PROJECT INFORMATION DOCUMENT (PID) ADDITIONAL FINANCING

Report No.: PIDA17601

D	GED AD G 1 A 11'.' 1 E' .' (D147070)		
Project Name	GEDAP Second Additional Financing (P147878)		
Parent Project Name	Ghana: Energy Development and Access Project (P074191)		
Region	AFRICA		
Country	Ghana		
Sector(s)	Transmission and Distribution of Electricity (100%)		
Theme(s)	Infrastructure services for private sector development (70%), Other public sector governance (30%)		
Lending Instrument	Investment Project Financing		
Project ID	P147878		
Parent Project ID	P074191		
Borrower(s)	Ministry of Energy		
Implementing Agency	Electricity Company of Ghana		
Environmental Category	B-Partial Assessment		
Date PID Prepared/Updated	11-Mar-2015		
Date PID Approved/Disclosed	11-Mar-2015		
Estimated Date of Appraisal	09-Mar-2015		
Completion			
Estimated Date of Board	30-Apr-2015		
Approval			
Appraisal Review Decision (from Decision Note)			

I. Project Context

Country Context

Ghana, with a population of about 25 million and GDP per capita of US\$1,730, has experienced strong and broadly inclusive growth over the past two decades. This is evidenced by the ongoing transition to lower middle-income status with significant improvements in poverty reduction and human development. Nevertheless, about quarter of the population lives below the poverty line, over 8% in extreme poverty, and 6 to 7 million jobs will need to be created in the next two decades to absorb new entrants into the labor markets. Success in addressing these challenges will critically depend on complementing extractive industries with diversified private sector-led growth in labor intensive industries. The Government's strategy is to leverage the new domestic gas and oil resources to develop the manufacturing sector and higher value agriculture. This will require significant investments in infrastructure and removal of main bottle necks to economic growth – inadequate and unreliable electricity supply and lack of affordable financing from the banking system.

Recently economic growth in Ghana has slowed down from a high of 15% in 2011 when commissioning of oil fields took place, to below 8% and 7% in 2013 and 2014, respectively. This is a result of macroeconomic imbalances stemming from a combination of overruns in fiscal spending and lower world markets prices for the country's main export commodities, crude oil, gold and cocoa. Growth is expected to remain modest at around 4-6% over the near term. To address the macroeconomic situation the Government has recently engaged in a dialogue with the IMF on economic and policy reforms that could form the basis of a possible Fund-supported program.

Sectoral and institutional Context

Electricity access in Ghana is 70%, which is well above the average for Sub-Saharan Africa. Ghana's power sector has an unbundled structure composed of generation, transmission and distribution subsectors. Power generation is predominantly undertaken by the Volta River Authority (VRA), while the transmission system is owned and operated by the Ghana Grid Company (GRIDCo). The distribution of electricity is carried out by the Electricity Company of Ghana (ECG), with about 2.6 million customers accounting for about 90% of retail power sales, and the Northern Electricity Corporation (NEDCo, a subsidiary of VRA) which handles the remaining 10%. The Ministry of Power is responsible for formulating, implementing, monitoring and evaluating energy sector policies, while the Energy Commission (EC) and the Public Utilities and Regulatory Commission (PURC) regulate the industry. Ghana has an installed power generation capacity of over 2,600MW, made up of 1,600 MW of hydropower plants and the remainder gas/oil thermal facilities. Electricity demand at peak is currently above 2,000MW.

Ghana is currently experiencing major shortages of electricity, which at peak times exceed 500 MW. This situation is due to (i) low water levels in the country's main hydro resource, the Akosombo hydroelectric plant; (ii) low and erratic gas supplies from Nigeria, through the West Africa Gas Pipeline; (iii) low availability of thermal generation plants due to equipment breakdowns; and (iv) lack of funding to purchase oil to make up for gas shortages.

ECG collects revenue on behalf of the entire energy value chain in Ghana. Despite continued efforts in reducing operational losses and the move to cost-reflective tariffs, its financial performance has declined since 2012. This is largely a result of poor revenue collection and sharply rising costs, resulting in the build-up of large consumer payment arrears and subsequent cross-arrears amongst energy sector companies. Non-payment of electricity bills by public sector bodies has especially aggravated these inter-company arrears.

ECG's financial and in particular, its revenue collection performance has also adversely impacted the ability to reach closure on IPP's necessary to address the generation shortage in the country. The lack of sufficient generation capacity has in turn adversely impacted ECG's sales and revenue, resulting in a vicious circle of insufficient cash to flow back to the generation companies.

II. Proposed Development Objectives

A. Current Project Development Objectives – Parent

To improve the operational efficiency of the electricity distribution system and increase the population s access to electricity.

III. Project Description

Component Name

Revenue Collection Improvement (US\$55 million)

Comments (optional)

(a) Revenue protection program- Activities to be financed include: (i) installation/relocation of AMI infrastructure at the customer's premises of at least 80,000 users with recorded monthly consumption above 600 kWh; (ii) creation of the MCCs as new organizational units within the company; and (iii) incorporation of a state-of-the-art MDM software package and training of the operators of the MCCs for systematic monitoring of consumption of the target customers. Meters prone to energy theft and/or direct unmetered connection to the grids will be relocated.

(b) Bulk metering - medium voltage distribution networks - The AF will finance the deployment of bulk metering AMI infrastructure in the four regional medium voltage distribution networks operated by ECG.

Component Name

Management and Planning Enhancement (US\$5 million)

Comments (optional)

- (c) Incorporation of an Incidents Management System The AF will finance an IT application to support management and resolution of outages and incidents in electricity supply at all levels but will in particular focus on low voltage distribution networks. Incidents at low voltage level cannot be detected through the supervisory control and data acquisition (SCADA) system for operation and supervision of high and medium voltage networks.
- (d) Technical Assistance and Project Management Support

IV. Financing (in USD Million)

Total Project Cost:	60.00	Total Bank Financing:	60.00
Financing Gap:	0.00		
For Loans/Credits/Others		Amount	
BORROWER/RECIPIENT			0.00
International Development Association (IDA)		60.00	
Total		60.00	

V. Implementation

The existing project implementation unit in ECG will continue to manage, coordinate and monitor the activities for the proposed AF. The commercial department of ECG has set up a team of senior staff that will lead the implementation of the activities related to the revenue protection program and bulk metering. The operations department will take the lead for the IMS. Staff from both departments will be identified for training in the use of software and management under respective activity.

The proposed AF does not finance any construction or civil works with environmental and social impacts. However, it is classed as a category B project since this was the classification of the original operation.

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		×

Comments (optional)

VII. Contact point

World Bank

Contact: Sunil W. Mathrani
Title: Senior Energy Specialist

Tel: 5331+3424 /

Email: smathrani@worldbank.org

Borrower/Client/Recipient

Name: Ministry of Energy Contact: Andrew Barfour Title: Project Coordinator Tel: 233-302667154

Email: atbarfour@hotmail.com

Implementing Agencies

Name: Electricity Company of Ghana

Contact: Mr. Robert Dwamena Title: Ag. Managing Director

Tel: 233-302676727

Email: rdwamena@ecggh.com

VIII.For more information contact:

The InfoShop
The World Bank
1818 H Street, NW

Washington, D.C. 20433 Telephone: (202) 458-4500

Fax: (202) 522-1500

Web: http://www.worldbank.org/infoshop