3.1 percent. If this trend continues, the population will double by 2035.

Despite an abundance of natural resources, Guinea is one of the poorest countries in the world. Per capita GDP was about \$492 in 2012 and the country is a prime example of the paradox of plenty: it is home to 25 percent or more of the World's known bauxite reserves and the largest hydro potential in West Africa. Furthermore, poverty has worsened in recent years with the 2012 Limited Poverty Evaluation Survey showing that 55 percent of the population is considered to be poor, compared with 53 percent in 2007 and 40 percent in 1995. Most of the poor live in rural areas.

On June 27, 2010, the country held its first competitive presidential election after more than 50 years of authoritarian rule. The assumption of power by a democratically elected president, Alpha

Condé, also marked a return to constitutional order and paved the way for new economic opportunities. The army had seized power on December 23, 2008 following the death of long-time President Lansana Conté, and a military junta had since led the country during a difficult transition period. In late 2010, a series of reforms were introduced and Guinea reached the completion point for the Heavily Indebted Poor Countries (HIPC) Initiative in September 2012. The country held legislative elections on September 28, 2013 and the elected MPs were sworn in January 2014. The political transition will be completed through local elections planned for the near future.

The current recovery is fragile. Ongoing implementation of the 2012-2014 economic and financial program supported by the IMF Extended Credit Facility has helped to reduce macro-economic imbalances. In 2012, despite the international crisis, economic activity remained strong, supported by the acceleration of investments in agriculture and the mining sector. Real GDP grew by 3.9 percent in 2011 to reach 4.8 percent in 2012, compared with a 1.9 percent growth rate in 2010. The economy is expected to grow at 3.7 percent in 2013, down from an estimated 4.8 percent in 2012. Assuming the political and external trading climates improve, growth is expected to rebound to 5 percent in 2014. The recovery could be derailed if political stability is not fully restored or if the global economic context remains weak.

Inflation eased dramatically in 2012, dipping below the government's stated objective of 15 percent year on year, ending the year at 12.8 percent and averaging 15.2 percent. The downward trend is the result of successful reductions in government spending and similar successful efforts by the central bank to sterilize excess liquidity. Tackling inflation is a government priority, chiefly for political reasons, given that price increases have triggered riots in the past. There remains a risk of political unrest, which could disrupt supply chains.

The Guinean economy is dominated by the mining and rural sectors. The country is well endowed with minerals particularly iron ore, bauxite, gold, uranium and diamonds. The Simandou iron ore deposit is one of the finest worldwide and its exploitation would result in a quantum change in the country's exports and GDP. Given the lack of a reliable supply of electricity from the grid and following common international practice, self-supply of electricity is common amongst existing mining operations: a total of 139 MW of thermal capacity in island systems was operated by mines in 2010 compared to approximately 235 MW on the national grid.

Private sector investments in Guinea remain limited due to the perceived country risk and an unfavorable business environment. Guinea is ranked 175 out of 183 countries by the Doing Business report, and ranks lowest amongst West African countries. However, the development of mining and hydropower potential has received increasing interest from private investors.

Sectoral and institutional Context

The Guinean electricity sector is performing poorly and is unable to deliver the level of service required to support economic growth and social development. Despite Government awareness of the magnitude of the issue and its consequences, little improvement has occurred over the past decade and sector performance has steadily worsened.

As a result, access to electricity remains low at 12 percent on average. Official statistics show a 96 percent access rate in urban areas and 3 percent access rate in rural areas, although these data are not very reliable. There is a high consumption of biomass, constituting 78 percent of the overall

energy balance and this has heavily contributed to rapid deforestation – forest coverage has decreased from 14 million ha in 1967 to 700,000 ha in 2002. The electrical power system consists of an interconnected western network supplying the largest concentration of electricity consumers (including Conakry), a second relatively large interconnected network in the center of the country, and isolated centers scattered throughout the country.

The sector comprises a number of agencies with differing levels of operational capacity. MEH is responsible for setting sector strategy and supervising EDG, the state-owned utility that was created following the failed privatization of the power network in the 1990s. In its latest structure, EDG comprises three main departments: (i) technical operations, (ii) planning and equipment, and (iii) support to operations. The total number of agents is 1,795 translating into a low productivity ratio of 286MWh of energy billed per agent per year, which is considered low by regional standards, particularly for a largely hydro system (less labor intensive than thermal). EDG's overstaffing, however, has little financial impact, as the payroll represented only 10 percent of total costs in 2012. It does, however, have a negative impact on staff motivation and effectiveness in the job. The Inter-ministerial Committee for Electricity (ICE) includes representatives from various ministries and government agencies and plays a strategic and coordination role. Finally, an Electricity Regulator was legally established in September 2005 but remains effectively non-functional as it awaits a clear definition of its role.

At the end of 2012, EDG had 197,626 registered customers but the actual number of consumers is much higher when illegal connections are taken into account. 65 percent of customers were located in the capital city Conakry. The total number of electricity consumers is estimated at around 300,000 as the number of illegal connections is estimated to be around 100,000. The demand for electricity in Guinea is not accurately known because (i) a large number of households and businesses are connected to the network illegally and are not listed in the EDG customer database, and (ii) up to 80 percent of Low Voltage (LV) customer billing is based on a flat fee with no metering. Peak demand forecast for 2025 is hence uncertain, but is most likely to be above 550 MW, representing an average annual growth above 8.5 percent, driven by: (i) meeting unserved demand; (ii) the acceleration of access to electricity under SE4All as soon as sufficient capacity is available; and (iii) the likely development of industrial activities. A significant number of potential and illegal customers have asked to be connected or regularized.

The share of expensive thermal generation is growing, effectively increasing financial losses in the sector. Electricity generation cost is high in Guinea due to the significant share of thermal (diesel and HFO fired power plants) energy in the generation mix. The generation cost of electricity produced by thermal plants is above 30 US¢ per kWh. The share of hydropower within the generation mix has dropped from 76 percent in 2010 to 67 percent in 2012. The near-term outlook is negative and has worsened since September 2013 when the Government procured 50 MW of emergency rental diesel-fired power. The cost is likely to remain high until relatively cheap generation of power from Kaléta and other hydropower projects will become available after 2017. At the end of 2013, EDG owned 107 MW of thermal generational capacity and 128 MW of hydropower generation capacity. Only 30 percent of the installed thermal capacity is currently operational, due to technical incidents and poor maintenance. In 2013, actual supply in urban areas reached 162 MW while unsuppressed peak demand is estimated to have reached 277 MW. EDG has resorted to rolling blackouts as a result of a significant shortfall in power production and frequent incidents in the network.

EDG is dependent on Government support for survival. Only about 58 percent of total electricity generated is billed due to high technical and non-technical losses (power theft or fraud). In addition, only 77 percent of energy billed is actually collected. The overall system efficiency is therefore only 45 percent, one of the lowest in Africa. Maintenance is insufficient to ensure reliability of assets at the expected standard or in a sustainable manner and service quality has consistently deteriorated since 2000. Systematic and unpredictable rationing has been applied as the result of insufficient supply and the poor condition of the distribution system leading to load imbalances and frequent failure of transformers. As a result of the overall inefficiency, although public funding for infrastructure decreased between 2006 and 2010, budget resources to financially support EDG since 2010 have increased and all investment is directly supported by the Government of Guinea's (GoG) budget.

In contrast to poor sector performance, Guinea has the largest hydropower potential in the West Africa region. Hydropower capacity has been estimated at more than 6,000 MW, equivalent to an average annual production of 19 TWh. The Kaléta hydropower plant with an installed capacity of 240 MW is under construction and scheduled to come online in late 2015 or early 2016 but the current grid condition is such that, if unchanged, it will be unable to absorb much of this additional power supply. Other low cost hydropower developments for which feasibility studies are ongoing include Souapiti (installed capacity of 515 MW) and Fomi (374 MW).

The Government is committed to the reforms needed to ensure the sector's recovery and eventual viability. The Government's energy strategy in the medium to long term, as articulated in its latest Energy Sector Policy Letter - General Policy Declaration (LPDSE) of December 2012, provides for a 20 year vision that includes:

- Providing improved energy access and quality of service through the accelerated rehabilitation of existing capacities and development of additional generation capacity (thermal and hydro);
- Achieving sector financial autonomy through a suitable tariff structure and commercial management and implementation of an Action Plan for EDG endorsed by GoG and the main donors on January 15-16, 2012;
- Supporting the participation of private partners in generation, transmission and distribution in a fair regulatory framework, relying in particular on partnerships with the mining industry established in Guinea;
- Redirecting the role of the Government toward definition of policies and strategies with a reinforcement of the Electricity Regulator; and
- Accelerating the development of the country's hydropower potential for increased energy security and lower production cost.

In 2011-2012, the World Bank and French Agency for Development (AFD) co-financed a comprehensive Power Sector Diagnostic and Recovery Plan (PSDRP). The recovery plan provided recommendations that centered on improving the commercial performance of EDG, restructuring and reorganization of EDG, updating the legal framework for the sector and Public Private Partnerships (PPP). The study also outlined a medium term investment plan of over US\$ 1 billion

over the next three years to fulfill those recommendations. Along with investments designed to address institutional and legislative hurdles outlined above, this plan includes the 240MW Kaleta hydropower plant (US\$ 527 million) funded by the Government of the People's Republic of China, as well other power generation, transmission and distribution infrastructure. In the short term, seven priority power projects in need of an estimated US\$423 million in financing have been identified.

The Government of Guinea has requested World Bank Group support to reform the energy sector. IDA has been a strong supporter of reforms in the past year. Furthermore, GoG has concluded based on the sector diagnostic and recovery plan of 2012 that a Management Services Contract (MSC) is the best way to implement the medium term power sector recovery to strengthen EDG performance. GoG has therefore specifically requested IDA support for such an MSC. In addition, in December 2013, the GoG signed a mandate letter with the International Finance Corporation (IFC) to provide business advisory services to the GoG in the design of an MSC and recruitment of a private operator to manage EDG during an initial recovery period of 3 to 5 years.

II. Proposed Development Objectives

The Project Development Objective (PDO) is to improve the technical and commercial performance of the national power utility.

III. Project Description

Component Name

Financing of a Management Services Contract to support EDG performance improvement

Comments (optional)

The project is therefore structured around three main components: (1) Financing of a Management Services Contract to support EDG performance improvement, (2) Selected investments in the power grid of greater Conakry, (3) Technical assistance to MEH and project implementation support.

This component will finance a Management Services Contract (MSC) between MEH and a private firm ("the Operator") with sufficient technical and fiduciary capacity to provide management, operation and capacity building services for EDG over 3-5 years. Specifically, the operator will be selected through a rigorous and competitive process on the basis of technical capacity and a proposed business plan. This component will fund fees paid to the operator.

Component Name

Selected investments in the Conakry power network

Comments (optional)

This component will support investments that will enable EDG to improve the reliability of electricity supply in the capital city Conakry, where 80 percent of its clients are located. In response to frequent rolling blackouts, this component further adds to rehabilitation and upgrading of the network in the districts of Kaloum, Ratoma, and Matoto carried out under separate financing. The proposed investments under this component focus on the district of Dixinn and are extracted from the Government's priority investment plan but the exact scope of each activity will be finalized once the operator is in place.

Component Name

Technical assistance to the Ministry of Energy and Hydraulics and project implementation support

Comments (optional)

This component comprises two sub-components, namely (3.A.) Technical assistance to MEH and

(3.B.) project implementation support. Sub-component (3.A.) will support MEH supervision of the operator and provide TA to MEH to carry out other sector policy and oversight activities, including financing for the restructuring of EDG, an independent technical auditor to track the operator's deliverables and certify whether agreed results have been achieved, and development of the Government's anti-fraud policy and its application. Sub-component (3.B.) will support costs related to the utilization of experts and equipment for the efficient operation of the Project Implementation Unit within MEH.

IV. Financing (in USD Million)

Total Project Cost:	50.00	Total Bank Financing:	50.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
BORROWER/RECIPIENT			0.00
International Development Association (IDA)			50.00
Total			50.00

V. Implementation

The Inter-ministerial Commission for Energy (ICE) and its Technical Committee will be responsible for overall strategic guidance and oversight of the project.

MEH will be the project implementation agency for components 1 and 3 of the project, including the procurement and administration of the MSC. Given the limited capacity of MEH, a Project Implementation Unit will be established within MEH. EDG (under the management of the Operator) will be the project implementation agency for component 2 and will be responsible for the management of all related technical, fiduciary, and safeguards aspects. Under the ongoing ESEIP, EDG has acquired extensive experience with project management in accordance with World Bank policies. At the closure of the ESEIP, the ESEIP PIU staff will be fully integrated into the utility to further strengthen fiduciary capacity.

After signature of the contract between the government and the Operator, the ICE and MEH will supervise the implementation of the MSC with support of the PIU to be established within MEH. To strengthen monitoring of MSC implementation and avoid potential disputes between the government and the Operator, an independent technical auditor to be financed under component 3 will be in charge of monitoring the fulfillment of key contract obligations by both parties, including the attainment of EDG performance targets.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04		x
Forests OP/BP 4.36		x
Pest Management OP 4.09		x
Physical Cultural Resources OP/BP 4.11		x
Indigenous Peoples OP/BP 4.10		x

Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

Comments (optional)

VII. Contact point

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