

**COMBINED PROJECT INFORMATION DOCUMENTS / INTEGRATED
SAFEGUARDS DATA SHEET (PID/ISDS)
ADDITIONAL FINANCING**

Report No.: PIDISDSA17017

Date Prepared/Updated: 14-Apr-2016

I. BASIC INFORMATION

A. Basic Project Data

Country:	Ethiopia	Project ID:	P155563
		Parent Project ID (if any):	P119893
Project Name:	ENREP ADDITIONAL FINANCING (P155563)		
Parent Project Name:	Electricity Network Reinforcement and Expansion Project (ENREP) (P119893)		
Region:	AFRICA		
Estimated Appraisal Date:	14-Mar-2016	Estimated Board Date:	27-May-2016
Practice Area (Lead):	Energy & Extractives	Lending Instrument:	Investment Project Financing
Sector(s):	Transmission and Distribution of Electricity (75%), Other Renewable Energy (20%), General energy sector (5%)		
Theme(s):	Rural services and infrastructure (70%), Other rural development (30%)		
Borrower(s):	FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA		
Implementing Agency:	Ethiopia Electric Power		
Financing (in USD Million)			
Financing Source		Amount	
BORROWER/RECIPIENT		43.00	
International Development Association (IDA)		200.00	
Carbon Fund		21.00	
Energy SME Support to SSA		5.00	
Total Project Cost		269.00	
Environmental Category:	B - Partial Assessment		
Appraisal Review Decision (from Decision Note):			
Other Decision:			

Is this a Repeater project?	No
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B. Introduction and Context

Country Context

Located in the Horn of Africa, Ethiopia extends over an area of 1.1 million square kilometers and is a country of many nations, nationalities and peoples. It is home to Sub-Saharan Africa's second largest population (about 92 million people), the vast majority of which are rural dwellers. With a per capita income of US\$550 (2014), Ethiopia remains the 11th poorest country worldwide. Nonetheless, growth averaged nearly 11 percent per year since 2004 and extreme poverty fell from 55 percent in 2000 to 33 percent in 2011, which is one of the most impressive poverty reduction results recorded internationally. Since the late 2000s, Ethiopia has embarked into a process of structural transformation, with the goal to reach the status of middle-income country in the medium term. The First Growth and Transformation Plan (2010-15; GTP I) increasingly promoted light manufacturing in key sectors where the country has a perceived comparative advantage. The recently launched Second Growth and Transformation Plan (2015-20; GTP II) puts an even stronger emphasis on structural transformation, industrialization, urbanization, and export promotion. Massive public infrastructure investment has been at the center of Ethiopia's economic strategy and as a result, the country was able to achieve a substantial expansion of energy, road, railway, and telecom infrastructure. In addition, public investments in basic services provision such as education and health have contributed to poverty reduction as did rural safety nets. Despite past progress, a historic legacy of underinvestment still bears its mark as more than half of the adult population is illiterate and the country's infrastructure deficits remains one of the largest in the world. Also, vulnerability to return to poverty remains high especially for rural livelihoods dependent on rain-fed agriculture.

Sectoral and institutional Context

The past decade has witnessed a complete turnaround in Ethiopia's electricity sector. Between 2005 and 2012, electricity services were spread to 7,000 towns and rural village from the initial 648, and the number of electricity customers reached over 2 million from 800,000 at the beginning of the period. Accordingly, demand for electricity grew at more than 15 percent per annum. In order to accommodate the exponentially increasing power needs, the Government of Ethiopia (GoE) focused on expanding power generation capacity, which tripled within a decade (from about 850 MW to above 2,000 MW). The steep growth in the electricity sector introduced significant constraints in the Ethiopian Electric Power Corporation (EEPCo), the vertically integrated utility, both in terms of infrastructure development and management. In 2013, EEPCo was unbundled in two public enterprises: (i) the Ethiopian Electric Power (EEP) company, responsible for the generation and transmission sub-sectors; and (ii) the Ethiopian Electric Utility (EEU), responsible for power distribution and sales.

Expanding electricity supply and access is critical to the structural transformation of Ethiopia's economy and society. Accordingly, the GTP I aimed to increase the number of electricity customers to 4 million; the GTP II has set an even more ambitious target – to reach 7 million customers by 2020. While major strides have been made in expanding generation capacity and large scale hydropower projects such as the Great Renaissance Hydro Electric Power Project (6000MW) and the Genale Hydro Power Project (254 MW), are in advanced stage of

construction, the extension of transmission and distribution (T&D) infrastructure has not kept up with demand growth. Recent electrification efforts have rightly focused on expanding network coverage, but connectivity has lagged behind due to a number of reasons including the absence a robust program and dedicated resources to roll out connections; affordability issues and capacity constraints at the utility level in handling a growing customer base. As a result, while 55 percent of the population resides in areas served by the network, less than 25 percent is connected to electricity services, a share that drops to a negligible 10 percent in rural areas. Rolling up connections is a top priority and a high-impact, low-hanging fruit to be reaped in areas already served by the network.

Going forward, Ethiopia faces the challenge to leap frog electrification in the face of sustained economic growth. Electricity demand is predicted to increase at above ten percent per annum in the medium term. A massive electrification expansion combining heavy network investments with a strong focus on connectivity can only be pursued in the context of a well-organized and efficient electricity sector. This status remains to be achieved in Ethiopia. After two years since the sector was unbundled, EEP and EEU are overstretched with the implementation demands of numerous large scale projects and challenging operational issues, and lack critical capacities needed to handle the complex challenges facing the energy sector. The low electricity tariff, among the lowest in the world, compounds the problem and pose a major constraints to scaling up electricity access. The last tariff revision dates back to 2006 and set the tariff at the equivalent of US\$ 0.06/kWh. Given the significant depreciation of the Birr over the years, the average electricity tariff is now less than US\$ 0.03/kWh. At this level, EEU cannot realistically operate as a sustainable business entity. This issue is increasingly recognized by the GoE, which is now in the process of evaluating a tariff increase proposed for approval by the power companies.

C. Proposed Development Objective(s)

Original Project Development Objective(s) - Parent

The Development Objectives of the Electricity Network Reinforcement and Expansion Project are to improve reliability of the electricity network and to increase access to electricity services in Ethiopia.

Key Results

Progress toward achieving the PDO would be measured by the following indicators (targets by June 30, 2019):

- Direct project beneficiaries (9,675,000 beneficiaries)
- Female beneficiaries (50%)
- Access: Number of HHs connected to the grid (150,000 HHs)
- Number of HHs with access to modern energy services (off-grid) (2,000,000 HHs)
- Reliability: System Average Interruption Frequency Index (SAIFI) in the project areas (cumulative) (89.0)
- Reliability: System Average Interruption Frequency Index (SAIFI) - Project area 1 (towns of Dessie, Jimma, Bahr Dar, Mekele, Awasa, Dire Dawa, Nazereth) (98.0)
- Reliability: SAIFI – Project area 2 (towns of Gonder, Debre Markos, Shashemene, Welayta, Harer, Adigrat) (78.0)

D. Project Description

The proposed Additional Financing (AF) operation entails an additional credit in the amount of US\$200 million to the Ethiopia Electricity Network Reinforcement and Expansion Project (ENREP). The project has also been allocated a US\$5 million grant from the Energy Small and Medium Enterprises (ESME) trust fund administered by the World Bank. The AF and the grant are processed together.

The project will also benefit from carbon finance support. Two carbon finance programs have been approved under the Carbon Initiative for Development (Ci-Dev) for a total amount of US\$ 21 million. In accordance with the procedures established under Ci-Dev, an Emission Reduction Purchase Agreement will be separately negotiated and signed between the beneficiary and Ci-Dev.

The proposed additional credit will finance: (i) expanded investments in on-grid electrification; (ii) scaling up of credit facilities for the financing of stand-alone renewable energy systems and energy efficient products; and (iii) additional technical assistance in support to sector modernization. The proposed activities will be linked to the four existing components of ENREP. As part of the additional credit, it is proposed to extend the closing date of the ENREP from December 31, 2017 to June 30, 2019.

Component Name

Reinforcement and Expansion of Electricity Network

Comments (optional)

Investments under this component focus on segments of the national transmission network that have been assessed as critical to enable the targeted expansion of electrification and to increase grid coverage in rural areas. Investments entail a combination of line upgrade and expansion, including the needed refurbishment of substations.

Component Name

Access Scale-up

Comments (optional)

Investments under this component will target six towns, including Harar, Adigrat, Debre Markos, Shashemene, Gondar and Woleyita Soddo, where high demand for electricity calls for immediate increase of distribution capacity. These towns are additional to the eight initially targeted under the ENREP. Investments entail a combination of upgrading and expansion of the distribution network – including medium and low voltage lines, substations and distributions transformers. In addition, the AF will partly finance the connection program being undertaken by EEU, which aims to add 405,500 connections in the short term. The AF will finance 150,000 of these connections and cover costs related to connection equipment, meters, and installation.

Component Name

Market Development for Renewable Energy and Energy Efficiency

Comments (optional)

This component will provide additional financing to the credit facilities set up under the ENREP to support the spread of off-grid renewable energy systems and energy efficient products (solar home systems, solar lanterns, improved cook-stoves, biogas, etc.). Credit lines administered by the Development Bank of Ethiopia (DBE) have been established for Private Sector Enterprises (PSEs) – approved retailers that import and commercialize products – and Micro Finance

Institutions (MFIs), which in turn provide financing to households or small business in rural areas interested in installing biogas plants, solar systems, etc. In addition to the proposed IDA credit, the US\$5 million grant from the ESME Trust Fund is meant to support and expand the results achieved by the credit lines.

Component Name

Modernization support

Comments (optional)

This component will finance assistance for strengthening the financial sustainability and the organizational and operational capacity of EEU and EEP.

E. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Transmission investments financed under the AF will be implemented in rural areas in the Amhara and Oromia regions, and will avoid populated areas, forests and natural habitats including protected areas, swamps/wetlands and any fragile and sensitive aquatic habitats. Distribution investments will be located in the following cities and regional states with different topography and climate: Shashemene (Oromia Regional State); Gondar and Debre Markos (Amhara Regional State); Adigrat (Tigray Regional State); Woleyita Soddo (South Nation and Nationality Peoples (SNNP) and Harar (Harari Regional State). Investments will be implemented in urban settings with associated development challenges of rapid population growth; shortage of decent housing; lack of basic infrastructure and public facilities such as water, electricity, sewerage and drainage; traffic congestion; and increasing inequality and deprivation. The physical characteristics already known at present include: investments in upgrading and expansion of transmission lines, including the needed refurbishment of substations; upgrading and expansion of the distribution network – including medium and low voltage lines, substations and distribution transformers; installation of new connections; installation/use of renewable energy systems and energy efficient products stimulated through providing financing to retailers and to households or small businesses; and sustainable dissemination of off-grid renewable energy products and the shift to more sustainable cooking practices supported by two carbon finance programs. Environmental and social mitigation measures will be undertaken for both transmission and distribution lines related activities. The project will use rigorous safeguards monitoring approach during implementation.

F. Environmental and Social Safeguards Specialists

Chukwudi H. Okafor (GSU07)

Edward Felix Dwumfour (GEN01)

II. Implementation

Institutional and Implementation Arrangements

The AF will be implemented with the same arrangements established for the parent project (ENREP). Specifically, EEP will implement components 1, 2, and 4; DBE will implement component 3.

For the purpose of the AF, EEP has prepared a Resettlement Action Plan (RAP) and an

Environmental and Social Impact Assessment (ESIA)/Environmental and Social Management Plan (ESMP) to address environmental and social impacts in the areas targeted by the investments in transmission capacity under component 1. In addition, EEP has prepared a Resettlement Policy Framework (RPF) and an Environmental and Social Management Framework (ESMF) to address potential impacts on the populations residing in the six towns targeted by the investments in distribution capacity (component 2 of AF) and related mitigations measures.

Under the ongoing parent project, DBE had prepared an Environmental and Social Management System (ESMS) for identifying, assessing and managing environmental and social risks and impacts associated with its lending activities, which will continue to be used for the AF.

III. Safeguard Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The upgrading of existing transmission infrastructure and the construction of new lines under component 1 might entail enhancement of right of way (ROW), potential increase of voltage and other adverse environmental and social impacts. The upgrading and expansion of the distribution network in six cities envisaged under component 2 may entail limited impacts on the environment and local communities. The Borrower has prepared an ESIA/ESMP for investments under component 1. For component 2, a framework approach is being used to address environmental and social safeguard issues and any potential resettlement issues that may arise following the identification of the specific investments. Therefore, the Borrower has prepared an ESMF, which reflects the updated policies and regulations of the Government of Ethiopia. Following the identification stage, a detailed technical ESIA will be carried out to identify the environmental and social impacts and an ESMP developed to propose mitigation measures as per the update ESMF.
Natural Habitats OP/BP 4.04	No	
Forests OP/BP 4.36	No	
Pest Management OP 4.09	No	
Physical Cultural Resources OP/BP 4.11	Yes	The project may affect physical resources triggering Bank's OP 4.11. The project will avoid damage or loss of cultural heritage during construction activities; and consistent with the established mitigation measures in country. The ESMF includes "chance finds" procedures to ensure that cultural heritage is protected in the course of project activities.

Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	Yes	The project will upgrade existing transmission infrastructure which is now overloaded and operating above optimum capacity. New transmission lines will also be constructed to bring electricity services to villages that are currently un-electrified. Distribution lines in the six towns targeted under the project will be upgraded and/or expanded. The project enhancements of the ROW may cause permanent relocation and/or temporary displacement of people, demolition of homes, removal of trees and other assets triggering OP4.12. Investments in the upgrading of lines with sufficient ROW already established could require less intrusive intervention. OP4.12 has been triggered to preclude and manage any potential social safeguards risk arising from the project's investments. The Borrower has prepared a site-specific RAP for the interventions on the transmission network under component 1. Exact interventions on the distribution network under component 2 are yet to be identified. As a precautionary measure, the Borrower has prepared and consulted upon a RPF to identify and mitigate potential adverse social and environmental impacts.
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

IV. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:
The project is classified as Category B as interventions are not expected to lead to large scale, significant, or irreversible environmental or social impacts. Potential impacts are all manageable and will be addressed within the project. The safeguards policy concerns vary by project component, and none are expected to cause any potential large scale, significant and/or irreversible adverse impacts. Environment: To a larger extent, the implementation of this project will face scope of activities

and associated environmental impacts similar to those encountered in the parent project (ENREP), including safety and health risks. Threats such as loss of vegetation and biodiversity; soil erosion and sedimentation of nearby aquatic/drainage systems; air pollution; soil and water contamination from both liquid and solid waste; hazardous chemical poisoning of biotic life from use of weedicides and herbicides; etc. are foreseen during the construction phase as vegetation will be cleared to pave way for erecting substations and towers for power lines as well as for constructing camp sites, material storage facilities, and access roads. To mitigate these threats, the substations and power lines will avoid going through forests and natural habitats including protected areas, swamps/wetlands and any fragile and sensitive aquatic habitats. It is likely that transmission and distribution lines may traverse culturally sensitive sites such as graveyards, archaeological sites, etc. Social: It is envisaged that distribution lines will be installed in existing road corridors with limited compensation requirements. The project will strengthen the ability of citizens to monitor service delivery, particularly metered versus not metered services, and usage among beneficiaries, including vulnerable groups; as well as reduce leakage and illegal connections. On the other hand, investments in transmission lines might cause unavoidable social issues of land acquisition for sub-stations and tower activities. Potential negative impacts might include social interaction between the contractor's workers and local populations that might lead to HIV/AIDs, temporary disturbance during construction activities, loss of crop, temporary loss of access to common property resources, restriction on the height of trees to be grown below towers and conductors, loss of houses/structure on the land, and decrease in livelihood due to acquisition of private agricultural land. These impacts are addressed in the RAP and the ESIA that have been prepared specifically for the new transmission investments covered under the AF.
2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
Although the project's footprint is not expected to have significant adverse impacts, there are a number of activities that may pose environmental and social concern. In particular, construction works related to line expansion may result in land take in both urban and rural (farming land) areas and project affected persons (PAPs) might lose their crops, houses, and other properties temporarily or permanently. Physical construction activities may negatively affect the health and safety of the local communities unless appropriate mitigation measures are taken. Potential short-term impacts include land acquisition for construction purposes (storage, site office) and denying of access to assets and properties that might be blocked for construction work.
3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
Flexibility was exercised (and will be further exercised) under the AF in selecting the route for the transmission lines and sites for sub-stations with a view to avoid private land take and, where unavoidable, to minimize the adverse impact on local communities. Alternative routes were examined for investments that may cause adverse social and economic impacts in the target areas. For this purpose, the AF carried out preliminary survey of social and physical conditions of the area, avoiding forests, wetlands, culturally sensitive areas, etc. The flexibility of site selection for sub-stations will enable the project to minimize physical relocation and economic displacement as well as to avoid socially and environmentally sensitive areas. Preference is given to government land with no encumbrances.
4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Institutional capacity to handle safeguards is weak; there is narrow focus on land acquisition and the related policy seems to cover only environmental impacts. Considering the land acquisition impact of high voltage lines, and especially any possible impact in terms of loss of access to resources (crops, fields, grazing land, etc.), it is imperative that EEP ensures implementation of the project's RAP, RPF, ESIA/ESMP, and ESMF with the support of its Social and Environmental staff, and that the project's contractors are held accountable for complying with safeguard requirements in the Project Management Matrix. The Bank will provide capacity building training and close supervision support.
5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.
In accordance with the World Bank's operational policies, stakeholder consultations with public and private sector institutions, research and academia, civil society organizations, traditional authorities, communities groups have taken place as part of ESIA/ESMP, RAP, ESMF and RPF formulation. Stakeholder workshops have been carried out to discuss all aspects of the project prior to finalization of these instruments. These workshops have had the purpose of involving all key beneficiary and stakeholder groups, particularly PAPs; seeking feedback and consensus from them and incorporating their comments, suggestions and remediation proposals. The final ESMF and RPF associated with the investments under component 2 have been publicly disclosed in-country and at the Bank's InfoShop on April 5, 2016. The final ESIA/ESMP and the RAP related to investments under component 1 have been publicly disclosed in-country and at the Bank's InfoShop on April 8, 2016.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	07-Mar-2016
Date of submission to InfoShop	08-Apr-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
Ethiopia	08-Apr-2016
<i>Comments:</i>	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	07-Mar-2016
Date of submission to InfoShop	08-Apr-2016
"In country" Disclosure	
Ethiopia	08-Apr-2016
<i>Comments:</i>	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

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C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment			
Does the project require a stand-alone EA (including EMP) report?	Yes [☐]	No [☐]	NA [☐]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [☐]	No [☐]	NA [☐]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [☐]	No [☐]	NA [☐]
OP/BP 4.11 - Physical Cultural Resources			
Does the EA include adequate measures related to cultural property?	Yes [☐]	No [☐]	NA [☒]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [☐]	No [☐]	NA [☒]
OP/BP 4.12 - Involuntary Resettlement			
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [☒]	No [☐]	NA [☐]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [☒]	No [☐]	NA [☐]
Is physical displacement/relocation expected?	Yes [☒]	No [☐]	TBD [☐]
60 Provided estimated number of people to be affected			
Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods)	Yes [☒]	No [☐]	TBD [☐]
60 Provided estimated number of people to be affected			
The World Bank Policy on Disclosure of Information			
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [☒]	No [☐]	NA [☐]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [☒]	No [☐]	NA [☐]
All Safeguard Policies			
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [☒]	No [☐]	NA [☐]
Have costs related to safeguard policy measures been included in the project cost?	Yes [☒]	No [☐]	NA [☐]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [☒]	No [☐]	NA [☐]

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [☒] No [☐] NA [☐]
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V. Contact point

World Bank

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Title: Senior Energy Specialist

Borrower/Client/Recipient

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VII. Approval

Task Team Leader(s):	Name: Issa Diaw,Elvira Morella	
<i>Approved By</i>		
Safeguards Advisor:	Name: Johanna van Tilburg (SA)	Date: 14-Apr-2016
Practice Manager/ Manager:	Name: Lucio Monari (PMGR)	Date: 15-Apr-2016
Country Director:	Name: Nicole Klingen (CD)	Date: 19-Apr-2016