

Environmental and Social Review Summary (ESRS) Belize Electricity Limited Phase I – BELIZE

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1. General Information of the Project and Overview of Scope of IDB Invest’s Review

Belize Electricity Limited (“The Client,” “The Company,” or “BEL”) is the primary distributor of electricity in Belize, Central America. Its aggregate energy sales in 2020 was 539.3 gigawatt-hours (GWh) to a approximately 104,000 customers with peak power demand of 102.7 megawatts (MW) during the year. The Client is seeking funds to cover both short-term working capital needs as well as to pay for scheduled capital projects. Phase I of the operation will provide financing for a working capital tranche and finance capex including equipment, software, system development, infrastructure upgrade works and customer services (the “Project”). Other Phases of the operation will be assessed in the future in terms of their potential environmental and social impacts.

Due to the travel restrictions imposed by the COVID-19 pandemic, the Environmental and Social Due Diligence (“ESDD”) carried out between September and November 2021 by means a series of virtual meetings with the Client, where information on the Company’s environmental management system, health and safety standards and indicators, human resources policies, Ethic’s Code, emergency preparedness and response plans, and performance records was requested and assessed. No site visits were performed.

2. Environmental and Social Categorization and Rationale

The Phase I of Project has been classified as a Category B operation according with IDB Invest’s Environmental and Social Sustainability Policy since some of the proposed interventions are likely to generate the following impacts: i) waste generation; ii) noise emissions; iii) dust emissions; iv) effluent emissions; v) health and safety risks; vi) traffic disturbance; vii) community disturbance, among others. These impacts are deemed to be of medium-low intensity and can be managed by means of standard risk and impact minimization and mitigation measures and plans.

The Performance Standards (“PS”) triggered by the Project’s Phase I are: i) PS1: Assessment and Management of Environmental and Social Risks and Impacts; ii) PS2: Labor and Working Conditions; iii) PS3: Resource Efficiency and Pollution Prevention, and iv) PS4: Community Health, Safety, and Security.

3. Environmental and Social Context

3.1 General characteristics of the Project's site

Project interventions will be implemented in existing installations and networks distributed across the country. The Project's interventions will not involve new greenfield projects.

3.2 Contextual risks

Belize is subject to the impacts of hurricanes. Hurricane season starts in June and finishes in November each year. The Client infrastructure is vulnerable to the impact of such storms, particularly transmission lines, substations, power plants and generation units. The Client has a Hurricane Preparedness Plan, which is constantly updated. The Plan aims to protect personnel and minimize the impact of such storms. In addition, a Disaster Restoration Plan is in place to ensure rapid repair of damaged infrastructure and reestablishing energy distribution as rapidly as possible after the hurricane has passed. There are also risks of infrastructure damage due to floods and sea level rise.

Another potential risk is vandalism potentially affecting some of the Client's infrastructure, particularly energy transmission lines and substations.

4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures

4.1 Assessment and Management of Environmental and Social Risks

The Client has an Environmental Management System ("EMS") which contemplates the assessment and management of environmental risks and impacts. However, the management of social risks and impacts is not covered by the existing EMS. The Client will, therefore, update its EMS to include potential social impacts and risks.

4.1.a E&S Assessment and Management System

The EMS Manual was prepared to reflect the requirements of the ISO 14.001¹ standard. The system contains requirements for: i) an environmental policy, ii) the identification and management of environmental aspects, iii) the identification and monitoring of legal requirements; iv) criteria for the definition of objectives, targets, and programs; v) criteria for attributing resources, roles, responsibility, and authority, vi) document control; vii) communications; viii) competence, training, and awareness; ix) operational control; x) emergency preparedness and response; xi) monitoring and measuring; xii) non conformities, preventive and corrective actions; xiii) record control; xiv) internal audits and xv) management review.

¹ ISO 14001 is the international standard that specifies requirements for an effective environmental management system.

4.1.b Policy

The Client has a Corporate Environmental Policy whereby commitments are declared to: i) meet the requirements of all applicable environmental legislation, regulations and accepted standards of environmental protection; ii) manage their activities in ways that are consistent with industry practices and in ways that meet or exceed the Belize Government's environmental policies; iii) the prevention of pollution and conservation of natural resources; iv) pursue continual improvement in environmental performance; and v) play a leadership role in community based projects that focus on the environment.

In the Corporate Environmental Policy, the Client commits to: i) regularly monitor and audit its operations and environmental management systems; ii) provide training to employees to enable them to perform in an environmentally responsible manner; iii) set and perform annual reviews of environmental objectives and targets; and iv) make available the policy and knowledge on environmental issues to customers, employees, and the general public.

4.1.c Identification of Risks and Impacts

The Client's procedure OP500.01 – Identification and Maintenance of Environmental and Significant Environmental Aspects, linked to its EMS, defines the methodology for identification of environmental aspects, impacts, determining their significance and managing significant impacts. This assessment is recorded in an environmental aspects' spreadsheet under the responsibility of the Environmental Management Representative ("EMR"). The procedure contains provisions to ensure periodic review of the environmental aspect spreadsheet at least once a year.

4.1.c.1 Direct and indirect impacts and risks

The activities included in Project may involve some environmental impacts linked to works needed to upgrade some of the Client's infrastructure. Direct impacts may potentially include: i) dust emission; ii) solid waste; iii) noise emissions; iv) effluents; v) temporary interruption of energy provision; vi) damage to street and road infrastructure; vii) health and safety risks to workers, among others. Indirect impacts may potentially include traffic disturbance and temporary access restriction to households and businesses.

4.1.c.2 Analysis of alternatives

The proposed Project interventions will be carried out in existing Company installations and infrastructure. Therefore, no alternative assessment was carried out.

4.1.c.3 Cumulative impact analysis

No cumulative impact assessment was carried out in the present Project, since all interventions will be undertaken within the Client's premises.

4.1.c.4 Gender risks

Belize is a diverse Central American country with a population of approximately 324,528, of which over 54% live in rural communities. The Belizean population is made up of Mestizo, Afro-Creole, Maya, Garifuna, and Mennonite identities, along with other groups such as East Indian, Lebanese, and Chinese, making the country rich with diverse cultures. Despite the vast cultural diversity of Belize, cultural constructions of femininity and masculinity have led to strong gender-based structures resulting in high rates of violence against women. According to the World Health Organization, 70.34% of Belizean women living in rural communities' report experiencing episodes of intimate partner violence.

In 2021, Belize scored 0.7 in the gender gap index, the highest score since 2015. This represents a gender gap of approximately 30 percent (women are 30 percent less likely than men to have equal opportunities). That year, the gender gap in political empowerment in Belize amounted to 92 percent.

Currently the Company has 94 female employees that correspond to 28.14% of the total workforce. Under its Code of Ethics, the Client declares its commitment to respect the human rights declared in the Belize Constitution and applicable laws, and, therefore, not to discriminate anybody on the grounds of gender, race, place of origin, political opinions, color, creed, physical or mental disability.

Within the Respectful Workplace Policy and Procedure which is part of the Company Code of Ethics, the Client declares that it does not tolerate verbal or sexual harassment. The offenders are subject to severe disciplinary actions. The policy also establishes a mechanism to receive complaints from their workforce.

4.1.c.5 Climate change exposure

Belize is exposed to hurricanes from June to November. Project infrastructure may be affected by hurricane events. The Client has a Hurricane Preparedness Plan, which is regularly updated and a Draft Disaster Restoration Plan, currently under internal review. These plans aim to minimize personnel and infrastructure damage during the storm and ensure rapid recovery of damaged infrastructure after the hurricane has passed. In addition, Company infrastructure is exposed to floods and sea level rise. The Client has Emergency Preparedness and Response Procedures that cover the response to floods.

4.1.d Management Programs

Under the EMS the Client has procedures to implement: i) operational control; ii) environmental communications; iii) competence, training, and awareness; iv) emergency preparedness and response, v) testing environmental emergency preparedness; vi) monitoring and measuring; vii) environmental management of contractors and suppliers; viii) environmental auditing; ix) internal audits; and x) management review. Other management plans include a procedure for handling and transferring of transformer oil, the Hurricane Preparedness Plan, and the Draft Restoration Plan.

4.1.e Organizational Capacity and Competency

The Client has a Safety, Health and Environment (“SHE”) Department that reports to the General Manager, and that is responsible for the corporate environmental and health and safety systems, procedures, and action plans. The current personnel structure of the SHE Sector consists of four (4) staff members – a Superintendent, Safety Health and Environment; a Health and Environment Coordinator/COVID-19 Coordinator; a Safety Coordinator; and a Registered Nurse.

4.1.f Emergency Preparedness and Response

The Client has an Emergency Preparedness and Response Procedure designed to respond to hazardous substances spills, fires, and floods. The procedure covers: i) methods for spill response; ii) containment and cleanup equipment for petroleum spills; iii) fire response; iv) flood response; v) reporting requirements; vi) communication requirements; vii) spill response contractors, and viii) containment of hazardous materials.

4.1.g Monitoring and Review

Monitoring and review are covered in Procedure OP500.08 – Monitoring and Measurement, part of the Company EMS. This procedure defines the process for the monitoring and measurement of i) the Client’s operations and activities linked to its identified significant environmental impacts; ii) the calibration of monitoring and measurement equipment; and iii) the evaluation of compliance with applicable legal and policy requirements related to the environment.

4.1.h Stakeholder Engagement

Under the EMS, a specific Procedure deals with communications, both internal and external, and with how the Company receives, documents, and responds to communications from external parties. In addition, it presents methods utilized for internal communications.

The Company uses several mechanisms to ensure effective communication with interested parties. These include customer newsletters, bill inserts, regulatory reports, proactive media relations, formal and informal discussions and meetings with regulators, community representatives and local business leaders, and written correspondence. Also, a variety of processes are used for internal communication on environmentally related matters. The effectiveness of these communication processes is evaluated on an on-going basis through environmental training programs, audits and inspections, and informal discussions.

4.1.i External Communication and Grievance Mechanisms

The mechanisms for external grievance reception and treatment are not yet clearly defined. Therefore, the Client will prepare a specific procedure to receive, treat and respond to external grievances.

4.2 Labor and Working Conditions

4.2.a Working Conditions and Management of Worker Relationships

Currently, the Client has 334 employees, of which 240 (71.85%) are male and 94 (28.15%) are female. The Company complies with Belize labor regulations and provides fair working conditions to its employees.

4.2.a.1 Human Resources Policies and Procedures

The Company has a Talent Acquisition Policy, as well as a Respectful Workplace Policy, a Code of Ethics, a Business Responsibility, and a Business Ethics Enforcement Policy, which establish the employment conditions, core principles, core values, expected employee behavior, disclosure policy, conflict of interest, fair dealing, and other conditions.

4.2.a.2 Working Conditions and Terms of Employment

Belizean Labour Act Chapter 297 governs the terms and conditions of employment in the country such as working hours, holidays and rest periods, wages, overtime, occupational health and safety, and termination of employment. The Client complies with Belize Labor regulations.

Under its Talent Acquisition Policy, the Company defines the positions needed, employee profiles, potential sources of adequate personnel, conduct interviews, and prepare employment packages including salary, benefits, and other conditions. Working hours are from 8:00 am to 5:00 pm, Monday to Friday.

4.2.a.3 Workers' Organizations

Belize Energy Workers' Union ("BEWU") is a labor union which represents Client non-management employees. The union is affiliated with the National Trade Union Congress of Belize. BEWU goals and objectives include job security for its members, better wages, benefits, and safe working conditions. Collective Agreements were signed and represent a comprehensive coverage of labor issues for employees. Its current membership is around 150 workers.

4.2.a.4 Non-discrimination and Equal Opportunity

Non-discrimination is defined in the Client's Code of Ethics, which includes a Respectful Workplace Policy. Under its terms, the Company commits not to discriminate on grounds of gender, race, place of origin, political opinions, color, creed, physical, mental disability, physical characteristics, pregnancy, sexual orientation, marital or family status, source of income, and association or activity. These policies, however, do not cover the issues of child and forced labor. The Client will, therefore, update its human resources policies to cover these subjects.

4.2.a.5 Retrenchment

At present there are no plans for collective dismissals.

4.2.a.6 Grievance Mechanism

The Client has not yet established a formal mechanism for the reception, treatment, and response to internal grievances from workers. Therefore, it will prepare and adopt such mechanism.

4.2.b Protecting the Workforce

At present, there are no provisions against forced and child labor in the Client's Code of Ethics or in the Talent Acquisition Policy. The Client will, therefore, revise its Code of Ethics including provisions against forced and child labor consistent with International Labor Organization ("ILO") Conventions 29² on Forced Labor, 138³ Minimum Work Age and 182⁴ Worst Forms of Child Labor.

4.2.c Occupational Health and Safety

The Client has a Corporate Safety Policy and Standards which covers: i) its vision; ii) a corporate policy statement; iii) statement of principles; iv) its commitment with due diligence; v) health and safety performance standards; vi) Safe Work Management Systems; vii) assessments of health and safety management system; and viii) appendices.

Accident records from January to September 2021 show 58 lost days, 2 accidents resulting in injuries and 4 vehicle accidents. All injury frequency rates, and motor vehicle incident rates were within established targets, but the severity rate was above target in July and September 2021. The Client will therefore perform a review of their Safe Work Management System to improve these results.

4.2.d Provisions for people with disabilities

Belize is a signatory of and has ratified the United Nations Convention on the Rights of Persons with Disabilities. Thereafter, in compliance with the Belizean regulations, the Client, under its Code of Ethics, declares its commitment against discrimination on the grounds of physical or mental disability.

4.2.e Workers Engaged by Third Parties

Under the EMS, a specific procedure covers the Environmental Management of Contractor and Suppliers, whereby the Client establishes management procedures to ensure environmental management of third-party operations. However, the Client will update this procedure to ensure that health and safety requirements and compliance with the Company Code of Ethics are also demanded from contractors.

² https://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO::P12100_ILO_CODE:C029.

³ https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C138

⁴ https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C182

4.2.f Supply Chain

Supply chain is managed through a specific EMS Procedure: Environmental Management of Contractors and Suppliers. This covers Tier 1 contractors. The Project does not involve the acquisition of solar panels.

4.3 Resource Efficiency and Pollution Prevention

4.3.a Resource Efficiency

The Client is the primary distributor of electricity in Belize. According to its 2020 Annual Report, the aggregate energy sold in 2020 was 539.3 GWh to approximately 104,000 customer base accounts.

BEL's national electricity grid connects all major municipalities in the country through approximately 1,900 miles of transmission and primary distribution lines. The grid is supplied by local Independent Power Producers ("IPP") that produce energy from hydroelectricity, biomass and petroleum. The grid is secured and stabilized by interconnection with Mexico. Renewable sources accounted for 94.4% of locally sourced energy supply in 2020.

Part of the Project's investments aim to promote energy efficiency ("EE"), by means of a Corporate Energy Efficiency Program. This will involve internal energy audits for customers and investments in EE systems (light bulb and air conditioning replacement, automated temperature control systems, use of natural lighting, insulation, etc.).

4.3.a.1 Greenhouse Gases

The Project does not involve any significant generation of GHGs. Nonetheless, a Corporate GHG Monitoring, and Management Plan will be prepared by the Client.

4.3.a.2 Water Consumption

The Client does not monitor water consumption. A Water Resources Management Plan will be prepared to monitor and manage water usage.

4.3.b Pollution Prevention

4.3.b.1 Wastes

Currently the Client does not have documented solid waste and wastewater management procedures. Therefore, it will prepare a Corporate Waste and Wastewater Management Plan.

4.3.b.2 Hazardous Materials Management

Hazardous wastes⁵ are disposed according to the instructions given either by the Belize's Department of the Environment or the Solid Waste Management Authority. A Handling of Transformer Oil Procedure⁶ is available for the disposal of transformer oil believed to contain Polychlorinated Biphenyls ("PCBs"). The management of hazardous waste will be covered in the Corporate Waste and Wastewater Management Plan.

4.3.b.3 Pesticide Use and Management

Pesticide use and management will be included in the Corporate Waste and Wastewater Management Plan to be developed by the Client.

4.4 Community Health, Safety and Security

4.4.a Community Health and Safety

The interventions considered the Project will not generate significant environmental and social impacts. However, some of these works may generate local small-scale impacts including: i) traffic disturbance; ii) noise; iii) dust; iv) health and safety risks; v) waste and wastewater; vi) traffic disturbance and, vii) damage to existing road infrastructure. These impacts will be managed by intervention-specific Environmental and Social Management Plans. Impacts to community health and safety are considered not material.

4.4.a.1 Infrastructure and Equipment Design and Safety

The Client's infrastructure is designed to be able to withstand Category 3 Hurricanes⁷ on the coast and Category 1 Hurricanes inland. The Client is currently implementing the Energy Resilience for Climate Adaptation Project (ERCAP) that comprises of a portfolio of activities geared towards the enhancement of the Belize energy sector against adverse weather and the impacts of climate change. It includes a number of activities including consultancy services for an Integrated Vegetation Management Study, an Emergency Response Plan for business continuity, a Rehabilitation Strengthening study for a selected portion of BEL's existing transmission line, Upgrade of the VHF communication system and upgrade of the existing substation and control buildings. ERCAP also includes a number of other demonstration measures such as construction and upgrade of new and existing stations and lines across Belize.

⁵ Materials used in upgrading and maintenance works such as lubricants, oil contaminated cloths, solvent and paint contaminated packaging, batteries, etc.

⁶ This procedure was designed to ensure the proper disposal of transformer oil potentially containing PCBs.

⁷ Saffir-Simpson Hurricane Wind Scale. Category 3 Hurricanes are those with wind velocities in the range 111- 129 mph. Under this category devastating damage will occur: Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes. Category I Hurricanes are those with wind velocities in the range of 74-95 mph. Under this category very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.

4.4.a.2 Hazardous Materials Management and Safety

Hazardous materials including solid waste and wastewater will be managed according to a Corporate Waste and Wastewater Management Plan to be prepared by the Client.

4.4.a.3 Ecosystem Services

No impacts on ecosystem services are anticipated during Phase I of the Project.

4.4.a.4 Community Exposure to Disease

The Project will include limited upgrade works of existing infrastructure. Exposure to disease will be managed through Corporate COVID-19 Prevention Procedures. Contractors will be requested to comply with these procedures.

4.4.a.5 Emergency Preparedness and Response

The Client will implement its Corporate Emergency Preparedness and Response (“ERP”) Procedures in case of emergencies. External stakeholders will be informed according to the emergency contacts list, as required in the ERP Procedures.

4.4.b Security Personnel

Security is provided by contractors. The Client will ensure that the security contractor personnel will be duly trained to deal appropriately with the public, by means of the existing Security Handbook to be updated in line with the requirements of IFC Performance Standard 4.

5. Local Access of Project Documentation

The documentation relating to the project can be accessed at the following link:
<https://www.bel.com.bz>.