Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 10/27/2023 | Report No: ESRSC03864

I. BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Botswana	EASTERN AND SOUTHERN AFRICA	P181221	
Project Name	Renewable Energy Support And Access Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Energy & Extractives	Investment Project Financing	4/1/2024	5/30/2024
Borrower(s)	Implementing Agency(ies)	Estimated Concept Review Date	Total Project Cost
		10/19/2023	122,220,000

Proposed Development Objective

To enable integration of renewable energy generation and increase access to electricity.

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project Activities

The proposed project will finance the upgrades of grid infrastructure including (1) first 2*25MW utility-scale Battery storage energy system (BESS); (2) Static Synchronous Compensator (STATCOM); and (3) Strengthening power system control and dispatch (upgrade of the Supervisory Control and Data Acquisition - SCADA), and rural electrification through off-grid solar program and grid expansion in two rural villages of Borolong and Kgatleng including a 66 kV Transmission Line (160 km) from Lobatse sub-station to Mabule sub-station and the associated substations Lobatse and Mabule, as well as construction of new substations at Sikwane and Oliphant in Kgatleng. The investment will strengthen BPC transmission network and increase capacity to supply new load and uptake new VRE generation, unlocking future opportunities for BPC to generate additional revenues and to increase power trade in SAPP. In addition, the project will provide technical assistance (TA) for institutional capacity building and support for the development of sustainable and bankable RE projects planned under the IRP and empower key stakeholders in this respect.

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

Botswana is a semi-arid, spares populated country and highly vulnerable to climate change. The proposed project will support climate resilient and critical grid investments under Component 1: (i) battery energy storage systems (BESS), (ii) Static Synchronous Compensator (STATCOM) and (iii) Strengthening power system control and dispatch (upgrade of the Supervisory Control and Data Acquisition – SCADA and roll out of Botswana rural electrification program under Component 2 including (i) financing the grid expansion in the rural villages of Borolong and (ii) technical assistance. The 50MW BESS will be installed on land adjacent to existing substation(s) of which the location(s) considered include Phikwe, Jwaneng or Letlhakane, but not yet confirmed. According to iBat there are no areas of biodiversity sensitivity near these substations. STATCOM will be installed at the existing substations namely, Francistown 1, Legothwane, Segoditshane 1 and Ramotswa substation. While the mini-distribution control centers will be installed at 11 locations (Kanye, Maun, Molepolole, Francistown, Palapye, Serowe, Selibi Phikwe, Bobonong, Lobatse, Jwaneng and Letlhakane) to manage the grid. Borolong villages will be connected to the national grid via a 66kV Transmission Line (166 km) from Lobatse sub-station to Mabule sub-station. The final alignment is yet to be confirmed. Works at the substation include installation of two transformers at Lobatse substation and construction of a new substation (Mabule). Activities will largely take place within existing facility footprints therefore it is anticipated that there will be little to no environmental sensitivities of concern.

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts

The MME and project implementing unit in BPC will be responsible for preparing and overseeing the implementation of the E&S instruments through the lifecycle of project and within the agreed timeframes. Both BPC and MME have limited in-house Environmental and Social (E&S) capacity for the management of environmental and social risk. To ensure adequate implementation and monitoring of the project's environmental and social performance, BPC will be required to ensure that additional and dedicated resources for the management and supervision of the preparation of the E&S instruments are done in a manner satisfactory to the Bank. The technical assistance provided under Component 3 will address any required training and staffing needs for the dedicated Project Implementation Unit (PIU) in BPC and MME. TA to be provided under the project will follow the guidance provided in the OESRC Advisory Note on Technical Assistance and the ESF. In addition, the Bank team is currently working with BPC and MME to implement the aforementioned ESMAP Grant processed as a small grant IPF which is an opportunity to increase the capacity of BPC as to the applicable Bank procurement framework as well as to the Bank Environmental and Social Framework (ESF). The E&S capacity building needs and measures identified during the Bank's due diligence during project preparation will be included in the Project's Environmental and Social Commitment Plan (ESCP).

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) Substantial

A.1 Environmental Risk Rating Moderate

The environmental risk rating is considered Moderate, due to the key potential environmental risks and impacts associated with the construction of the Battery Energy Storage Systems (BESS) and upgrading of one substation and construction of one new substation, SCADA hardware, STATCOM, mini-distribution control centers at existing facilities and 66kv transmission line to support energy access to rural Borolong village. The moderate to small scale civil works supported under components 1 and 2, may lead to potential adverse impacts related to: (i) removal of vegetation, (ii)

soil and water contamination due to disposal and management of general and hazardous waste during the construction and end-of life batteries disposal, (ii) occupational health and safety of workers, (iv) nuisances related to air and noise emissions, and (iiv) community health and safety. At this stage the installation of BESS will take place adjacent to existing substations, while upgrading of substations, SCADA, STATCOM and mini-distribution control centers will take place within existing facilities. The 66kv transmission line routes for Borolong (160Km) are not yet known, but likely to be located road reserves. Component 3 supports technical assistance and capacity building and is considered to have limited to no downstream environmental impacts. The Borrower a legal and regulatory framework in place for environmental, however lack historical performance with implementation of ESF projects and has limited internal capacity to manage environmental risks. A PIU in BPC and MME with dedicated environmental specialist will be established. Funds allocated under Component 3 will support capacity building.

A.2 Social Risk Rating Substantial

The social risk is considered as Substantial at this stage. The Project's key interventions relate to construction of the distribution line (160 km), installation of battery storage system, and installation of STATCOM within existing sub-stations. Downstream socio-economic effects of these activities are expected to result in improved and reliable electricity supply, potentially reduced tariffs for customers, and have other positive social impacts on the lives and livelihoods of beneficiary communities. Potentially adverse social impacts may primarily occur in connection with the physical works under proposed Components 1 and 2, and may be related to: (i) potential small to medium scale land acquisition and land easement arrangements (to be assessed further and confirmed during preparation); (ii) social aspects of environmental impacts related to construction-related activities, including community health and safety risks; (iii) temporary labor influx needed for construction activities, and associated GBV/SEA/SH risks; and (iv) risk of potential exclusion of stakeholders, which creates the need for robust stakeholder engagement, and outreach to stakeholder and beneficiaries (including any vulnerable and/or disadvantaged groups);, as well as (iv) institutional coordination risks, which involve in particular the need for strengthening and coordination of grievance redress mechanisms between BPC and MME. These social risks and impacts need to be assessed further during preparation as part of social assessment (to be included in the ESMF), but most of them are likely to be temporary, predictable and/or reversible, and the nature of the Project does not preclude the possibility of avoiding or addressing them through appropriate ESF instruments (ESMF, SEP, possibly RPF/site-specific RAPs, and LMP).

B. RELEVANCE OF STANDARDS AND POLICIES AT CONCEPT STAGE

B.1 Relevance of Environmental and Social Standards

ESS1 Assessment and Management of Environmental and Social Risks and Impacts Relevant

Physical activities may have an adverse impact on community and worker health and safety, generation of waste, dust emissions, soil pollution, removal of vegetation during construction, generation of hazardous battery waste and fires during operations which need to be assessed. An ESMF will be prepared for screening project activities, guiding the preparation of environmental and social assessments and site specific ESMPs. The ESAs and ESMPs will contain mitigation measures related to Labor management and occupational health and safety, pollution and waste management, community health and safety, biodiversity and habitat loss and chance finds procedure. TA studies to incorporate ESF aspects. Component 2 may require a site specific RAPs while the Transmission line may require easement/servitude arrangements only.

ESS2 Labor and Working Conditions Relevant

The project will engage direct and contracted workers, and primary supply workers. Community workers will not be involved in project activities. The project will adhere to Botswana's Labor Laws and the Bank's ESS2 requirements. The project will have construction workers who will be contracted for the anticipated civil works under Components 1 and 2, and trained technicians for the installation and maintenance of battery storage systems and STATCOM. The total number of workers is unclear at this stage, but the project will involve installation of labor camps. An OHS plan in line with WB ESHG and Good International Industry Practice (GIIP) will be prepared including assessment and management of HS requirements if PCBs and asbestos are confirmed to exists at substations to be upgraded. These labor issues will need to be assessed and addressed through preparation of LMP. BPC and MME will prepare and disclose LMP in line with the requirements of ESS2.

ESS3 Resource Efficiency and Pollution Prevention and Management Relevant

Civil works under Component 1 and 2 is likely to lead to soil and water pollution generate non-hazardous and hazardous waste during both construction, operations and end-of-life (Batteries), which may have an adverse impact if not adequately managed. Use of construction vehicles, poor design of substation expansion and use of PCBs may lead to soil and water pollution and erosion. Use of equipment containing Polychlorinated biphenyls (PCBs) should be avoided. ESMF to include guidelines of assessing and managing existing PCBs at substation, if any. Project activities are not likely to require significant amount of raw materials or use of natural resources. The borrower will need to prepare and adopt specified waste and pollution management in line with WBG EHS General guidelines as part of the site specific ESMPs for construction and operations. A Waste Electrical and Electronic Equipment Management Plan" (WEEEP) will be prepared as part of the ESMF.

ESS4 Community Health and Safety Relevant

Civil works may result in the presence of outside workers and/ or influx of opportunistic migrants. This has the potential to result in impacts to community health or safety. In the absence of appropriate mitigation measures, gender-based violence (GBV), sexual exploitation and abuse (SEA), and the spread of sexually transmitted and communicable diseases, may occur or be exacerbated by the presence of a migrant workforce. The project will therefore require a risk assessment and a plan for Gender Based Violence (GBV) / Sexual Exploitation and Abuse (SEA), to be disclosed as part of the ESMF, and measures incorporated into ESMPs to be prepared prior to the commencement of the works.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement Relevant

The scope of potential application of this standard, as well as potential need for preparation of site-specific RAPs will be assessed further during preparation. The project activities will not result in any significant physical displacement as defined under ESS5. Although the proposed distribution line will go through rural areas, the construction activities will not take place in densely populated areas. Proposed distribution/transmission line will mostly go through the Borolong villages and will be about 160 km long. Component 2 will also finance construction of a new sub-station at Mabule. Site-specific RAPs will have to be prepared prior to the commencement of works and PAPs will have to be compensated and land acquired prior to any works too, all in accordance with ESS5 provisions, and as to be specified in the ESCP.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources Relevant

Civil works associated with BESS, new substation and transmission lines will require clearing of vegetation and minor earthworks and excavations, which will impact on vegetation and soil within the immediate footprint. These disturbances will be for a temporary period (during the construction phase), localized and of low magnitude. Based on the iBat screening tool there are no areas of sensitivity for BESS and along the villages to be supplied by the transmission line that will be impacted. The ESMF will be used to screen, the proposed 66kV transmission line routes, substation and BESS for potential impacts on biodiversity sensitivities. Lines are likely to be located in existing road reserves. The ESMF will include an exclusion criteria for works in critical habitats and provision for mitigation measures in line with ESS6 to form part of the ESA and site specific ESMPs to be prepared. No impacts on community access to ecosystem services anticipated.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities TBD

The standard is considered relevant at this stage, and its relevance will be assessed further during preparation. There are a few groups in Botswana that self-identify as Indigenous, these include the San (known in Botswana as the Basarwa), the Balala, and the Nama. The ESMF will aim to assess whether any Indigenous people/ Sub-Saharan African Historically underserved traditional local communities have a collective attachment to any of the potential selected sites in identified villages or other places within the project's area, including the transmission and distribution lines. If found applicable, the ESMF should would need to propose measures to avoid cultural and physical impacts and if not avoidable propose measures to reduce and mitigate impacts on IP/SSAHUTLC. The project may would need to prepare an IP/SSAHUTLC plan as well, in line with legislation concerning IPs and ESS7.

ESS8 Cultural Heritage Relevant

Although the project will not finance activities that will affect cultural heritage resources, "chance find" procedures should be implemented in construction activities, to cover tangible and intangible cultural heritage. This should be outlined in the ESMF and in any subsequent ESA/ESMP.

ESS9 Financial Intermediaries Not Currently Relevant

This standard is not considered relevant.

ESS10 Stakeholder Engagement and Information Disclosure Relevant

The main stakeholders for this project various agencies in energy sector in Botswana, local governments at the respective localities, vulnerable and disadvantaged groups and their representatives, community leaders and representatives, and civil society organizations (CSOs). Given that the proposed distribution line will go through rural, potentially difficult to reach areas engagement with local communities may be a challenge that would need to be addressed in a manner consistent with ESS10. The project will require inputs from different stakeholders, including those who will be directly affected as well as those who have other interests in the project interventions. A draft of the SEP will be disclosed as soon as possible and prior to Appraisal, which will need to include information about the consultations with the key stakeholders.

B.2 Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways	No
OP 7.60 Projects in Disputed Areas	No

B.3 Other Salient Features

Use of Borrower Framework No

N/A

Use of Common Approach No

No common approach is being considered for this project

C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by Appraisal?

The MME and project implementing unit in BPC will be responsible for preparing and overseeing the implementation of the E&S instruments through the lifecycle of project and within the agreed timeframes.

A draft Environmental and Social Management Framework (ESMF) will be prepared for interventions for which the location is not confirmed by appraisal. The ESMF will set out principles for preparation and implementation of site-specific E&S assessments/EMSPs, including a SEA/SH assessment and action plan and exclusion list for activities which will have a potential adverse impact on biodiversity. The ESMF will be prepared jointly by the implementing entities and disclosed as prior to appraisal.

A draft of Stakeholder Engagement Plan (SEP) will be prepared by BPC and MME consistent with the requirements of ESS10 and disclosed prior to the project appraisal. This SEP will include a detailed schedule of planned engagement activities for the various stakeholders during the project cycle and will include the information of the consultations already carried out until then. The SEP will ensure all consultations are inclusive and accessible. It will include a Grievance Redress Mechanism.

Labor Management Procedures (LMP) will be prepared by BPC and MME by Appraisal as part of the ESMF, to provide measures to address the terms and conditions of works. These procedures will outline the Borrower's responsibilities for enforcing ESS2 requirements, applicable to the program.

A draft Environmental and Social Commitment Plan (ESCP) which sets out the Borrower's commitments to implement measures and actions required for the project to achieve compliance with the applicable ESSs within the agreed timeframes. The ESCP will be prepared and disclosed prior to appraisal.

Site specific Environmental and Social Management plans (ESMPs) will be prepared by the contractors responsible for the small-scale civil works. The ESMPs will make provision for measures to address occupational health and safety,

community health and safety, waste and pollution management and chance finds procedures which will be prepared prior to undertaking the physical activities.

Should further assessments during preparation suggest the need for preparation of RPF/site-specific RAPs, the Borrower will be responsible to prepare it as to be specified in the ESCP (preferably prior to appraisal).

III. CONTACT POINTS

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