HAITI

Project Profile (PP)

Basic data

Project name:	**Rehabilitation of Péligre Transmission Line**
Project number:	HA-G1030
Project team:	Pierre Kenol Thys, Team Leader (ENE/CHA); Natacha Marzolf, Alternate Team Leader (INE/ENE); Fritz Gerval Octave (INE/CHA); Letizia Sosa (INE/ENE); Alejandro Melandri (INE/ENE); Virginia Snyder (INE/ENE); Emilie Chapuis (FMP/CHA); Leila Chennoufi (VPS/ESG); Taos C. Aliouat (LEG/SGO); Daniel Bayes (FMP/CHA) under the supervision of Leandro Alves, Division Chief of the Energy Division (INE/ENE/) and Gilles Damais, Representative a.i. IDB in Haiti (CDH/CHA).
Beneficiary:	Republic of Haiti
Executing agency:	Electricité d'Haïti (EDH), with the participation of the Ministry of Public Works, Transport, Energy and Communications (MTPTEC)
Financing plan:	Haiti Reconstruction Fund (HRF): US$ 8,000,000 Local Counterpart: US$12,000,000 Total: US$ 20,000,000
Safeguards:	Policies triggered: B.01-OP102- OP704-OP710, B.02, B.03, B.04, B.05, B.06, B.07, B.09, B.10,B.11,B.017 Classification B

I. GENERAL JUSTIFICATION AND OBJECTIVES

1.1 **Current Conditions in the Energy Sector.** Haiti is slowly recovering from the earthquake that massively struck the country in January 2010 and is rebuilding its damaged infrastructure through bilateral and multilateral aid. Following the earthquake and the displacement of hundreds of thousands of refugees to *Port-au-Prince*, an estimated US$20 million was allocated to address direct damage to the power system. For the past two years, the Government of Haiti (GoH), with the support of the international financial donor community, has embarked on an unprecedented reform of its energy sector in terms of governance, rehabilitation of generation, distribution and transmission infrastructure, promotion of renewable and sustainable energy sources and overhaul of its main energy agency, *Electricité d'Haïti* (EDH).

1.2 **Energy Sector Organization.** EDH, the state-owned monopoly for the provision, transmission and distribution of public electricity service in Haiti, was established in 1971 following the commissioning of the first unit of the 54 Mega Watt (MW) *Péligre* Hydroelectric Plant (PHP). PHP is the main source of renewable energy

for the metropolitan area of *Port-au-Prince* and with the largest nominal installed capacity. In addition, EDH relies on diesel generation plants[1] to meet demand growth through Power Purchase Agreements (PPAs) entered with Independent Power Producers (IPPs). The governance of the energy sector falls under the umbrella of the Ministry of Public Works, Transport, Energy and Communications (MTPTEC) which is formally in charge of establishing policies, objectives and proposing new regulations. In 2012, within the context of reforming the energy sector, an Energy Desk within the MTPTEC was created to specifically address all energy related matters and the Ministry Delegate for the Energy Security was appointed.

1.3 **Haiti's Sector Strategy.** In the post-disaster needs assessment study (PDNA)[2], the GoH established that reconstruction of the electricity sector should be part of an overall development plan to make the sector efficient and financially viable, operating as an open, transparent market, promoting renewable energy and attracting enough capital to meet the rising demand and to provide affordable, high-quality electricity service. The GoH also decided to implement an integrated and coordinated program of reform and transformation of Haiti's electricity sector to: (i) achieve greater access for rural and urban households; (ii) lower energy costs; (iii) improve the reliability for new and existing commercial customers; (iv) make viable energy utility with reduced technical and commercial losses and efficient rates; and (v) improve revenue collection and sustainable mix of fuel sources, including renewable energy sources.

1.4 **IDB Country Strategy/Programing Objectives.** The Rehabilitation of the *Péligre* Transmission Line (the Project) is fully aligned with the Inter-American Development Bank (IDB or the Bank) Country Strategy (CS) with Haiti 2011-2015 (GN-2646), in which energy is one of the priority sectors. The Project contributes to the CS Priority Objective to "expand the coverage of electricity and energy services in urban and rural areas". Additionally, the Project is aligned with IDB's institutional priorities as outlined in the Report on the Ninth General Increase in Resources for the IDB (GCI-9) (AB-2764) as it contributes to the goal of "supporting development in small and vulnerable countries" (such as Haiti) and to that of "assisting borrowers in dealing with climate change, sustainable energy (including renewable) and environmental sustainability". In addition, the Project is linked to a larger infrastructure project, which is the rehabilitation of the PHP financed as follows: (i) US$32.5 million financed by the IDB (HA-L1032 and HA-L1038)[3]; (ii) OPEC Fund for International Development (OFID) for an

1 They are as follows: (i) ***Carrefour*:** thermal generation plant; installed capacity 49.5-MW; available capacity 10-MW; (ii) ***Varreux I* and *Varreux II***: thermal generation; installed capacity 40-MW and available capacity 35-MW; (iii) ***Varreux III*:** thermal generation plant; installed capacity 18-MW and available capacity 14-MW; (iv) ***E-Power***: installed capacity 30-MW and an available capacity 30-MW and (v) ***Alexandre Pétion**:* installed capacity 34-MW.

2 PDNA, Assessment of damage, losses, general and sectorial needs. Annex to the Action Plan for National Recovery and Development of Haiti. March 2010.

3 (i) *Peligre* Hydropower Plant Rehabilitation Program (HA-L1032; grant 2073/GR-HA) approved in 2008 for US$12.5 million and Supplementary Financing for *Peligre* (HA-L1038, grant

amount of US$15 million and (iii) *Kreditanstalt für Wiederaufbau* (KfW), a German Development Bank for an additional 10 million euro grant.

1.5 **Coordination of *Péligre* Transmission Line (TL) and PHP:** As the *Péligre* Transmission Line (TL) connects to the *Port-au-Prince* area, both projects (PHP and TL rehabilitation) will need to be executed in tight coordination. In terms of advancement of PHP rehabilitation work (which needed to commence prior to the TL rehabilitation given the longer time period required for rehabilitation of the three turbines), as of April 2013, US$8.9 million (71%) had been disbursed under HA-L1032 and HA-L1038 combined, and an additional US$6 million is envisioned to be disbursed this year (2013). The supervision contract was awarded for US$3.2 million and the electromechanical rehabilitation of the PHP equipment in February 2012 for US$50 million. Pursuant to the decision made in 2012 to carry out the rehabilitation work without emptying the *Péligre* reservoir, subaquatic works were contracted to perform all required underwater physical inspection and work to repair the dam gates. Once such gates are working properly, rehabilitation work of the PHP will begin. Contractor mobilization for subaquatic work is currently in place and work started in March 2013 with local hiring and counterpart Manager already in place.

1.6 **Proposal for the Rehabilitation of *Péligre* Transmission Line**. The Péligre TL is a 115 kilo-Volt (kV) bi-tern that covers a distance of approximately 55-kilometers (km) between PHP and the substation "New Delmas" in *Port-au-Prince*. The *Péligre* TL is supported by 194 pillars, some with solid bases such as concrete and others with lattice steel towers. The bases are protected by stone walls and embankments. A protection wire on the top connects the towers. The maximum capacity per circuit is 72-Mega-Volt Ampere (MVA). The *Péligre* TL has been in operation for over 40 years, with approximately 40% of its elements in a salty environment and reaching their useful life, therefore becoming obsolete and inefficient. As a consequence, the *Péligre* TL requires both rehabilitation and replacement of all the conductors, insulation and ground wires.

1.7 **Rationale.** IDB Rehabilitation of *Péligre* TL has been sized to an amount estimated at US$20 million to cover all repairs and financing costs[4]. The rehabilitation of the *Péligre* TL is crucial for the entire PHP rehabilitation to avoid major blackouts, further energy losses and maximize the usage, reliability and security of all energy that will be produced when the PHP rehabilitation is complete (scheduled for 2016). The Project will consist of replacing, restoring, insulating and grounding the *Péligre* TL and distribution lines and performing associated auxiliary activities.

1.8 **Project Objective.** The rehabilitation of *Péligre* TL will improve the performance of the distribution system and provide reliable and secure power to the Haitian population. The expected outcomes include: (i) improved power

---

2684/GR-HA) approved in 2011 for US$20 million to cover the funding gap resulting from higher costs than anticipated and the impact of the 2010 earthquake.

4 Formulaire de Note Conceptuelle de Projet; Soumission de Nouveau Projet pour le Financement par le Fonds de Reconstruction d'Haïti ; Gouvernement d'Haïti Janvier 2013.

transmission capacity; (ii) reduced risk of power outages; and (iii) reduced electrical losses in the system.

1.9 **Component I: Design and Construction Engineering.** Component I will finance: (i) comprehensive diagnosis of the current condition of the TL (considering all social and environmental aspects) and focusing on the high-tension towers; (ii) elaboration of technical specifications and designs; (iii) definition of parameters, costs, construction process and schedule, and (iv) pre-investment activities during the engineering, construction and repair phases of the transmission line rehabilitation.

1.10 **Component II: Construction and Engineering Supervision.** Component II will support the implementation of the Project, including administration and supervision of all activities performed by the contractor in order to mitigate any potential risks and ensure successful and timely completion of the Project.

1.11 **Component III: Investment.** Component III will support the major part of the rehabilitation works, including the acquisition of supplies, equipment and services as well as the measures to enforce environmental safeguards during the rehabilitation process.

1.12 **Execution.** The beneficiary will be the GoH and the executing agency will be EDH, with the participation of the MTPTEC. The rehabilitation of *Péligre* TL will use the same execution mechanism as the one contemplated in grants 2073/GR-HA and 2684/GR-HA.

II. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

2.1 The IDB has been deploying a strategy of comprehensive support to the energy sector, which includes the approval and execution of several operations: (i) grant 2073/GR-HA for the Rehabilitation of the Electricity Distribution System in Port-au-Prince (HA-L1014) approved in 2007 for an amount of US$18.1 million and supporting loss reduction in the *Port-au-Prince* area and its Supplemental Financing (HA-L1035) approved in 2010 for an amount of US$14 million to finance the construction of the Tabarre substation connecting to the *Péligre* TL (over 55% disbursed for both operations combined); (ii) 2073/GR-HA and 2684/GR-HA for the Rehabilitation of the PHP (see above); (iii) a series of three programmatic grants to support reform in the energy sector[5] (HA-L1065 approved in 2011 for an amount of US$35 million and 100% disbursed; HA-L1073 approved in 2012 for an amount of US$12 million and 100% disbursed) and with the third and last program scheduled to be approved and disbursed in 2013 for a total amount of US$12 million, and (iv) several technical assistance programs to support sustainable energy sources such as (a) installation of solar power generators and application through grants of US$1.5 million from the Sustainable Energy and Climate Change Initiative (SECCI), HA-X1019, and the Global

[5] The objective of the programmatic series is to support the GoH in developing an energy sector framework that will contribute to modernize the sector and increase the availability and affordability of energy in order to satisfy the population's needs and foster competitiveness.

Environment Facility (GEF); (b) HA-T1077 to promote the development of biofuels and (c) HA-T1150 to promote renewable energy sources and overall support to the infrastructure operations currently in execution.

III. SAFEGUARDS AND FIDUCIARY SCREENING (SEE SAFEGUARD ANNEX)

3.1 **Environmental and Social Aspects.** This operation will likely cause environmental and associated social impacts that are mostly local and short-term, based on which the Project has been classified as category "B" according to the Environment and Safeguard Compliance Policy. Anticipated impacts are mostly related to potential temporary or permanent resettlement due to current invasion of the right of way under the existing transmission line as well as potential risks related to hazardous materials and hazardous work conditions, as detailed in the attached environmental and social strategy. An Environmental Impact Assessment (EIA) will be carried out during the preparation of the Project, in line with IDB's policies and procedures. Issues flagged during the environmental and social due diligence and their corresponding mitigants and recommendations will be included in the Environmental and Social Management Plan (ESMP) and summarized in the Environmental and Social Management Report that will be annexed to the Proposal for Operation Development (POD).

3.2 **Fiduciary Aspects.** Procurements for the Project will be carried out in accordance with the Policies for the Procurement of Work and Goods Financed by the Bank (GN-2349-9) of March 2011; and the Policies for the Selection and Contracting of Consultants (GN-2350-9) of March 2011. The Procurement Provisions for Haiti (GN-2654) of February 2012 will also apply for this operation, under the conditions foresees therein. Provisions established in the Grant Contract and the procurement plan that will be developed during the analysis stage and incorporated in the POD.

IV. OTHER ISSUES

4.1 With the demographic explosion of the *Port-au-Prince* Metropolitan area over the past 20 years, several sections of the TL line appear to have been invaded. In addition, the following preliminary flagged issues will be addressed during the preparation of the operation: (i) exploitation of construction material; (ii) problems of logistics; (iii) rehabilitation methodology (i.e. issue of transferring the load without interruption since there is a switch at the output of the Péligre sub-station that operates manually), and (iv) optimization of the *Tabarre* Substation.

V. RESOURCES AND TIMETABLE

5.1 Annex V details the timetable for the preparation of this operation and points out the milestones to be achieved in order to have the POD presented to the Operations Policy Committee (OPC) by October 2nd, 2013. Annex V also estimates the preparation cost of the Project at US$44,099; and an additional cost of US$300,000 to prepare the EIA and Cost Detailed Analysis which will be financed with the resources from HA-T1150.

ANNEX CONFIDENTIAL

SAFEGUARD POLICY FILTER REPORT

This Report provides guidance for project teams on safeguard policy triggers and should be attached as an annex to the PP (or equivalent) together with the Safeguard Screening Form, and sent to ESR.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

PROJECT DETAILS	**IDB Sector**	ENERGY-ENERGY SECTOR REHABILITATION AND EFFICIENCY
	Type of Operation	Other Lending or Financing Instrument
	Additional Operation Details	
	Investment Checklist	Infrastructure Power Transmission
	Team Leader	Thys, Pierre Kenol (PTHYS@iadb.org)
	Project Title	Rehabilitation of the Peligre Transmission Line
	Project Number	HA-G1030
	Safeguard Screening Assessor(s)	Sosa, Letizia (letizias@IADB.ORG)
	Assessment Date	2013-03-07
	Additional Comments	

SAFEGUARD POLICY FILTER RESULTS	**Type of Operation**	Investment Grants	
	Safeguard Policy Items Identified (Yes)	Potential disruption to people's livelihoods living in the project's area of influence (not limited to involuntary displacement, also see Resettlement Policy.)	(B.01) Resettlement Policy– OP-710
		Activities to be financed in the project area are located within a geographical area or sector exposed to natural hazards* (Type 1 Disaster Risk Scenario).	(B.01) Disaster Risk Management Policy– OP-704
		The operation itself has a potential to exacerbate hazard risk* to human life, property, the environment or the operation	(B.01) Disaster Risk Management Policy– OP-704

		itself (Type 2 Disaster Risk Scenario).	
		The Bank will make available to the public the relevant Project documents.	(B.01) Access to Information Policy– OP-102
		The operation is in compliance with environmental, specific women's rights, gender, and indigenous laws and regulations of the country where the operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	(B.02)
		The operation (including associated facilities) is screened and classified according to their potential environmental impacts.	(B.03)
		There are Associated Facilities (see Policy definition) relating to the investments being financed by the Bank.	(B.04)
		The Borrower/Executing Agency exhibits weak institutional capacity for managing environmental and social issues.	(B.04)
		An Environmental Assessment is required.	(B.05)
		Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation of women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.	(B.06)

		The Bank will monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.	(B.07)
		The operation has the potential to impact the environment and human health and safety from the production, procurement, use, and disposal of hazardous material, including organic and inorganic toxic substances, pesticides and Persistent Organic Pollutants (POPs).	(B.10)
		The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases...).	(B.11)
		Suitable safeguard provisions for procurement of goods and services in Bank financed projects may be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.	(B.17)
	Potential Safeguard Policy Items(?)	Environmental or culturally sensitive areas, defined in the Policy as critical natural habitats or critical cultural sites in project area of influence (please refer to the Integrated Biodiversity Assessment Tool for more information).	(B.09)
	Recommended Action:	Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR. The project triggered the Disaster Risk Management policy (OP-704). A Disaster Risk Assessment (DRA), is required, as established under Directive A-2 of the DRM Policy OP-704).	

		Please contact a Natural Disaster Specialist in VPS/ESG or INE/RND for guidance. Also: if the project needs to be modified to increase resilience to climate change, consider the (i) possibility of classification as adaptation project and (ii) additional financing options. Please contact a INE/CCS adaptation specialist for guidance.
	Additional Comments:	

ASSESSOR DETAILS	**Name of person who completed screening:**	Sosa, Letizia (letizias@IADB.ORG)
	Title:	
	Date:	2013-03-07

SAFEGUARD SCREENING FORM

This Report provides a summary of the project classification process and is consistent with Safeguard Screening Form requirements. The printed Report should be attached as an annex to the PP (or equivalent) and sent to ESR.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

PROJECT DETAILS	**IDB Sector**	ENERGY-ENERGY SECTOR REHABILITATION AND EFFICIENCY
	Type of Operation	Other Lending or Financing Instrument
	Additional Operation Details	
	Country	HAITI
	Project Status	
	Investment Checklist	Infrastructure Power Transmission
	Team Leader	Thys, Pierre Kenol (PTHYS@iadb.org)
	Project Title	Rehabilitation of the Peligre Transmission Line
	Project Number	HA-G1030
	Safeguard Screening Assessor(s)	Sosa, Letizia (letizias@IADB.ORG)
	Assessment Date	2013-03-07
	Additional Comments	

PROJECT CLASSIFICATION SUMMARY	**Project Category:** B	**Override Rating:**	**Override Justification:**
			Comments:
	Conditions/ Recommendations	• Category "B" operations require an environmental analysis (see Environment Policy Guideline: Directive B.5 for Environmental Analysis requirements). • The Project Team must send to ESR the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports.	

		• These operations will normally require an environmental and/or social impact analysis, according to, and focusing on, the specific issues identified in the screening process, and an environmental and social management plan (ESMP). However, these operations should also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.) where necessary.

	Identified Impacts/Risks	**Potential Solutions**
SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS	The project will or may require involuntary resettlement and/or economic displacement of a minor to moderate nature (as a result of Right of Way alignment) and does not affect indigenous peoples or other vulnerable land based groups.	**Develop Resettlement Plan (RP):**The borrower should be required to develop a simple RP that could be part of the ESMP and demonstrates the following attributes: (a) successful engagement with affected parties via a process of Community Participation; (b) mechanisms for delivery of compensation in a timely and efficient fashion; (c) budgeting and internal capacity (within borrower's organization) to monitor and manage resettlement activities as necessary over the course of the project; and (d) if needed, a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, project completion tests etc.), require regular (bi-annual or annual) reporting and independent review of implementation.
	Potential minor or moderate impacts on bird population due to proximity to wetlands	**Ensure Proper Management and Monitoring of the Impacts on bird population:** A Biodiversity Management Plan (BMP) should be prepared that defines how impacts, if any, will be mitigated (roles and responsibilities, monitoring, budget, etc.) and could be incorporated in the ESMP. Depending on the financial product, the BMP should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.).
	Borrower and/or third party has only a partial commitment/capacity to comply with applicable ILO requirements (including commitment to non-discrimination, equal opportunity, collective	**Ensure the Development of Adequate Labor Policy and Practices:** The borrower should be required to improve employment and employment rights including (as appropriate): (a) clarification of employment practices

	bargaining and rights of association) and national employment in relation to working conditions.	and terms; (b) support of collective bargaining; (c) approaches to workers' organizations (d) non-discrimination and equal opportunity; (e) fair and transparent retrenchment/redundancy amongst workers; and (f) development of appropriate grievance mechanisms. These issues should be defined in a human resources policy. Depending on the financial product, the policy should be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.) and require regular (bi-annual or annual) reporting and independent review of implementation.
	The project includes dangerous and hazardous working conditions where there could be significant negative impacts to workers or communities.	**Ensure that the borrower Addresses Occupational Health and Safety:** The borrower should provide details of how occupational health and safety issues will be addressed (including those found in the supply chain as appropriate) in a timely and efficient manner as a condition of disbursement and annual audits by third party experts should be considered. This should be addressed using an occupational health and safety management plan.
	The negative impacts from production, procurement and disposal of hazardous materials (such as oils, solvents and electrical equipment containing PCBs) are minor and will comply with relevant national legislation, IDB requirements on hazardous material and international standards and guidelines such as the IFC Power Distribution Guidelines (if applicable).	**Monitor hazardous materials use:** The borrower should document risks relating to use of hazardous materials and prepare a hazardous material management plan that indicates how hazardous materials will be managed (and community risks mitigated). This plan could be part of the ESMP.
	Generation of solid waste (such as construction waste) is moderate in volume, does not include hazardous materials and follows standards recognized by multilateral development banks.	**Solid Waste Management:** The borrower should monitor and report on waste reduction, management and disposal and may also need to develop a Waste Management Plan (which could be included in the ESMP). Effort should be placed on reducing and re-cycling solid wastes. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within

		the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.
	Likely to have minor to moderate emission or discharges that would negatively affect ambient environmental conditions (potentially from soil disturbance, noise impact and dust).	**Management of Ambient Environmental Conditions:** The borrower should be required to prepare an action plan (and include it in the ESMP) that indicates how risks and impacts to ambient environmental conditions can be managed and mitigated consistent with relevant national requirements and international standards and guidelines such as the IFC Power Distribution Guidelines (as appropriate). The borrower should (a) consider a number of factors, including the finite assimilative capacity of the environment, existing and future land use, existing ambient conditions, the project's proximity to ecologically sensitive or protected areas, and the potential for cumulative impacts with uncertain and irreversible consequences; and (b) promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.).
	Moderate Greenhouse Gas Emissions are predicted.	**Greenhouse Gas (GHG) Assessment:** GreenHouse gas emissions might occur if some of the rehabilitated equipment is not properly handled. The ESMP will have specific procedures included in order to avoid release of GHG during the rehabilitation of the transmission line.
	Safety issues associated with structural elements of the project (e.g. transmission towers, substations, transmission and distribution lines, etc), or road transport activities (e.g. increased heavy vehicle movements) exist which could result in moderate health and safety risks to local communities.	**Address Community Health Risks:** The borrower should be required to provide a plan for managing risks which could be part of the ESMP; (including details of grievances and any independent audits undertaken during the year). Compliance with the plan should be monitored and reported. Requirements for independent audits should be considered if there are questions over borrower commitment or

		potential outstanding community concerns.

DISASTER SUMMARY	**Details** The Project should include the necessary measures to reduce disaster risk to acceptable levels as determined by the Bank on the basis of generally accepted standards and practices. Alternative prevention and mitigation measures that decrease vulnerability must be analyzed and included in project design and implementation as applicable. These measures should include safety and contingency planning to protect human health and economic assets. Expert opinion and adherence to international standards should be sought, where reasonably necessary.	**Actions** A Disaster Risk Assessment (DRA), is required, as established under Directive A-2 of the DRM Policy OP-704). Please contact a Natural Disaster Specialist in VPS/ESG or INE/RND for guidance. Also: if the project needs to be modified to increase resilience to climate change, consider the (i) possibility of classification as adaptation project and (ii) additional financing options. Please contact a INE/CCS adaptation specialist for guidance.

ASSESSOR DETAILS	**Name of person who completed screening:**	Sosa, Letizia (letizias@IADB.ORG)
	Title:	
	Date:	2013-03-07

ENVIRONMENTAL AND SOCIAL STRATEGY[6]

A. PROJECT DESCRIPTION

1. The Project consists of an all-encompassing rehabilitation of a 55km, 115 kV transmission line from the Peligre hydro-electric power plant (currently incurring rehabilitation) to Port-of-Prince, including all related substations, mechanical and electric equipment. Partial re-routing of the line is likely given the dense urban growth around sections of the existing line.

2. The line is more than 40 years old, is comprised of 194 towers and runs from north-northeast to south-southwest roughly following national route #3, though not in the exact same alignment. The transmission line goes up and down the mountain range separating the *Centre* and *Ouest* regions, and notably traverses several populated areas and an open pit quarries area (see transmission lien in white on figure below).

6 This Environmental and Social Strategy (ESS) is being made available to the public in accordance with the Bank's Policy on Disclosure of Information. The ESS has been prepared based primarily upon information provided by the project sponsors and does not represent either the Bank's approval of the project or verification of the ESS's completeness or accuracy.

B. INSTITUTIONAL AND REGULATORY CONTEXT

3. The Haitian constitution has seven articles dedicated to the environment, the rational use of soils and land on slopes, natural sites, vegetation, toxic waste and clean energy. Article 253 of the constitution clarifies that practices that may endanger or tilt the ecological balance of the general environment where people live are formally prohibited. The Haitian government adopted in 2006 the decree on the management of the environment and the regulation of citizen's behavior for sustainable development. Article 56 of chapter IV on environmental assessment stipulates that institutions in charge of implementing policies, plans, programs, projects or activities susceptible to have an impact on the environment shall have an environmental impact assessment prepared. The same decree indicates that the declaration of environmental impact is subject to the non-objection of the ministry of the environment. The institution in charge of environmental protection in Haiti is the Ministry of Environment, created in 1994 through a legislative decree.
   In case the transmission line is re-routed, an environmental and social impact assessment will be prepared and submitted to the ministry of environment for non-objection.

4. Haitian constitution in its articles 36 and 36.1 recognizes the right to property and conditions for expropriation. The 09/18/1979 law was passed to further clarify when and how expropriations may occur, basically only in the case of a declaration of Public Utility through official decrees. In case expropriation is needed in practice, an expropriation commission, established in 1994 within the MTPTEC, is in charge of compensation for real estate and other properties when the project is declared of public utility. No official compensation mechanism is in place for collateral damage (e.g., lost crops while accessing a site) or for illegal occupants.
   It is unclear at this point what the requirements are in terms of right of way for transmission lines in Haiti. However, it appears that some of the existing towers are located within densely populated areas and even within houses, making it impossible to conduct any rehabilitation without temporary or permanent physical resettlement.

5. IDB safeguards policies and directives apply to this operations, including: (i) the environmental and safeguards compliance policy (OP-703) and its directives on environmental and social assessment (B5), on public consultation (B6), natural habitats (B9), hazardous materials (B10), and pollution prevention (B11) (ii) The disaster risk management policy (OP-704) and (iii) The involuntary resettlement policy (OP-710)
   An environmental and social assessment will be prepared as part of this operation taking into account the requirements of the policies and directives listed above.

C. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS

6. In the absence of an environmental and social assessment specific to the project, we are listing potential environmental and social impacts and risks that are generic and can generally be expected from these types of operations. The EIA must be completed

and disclosed before the ESMR can be completed, and before the POD distribution for QRR.

7. **Natural habitats (B9)**: the existing transmission line (or potential re-routing assuming it follows a similar alignment) passes within 2km of the key biodiversity area of ***Lac Azuei – Trou Caïman***, mainly comprised of wetlands (see annex A). This area harbors 4 vulnerable species of bird, though it is unclear at this point whether they are migratory species and whether the transmission line presents a risk to these species (or others) on their way from the ocean to the wetlands along the mountain range.

8. **Hazardous materials (B10)**: electric equipment may contain hazardous materials such as PCBs (a persistent organic pollutant regulated under the Stockholm Convention), with the associated soil contamination, or human exposure risk. If encountered, such materials will have to be collected and disposed of appropriately.

9. **Pollution Prevention and Abatement (B11)**: There are potential liabilities related to the use of hazardous materials and potential leaks or spills. Other potential issues are related to the use of SF6 (potent GHG) in breakers, which might require a mechanism to safely collect the gas if the equipment is to be discarded. Finally, it is expected that various waste materials will be generated as part of the rehabilitation works, solid or non-solid, hazardous or not. All these streams will have to be identified to manage and reduce potential risks and impacts.

10. **Other risks (B4):** Given that this transmission line is essential to the distribution of electricity to Port of Prince, it is envisaged at this point to conduct the rehabilitation mostly under livewire conditions, with the associated safety risks to workers.

11. **Disaster risk management (OP-704)**: Haiti is prone to various types of natural disasters that pose risk to the transmission line, and that exacerbate risks to local communities, should a disaster affect the transmission line.

12. **Involuntary resettlement (OP-710):** Given the urban growth around some of the towers of the existing line, it is expected that temporary or permanent resettlement will be required, though it is difficult to estimate the extent of this activity at this time. If some sections of the transmission line are re-routed, physical resettlement, expropriation or right of way limitations might be imposed on land owners, legal or non-legal occupants might be required as well. During the construction phase, potential impacts to property might occur due to the passing of heaving trucks and equipment.

13. All of the above will have to be carefully assessed in an environmental and social impact assessment to be conducted as soon as possible and revised as necessary depending on the final decisions on pure rehabilitation and/or partial re-routing. The EIA must be completed and disclosed before the ESMR can be prepared and included in the POD package for QRR.

D. ENVIRONMENTAL AND SOCIAL DUE DILIGENCE STRATEGY

14. Taking into account the aspects discussed in the previous sections and the requirements outlined in IDB's OP 703 Environment and Safeguards Compliance Policy, the Team proposes that the Project be classified as a Category B operation.

15. The Bank will perform an Environmental and Social Due Diligence ("ESDD") in order to confirm that all Project relevant impacts and risks have been, or will be properly and adequately evaluated and mitigated. In particular potential impacts of the Project's operation on migratory birds, including its cumulative impacts, will be fully evaluated during due diligence.

16. The environmental and social due diligence will specifically address the following aspects:

    (a) An assessment of project compliance status with the applicable national, state, and municipal environmental, social, health and safety and labor regulatory requirements (e.g., laws, regulations, standards, permits, authorizations, etc…) in particular the specific requirements of the Environmental License; and any applicable Bank environmental and social policy or guideline, in particular the OP-703 Environment and Safeguards Compliance Policy, OP-102 on Information Disclosure, and on OP-710 on Involuntary Resettlement;

    (b) An evaluation of the environmental impact assessment reports, once available, and additional environmental studies related to the Project to confirm that the Project's relevant direct, indirect, cumulative and regional environmental and social impacts and risks have been properly identified and evaluated; including in particular the risk of bird collision with the transmission line;

    (c) An assessment of the adequacy and sufficiency of all Project's existing environmental and social plans, programs and procedures developed; An evaluation of the adequacy of contingency plans (i.e. emergency and spill plans), including confirmation that all relevant project-related environmental risks have been identified, proper procedures have been developed, and sufficient resources will be made available to ensure adequate implementation;

    (d) Assessments of the line's intersection with local communities, criteria and procedures for the establishment and management of the right of way, including consultation and compensation. Assessment of the adequacy of the resettlement action plan, its compliance with OP-710 and its completeness with timelines, resources and responsible parties;

    (e) An evaluation of project-related information disclosure and public consultation activities that have been performed and the proposed future

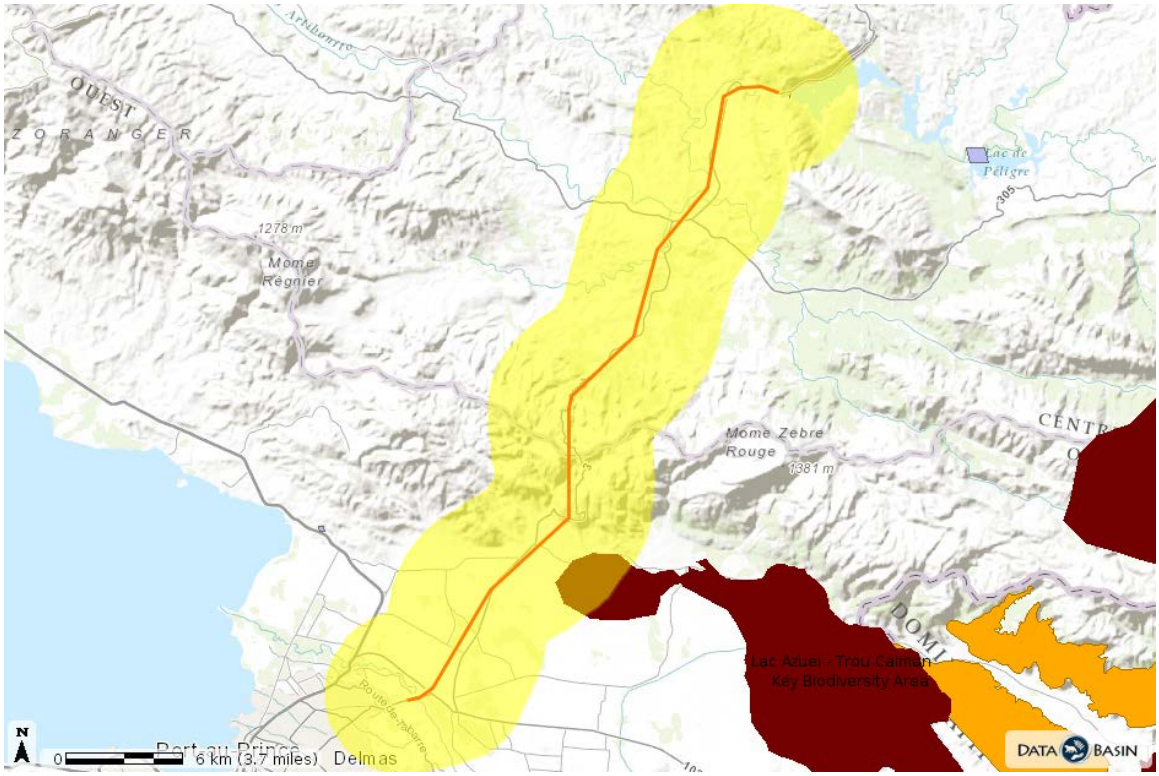
actions to provide adequate ongoing information disclosure and public consultation with the local population, as well as complaint mechanisms;

(f) If known, an assessment of the construction company's Environmental, Health and Safety Management System, including plans and procedures, to assess their adequacy in terms of responsibilities, training, auditing, reporting, and resources to be made available to ensure adequate implementation, and specifically all the system components necessary to ensure that Project's works that will be implemented will not generate significant negative impacts;

(g) An evaluation, and further development as necessary, of Project execution monitoring/supervision procedures to ensure proper implementation of environmental, social, health and safety and labor actions and requirements;

(h) As part of the ESDD process, the Project Team will analyze the environmental and social aspects of the Project and prepare an Environmental and Social Management Report ("ESMR").

Annex A: Map showing project area with a 5-km buffer zone and nearby protected areas, key biodiversity areas and Alliance or zero extinction sites



Legend

Polylines
Displaying: SymbolID
0

- Alliance for Zero Extinction Sites
- Key Biodiversity Areas, Areas (points: 0.5 km buffer)
- Protected Areas I-VI (fixed boundaries)
- Protected Areas I-VI (no fixed boundaries)
- Peligre Transmission Line
- Peligre Transmission Line (Including 5 km buffer)

REHABILITATION OF PELIGRE TRANSMISSION LINE

HA-G1030

INDEX FOR PROPOSED SECTOR WORK

Issues	Description of Works	Date (Expected)	Reference and links to Technical files
White Paper	Legal and regulatory assessment carried out by the IDB	Dec 2010	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35764165
Post Disaster Needs Assessment (PDNA)	Assessment of damage, losses, general and sectorial needs. Annex to the Action Plan for National recovery and Development of Haiti	Mar 2010	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35764178
Stability Study	Study of the electrical stability of the metropolitan grid	Nov 2009	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35794910
HA-L1032: Programa De Rehabilitación Electromecánica de la Central Hidroeléctrica Peligre (CHP)	Evaluación Ambiental y Social (EAS)1	Set 2008	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=1670162
PTL Estimated Financing Cost	Project concept note: Presentation New Project for funding through the reconstruction of Haiti; Government of Haiti. "Soumission de Nouveau Projet pour le Financement par le Fonds de Reconstruction d'Haïti ; Gouvernement d'Haïti"	May 2012	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37567782
Others Studies	Feasibility Study for Tabarre Substation	Jul 2011	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37553649
Other Publication	Le Moniteur_ Journal Officiel de la République d Haiti_Peligre	Feb 2013	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=37553893

ANNEX CONFIDENTIAL

ANNEX CONFIDENTIAL