Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 11/08/2023 | Report No: ESRSA03107

I. BASIC INFORMATION

A. Basic Operation Data

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P179845	Investment Project Financing (IPF)	Dominica Geothermal Risk Mitigation II	2024
Operation Name	Dominica Geothermal Risk Mitigation II Project		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Dominica	Dominica	LATIN AMERICA AND CARIBBEAN	Energy & Extractives
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Government of the Commonwealth of Dominica - Ministry of Finance	Dominica Geothermal Development Company	06-Nov-2023	16-Jan-2024
Estimated Decision Review Date	Total Project Cost		
19-Oct-2023	97,650,000.00		

Proposed Development Objective

The Project Development Objective is to integrate geothermal electricity capacity and strengthen the resilience of the national grid in Dominica.

B. Is the operation 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

[Description imported from the PAD Data Sheet in the Portal providing information about the key aspects and components/sub-components of the project]

The proposed project would finance the first of two phases of the new transmission network required to support the development of the DGPP. The first phase entails construction of new 33 kV and 69 kV transmission lines and associated

substations to evacuate electricity generated at the DGPP to Fond Cole- the largest electricity system load center in Dominica. The second phase would extend the 69 kV transmission line from Fond Cole substation to Sugar Loaf substation in the north of the island; it would be financed by a follow-up investment project. The proposed project will run in parallel with DGRMP, the outcome of which is expected to be 10MW of geothermal generation capacity becoming available to the DOMLEC system. When both projects are completed, the share of renewable electricity used by the domestic power system is expected to increase significantly while the reliability of the electricity supply will be improved as the majority of the aged diesel generators which exceed their unit's maximum operational hours and life expectancy will be displaced by the new geothermal capacity. The average cost of electricity generated (and consequently the tariff paid by consumers) is expected to decrease proportionally. DGRMP and DGRMP II will, between them, enable significant greenhouse gas (GHG) emission reductions by displacing the diesel generating units that would continue to operate or be retired and replaced under the current 'business as usual' baseline. The proposed project will create a robust network for transmission of electricity from the new geothermal power plant to the Fond Cole Station, including connecting three existing hydroelectric power plants in the Roseau Valley. This network involves parallel routes and significant undergrounding of 33 kV and 69 kV lines to create the system redundancy. It is built to withstand known natural hazards in the area, including winds associated with Category 5 hurricanes. Other features such as rapid system restoration and optimum levels of spare parts holdings are also factored into the design and procurement. The project will finance goods, works, and consultant services in support of these goals. The proposed project will have two components. (a) Component 1: Transmission Network Expansion and Resilience Development. This component will support the construction of new transmission lines and substations connecting the DGPP with the country largest electricity system load center in Fond Cole (near Roseau city) and technical assistance to enhance emergency preparedness of DOMLEC, the national electric utility as described below. - 1.1 Network Expansion. Network expansion will include: (i) A 69 kilovolt (kV) overhead transmission line of around 7.6 km from the DGPP to the Fond Cole substation; (ii) a 33 kV underground transmission line of around 11 km, connecting the DGPP with Fond Cole substation via New Trafalgar and Padu substations (iii) construction of new 69/33/11 kV substation at Fond Cole, a new 33/2.2 kV substation at New Trafalgar and new 33/11 kV substation at Padu, (iv) a 11 kV underground distribution line of 0.5 km connecting the DGPP to the existing Laudat substation and (v) other transmission and distribution system strengthening. All transmission lines and substations will be constructed to standards and with features which harden them against extreme weather events and subsequent effects such as flooding and erosion. - 1.2 Resilience Development. A stock of emergency spare parts and equipment will be procured that is sufficient to allow efficient and fast response to future extreme weather events. In addition, technical assistance will be provided to DOMLEC will be provided to DOMLEC to improve its climate diagnostics, further climate risk assessments, develop an emergency preparedness plan and safety regulation for the upgraded T&D system (b) Component 2: Technical Assistance (TA) and Project Implementation Support. This component will finance technical assistance to: (i) improve the capacity of DOMLEC to operate and manage the 33kV and 69kV networks sustainably, a more complex task than managing the present 11kV distribution system, through training and technical assistance; (ii) promote female participation in the electricity sector, especially in DOMLEC by providing gender-sensitive training and skill development for technical and managerial positions, improving the gender-sensitivity of human resources (HR) policies and practices and preparation of action plans to tackle gender based violence (GBV) and sexual harassment; (iii) capacity building in regulatory framework development and grid modernization through training, technical assistance ; and (iv) support for project implementation by DGDC through the provision of technical, engineering and project management expertise.

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

[Description of key features relevant to the operation's environmental and social risks and opportunities (e.g., whether the project is nationwide or regional in scope, urban/rural, in an FCV context, presence of Indigenous Peoples or other minorities, involves associated facilities, high-biodiversity settings, etc.) – Max. character limit 10,000]

The government has adopted a National Resilience Development Strategy (NRDS) aimed at transitioning to a more diversified and greener economy with one of the growth poles as renewable energy. Dominica's electricity system relies primarily on a fleet of aging diesel generators resulting in high electricity costs and unreliable supply undermining Dominica's competitiveness. In 2021, installed generation capacity owned by the national utility - Dominica Electricity Services Limited (DOMLEC) was 25.53 megawatts (MW). 74 per cent of the generation capacity (18.89 MW) came from two diesel power plants located at Fond Cole in the southeast outside Roseau, and Sugar Loaf in the northwest outside Portsmouth. The remaining 26 per cent or 6.6 MW is derived from a cascade of three small run-of-the-river hydro plant in the Roseau Valley. There is also an estimated 15MW diesel self-generation.

This project in conjunction with the Dominica Geothermal Risk Mitigation Project (DGRMP) aims to diversify Dominica's domestic power generation mix and demonstrate the potential of larger development of the geothermal resource. The project will entail the construction of new transmission lines and construction and upgrade of substations connecting the Domestic Geothermal Power Plant (DGPP) with the national electric system. Specifically, the project will support the construction of new 33 kV and 69 kV transmission lines and associated substations to evacuate electricity generated at the DGPP to Fond Cole. The construction of the two new transmission lines will create redundancies in the connection between the DGPP and Fond Cole substations.

The proposed 69 kV transmission line of about 7.6 km from the geothermal power plant to the Fond Cole substation consists of underground (about 2.7 km) and overhead installation (about 4.8 km) and mainly passes along the ridge of the Roseau Valley. The 33 kV line will mostly follow the road network leading up from Roseau Valley connecting the geothermal power plant to Fond Cole substations via Trafalgar and Padu substations. In some instances, the line will traverse the river valley. Underground cables will be installed along the public roads between Trafalgar and Roseau City. The initial sections of the 33 kv line will be installed near the existing right of way of Laudat's hydropower pipeline. There will also be an underground 11 kV transmission line of 0.5 km connecting the geothermal power plant to the Laudat substation where electricity will enter the DOMLEC grid. New substations will be constructed - 69/33/11 kV substation at Fond Cole, 33/2.2 kV substation at Trafalgar, and 33/11 kV substation at Padu.

The Project activities will be carried at the Roseau Valley, to the southeast of Laudat. The Roseau Valley is characterized by landscapes such as tropical and mountain forests, urban villages, and connecting roads. The DGPP is situated close to the Morne Trois Pitons National Park, home to one of the last largely intact forest areas remaining in the insular Caribbean, rich in biodiversity. Much of the original natural forest vegetation in the project area have been altered due to the impacts of human induced activities and tropical cyclones. Human activity, such as the clearance of natural forests for agriculture, small-scale timber harvesting, charcoal production, firewood collection, livestock grazing, construction of residential homes, and installation of hydroelectricity infrastructure, has altered the species composition of the habitat and by extension, its primary ecological functions. The aquatic sub-habitat close to the DGPP comprises of a network of relatively small seasonal ravines which carry surface runoff downslope, whenever it rains.

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

[Description of Borrower's capacity (i.e., prior performance under the Safeguard Policies or ESF, experience applying E&S policies of IFIs, Environmental and social unit/staff already in place) and willingness to manage risks and impacts and of

provisions planned or required to have capabilities in place, along with the needs for enhanced support to the Borrower – Max. character limit 10,000]

The project will be implemented by the Dominica Geothermal Development Company Ltd (DGDC) on behalf of the Government. DGDC is also responsible for implementing the Dominica Geothermal Risk Mitigation Project (DGRMP – P162149), which is currently under the implementation. DGDC will undertake the fiduciary, environmental and social management tasks necessary for the successful completion of all components of the project. Based on the site visits undertaken by the Bank team, discussions, and reports received from DGDC, the overall environmental and social performance rating of the DGRMP is considered satisfactory.

An Environmental specialist and resettlement specialist will be hired to support this project and the DGRMP as the E&S officer recently left DGDC. Currently there is an interim E&S officer. There is also a Community Liaison Officer who is responsible for community engagement and the grievance mechanism. Staff at DGDC have received the ESF training and Incident Response and Reporting training provided by the Bank and continue to benefit from continued engagement with the Bank. In the ongoing DGRMP, both the owner's Engineer (with DGDC as the owner) and contractors have E&S officers on site. The same will be followed for this project.

The transmission assets to be built under the project are to be leased to and be operated by Dominica Electricity Services Limited (DOMLEC) - the utility company. DOMLEC has already engaged closely with DCDC during the project preparation and will continue during project implementation under the oversight of a Stakeholder Executive Team. At least one DOMLEC engineer will be assigned to work full time for the project. In addition, DOMLEC will assign 10 technical, health and safety, and Human Resource staff, forming as a project Functional Teams to work part time with DGDC. An on-job-training program to DOMLEC team will be included in the scope of work of the Owner's Engineer and the EPC contractor.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) — Substantial

A.1 Environmental Risk Rating — Substantial

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The environmental risk rating is considered Substantial due to (i) the anticipated occupational and community health and safety risk during construction (e.g. working at heights and difficult terrain); (ii) traffic management issues related to transporting equipment and materials through residential areas and narrow winding roads; (iii) potential impacts on biodiversity including the possibility of bird collisions; and (iv) institutional capacity of DGDC to supervise and monitor the DGRMP (which has a Substantial E&S risk rating) and DGRMP II if both are implemented simultaneously. The potential environmental, health and safety impacts related to the construction of the transmission lines and upgrade and constructions of the substations include noise, water, and air pollution; occupational health and safety; hazardous and non-hazardous waste management, including construction waste management during excavation; traffic management among others. These are likely to be short-term and reversible that would be addressed through mitigation measures incorporated into the Environmental and Social Management Plan (ESMP) in line with good international industry practice (GIIP) delineated in the WB Group General Environmental, Health and Safety (EHS)

Guidelines and Guideline for Electric Power Transmission and Distribution. The Terms of Reference (ToRs) for the TA activities will be reviewed to ensure environmental and social requirements are included. The environmental risk rating will be further assessed during preparation and will be reviewed periodically throughout project implementation to ensure it continues to accurately reflect the level of risk.

A.2 Social Risk Rating Moderate

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The Social Risk Rating is considered Moderate due to the ESS5 impacts which small-scale and do not involve the physical displacement of people. These impacts mostly derive from easements and tower poles and will effect small parcels of land, crop and tree, with possible livelihoods impacts. These impacts which will be compensated for as per the RAP prior to the project accessing private land and prior to construction. PIU has some experience in handling resettlement according to World Bank requirements. To date, the social risk mitigation has been well managed with detailed consultations already held with impacted communities. In order to assess and address the impacts from the creation/expansion of access roads and right of ways for the overhead transmission lines and underground cables, changes in design and alignment have been made and more are under investigation. A draft Stakeholder Engagement Plan (SEP) has been prepared which describes a program for stakeholder engagement, including public information disclosure and consultation throughout the entire project cycle. DGDC has established a functioning grievance redress mechanism (GRM) under the first phase of the project i.e., Dominica Geothermal Risk Mitigation Project (DGRMP – P162149) which will also serve as the GRM for this project.

[Summary of key factors contributing to risk rating. This attribute is only for the internal version of the download document and not a part of the disclosable version – Max. character limit 8,000]

B. Environment and Social Standards (ESS) that Apply to the Activities Being Considered

B.1 Relevance of Environmental and Social Standards

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

[Explanation - Max. character limit 10,000]

ESS 1 is relevant. Component 1 will support the construction of new transmission lines and construction of substations connecting the DGPP with the national electric system. Of the around 7.6 km of transmission line from the DGPP to Fond Cole substation, 4.8 km will be over head and 2.7 km will be underground. For the transmission line (around 11km), connecting DGPP via New Trafalgar and Padu substations to Fond Cole substation, the initial section of the line passes through the existing right of way of Laudat's hydropower pipeline. Then it will pass through the public road up to the Fond Cole substation. About 2 km of the underground cable is located in the urban areas of Roseau city, in which 0.4 km is located along the highway. The client has prepared (i) an environmental and social impact assessment (ESIA) which includes the environmental and social management plan (ESMP) for the proposed project; (ii) an abbreviated resettlement action plan (ARAP) for the proposed transmission network; (iii) Labor Management Procedures (LMP); and (iv) draft Stakeholder Engagement Plan. As per the ESIA, the potential EHS impacts of the project activities are not likely to be significant and likely to be short-term, reversible and will occur mainly during construction. These risks are related to occupational health and safety of workers due to working on heights and

mountain slopes, use of heavy machinery; air, water and noise pollution; waste management; soil erosion from clearing of vegetation and excavation works; traffic management and safety for communities; and impacts to biodiversity (discussed under ESS6). Through measures proposed in the ESMP, the impacts can be avoided, mitigated and managed during the construction and operational phase. The social impacts primarily relate to small scale land taking for posts and related access easements, access roads, and a short stretch of cable line. An ARAP has been drafted to document these impacts. Public concern around resettlement and the project in general have been well managed to date with numerous consultations already held with those who will be impacted by the construction and operation of the project. During implementation prior to civil works starting, the contractor will be required to develop a Contractor ESMP (C-ESMP) based on the project ESMP. DGDC will be responsible for the detailed review and clearance of the C-ESMP before starting of the physical work. If the C-ESMP requires adjustment/updating during the implementation of the project, the contractor will seek the DGDC's clearance before making changes. The contractor will also be responsible for the C-ESMP for subcontractors and share with the DGDC before starting those particular activities. The E&S specialists of the supervision engineer (owners engineer) and DGDC along with staff from DOMLEC will monitor construction. In addition, an independent E&S monitoring consultant will be hired to verify compliance with environmental, social, health and safety (ESHS) performance of the Project. DOMLEC will be responsible during the operation phase. The construction of the DGPP (through private investment), geothermal wells (production and injection wells) and related infrastructure such well pad and access road are considered Associated Facilities to the proposed Project since these meet the criteria given in paragraph 11 of the World Bank Environmental and Social Policy for Investment Project Financing for Associated Facility. The environmental and social instruments prepared for the DGRMP in 2018 i.e., ESIA, ESMP, Resettlement Action Plan (RAP) and SEP were revised and updated by DGDC in 2021 to reflect the change in the scope of works under DGRMP. These reports were reviewed and cleared by the World Bank. The contract for the construction of the power plant is being negotiated. Works at the production well and reinjection well which were financed by the World Bank have been completed. Regular Environmental Health and Safety monitoring was conducted at the construction sites by DGDC and their E&S supervision consultant. The Technical Assistance (TA) activities are not expected to generate environmental and social impacts. The requirements set out in paragraphs 14–18 of ESS1 will be applied to TA activities as relevant and appropriate to the nature of the risks and impacts. The terms of reference (TOR) for the activities and other documents defining the scope and outputs of TA activities will be reviewed by the World Bank so that the advice and other support provided are consistent with ESS 1–10 and duly incorporate relevant requirements of the ESSs.

ESS10 - Stakeholder Engagement and Information Disclosure Relevant

[Explanation - Max. character limit 10,000]

ESS10 is relevant. The Stakeholder Engagement Plan has been prepared by the client and a number of consultations have been held with impacted communities. The project stakeholders identified thus far are (i) the Project-affected parties, such those who are impacted by land acquisition or easements, and communities temporarily affected by the construction activities, including communities of near the proposed sub stations and line, (ii) people and business affected by the operations of the facilities and, (iii) other interested parties such as village councils, nonprofit organizations (NPOs), and relevant government agencies. Between March 11 and 18, 2023, initial public consultations were carried out at six communities and attended by around 54 community members (30 men and 24 women). Key questions/concerns raised include safety of electromagnetic fields/radiation, safety for families/communities, emergency plans, land acquisition/compensation, land use restrictions, transmission line routes, employment opportunities for youth (construction and O&M phases), etc. Vulnerable groups include female-headed households,

the disabled, the elderly, and migrants. A summary of stakeholder engagement activities will be included in the SEP which will be disclosed on the website of DGDC. DGDC has a functioning GRM for this project.

ESS2 - Labor and Working Conditions Relevant

[Explanation - Max. character limit 10,000]

ESS2 is Relevant. The type of Project Workers expected are Direct workers and Contracted workers. No primary supply workers or community workers are envisioned. Direct workers are those assigned to this project in the DGDC which is the PIU. The DGDC is wholly owned by the government having eight permanent staff members with responsibility for procurement, technical, financial, environmental, and social management, and administrative functions. The civil works under this project require a small labor force of contracted workers. The risks associated with labor influx, and the risk of child labor, are considered low because the labor influx will be small and easy to manage and because child labor is unlikely because of local restrictions and practices. Risks of discrimination based on gender or ethnicity will be managed through a code of conduct for contracted workers. For the construction of the underground transmission lines, around 10-12 workers would be required per 300m segment, including a few skilled workers (likely regional or international). The contractor would work on 4-5 segments at a time. Similarly, around 10-12 workers would be anticipated per structure site to construct overhead lines. The estimated number of contracted workers will be 100, of which 40 will be foreign, and the remaining will be local. A construction camp may be established for foreign workers, or accommodated in rented houses or hotels (as currently practiced for the well-drilling Contractor under DGRMP). An advanced draft LMP has been submitted to the World Bank. DGDC has its own HR manuals and has a workers' GRM/internal grievance mechanism which was developed following OP 4.03 under the ongoing DGRMP I. The details of the workers GRM are in the draft LMP for this project and the procedures for handling grievances are being revised to meet the requirements of ESS2.

ESS3 - Resource Efficiency and Pollution Prevention and Management Relevant

[Explanation - Max. character limit 10,000]

ESS3 is relevant. Pollution risks associated with the construction of transmission lines and substations include air, noise and water pollution, soil erosion, inadequate disposal of construction wastes and hazardous materials and oil spills. These impacts will be managed through good construction practices in line with the World Bank General EHS Guidelines and detailed in the ESMP. Fire and life safety risk considerations have been included at the substations. Green House Gas emission reductions are anticipated for the project and will be calculated as part of the projects results and indicator and economic analysis. Considering the associated facility of the project as a renewable geothermal project, the net emissions from the proposed transmission lines will be negative. The terms of reference, work plans or other documents defining the scope and outputs of TA activities will be reviewed to ensure consistency with ESS3.

ESS4 - Community Health and Safety Relevant

[Explanation - Max. character limit 10,000]

ESS4 is relevant. Adverse impacts on the health and safety of surrounding communities may occur while works are being undertaken. Risks include the excavation works, generation of hazardous and non-hazardous waste, noise, dust,

transportation of construction materials, and increased traffic. It would be important to ensure that the public is made aware through appropriate signage and fencing to cordon off restricted areas and ensure public safety and measures to manage the impacts are given in the ESMP. Under the DGRMP, DGDC has taken a proactive approach towards traffic management and community relations. An emergency preparedness plan will be prepared under Component 1 and will be published as part of the consultations.

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

[Explanation - Max. character limit 10,000]

ESS5 is relevant. An ARAP has been prepared which provides the details for each of the four (4) segments of the network expansion. The rational for the routes chosen is provided in detail in the ESIA, and the type and scale of the resettlement impacts are documented in the RAP which includes a socio-economic survey. The number of Project Affected People is known except those to be impacted from two planned realignments. The two realignments under discussion are firstly on the overhead transmission line (OHL) route from the Geothermal substation (near Laudat) to Glasgow, which is being explored to avoid the loss of private commercial structures from the placement of transmission pole towers 22 and 23, and secondly to work around a future cable car installation which will be close to transmission pole towers 25 and 26. Based on the socio economic survey, and the extent to which the alignment of the OHL is finalized, the project expects between 20 to 25 PAPs which relate to land acquisition (including easements), crop and tree impacts, and livelihood impact, there are no tenants or informal users of private or government land (ESS 5 para 10. (c)). Most of the project's resettlement impacts relate to the placement of twenty one (21) pole towers for the short distance (4.8 km) the 69 kV OHL will run between Geothermal substation to Glasgow. There will be land acquisition for the pole placement, land use restrictions and an easement for the right of way around the poles, and easements for new access roads. An estimated 22 land parcels will be affected by these land acquisitions and/or easement. 20 land parcels are privately owned, while two are owned by the Government. The majority of the identified 20 PAPs will be affected by both land acquisition and easement. The access roads will facilitate landowners' access to their own lands in a mountainous area with limited impact on assets and livelihoods so placing the land for the access roads under easement is appropriate with compensation for livelihood impacts (which in these cases are agricultural). The underground cable for the 69 kV line between Fond Cole to Glasgow will be installed mostly in public road space. However, there will be a diversion from the public road to connect the cable to the Fond Cole substation. Four land plots will be affected by permanent as well as temporary land acquisition for the diversion. A 11 km underground transmission 33kV line will be constructed connecting Geothermal substation with Fond Cole substation via Trafalgar and Padu substations. The line will be built within the right-of-way of the existing roads and there will be no ESS5 impacts. The project will not require land or have ESS 5 impacts for the construction of the 11 kV line (0.5 kilometers) connecting Geothermal substation to Laudet power station (hydro-electricity plant) because the underground cable will be installed on the public land owned by DOMLEC and DGDC. Likewise there will be no ESS5 impacts from the three (3) new substations at Fond Cole, Trafalgar, and Padu, and the sites are already owned either GOCD or DOLMEC.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources Relevant

[Explanation - Max. character limit 10,000]

ESS6 is relevant. As part of the ESIA for the project, baseline surveys were undertaken for the biodiversity assessment. The surveys mainly focus on the 69 kV alignment which is a new greenfield alignment. The tailend of the transmission line near the Fond Cole mainly passes through the dry scrub woodland. The dry scrub woodland is located in the "West Coast Shrub Woodland, a Key Biodiversity Area (but not a protected area) due to the presence of a critically endangered frog species known as mountain chicken (Leptodactylus fallax). The proposed transmission does not cross the habitat of the mountain chicken and the species is not found in the project area. Globally threatened species of concern within the transmission line's area of influence include the Red-necked Amazon Parrot (Amazona arausiaca, a vulnerable species), the Imperial Amazon Parrot (Amazona imperialis, a critically endangered species), and the Black-capped Petrel (Diablotin Pterodorma hasitata, an endangered species). The Morne Trois Pitons National Park is a legally protected area located about 1 km from the project (near the geothermal power plant). To mitigate the impacts on flora and fauna from construction activities, the ESMP includes a Biodiversity Management Plan. It includes measures to minimize impacts and to protect biodiversity such as pre-clearing surveys and rescue and relocation, best practice vegetation removal, revegetation of temporary areas, management of artificial lighting, controlling the spread of invasive species, mitigating the risk of bird collisions and managing illegal wildlife trade. In addition, as part of the ESIA and ESIA/ESMP update for the DGPP under the DGRMP, comprehensive biodiversity assessments were undertaken and a range of measures have been incorporated in the project design including designing of a MTPNP monitoring program (by DGDC) to be implemented for the five key species considered Threatened by IUCN: giant ditch frog, imperial parrot, red-necked parrot, forest thrush, and a species of tree frog (Eleutherodactylus amplinympha). The ESMP of the DGPP includes a biodiversity management plan laying out the roles and responsibilities of all stakeholders, mitigation measures and monitoring requirements in line with the Mitigation Hierarchy. Measures are also included to protect the Morne Trois Pitons National Park (MTPNP) from indirect impacts such as possibility of increased hunting. During the construction of the DGPP, these aspects will be monitored by DGDC and the owners engineers' E&S specialists. In addition, DGDC is to engage an independent E&S monitoring consultant to verify compliance with environmental, social, health and safety (ESHS) performance of the overall Project including the biodiversity management plan. The scope of the E&S monitoring consultant will be expanded to include the proposed project and will be reflected in the project's Environmental and Social Commitment Plan (ESCP).

ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities — Not Currently Relevant

[Explanation - Max. character limit 10,000]

ESS7 is not currently relevant. The Kalinago mostly live on the east coast of Dominica so there are no expected impacts on indigenous land.

ESS8 - Cultural Heritage — Relevant

[Explanation - Max. character limit 10,000]

ESS8 is relevant. The ESMP includes a Chance Finds Procedure (CFP) to be implemented in line with national legislation and the requirements under ESS8. Construction contracts will include clauses requiring civil contractors to take proper protective measures in case cultural heritage sites are discovered, including to stop activities if a cultural property is

found during civil works. Impacts to cultural sites and natural habitats of cultural significance will be investigated as part of the ESIA.

ESS9 - Financial Intermediaries Not Currently Relevant

[Explanation - Max. character limit 10,000]

ESS9 is not relevant. FIs will not be involved in the Project.

B.2 Legal Operational Policies that Apply

OP 7.50 Operations on International Waterways No

OP 7.60 Operations in Disputed Areas No

B.3 Other Salient Features

Use of Borrower Framework No

[Explanation including areas where "Use of Borrower Framework" is being considered - Max. character limit 10,000]

None

Use of Common Approach No

[Explanation including list of possible financing partners – Max. character limit 4,000]

None

B.4 Summary of Assessment of Environmental and Social Risks and Impacts

[Description provided will not be disclosed but will flow as a one time flow to the Appraisal Stage PID and PAD – Max. character limit 10,000]

The environmental, health and safety risks related to the construction of the transmission lines and construction of the substations are Substantial due to (i) the anticipated occupational and community health and safety risk during construction (e.g. working at heights and difficult terrain); (ii) traffic management issues related to transporting equipment and materials through residential areas and narrow winding roads; (iii) potential impacts on biodiversity including the possibility of bird collisions; and (iv) institutional capacity of DGDC to supervise and monitor the DGRMP (which has a Substantial E&S risk rating) and DGRMP II if both are implemented simultaneously.

The social risk rating is considered moderate with risks linked primarily to impacts under ESS5. These impacts are small in scale and easy to manage as already documented in a RAP. The RAP will be updated once two realignments are finalized, but at this stage there are around 20 people who will be impacted by pole towers, tower easements, and access road easements. The specific impacts will be loss of land, restrictions in use of land, and loss of crops and trees.

PAPs and community member have been consulted with on the design of the transmission line, resulting in a design changes to underground cable between the Geothermal plant to Glasgow, with other changes to reduce impacts currently being investigated. No other significant issues were raised during the public consultations.

Environmental and social Impacts are likely to be short-term and reversible and would be addressed through mitigation measures incorporated into the Environmental and Social Management Plan (ESMP) in line with good international industry practice (GIIP) delineated in the WB Group General Environmental, Health and Safety (EHS) Guidelines and Guideline for Electric Power Transmission and Distribution. Drafts of the environmental and social instruments - Environmental and Social Impact Assessment, Environmental and Social Management Plan, Abbreviated Resettlement Action Plan, Labor Management Procedures, and Stakeholder Engagement Plan have been prepared and submitted to the World Bank for final review.

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 implementation?

[Description of expectations in terms of documents to be prepared to assess and manage the project's environmental and social risks and by when (i.e., prior to Effectiveness, or during implementation), highlighted features of ESA documents, other project documents where environmental and social measures are to be included, and the related due diligence process planned to be carried out by the World Bank, including sources of information for the due diligence - Max. character limit 10,000]

The following instruments have been prepared and will be finalized and disclosed prior to appraisal:

- Draft Environmental and Social Impact Assessment including the Environmental and Social Management Plan
- Draft Abbreviated Resettlement Action Plan
- Labor Management Procedures
- Draft Stakeholder Engagement Plan

The Bank team will closely monitor the implementation of the E&S instruments, review E&S reports by the client and carryout out regular implementation support missions.

III. CONTACT POINT

World Bank

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IV. FOR MORE INFORMATION CONTACT

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V. APPROVAL

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