

Environmental and Social Review Summary (ESRS) **Energía del Pacífico LNG Thermal Power Project – EL SALVADOR**

Original language of the document: English

Review cutoff date: July 2019

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

The Energía del Pacífico project (“the Project” or “EDP”) consists of the installation of i) a combined steam-cycle system thermal power plant (“the Power Plant”) with a net capacity of 378 MW using natural gas as fuel; ii) a marine terminal (“the Marine Terminal”), consisting of a dedicated Floating Storage and Regasification Unit (FSRU), a subsea gas pipeline and its pipeline end termination (PLET); iii) a new 44 km long 230 kV transmission line (“the ETL”); and iv) the installation of a new switchyard at the Power Plant and the expansion of two existing electric substations at Ahuachapán (230kV) and Acajutla (115kV).

The liquefied natural gas (LNG) will be shipped to a Marine Terminal using LNG carrier ships, which will moor directly next to the permanently moored FSRU by means of a Restricted Catenary Mooring (RCM) system. The LNG will be transferred to the FSRU using flexible hoses. The FSRU will re-gasify the LNG and supply such fuel to the onshore power plant.

The FSRU has a capacity of re-gasifying 93.3 million cubic feet per day, and it will receive approximately six LNG shipments per year. A combination of a flexible riser and an approximately 1.2 km long, 24” diameter subsea gas pipeline (installed with a micro-tunneling technique and partially buried in a dredged trench) will transfer the re-gasified natural gas from the FSRU to the onshore power plant. Electricity generated at the power plant will be connected to the national grid through the ETL.

Wärtsilä has been contracted to be the main EPC contractor in charge of building and equipping the Power Plant. Elecnor, a Spanish contractor specializing in low-impact transmission line installation, has been selected to provide and construct the 230kV ETL and the related substations. Boskalis was engaged to develop the EPC works for the subsea gas pipeline and the installation of the RCM system and the flexible riser, these two last components will be engineered and furnished by BW Offshore, while Shell International Trading Middle East Limited has been contracted to be the LNG supplier.

The Environmental and Social Due Diligence (ESDD), performed by IDB Invest from June 19 to 21, 2019 included a visit to the Power Plant site as well as meetings with representatives from the following entities and associations: EDP, Wärtsilä, Elecnor, the Municipality of Acajutla, the single family affected by the construction of the ETL, and three associations of artisanal fishermen of Acajutla. As part of the ESDD, IDB Invest has also reviewed EDP’s environmental and social impact assessments (ESIAs) for the Power Plant, the Marine Terminal and the ETL, including the amendment needed as a result of the modification of the Marine Terminal design and configuration, supplemental studies developed by EDP on biodiversity, cumulative impact assessment, occupational health and safety and E&S management plans, marine traffic safety, existing security management practices, and ongoing and planned stakeholder engagement activities.

2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category A operation according to IDB Invest's Environmental and Social Sustainability Policy because it will generate, among others, the following impacts: i) labor health and safety risks during construction and operation; ii) production of air emissions, noise, vibrations and dust from construction activities and operation of the Project; iii) temporary increase in sediment levels in the marine environment from sediment dredging and disposal; iv) effects on wildlife and marine species due to Project lighting and cold and warm water discharge; v) public safety risk due to vehicles on local roadways from general construction activities; vi) social stress due to the influx of workers; vii) fishermen access restriction around offshore project components; viii) security management; ix) land acquisition and x) removal of vegetation within the construction laydown area, pipeline corridor, power house site and ETL. All these impacts are deemed to be of medium to high magnitude and importance.

The Performance Standards (PS) triggered by the Project are: i) PS-1: Assessment and Management of Environmental and Social Risks and Impacts; ii) PS-2: Labor and Working Conditions; iii) PS-3: Resource Efficiency and Pollution Prevention; iv) PS-4: Community Health, Safety and Security; v) PS-5: Land Acquisition and Involuntary Resettlement; and vi) PS-6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

The Project does not trigger PS-7 Indigenous Peoples, as no indigenous community or indigenous land or resources are within the area of influence of the Project (including the ETL), nor PS-8 Cultural Heritage, given that no historical sites are expected to be affected.

3. Environmental and Social Context

The Power Plant will be located within an industrial brownfield area at the Port of Acajutla, in the Department of Sonsonate in El Salvador. The ETL's layout will intersect the communities of Sonsonate, Santo Domingo, San Pedro Puxtla, and Apaneca and will arrive at the Ahuachapán substation. Land use along the ETL is predominantly agricultural (smallholder coffee farms). However, sections are close to existing protected areas (see section 4.6, in this document).

At the municipal level, the most common economic activity is agricultural production, followed by retail trade. In the municipalities of Ahuachapán and Apaneca, hospitality, food and beverage services are also relatively significant, while in the departments of Acajutla, Sonsonate and Santo Domingo construction is the third most important economic activity.

The Marine Terminal and the ETL will be located within natural habitats per IFC's PS-6 definition, with high number of important biodiversity values (both species and habitats). However, none of the latter qualify as critical habitats.

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

4.1 Assessment and Management of Environmental and Social Risks

4.1.a E&S Assessment and Management System

EDP is in the process of developing and implementing a comprehensive Environmental and Social Management System (ESMS) with the aim of integrating environmental and social (E&S) management and responsibilities in all its activities. The ESMS will adhere to the IFC Performance Standards, relevant World Bank Group (WBG) environmental health and safety (EHS) guidelines, Salvadoran regulations, as well as ISO 14001:2015, OHSAS 18001:2007, SA 8000:2014, and ISO 26000:2010 management system principles. The ESMS will set the framework, policies, directives, programs and plans, and operating procedures that support a continuous improvement of the company. The ESMS is being developed with the support of an international consultant firm (ERM).

EDP's draft ESMS manual indicates that the management system will be composed of 16 directives (covering PS1 requirements) and that its elements will be reviewed every three years or when significant changes occur to its organizational structure, activities, operations or processes

4.1.b Policy

EDP has adopted an Environmental, Social, and Occupational Health and Safety Policy (ESHS) policy, a human resources policy and a security policy consistent with PS1 requirements.

Policies are communicated to all staff at all levels, including subcontracted employees. The ESHS Policy is also visible to other stakeholders at EDP's community office in Acajutla.

4.1.c Identification of Risks and Impacts

4.1.c.i Direct and indirect impacts and risks

The assessment of potential environmental and social risks and impacts for the power plant and ETL is presented in two Environmental Impact Studies (ESIAs): LNG to Power (prepared by Eco Ingenieros and Dillon Consulting in 2014, and amended in 2016 and 2018); and Transmission Line Project Ahuachapán to Acajutla (prepared by ERM in 2016). These two studies were prepared as part of permit applications with the Ministry of Environment (MARN).

Main risks identified in the documents include impacts to native vegetation, terrestrial and marine fauna, atmospheric emissions, surface water, groundwater and seawater quality, noise and vibrations, for both the construction and the operation phases. The studies further identified social related impacts with regards to influx, community health, safety and security and economic activities such as fishing.

With regards to occupational health and safety, EDP has carried out the following risk assessment studies as part of the front-end engineering design: i) Hazards identification study (HAZID), which identified 18 major and worst-case, credible scenarios for the Project; ii) Identification of risks

associated with simultaneous operations (SIMOPS) for the Marine Terminal; and iii) Quantitative risk analysis study (QRA) to examine potential risks to the environment and the public as a result of 18 scenarios identified in the HAZID. EDP will incorporate the recommendations of these risk assessment studies (HAZID, HAZOP, updated QRA, and others) for the FSRU and for the subsea natural gas pipeline into the final design package of the Project and into the Project's ESMS and Environmental & Social Management Plans (ESMPs).

4.1.c.ii Cumulative impact analysis

The ESIA for the LNG to Power Project reviews potential cumulative impacts but only with regards to the following Valued Environmental Components (VECs): air quality, noise and vibration. According to this study, none of the VEC's would have an adverse cumulative impact.

Thus, a complementary Cumulative Impact Assessment (CIA) was prepared by ERM in December 2018 for the two components of the Project (LNG to Power and ETL), following IFC's guidelines¹. The CIA study identified no high priority cumulative impacts, while medium priority cumulative impacts were identified on the following VECs: Coastal-Marine Biota; Livelihood from Artisanal Fisheries; Noise and Vibration (from low frequency noise). The CIA recommends some initiatives that EDP could take to strengthen the collaborative management framework for the VECs, such as conducting fish biomass studies periodically to monitor any effects of the Project on fish populations, engaging local authorities and community leaders to organize beach cleaning efforts, promoting the creation of a Marine Traffic Safety Committee, and others related to noise and vibration control. EDP will incorporate such recommendations from the CIA in the corresponding ESMS plans and procedures.

4.1.c.iii Analysis of alternatives

According to the ESIA documentation, the following alternatives for the development of the Project were analyzed, and studies were carried out to optimize the Project: i) site selection for the thermal power plant; ii) LNG storage system; iii) cooling system of the thermal Power Plant; iv) water supply system for the thermal power plant; v) layout of the Power Plant; vi) design of the Marine Terminal; and v) alignment of the ETL route.

The design and routing of the ETL considered various alternatives including the evaluation of multiple possible routes such as an alternative of a 100km ETL from Acajutla to El Pedregal. The final route selection avoids towns, communities and small populations, as well as protected areas and natural reserves. Design and construction procedures have been also undertaken to minimize impacts to coffee plantations such as raising the elevation of the ETL in these areas and by building underground in the Ruta de Flores (a tourist area), where adverse visual impact was considered excessive.

Other design options were also considered in order to minimize environmental impacts. In particular, the design of the cooling system based on radiators rather than the use of sea water in order to avoid potential adverse impacts to marine life. The final design of the FSRU also minimizes

¹ Good Practice Handbook—Cumulative Impact Assessment and Management: Guidance for Private Sector in Emerging Markets (IFC, 2013).

impacts to marine life given that most of the pipeline route will be constructed with a micro tunneling technique.

4.1.d Management Programs

As part of the development of the ESMS, EDP has developed draft E&S management plans (ESMPs) to manage the risks identified in the ESIA, other studies and the ESDD process. These include the following plans: i) noise vibration and air quality; ii) waste management; iii) water use; iv) terrestrial fauna rescue and relocation; v) erosion control; vi) stakeholder engagement; vii) local procurement and workforce recruitment; viii) influx management; ix) community grievance; x) security management; xi) labor grievance; xii) fishers' management and livelihood restoration; xiii) transportation management; xiv) occupational health and safety; xv) biodiversity management; and xvi) cultural heritage chance find. EDP will develop final versions of these ESMPs which shall be aligned with Salvadoran requirements, IFC standards and WBG EHS guidelines for both the construction and the operation phases.

In addition to the ESMPs listed above, EDP will develop and integrate into the ESMS the following management programs: i) marine sediments management; ii) marine fauna rescue; iii) illumination management plan for marine and nearshore environments during construction and operation; iv) worker's transportation management; and v) hazardous materials management plan.

All contractors working on the Project will follow EDP's ESMS. However, given that some contractors are expected to bring their own E&S management systems, EDP will conduct a gap analysis between these and EDP's ESMS and develop an ESHS bridging document. The ESHS bridging document will clarify which ESHS rules and procedures are enforced to bridge the identified gaps using the highest set of standards available to meet local legislation, IFC standards and WBG EHS guidelines.

EDP has developed a draft Contractor Management and Assurance Plan (CMAP) describing certain controls to be implemented to ensure that all ESHS risks and impacts are being properly managed from mobilization and early works, through the main construction and overall project demobilization phases. The final version of the CMAP will be updated to ensure that all contractor's workers are provided with contracts and adequate labor and working conditions.

4.1.e Organizational Capacity and Competency

EDP has established a core organizational structure with roles definition, responsibilities, and authority to implement the ESMS, as per PS-1. EDP has appointed the following staff: i) an ESHS Manager with managerial responsibilities reporting to the Project Director; ii) a Community Relations Coordinator, who is responsible for stakeholder engagement and public consultation; iii) an Environmental Coordinator; iv) a Health & Safety Coordinator; and v) a Security Coordinator.

This core ESHS team has so far been able to undertake and manage all the necessary actions and issues prior to construction starts. Moving forward, EDP will revise the adequacy of its ESHS Staffing Plan for the construction phase, and likewise for the operations phase, in order to ensure allocation of sufficient and well-trained resources to manage all ESHS aspects throughout the Project life cycle.

4.1.f Emergency Preparedness and Response

Wärtsilä, Elecnor and Boskalis have prepared individual Emergency Preparedness and Response Plans (EPRP) that contemplate all possible adverse events during the construction activities. EDP, in turn, has yet to prepare and adopt an EPRP consolidating the most likely adverse events and a flowchart of communication and response between its contractors and interested parties.

Therefore, EDP will prepare and implement an overall EPRP incorporating EPC contractors' plans for construction, in accordance with Salvadoran regulations and IFC PS requirements. The EPRP will be updated for the operations phase, focusing on the highest risks of the Marine Terminal, Power Plant and ETL, and including necessary provisions from process safety and industry best practice.

4.1.g Monitoring and Review

EDP's ESMS will include management plans and procedures that define the operating criteria and the mitigating measures and controls to manage the ESHS risks identified in the ESIA and the ESDD process. The Project will track its E&S performance through several mechanisms, including internal inspections and audits in comparison to a set of key performance indicators (KPIs). The ESHS Manager will review the monitoring and measurement results at least once per month to evaluate the efficiency of the proposed mitigation measures, assess compliance with ESHS legal requirements, and verify the effectiveness of the ESMS processes allowing the identification of potential deviations.

EDP has developed a draft E&S Assurance Plan to track improvement areas and deviations, monitor the implementation of the corresponding corrective actions, and prevent the recurrence of deviations. A final version of the E&S Assurance Plan will be submitted and implemented as part of the investment.

EDP will receive monthly reports from its contractor covering environmental actions taken and monitoring results and will then consolidate them in annual reports that will be submitted to MARN. EDP will also submit quarterly reports to Lenders.

4.1.h Stakeholder Engagement

Stakeholder identification and mapping in the Project's area of influence was done as part of the ESIA approval process and was last updated in August 2018. The categories of stakeholders were assigned according to their importance and their potential influence with respect to the Project through a qualitative mapping criteria scale. As a result of the stakeholder mapping process, EDP has prepared a draft Stakeholder Engagement Plan (SEP) outlining the Project's engagement with communities in the Project's Area of Influence, including the following elements: i) objectives for stakeholder engagement; ii) local regulations and lender requirements; iii) summary of EDP's precedent stakeholder engagement activities; iv) stakeholder engagement mapping; v) action plans for future stakeholder engagement activities; vi) description of EDP's external Grievance Mechanism; vii) monitoring activities plan to evaluate compliance with predefined stakeholder engagement KPIs.

The final version of the SEP will comply with national legal requirements and ESIA commitments and corporate policies and directives, and it will be aligned with PS-1. It will also include a description of the Project as well as for key social and environmental risks and impacts.

4.1.h.i Disclosure of Information and informed consultation

EDP has conducted inclusive project disclosure and public consultation activities as part of requirements of the environmental licensing process in El Salvador, and has an external communications protocol in place as part of the SEP. Key stakeholders engaged have included local communities, fishers and fisher's organizations, and representatives of the Autonomous Port Executive Commission of the port of Acajutla (CEPA), of Municipality of Acajutla, and of local institutions such as schools and health centers. Engagement with stakeholders is documented in the ESIA's and the draft SEP. Beyond the minimum national requirement, EDP has also carried out additional informational meetings with stakeholders in October 2018. These meetings aimed at providing information to the communities and at formally introducing EDP's External Grievance Mechanism (see below).

In addition, EDP maintains permanent a community liaison office in the town of Acajutla, where its staff provide information and addresses concerns to the public.

4.1.i External Communication and Grievance Mechanisms

EDP has developed and implemented a Community Grievance Mechanism to ensure that consultation, outreach, and community participation continues throughout the different stages of the Project. In order to fully comply with PS-1, EDP will update its directives and procedures to ensure that the Grievance Procedure will not hinder access to judicial or administrative remedies.

EDP's Grievance Mechanism can be accessed via telephone at (503) 2452-6313 and through its website: . EDP has also set up a box in its Acajutla office to receive grievances. Anonymous claims are contemplated under the Grievance Mechanism and responded to via an announcement on the Project website, indicating the solution or the updated state of the claim.

The SEP defines KPIs to be monitored, such as the method of grievance reporting, the number of grievances received and the breakdown of grievance topics (e.g. health, safety, etc.).

4.1.j Ongoing Reporting to Affected Communities

The SEP presents the framework for stakeholders' participation, including the methods of participation, the information to be shared and the periodicity of the meetings. It also contemplates reporting back to the affected communities regarding the implementation of the Grievance Mechanism. However, at the time of the ESDD there was little information disclosure related to project development, E&S performance, employment opportunities or other periodic reporting to the communities impacted by the Project.

4.2 Labor and Working Conditions

4.2.a Working Conditions and Management of Worker Relationships

4.2.a.i Human Resources Policies and Procedures

EDP has developed and implemented a Human Resources Policy that is aligned with PS-2. EDP's draft Human Resources Manual sets out workers' rights under national labor law and other employee's benefits such as medical insurance and academic scholarships. The HR Manual is aligned with PS-2 regarding non-discrimination, equal opportunity, collective labor agreements and prohibition of child labor. However, in order to be fully compliant, the Manual needs to include provisions to ensure freedom of association and inclusive collective bargaining, as well as to detail the enforcement against forced and child labor.

EDP has also developed and implemented a Code of Conduct that references its anti-discrimination policy, avoidance of child and forced labor, including policy statements against sexual and workplace harassment and provisions to manage behavior of workers within local communities. Additionally, EDP has developed a draft Gender-Based Violence Risk Management Program to address gender equality and gender-based violence by setting forth a training program to raise awareness about these issues and to establish procedures to respond to gender-based violence-related grievances.

4.2.a.ii Working Conditions and Terms of Employment

EDP currently has 183 employees of which 22 are women. The workforce required during Project implementation is anticipated to reach approximately 1,540 workers at peak construction. About 90 permanent employees in multiple shifts will be kept for the operation phase. Most of the unskilled labor, both for direct employment and any indirect or temporary hires, is expected to be sourced from the local communities, whereas the rest of the workforce, including skilled workers, will be sourced from the broader local region. EDP will provide contracts to all its employees on permanent for temporary basis and, through the CMAP, will ensure that all contractor's workers are provided with contracts and adequate labor and working conditions.

Given that most of the unskilled workers will commute daily from their nearby communities of origin, it will not be necessary to build dormitories or worker camps. However, EDP will develop a workers' transportation plan to ensure that EPC Contractors provide adequate and safe transportation from the main supply centers for the semiskilled and skilled workers that are recruited outside Acajutla.

The EDP workday consists of 44 hours per week for daytime work with Saturdays and Sundays being considered rest days. Overtime is paid according to the local Labor Law for work performed outside the working hours.

4.2.a.iii Workers' Organizations

Currently there are no workers unions nor any association to reach collective agreements within EPD nor with its contractors. Salvadorian labor laws protect workers' right to form and join a trade union of their choice, participate in collective bargaining agreements, and go on strike. Though EDP's HR Policy acknowledges the right of employees to form a union and to join or not a union, the current HR Manual does not include references on how this right will be ensured.

4.2.a.iv Non-discrimination and Equal Opportunity

EDP's HR Policy, Manual and Code of Conduct explicitly refer to equality of opportunities and no discrimination. EDP will update its draft Local Hiring Plan so that it defines and implement strategies to increase hiring from residents of Acajutla, local fishers and from directly affected communities along the ETL. The strategies will include: i) communicating job opportunities to different sectors of the local population; ii) indicating EDP staff member(s) assigned to enhance local recruitment; iii) assisting local residents with the application process including facilitating access to computers and internet; iv) defining policies prioritizing workers in the directly affected area (fishers, local residents, displaced people); v) broadly communicating EDP's local hiring policies; vi) implementing a training program to provide basic skills and to enhance the suitability of local population to access Project and other industry jobs; and vii) defining measures for monitoring and evaluation of the implementation of the strategies, including assessing workers diversity. In the final version of the Local Hiring Plan, EDP's stakeholder engagement and communication teams will be required to disseminate information about job openings to the local community.

4.2.a.v Retrenchment

The draft CMAP provides for contractors to develop a demobilization plan for the completion of its contracts, which shall include provisions for collective dismissals or retrenchment planning in order to reduce adverse impacts on workers. Demobilization plans are set to be compliant with the Performance Standards, collective agreements (should they be reached), and applicable legal requirements and contractual agreements.

4.2.a.vi Grievance Mechanism

EDP has developed and implemented a Labor Grievance Mechanism that captures claims, suggestions and grievances by means of suggestion boxes located at work sites and EDP's offices, face to face, by telephone and by email. Claims submitted are documented by EDP's or the Contractors' human resource team and addressed within 30 days from the receipt of the claim. The mechanism has been socialized among EDP's and Contractor's employees during induction training.

EDP's Labor Grievance Mechanism procedures define the mechanism, the process for receiving grievances, and the process and timeline for evaluating and managing grievance and allows employees and contractors to raise their concerns and grievance anonymously while protecting employees from retaliation. It also contemplates the monitoring of the mechanism on a quarterly

basis during construction, and annual during operations. EDP's labor grievance mechanism procedures will be updated to include a gender-sensitive channel for access.

4.2.b Protecting the Workforce

4.2.b.i Child Labor

The ESDD process did not detect any child labor.

4.2.b.ii Forced Labor

The ESDD process did not detect any forced labor.

4.2.c Occupational Health and Safety

EDP is in the process of developing its Occupational Health and Safety (OHS) plans which will include the creation of a Health and Safety Committee, monitoring provisions for recordkeeping of all incidents, near misses, and follow-up to prevent reoccurrences. The OHS management programs will include inductions and trainings for all site personal, thus ensuring that staff and contractors have the necessary skills to identify hazards and carry out their work safely.

As mentioned in Section 4.1.d, EDP will develop an ESHS bridging document to ensure that EPC Contractors apply the most stringent OHS management plans, while through the CMAP, EDP will ensure that OHS risks are adequately identified and managed, from mobilization and early works, through the main construction phase and demobilization.

OHS plans and procedures for the operation phase will be developed prior to commissioning of the plant, marine and ETL as part of the ESMS for operations.

4.2.d Workers Engaged by Third Parties

EDP will ensure that relevant parts of their human resources policies and procedures are extended to cover the labor practices of contractors and sub-contractors (e.g compliance with local laws, non-discrimination, provisions to ensure timely payment of salaries, no child and forced labor, occupational health and safety plans and procedures, etc). EDP will monitor the performance of the EPC Contractors through the CMAP and will ensure that labor conditions follow Salvadoran regulations, contractual requirements and are aligned with PS-2. Monitoring will include regularly scheduled and un-scheduled audits, review of the EPC contractor internal monitoring reports and documentation, as well as review of grievance logged by contractors and subcontractor's employees.

4.3 Resource Efficiency and Pollution Prevention

4.3.a Resource Efficiency

EDP will use 19 Wärtsilä 18V50SG Engine-Generator units. Each generator, with a net power of 18.9 MW, will have a heat recovery steam generator that will supply steam to a 30 MW turbine, reaching a maximum capacity of 378 MW of the plant when executed in combined cycle. The configuration of the Power Plant will allow the Project to have a net efficiency of 49.4%. This combustion engine solution was selected in order to enhance flexibility and reliability, complementing renewable energy (whose energy outcome is unsteady) by being able to rapidly start and shutdown following the needs of the electricity grid.

4.3.a.i Greenhouse Gases

The Project will generate greenhouse effect gases (GHG) from the following sources: i) natural gas combustion in the Power Plant; ii) Sulfur Hexafluoride (SF₆) gas used in high voltage switches; iii) the operation of the FSRU; and iv) LNG and natural gas leaks from the maintenance and storage systems.

The GHG generation during the construction period is considered short term and negligible. With a planned 69% plant utilization per year, total annual GHG emissions during operation is estimated on 1.571 million CO₂e kt/year. However, the Project is expected to represent a significant reduction in GHG emissions compared to the thermal sources currently used in El Salvador, which utilize more polluting forms of fossil fuels such as heavy fuel oil (HFO).

As part of the investment, EDP will provide a detailed Scope 1 & 2 GHG inventory as prescribed in the GHG protocol from World Resources Institute and the World Business Council for Sustainable Development. Also, it will keep track of the GHG and report their emissions on an annual basis. In addition, EDP will also develop a boil-off gas management plan following industry best practice to adequately manage and minimize any potential release of methane to the atmosphere from the FSRU, the LNG vessel and any other Project component; and a SF₆ management plan, to manage and minimize the use and leaks of this greenhouse gas.

4.3.a.ii Water Consumption

Water use for the construction of the Project is considered negligible and will be required for dust control during dry season, cleaning of work areas, preparation of concrete and cement mixtures, and other temporary uses. Bottled water will be supplied for human consumption. Portable toilets to be used will require no water.

The engine cooling systems have been designed to use a close water circuit with fin radiators and fans which, although resulting in a lower efficiency compared to cooling systems with water, ensure a minimum consumption of water given that air is used as cooling media instead of water. Hence, during plant operation, the Project water demand is estimated at 324 m³/day, which will be supplied from two groundwater wells that have been duly permitted by the National Administration of

Aqueducts and Sewers (ANDA for its Spanish acronym) and MARN². EDP will install two check wells to continuously monitor any saline intrusion into the aquifer. It will also build 15 m in diameter and a 1,500 m³ capacity storage tank that will provide water for common use and the fire system.

FSRU freshwater needs will be approximately 6m³/day and will be supplied on site via a freshwater generator. Seawater usage during the operation of the FSRU will require a flow of 10,000 m³/h and will be returned 5°C colder to the surrounding waters. The cooling of the engines will require approximately 1,200 m³/h and will be returned to the sea 5°C warmer. Dispersion analysis prepared for EDP confirmed that the warm and cold discharges from the FSRU will allow maximum mixing of the thermal plume to ensure that the temperature is within 3°C of ambient temperature at the edge of the mixing zone, as indicated in WBG LNG EHS guidelines.

4.3.b Pollution Prevention

The Project has been designed to minimize footprint. Therefore, it includes pollution prevention and abatement strategies in order to avoid significant impacts to the environment and communities.

As part of construction activities, EDP will periodically monitor and report to IDB Invest the levels of noise, particulate matter (PM₁₀ and PM_{2.5}), vibration, sediments produced to ensure that their concentrations are within the maximum limits set forth by Salvadorian legislation and the WBG EHS Guidelines.

4.3.b.i Air Emissions & Air Quality

In 2016, as part of the ESIA, a baseline ambient air quality monitoring was performed continuously for 101 days. Data was collected in the Town of Acajutla (sensitive receptor location expected to have be impacted the most by air emissions from the Power Plant), for the following parameters: nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), total suspended particles (TSP), PM₁₀ and PM_{2.5}. Results showed that the 24-hour levels for PM₁₀ (196.2 µg/m³) are above both Salvadorian regulatory limits (150 µg/m³) and WBG ESH Guidelines, while 24-hour SO₂ baseline levels (178.2 µg/m³) are within the local limits but surpass WBG ESH Guidelines.

Expected air emissions from construction activities include combustion gases from energy generation and construction related vehicles, machinery and particulate matter. During the operational phase, Nitrogen Oxides (NO_x) and CO would be emitted from stack bundles associated with the LNG powered engines, from the FSRU and from the LNG carrier while moored and unloading. The maximum predicted in-stack concentration of NO_x will be 185 mg/Nm³ which is below the reference value of 200 mg/Nm³ for reciprocating engines of the WBG EHS Guidelines for Thermal Power Plants.

As part of the ESIA process, EDP assessed impacts on air quality using the US EPA AERMOD dispersion modelling system to predict the maximum concentrations at ground-level receptors

² The ESIA contains a hydrogeological study that assessed the feasibility of groundwater supply. The study concluded that the proposed 4.5 l/s extraction rate is acceptable and not will not impact other the ANDA wells in the area that are currently used for drinking water supply for the nearby communities.

extending from the power plant boundary to 30 km in all directions. The predicted maximum concentrations at receptors were compared with local ambient air quality criteria / standards.

WBG ESH Guidelines suggest that facility's impact on an airshed be less than 25% of the applicable local criteria, to allow for other development within the airshed. EDP's dispersion modeling for NO_x emissions showed some exceedances of the 24-hour averaging period, with a very low frequency of exceedances at sensitive receptors. Considering a planned 69% plant utilization per year, the maximum 24-hour NO_x concentration would be 100.66 µg/m³ which represents 67% of the national Maximum Permitted Limit (MPL). Modeling results show the Project would exceed the 25% guideline with a frequency of 1.5% at Sensitive Receptors (on average 6 days per year). In the worst-case scenario (100% capacity factor), the maximum 24-hour NO_x concentration would be 134.06 µg/m³ or 89% of the national Maximum Permitted Limited (MPL). Under this scenario the Project would exceed the 25% guideline with a frequency of 5.7% at Sensitive Receptors (on average 20 days per year).

Cumulative airshed analysis show that the predicted Maximum Cumulative Concentration (EDP Maximum Concentration + 90th Percentile of monitored data) for both the 24-hour and annual average NO_x concentrations, would be well below their respective ambient air quality standards. Furthermore, considering a plant dispatch model developed by EDP, it is expected that once the Project is running there will be a corresponding significant drop in the operation of existing HFO fired plants, which should significantly lower emissions of both NO_x and SO₂.

EDP's draft Air Quality Management Plan sets out a series of actions in order to adequately manage, mitigate or prevent the negative impacts produced by combustion engine emissions and dust during the construction of the Project. EDP will operate and maintain two continuous ambient air quality monitoring stations for NO_x and other required ambient air quality parameters. One will be located in the same place described in the ESIA and the other in the area of the highest predicted NO_x impacts. Monitoring will be conducted at least six months prior to Project Physical Completion Date. The Air Quality Management Plan also includes a stack emissions monitoring program fully integrated within the ESMS to ensure that monitoring results are constantly assessed, and trends and KPIs are analyzed and timey reported to plant operations and senior management. This will allow to proactively assess the effectiveness of the monitoring program.

4.3.b.ii Environmental Noise

EDP's power plant will be located west of an existing power plant which is the dominant source of noise in the area.

Like air quality, the Power Plant baseline study found high levels of ambient noise when compared with the WBG EHS Guidelines limits. The maximum noise levels (62.6 – 67.3 dBA) measured during the day (0700 hrs to 2200 hrs) at all monitoring locations were above the IFC guideline of 55 dBA (daytime). During night measurements (2200 hrs at 0700 hrs), both the maximum (58.9 – 63.9 dBA) and minimum (43.9 – 55.5 dBA) noise levels registered values above the Guideline of 45 dBA (night) for most of the monitoring stations. The Project will ensure that environmental noise during operations is within the recommended standard for residential receptors, and in any case, will not result in a maximum increase in background levels of 3dBA in line with WBG EHS Guidelines limits.

Low frequency noise (in the range between 10Hz a 200Hz), has been identified as a nuisance with potential health effects for the residents living near the Project. Models ran by Wartsila show that, with the embedded controls to be implemented (e.g. exhaust silencer), the Power Plant would generate a low frequency noise significantly lower than the existing thermal power plant. As part of the investment, EDP will incorporate in its Noise & Vibration Management Plan, the recommendations outlined in the CIA prepared by ERM in order to manage low frequency noise.

As per EDP's draft Noise & Vibration Management Plan, EPC Contractors will establish a monitoring program for noise level monitoring to be performed on a monthly basis with a 24-hour duration. Should the environmental noise monitoring results detect non-conformities with the standards and guidelines of the Project, corrective actions such as using sound absorptive materials in walls and ceilings, will be developed and implemented.

Environmental noise monitoring will be performed annually for the operating phase and the results will be compared with the WBG EHS Guidelines limits. Any noise related complains will be managed through the EDP's Community Grievance Mechanism.

4.3.b.iii Effluents

During construction the main effluent will be domestic wastewater, which will be managed via an external contractor. During operation, liquid waste streams will include: i) effluents from the power plant wastewater treatment plant; ii) runoff from the power plant storm water management system; iii) discharges from the oil and water separator; iv) treated effluents from the FSRU wastewater treatment plant ; v) boiler blowdown; vi) reject water from the drinking water treatment plant; and vii) bilge from the FSRU.

EDP is developing a Liquid Effluent Management and Monitoring Plan³ to systematically manage all liquid and semi-liquid effluents generated by the Project during its construction and operation phases. The Project will adopt the most stringent between local regulations and WBG ESH Guidelines.

4.3.b.iv Solid Waste & Hazardous Materials Management

As stated in EDP's draft version of its Waste Management Plan, all solid wastes generated during the construction and operation phase will be managed in the waste storage areas at the power plant, segregated at the source and transported by licensed contractors to government approved disposal facilities. Hazardous wastes (including lubricant oil empty/full drums, spent oils, oil contaminated materials and containers), will be transported off site and contained/treated in licensed storage facilities.

EDP will update its Waste Management Plan in order to be in line with IFC Performance Standards and the WBG EHS general guidelines.

³ This plan includes definition of objectives, targets, responsibilities, planned management and monitoring activities, project environmental standards for each discharge, and key performance indicators and reporting requirements.

4.4 Community Health, Safety and Security

4.4.a Community Health and Safety

The ESIA considered the potential effects of the Project on the community's health during its construction and operation phases which are being addressed in the management programs that EDP is developing within its ESMS.

The potential for impacts regarding people influx to the Project's area is considered low, as most of the workers will be hired locally and non-local hires are expected to commute to the Project site on a daily basis. However, these potential impacts are being captured and dealt with in the Influx of Workers Management Plan that EDP is finalizing. This plan will cross-reference other relevant plans of the ESMS, such as local hiring, worker's transportation and stakeholder engagement, and seeks the coordination of efforts with the municipality of Acajutla to avoid overloading social services in the area.

One of the potential effects identified in the ESIA is a safety risk for seafarers and fishermen that perform their activities in the vicinity of the temporary trestle, pipeline, and maneuvering areas of vessels that will be operating during the construction of the pipeline. Therefore, during operation, the FSRU will have an exclusion zone with a radius of 300m within a shared zone of 500m radius. EDP is developing a Marine Safety Traffic Plan to describe the actions to be taken in order to mitigate safety risk, including coordinating with CEPA for the monitoring and prevention of trespassing the exclusion zone by fishers and other vessels.

4.4.a.i Infrastructure and Equipment Design and Safety

The Power Plant will be located in a brownfield port and industrial complex, which reduces some potential E&S impacts to surrounding communities. Inside the port, access roads to the Project area are already available and in use for all road traffic derived from the port's activities. Most materials and equipment for the Project will be delivered by sea directly to the port of Acajutla, limiting the use of external access route. A temporary laydown area for construction of the Power Plant will be habilitated within the port's free area.

4.4.a.ii Hazardous Materials Management and Safety

Pursuant to the LNG to Power ESIA, EDP will develop operating procedures to regulate how to handle LNG as well as to other hazardous materials. EDP is yet to develop a Hazardous Materials Management Plan.

4.4.a.iii Ecosystem Services

The main ecosystem service identified within the Project area is fishing and oyster and lobster collection. This ecosystem service will be managed through compensation to the fishermen for the effects on the reduction of fishing zones and distance traveled by fishermen.

4.4.a.iv Community Exposure to Disease

As part of the ESIA process, EDP analyzed the potential effects that the construction and operation activities could generate on transmitting vector borne diseases, specifically those that could create breeding habitat for the mosquitos. Thereafter, EDP will adopt breeding control measures (such as reducing potential mosquito breeding habitats such as containers and buckets), together with monitoring and larvicide treatments.

4.4.a.v Emergency Preparedness and Response

EDP is in the process of finalizing its EPRPs. These plans involve, through the SEP, communities and provide detail regarding the way through which the population is to be informed and, if necessary, organized for emergency situations, including possible evacuation. EDP's EPRPs describe prevention and general awareness information for communities, such as how to determine the difference between a drill or a simulation and an actual accident or emergency. Once the EPRPs are finalized, EDP will disseminate and share it with nearby communities.

4.4.b Security Personnel

EDP has engaged Lamb's Security Solutions to develop a security risk assessment that will feed into the Project's security management plans in the port area and along the transmission line. As part of the investment, EDP is in the process of developing a security management plan in line with IFC Performance Standards for all its activities. The plan includes: i) definition of security management objectives; ii) discussion of internal and external risks identified in the security risk assessment; iii) definition of how EDP will screen private security firms and guards and provide adequate training; iv) definition of conditions for use of force; v) definition of how coordination between private and public security forces will occur; vi) definition of incident reporting; vii) description of how the company will engage with individuals, communities and fishers and report on security matters; and viii) establishment KPIs for security performance assessment.

EDP is also developing memorandums of understanding with local police departments, the navy, and CEPA port security authority in order to coordinate security efforts.

4.5 Land Acquisition and Involuntary Resettlement

4.5.a General

The land where the Project's port component will be located has been part of the port of Acajutla since the early 1900s and has been under the administration of CEPA since 1952. EDP secured the land through a 24-year lease agreement with CEPA. The Project will locate the substations within the existing ETESAL⁴ facilities east of the towns of Acajutla and Ahuachapán, respectively.

For the 44-km ETL, EDP evaluated four alternative routes. The selected one runs northwest from Acajutla to Ahuachapán, avoiding populated areas, and crossing mainly pasture and agricultural

⁴ Empresa Transmisora de el Salvador, S.A de C.V

lands. It also shares parts of the right of way (ROW) of an existing road, minimizing potential social impacts. The ETL route will intersect 261 parcels property of 202 individuals, groups, or companies ranging from the urban/suburban poor to the wealthy in highland coffee-country, with various small companies and family group owners along the way. No parcel will be entirely affected, and all the landowners will still be able to use the remaining portions of their land for their prior economic activities. The agreed-to amounts were calculated and paid in US dollars and averaged up to USD \$10 per square meter which is approximately 50 times above average for local undeveloped land prices⁵.

4.5.a.i Project Design

4.5.a.ii Compensation and Benefits for Displaced Persons

Given that the port land was government-owned and controlled, and that the ETL's right-of-way mostly avoids inhabited areas, the Project has not generated any involuntary physical resettlement other than to a single family with which a negotiated solution (applying best international practices⁶) was agreed with EDP. The substation expansions will not produce any type of physical or economic displacement.

The Project, however, is expected to produce some limited economic displacement to artisanal fishers which include, for the construction phase, the following temporary impacts⁷: i) restriction from using waters near the temporary trestle and the open waters between the trestle and the FSRU where the marine pipeline will be installed; and ii) loss of fishing grounds⁸ for some groups of independent fishermen, specifically those who collect oysters, tuberos (who use floats) and lobsters. During operation, the main effects on fishermen will be the additional distance they will need to travel around the FSRU exclusion zone to reach their fishing areas.

To manage these effects, EDP is developing a Fishermen Livelihood and Restoration plan that contemplates a series of actions to mitigate impacts over fishermen, such as the installation of fish aggregating devices, technical training, winch replacement at the artisanal dock where they operate and the creation of artificial reefs. The final version of this plan will be further consulted and agreed with affected stakeholders in order to ensure that their quality of life is not negatively affected by the Project.

4.5.a.iii Community Engagement

As part of the SEP, during the preparation of the ESIA, EDP engaged fishermen and other stakeholders likely to be affected by the Project. As a result, EDP is actively involving fishermen in the design of the Fishermen Livelihood and Restoration plan mentioned in Section 4.5.a.iii.

⁵ According to a limited independent investigation of the rural real estate market in Sonsonate carried out by RINA (IDB Invest's E&S Independent Consultant).

⁶ Verified by RINA, IDB Invest's Independent Environmental and Social Consultant.

⁷ Restriction time is expected to last 33 months.

⁸ Approximately 36 hectares.

4.5.a.iv Grievance Mechanism

On October 2018, in a meeting with fishermen and other stakeholders, EDP formally introduced its EDP's External Grievance Mechanism. Economically displaced people and other external stakeholders are able to raise their concerns and grievance by phone or physically on EDP's office located in Acajutla.

4.5.a.v Resettlement and Livelihood Restoration Planning and Implementations

According to PS-5, the socioeconomic conditions of the sole family that has been physically relocated due to the construction of the ETL as well as of those that will be economically displaced by the project (mainly fishermen) will be monitored to assure that their condition after the displacement is equal when not better than the one they had before they were impacted.

4.6 Biodiversity Conservation and Natural Habitats

4.6.a General

For the development of the Project, two ESIA's were prepared: one for the LNG to Power facility and another for the ETL.

The LNG to Power ESIA included surveys of marine fish, sea turtles and marine mammals during both the wet and dry seasons. Conservation status of the species was compared to the IUCN Red List (global listing) and the Ministry of Environment and Natural Resources (MARN) national list (MARN 2015).

Four species of sea turtles were the most important biodiversity values found within the Project's area of influence: i) the Green sea turtle (*Chelonia agassizi* – IUCN Red List Vulnerable [VU]); ii) the Leatherback sea turtle (*Dermochelys coriacea* – VU); iii) the Hawksbill sea turtle (*Eretmochelys imbricate* – IUCN Red List Critically Endangered [CR]), and iv) the Olive Ridley sea turtle (*Lepidochelys olivacea* – VU). Most of the nesting sites are located at Los Cóbano's Important Bird Area (IBA) which is 7km south of the Project area, so turtle nesting should not be affected, provided good lighting management. No fish species of concern were documented during the field studies.

Baseline studies for the ETL included sampling for flora and fauna with sampling sites and transects parallel to the ETL. The surveys encountered a total of twenty-five animal species that are listed as threatened nationally by MARN and globally by IUCN⁹. Most of the recorded species are common, with wide distribution at national level and high adaptability to areas disturbed by anthropogenic activity.

⁹ Including the Sharp-shinned hawk (*Accipiter striatus chionogaster*), Black-eyed Tree Frog (*Agalychnis moreletii*), Black spiny-tailed iguana (*Ctenosaura similis*)

4.6.b Protection and Conservation of Biodiversity

The Power Plant is located on a modified habitat within the Acajutla port area. The FSRU is located within the El Salvador's largest commercial port. The Port of Acajutla is located north of natural marine habitat and beaches of importance for sea turtle nesting and the El Salvador's most important coral reef. The ETL passes through the largest coffee growing landscape in the country and contains some patches of natural forest located between coffee plantations. The ETL is located within Conservation International's Biodiversity Hotspot of Central America, the Birdlife's North Central American Pacific Slope Endemic Bird Area and crosses the Meso-American Biological Corridor.

The Project has made considerable efforts to reduce any impacts to the natural environment and biodiversity, such as choosing the design of the Marine Terminal from a coffer dam to a FSRU with a Restricted Catenary Mooring System (which will substantially reduce impacts on the sea floor during construction and operation), and the installation of the subsea pipeline using a micro-tunneling technique (in order to mitigate impacts on marine life). The ETL has been also routed to avoid Natural Habitats as much as possible, locating towers within modified habitat such as pasture or coffee fields, and at higher elevations when crossing the buffer zone of the Apaneca-Llamatepec Biosphere Reserve.

For the construction and operation of the Marine Terminal, the Project will implement a series of mitigation actions such as lighting management plan (to minimize impacts to marine fauna), turbidity and water monitoring, prohibition of fishing, and the installation of a Marine Wildlife Rescue Center, in collaboration with MARN, for the recovery of marine animals that could be affected during the construction works.

With respect to the ETL, the main impacts to biodiversity are vegetation loss due to the installation of the transmission towers¹⁰ and potential collision of birds with the transmission lines, which is especially important to migratory birds. Trees cut for the ETL will be compensated per the MARN requirements (10:1 for all trees, 25:1 for protected species). The implementation of the reforestation and revegetation project will be carried out by a NGO or Community Development Association and supervised by the Initiative Fund for the Americas (FIAES).

The ETL's ESIA also assessed the potential impacts of bird collision and determined the need to install flight deterrents¹¹ near crossings of rivers, streams and on hilltops of the Apaneca mountain range. The ESIA requires that, as part of maintenance, EDP will verify at least once per year the condition of bird diverters and will report mortality events to the E&S Coordinator in order to include recommendations into EDP's ESMS.

4.6.b.i Natural Habitat

Since the Project will operate within Natural Habitat per IFC's PS-6, the Project will need to demonstrate that the mitigation actions will achieve No Net Loss (NNL) of biodiversity for priority

¹⁰ Approximately 27.8 hectares of natural habitat and 37.6 hectares of modified habitat are expected to be impacted by the ETL.

¹¹ Spiral devices installed in the guard cables, with a maximum separation of 15.0m between them.

biodiversity values. Given the high number of important biodiversity values (both species and habitats) within and near to the Marine Terminal and the ETL, EDP will develop a terrestrial and marine Biodiversity Management Plan (BMP) to summarize all important biodiversity values, project impacts and biodiversity mitigation actions to be carried out, with timelines, roles and responsibilities, and planned activities, with key performance indicators and reporting requirements, especially for the Apaneca-Ilamatepec Biosphere Reserve and the Los Cóbano IBA.

Additionally, EDP will develop a Biodiversity Monitoring and Evaluation Program (BMEP). The BMEP will establish a biodiversity baseline and monitoring protocols and targets for all components of the project to evaluate and demonstrate NNL of biodiversity.

4.6.b.ii Critical Habitat

None of the two ESIA's performed for the Project included a Critical Habitat Assessment (CHA). However, CHAs were undertaken in 2018 covering the ETL and Marine Terminal, as part of lender's ESDD.

For the ETL, the CHA identified 21 species that live in natural habitats, according to PS-6 definition. It also defined Discrete Management Units (DMU) for the three watersheds intercepted by the ETL: Paz, Cara Sucia and Grande de Sonsonate-Banderas. No Critical Habitats were identified.

The CHA for the Marine Terminal identified natural habitats for the Hawksbill turtles, the Brown turtles (Green turtles), the Brown Sea cucumber, and the Blue Whale. No marine Critical Habitats were identified.

4.6.b.iii Legally Protected Areas and Internationally Recognized Areas

Neither the Marine Terminal nor the Power Plant are located within any legally protected or internationally recognized conservation areas. However, the Marine Terminal is located close to and between two natural areas: Barra de Santiago Natural Protected Area (17 km west) and Los Cóbano Natural Marine Protected Area (6 km south-east).

There are several protected or internationally recognized conservation areas located within or near the ETL alignment. Although EDP is in compliance with legal requirements concerning legally national protected areas, it needs to implement additional programs to be fully compliant with PS-6. Therefore, the Biodiversity Management Plan will include a set of actions to be undertaken for that purpose, specifically for the Apaneca-Ilamatepec and the Los Cóbano IBA's.

4.6.c Management of Ecosystem Services

The main Ecosystem Service within the Project area is fishing and oyster and lobster collection. This ecosystem service will be managed through compensation to the fishermen, which is being designed under the Fishermen Livelihood and Restoration plan.

4.7 Indigenous Peoples

The Project will not affect any indigenous peoples or lands.

4.8 Cultural Heritage

Surveys carried as part of the ESIA process, showed to no archaeological remains in the Project's area. Thereafter and based on the latter, the Project has received a non-objection letter from the Cultural Secretariat SECULTURA (El Salvador's regulatory body for the protection of cultural heritage) to continue its activities. Notwithstanding, EDP will develop and implement a chance find procedure (mandatory for all contractors and subcontractors), in line with the requirements of PS-8.

5. Local Access of Project Documentation

The ESIA, the E&S Licenses and others can be accessed on the IDB Invest website. <https://www.idbinvest.org/en/projects/energia-del-pacifico-Ing-thermo-power-project>. Project information is also available in EDP's offices located in Acajutla.

6. Environmental and Social Action Plan (ESAP)

Energía del Pacífico LNG Thermal Power Project – EL SALVADOR

No.	Aspect	Action	Product	Expected delivery date
PS 1: Assessment and Management of Environmental and Social Risks and Impacts				
1.1	Environmental, occupational health, safety and social management system (ESMS) for the construction phase.	1. Develop and implement an ESMS for construction in alignment with IFC Performance Standards and relevant WBG EHS guidelines, Salvadoran regulations and the Project approved ESIA's and resolutions issued by the Ministry of Environment and Natural Resources (MARN for its Spanish acronym).	1. ESHS Management System framework consisting on set of Policies, Manual and Directives, plans and procedures related to site preparation and grading activities for Power Plant.	1. Prior to first disbursement
			2. Plans and procedures related to foundation works in general, site preparation and grading activities for ETL and Pipeline	2. Prior to first disbursement
			3. Plan and procedures related to Mechanical, Electrical, Offshore and other works.	3. Prior to the third disbursement
1.2	Environmental, occupational health, safety and social management system (ESMS) for the operation phase.	1. Develop and implement an ESMS for operations in alignment with IFC Performance Standards and relevant WBG EHS guidelines, Salvadoran regulations, and approved ESIA's and MARN Resolutions. The ESMS for operations must include the required process safety management considerations as per industry best practice.	1. Set of policies, management plans, procedures and processes including a Document Register (list) and a Commitments Register (Matrix) for operations describing how the Company identifies and properly manages environmental, health, safety, process safety and social (ESHS) risks and impacts.	1. Prior to Project Physical Completion Date
1.3	Certification of the operational phase ESMS	1. Obtain of the corresponding ISO/OHSAS certifications (or equivalent) for the operational phase ESMS.	1. External certification of the operational phase ESMS in ISO 14001:2015 and ISO 45001:2018 or the latest available version of these standards at that time.	1. Not later than 3 yrs post-Project Physical Completion Date
1.4	Cumulative impact assessment (CIA) study	1. Incorporate in the corresponding ESMS plans and procedures, the most important recommendations from the CIA study prepared by ERM (December 2018).	1. Copy of ESMS plans and procedures.	1. Prior to first disbursement
		2. Perform: i) periodic fish biomass studies; ii) stakeholder engagement and public participation with regards to solid waste management; iii) the facilitation of the creation of a Marine Traffic Safety Committee, in coordination with CEPA and other users; and iv) stakeholder engagement and public participation with regards to noise and vibration.	2. Documented evidence through regular client monitoring (Environment & Social Compliance Reports)	2. Semiannually during construction and yearly during operations
1.5	Management Programs	1. Develop final versions of the following Environmental and Social Management Plans (ESMPs) aligned with Salvadoran requirements and IFC standards and WBG EHS guidelines for both the construction and the operation phases: i) Stakeholder engagement; ii) Local procurement; iii) Local hiring; iv) Fisher's Management and Livelihood Restoration; v) Influx management; vi) Workers transportation management; vii) Occupational health and safety; viii) Terrestrial fauna rescue and interaction; ix) Erosion control management; x) Environmental monitoring and inspection; xi) Land acquisition framework and management; xii) Noise and air quality monitoring;	1. Updated versions of the plans.	1. Prior to first disbursement.

No.	Aspect	Action	Product	Expected delivery date
		xiii) Security Management; xiv) Biodiversity Management; and xv) Transportation Management.		
		2. Develop final versions of: i) Labor grievance mechanism; ii) Community grievance mechanism; ii) Cultural heritage chance find procedure; and iii) Water use strategy.	2. Updated versions of the documents	2. Prior to first disbursement
		3. Develop final versions of the following Environmental and Social Management Plans (ESMPs) aligned with Salvadoran requirements and IFC standards and WBG EHS guidelines for both the construction and the operation phases: i) Marine sediments management and monitoring; ii) Marine fauna rescue and interaction; iii) Illumination management for marine and nearshore environments; iv) Marine Safety Traffic; and v) Hazardous Materials Management..	3. Updated versions of the plans.	3. Prior to disbursement applied to the Marine Works
		4. Incorporate the recommendations of the risk assessment studies conducted as part of the front-end engineering design – FEED – (HAZID, HAZOP, LOPA, ALARP studies, updated QRA, etc.) for the subsea natural gas pipeline into the final design package of the Project and into the Project's ESMS and ESMPs.	4. Evidence that ESMPs incorporate all recommendations from the Project risk assessments and safety studies conducted as part of the final design package of the subsea natural gas pipeline.	4. Prior to the Borrower's first lease payment under the FSRU Lease
		5. Incorporate the recommendations of the risk assessment studies conducted as part of the front-end engineering design – FEED – (HAZID, HAZOP, LOPA, ALARP studies, updated QRA, etc.) for the FSRU into the final design package of the Project and into the Project's ESMS and ESMPs.	5. Evidence that the ESMPs incorporate all recommendations from the Project risk assessments and safety studies conducted as part of the final design package of the FSRU	5. Prior to the Borrower's first lease payment under the FSRU Lease
		6. Conduct a gap analysis between the EPC Contractors' management systems and EDP's and develop an ESHS bridging document, clarifying which ESHS rules and procedures are enforced to bridge the identified gaps using the highest set of standards available to the main parties an all required obligations are fulfilled to meet local legislation, IFC standards and WBG EHS guidelines.	6. A documented plan that defines how EDP agrees with EPC Contractors on which occupational health, safety, environmental and social management elements and standards will be used during Project construction, according to the following phases: a) Power Plant; b) ETL and Substations; c) Offshore Works and Pipeline.	6. a) and b), Prior to first disbursement; c) Prior to disbursement applied to the Marine Works.
		7. Develop and implement a comprehensive CMAP describing the controls to be implemented to ensure all ESHS risks and impacts are being properly managed from mobilization and early works, through the main construction and overall Project demobilization phases.	7. A documented management plan explaining EDP's management and oversight process on Contractors ESHS performance.	7. Prior to first disbursement
1.6	Organizational Capacity and Competency	1. Hire the personnel proposed in EDP's E&S staffing plan for the construction phase and update it for the operations phase allocating sufficient and well-trained resources to manage all ESHS aspects throughout the Project life cycle.	1. Organizational chart and resumes of key ESHS personnel working for EDP.	1. Prior to first disbursement
1.7	Emergency Preparedness and Response	1. Prepare and implement an Emergency Preparedness and Response Plan (EPRP) in coordination with the EPC contractors for construction in accordance with Salvadoran regulations and IFC PS requirements. When emergencies scenarios affect, communities, EDP will ensure that its EPRP involve communities and provide detail regarding the way in which the population should be informed and, if necessary, organized for evacuation. The EPRP will describe prevention and general awareness information for communities, such as how to determine the difference between a drill or a test on site and an actual accident or emergency. Once the EPRP is finalized, EDP will disseminate it to nearby communities.	1. EPRP for construction phase.	1. Prior to first disbursement
		2. Develop an EPRP for operations phase, focusing on highest risks of the marine terminal, plant and ETL, and including necessary provisions from	2. EPRP for operation phase	2. Prior to Project Physical Completion Date

No.	Aspect	Action	Product	Expected delivery date
		process safety and industry best practice. When emergencies scenarios affect, communities, EDP will ensure that its EPRP involve communities and provide detail regarding the way in which the population should be informed and, if necessary, organized for evacuation. The EPRP will describe prevention and general awareness information for communities, such as how to determine the difference between a drill or a test on site and an actual accident or emergency. Once the EPRP is finalized, EDP will disseminate it to nearby communities.		
1.8	Monitoring and Review	1. Develop an E&S assurance plan and implement an action tracking system to record all the findings, observations, lessons learned and opportunities for improvement, monitor corrective and preventive actions to completion, and prevent recurrence.	1. A documented management plan describing EDP's ESHS assurance process including EPCs' roles.	1. Prior to first disbursement
PS 2: Labor and Working Conditions				
2.1	Human Resources Policies and Procedures	1. Develop a human resource related plan and procedures for the entire workforce of the Project including capacity building measures consistent with IFC PS2 and national law. These will be developed to explain step by step how EDP will ensure adequate working conditions for direct and indirect workers and compliance with EDP Human Resources Policy in reference to non-discrimination, equal opportunity, health and safety, freedom of association and collective bargain, and prohibition of child and forced labor.	1. Human Resource management plans and procedures as per PS-2 requirements.	1. Prior to first disbursement
		2. Develop and implement a code of conduct integrated into the ESMS. The code of conduct will be applicable to all EDP employees, and to workers engaged by contractors and subcontractors. It will include references to anti-discrimination, zero tolerance for sexual harassment and gender-based violence, anti-corruption, child and forced labor, and set the rules for interaction with the local population, including landowners and occupants	2. Code of Conduct	2. Prior to first disbursement
		3. Implement measures to manage the risk of gender-based violence, including: a) Develop and implement an induction and training program on HR policies and procedures, code of conduct, local laws, and awareness raising for the workforce about refraining from unacceptable conduct toward community members, specifically women; b) Ensure the external and internal grievance mechanisms have well-trained staff and adequate human and budget resources to allow for proper handling of gender-based violence-related grievances, including but not limited to sexual harassment; c) Contractors to cooperate in investigating complaints about gender-based violence	3. A documented gender-based violence risk management program for the Project.	3. Prior to first disbursement
2.2	Grievance Mechanism	1. Develop a labor grievance mechanism integrated into the ESMS that includes: a) definition of mechanism, b) process for receiving grievances, including a gender-sensitive channel for access, c) process and timeline for evaluating and managing grievances, d) reporting of results, e) roles and responsibilities, and f) monitoring and evaluation.	1. A document plan explaining the Worker's Grievance Mechanism for the Project.	1. Prior to first disbursement
2.3	Workers Engaged by Third Parties	1. Ensure that contractually relevant parts of EDP's Human Resource Policy and procedures, according to the IFC Performance Standards, specifically have been extended to cover the labor practices of contractors and sub-contractors (e.g compliance with local laws, non-discrimination, provisions to ensure timely payment of salaries, no child and forced labor, occupational health and safety plans and procedures, etc). Under the relevant EPC Contracts, EDP shall be entitled to perform regular scheduled and un-scheduled audits.	1. Evidence that IFC Performance Standards for Labor / Working Conditions are part of the contractors' obligations in the EPC Contracts	1. Upon signature of contracts with EPC contractors

No.	Aspect	Action	Product	Expected delivery date
2.4	Occupational Health and Safety	1. Develop OHS management programs as part of the construction ESMS. Procedures will include monitoring provisions for recordkeeping of all incidents, near misses, and follow-up to prevent reoccurrences	1. OHS Management Plan	1. Prior to first disbursement
PS 3: Resource Efficiency and Pollution Prevention				
3.1	Greenhouse Gases	1. Provide a detailed Scope 1 & 2 GHG inventory as prescribed in the GHG protocol from World Resources Institute and the World Business Council for Sustainable Development, track them accordingly and report them on an annual basis.	1. Detailed inventory of GHG emissions.	Detailed Inventory: Prior to Project Physical Completion Date Annual report beginning on Project Physical Completion Date
		2. Develop: (a) a boil-off gas management plan following industry best practice; and (b) a SF6 management plan	2. Management plans for boil-off gas and SF6.	2. 6 months prior to Project Physical Completion Date.
3.2	Pollution Prevention	1. Periodically monitor and report to IDB Invest the levels of noise, particulate matter (PM10 and PM2.5), vibration, sediments produced to ensure that their concentrations are within the maximum limits set forth by Salvadorian legislation and the WBG EHS Guidelines.	1. Periodic monitoring reports	1. Quarterly reports
3.3	Air Emissions & Air Quality	1. Deployment of two ambient air quality monitor stations for NOx and other required ambient air quality parameters. One will be located in the same location described in the ESIA and the other monitoring station will be located in the area of the highest predicted NO2 impacts. Monitoring will be conducted at least six months prior to Project Physical Completion Date.	1. Air Quality Monitoring Plan	1. 6 months prior to Project Physical Completion Date
		2. Develop a stack emissions monitoring program fully integrated within EDP's ESMS to ensure that monitoring results are constantly assessed, and trends and KPIs are analyzed and timely reported to plant operations and senior management. This will allow to proactively assess the effectiveness of the monitoring program.	2. A documented stack emissions monitoring program for the operations phase.	2. 6 months prior to Project Physical Completion Date
3.4	Effluents	1. Develop a liquid effluent management and monitoring plan to systematically manage all liquid and semi-liquid effluents from the Project during construction and operations. The plan will include definition of objectives, targets, responsibilities, planned management and monitoring activities, Project environmental standards for each discharge, and key performance indicators and reporting requirements.	1. Liquid Effluent Management and Monitoring Plan according to the following structure and timeline: a) For construction b) For operations	1.a) Prior to first disbursement; 1.b) 30 days prior to Project Physical Completion Date
3.5	Solid Waste & Hazardous Materials Management	1. Develop detailed waste management plan including hazardous wastes in line with PS-3 and with due consideration to Section 1.6 of the WBG EHS general guidelines and specific waste related requirements set forth in the WBG EHS guidelines for thermal power plants for the construction and for the operation phase of the Project.	1. a) Waste management plan for construction; and b) Waste management plan for operations.	a) Prior to first disbursement; b) 3 months prior to Project Physical Completion Date
PS 4: Community Health, Safety, and Security				
4.1	Security Personnel	1. Develop a security management plan for all EDP's activities in line with PS-4 requirements. The plan will include: (i) define security management objectives; (ii) discuss internal and external risks identified in the security risk assessment; (iii) define how EDP will screen private security firms and guards and provide adequate training; (iv) define conditions for use of force; (v) define how coordination between private and public security forces will occur; (vi) define incident reporting; (vii) describe how the company will	1. Security Management Plan	1. Prior to first disbursement

No.	Aspect	Action	Product	Expected delivery date
		engage with individuals, communities and fishers and report on security matters; and (viii) establish KPIs for security performance assessment.		
PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources				
6.1	Protection and Conservation of Biodiversity	<ol style="list-style-type: none"> 1. Develop a terrestrial and marine Biodiversity Management Plan (BMP) to summarize all important biodiversity values, Project impacts and biodiversity mitigation actions to be carried out, with timelines, roles and responsibilities, and planned activities, with key performance indicators and reporting requirements, especially for the Apaneca-Ilamatepec Biosphere Reserve and the Los Cóbano IBA. 2. Develop a Biodiversity Monitoring and Evaluation Program (BMEP) in line with PS6 requirements. The BMEP should establish a biodiversity baseline and monitoring protocols and targets for all components of the Project to evaluate and demonstrate No Net Loss of biodiversity. 	<ol style="list-style-type: none"> 1. Biodiversity Management Plan in line with PS-6 requirements (including IFC Guidance Notes on PS-6) describing on-site mitigation measures to be applied by EDP and/or its Contractors, according to the following structure: a) Terrestrial Plan; b) Marine Plan. 2. Biodiversity monitoring and evaluation program in line with PS-6 requirements (including IFC Guidance Notes on PS-6). Monitoring should be conducted by biologists and qualified personnel, according to the following structure: a) Terrestrial Plan; b) Marine Plan 	<ol style="list-style-type: none"> a) Prior to first disbursement: b) Prior to disbursement applied to the Marine Works <ol style="list-style-type: none"> a) Prior to first disbursement: b) Prior to disbursement applied to the Marine Works