

Tacuarembó-Salto Green Transmission Line

Original language of the document: Spanish

A. Investment Summary tab

Disclosed Date:	8 November 2019
Project Name:	Tacuarembó-Salto Green Transmission Line
Project Number:	12220-01
Investment Type:	Loan
E&S Category:	B
Projected Board Approval Date:	10 December 2019
Company name (Borrower):	Fideicomiso Financiero Línea de Transmisión Tacuarembó Salto
Sponsoring Entity:	Administración Nacional de Usinas y Transmisiones Eléctricas (UTE)
Sector:	Energy, Transmission
Financing Requested:	US\$114.1 million
Financing Currency:	U.S. Dollar
Project Country:	Uruguay
Team Leader:	Rafael Matas
For inquiries about the Project, contact:	Client Contact name: Jonathan Crokker; Republica Afisa Title: Business Manager Phone number: + 59 8 2916 6760 email address: Jonathan.Crokker@fideicomiso.com.uy

Project Scope and Objective:

The project consists of the design, construction, operation and maintenance of a 350 km transmission line in 500 kV; the construction of a substation in Chamberlain; the reinforcement of the Salto substation; and the provision of auxiliary services allowing the interconnection of the substations in the departments of Tacuarembó and Salto, enabling the closure of the transmission ring in northern Uruguay (the "Project"). The Project has a construction period of 42 months.

The Borrower is the "*Fideicomiso Financiero Línea de Transmisión Tacuarembó Salto*" (Tacuarembó Salto Transmission Line Financial Trust) which will be established as a trustee under the laws of Uruguay. The Borrower will issue Certificates of Participation ("COPS"), of which UTE (the "Sponsor") will have 20% and the remaining 80% will be owned by institutional and individual investors through an Initial Public Offer that will take place before the first disbursement. From its beginning until the public offer, UTE will have 100% of the shares. The total cost of the project is estimated at US\$ 285.2

million, which is projected to be financed through a long-term A loan of US \$ 114 million from the IDB Group, a B loan of US \$ 114 million, and Sponsor capital contributions for 20% of total project costs (approximately US \$ 57 million).

The objectives of the Project are: (i) ensure the current and future reliability of the national electricity system in Uruguay, and (ii) support the integration of greater renewable energy production through the expansion of the electricity grid. The Project, which represents approximately 6.6% of the current total high voltage transmission network and 32% of the 500kV system, has been certified as a green transmission line (IDB Invest GTL Certificate).

B. Environmental and Social Review Tab

ENVIRONMENTAL AND SOCIAL REVIEW SUMMARY

1. Scope of Environmental Review

The Project consists of the construction and commissioning of a 500 kV high voltage line (HVL) between the cities of Salto and Tacuarembó. The proposed line is divided into two sections, one from Tacuarembó to Chamberlain (120 km) and another from Chamberlain to Salto (230 km) that will be linked through the Chamberlain substation, which will be built as part of the Project. Additionally, two sections of 150 kV lines are included that will connect the Chamberlain substation with an existing 150 kV line between Bonete and the Palmatir Wind Farm.

This summary is based on the review of the information provided by UTE, which includes: i) Project Communication - High Voltage Line 500kV Salto - Tacuarembó, prepared by Estudio Ingeniería Ambiental (EIA); ii) the Preliminary Report on the Environmental and Social Due Diligence for the High Voltage Line prepared by IIC's technical consultants (G-Advisory); iii) the Environmental Analysis¹, prepared by EIA and UTE; and iv) the due diligence visit carried out between September 9 and 12, 2019, which included meetings with the technical teams of UTE, EIA, and G-Advisory and the visit of the path of the HVL, emphasizing critical points such as river crossings, road crossings, flood areas, natural forests and visits to certain rural establishments located on the path and affected by the easement strip.

2. Environmental and Social Categorization and Rationale

According to IDB Invest's Environmental and Social Sustainability Policy, this is a Category B project, as the magnitude and importance of its environmental and social risks are medium to low and can be managed via measures that are readily available and feasible to implement in the context of the operation.

The Project activates the following International Finance Corporation (IFC) Performance Standards (PS):

- PS 1: Assessment and management of environmental and social risks and impacts;
- PS 2: Labor and working conditions;
- PS 3: Resource efficiency and pollution prevention;
- PS 4: Community health, safety, and security.

¹ The Environmental Analysis is composed of the document called "Informe de Avance de Estudio de Impacto Ambiental LAT Tacuarembó Salto, Noviembre 2019" prepared by Estudio de Ingeniería Ambiental (EIA) and the "Plan de Manejo Ambiental – LAT Tacuarembó Salto" prepared by UTE.

3. Environmental and Social Context

The HVL crosses the departments of Salto, Paysandú, Río Negro and Tacuarembó. The geography of the land, of undulating meadows, with no steep slopes or significant geographical accidents, with elevations between 40 and 270 meters above sea level, allows a relatively direct layout. The existing public road network allows easy access to the proximity of the tower installation sites, limiting the need for new access within the affected properties. The Project foresees the installation of between 1,000 and 1,100 towers, separated between 350 and 400 m apart. The path crosses entirely rural areas, avoiding populated centers.

The study area that covers a 2 km wide strip along the entire path (about 700 hectares) is mostly occupied by natural grasslands dedicated to extensive cattle and sheep grazing (approximately 85%), with areas of agricultural crops and forage (11%), forestry (3%) and areas with citrus fruit plantations (1%) in the vicinity of the city of Salto.

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

The main environmental and labor aspects to be evaluated for the Project are: (i) the possible impact on the biological environment and biodiversity, particularly birdlife due to eventual collisions or electrocutions; (ii) efficiency in the use of resources and pollution prevention; (iii) occupational health and safety and working conditions; and (iv) possible effects on land use.

4.1 Assessment and Management of Environmental and Social Risks and Impacts

UTE has not yet selected the contractor that will carry out the construction of the line and its operation. However, all the companies invited to participate in the bidding of the Project have international experience with knowledge and experience working with multilateral financing. Once this contractor is selected, a particular evaluation of its environmental and social evaluation and management system will be carried out, which must comply with the IDB Invest Environmental and Social Sustainability Policy.

- a. Policy. UTE's relationship with the environment and its orientation towards sustainability is one of the commitments expressed in the company's Code of Ethics (<https://portal.ute.com.uy/sites/default/files/generico/UTE-Codigo-etica.pdf>).
- b. Identification of Risks and Impacts. The procedures for identifying risks and impacts, in addition to those identified in the Environmental Analysis, must be part of the contractor's environmental and social evaluation and management system.
- c. Management Programs. In the Environmental Analysis the main impacts are identified, among which are: (i) impact on biodiversity; (ii) soil erosion due to improper rainwater management; (iii) impact on surface water quality; and (iv) affectation to archaeological heritage. The evaluation will focus on the analysis of how the contractor is considering executing these programs, both for the construction phase and for the operation phase.
- d. Organizational Capacity and Competency. Likewise, the technical team responsible for environmental, health and safety matters and the training plan for contractor personnel of their subcontractors will be evaluated.
- e. Emergency Preparedness and Response. The main risks identified in the Environmental Analysis refer to the risks of accidents, both occupational and transit, possible spills of

hazardous substances and fires. The review will focus on how the contractor will adapt these plans to the sites where the tasks will be carried out with preventive and emergency response actions specific to those sites, including a survey of the assistance services available according to the location of the works and their distances to populated centers. Special emphasis will be placed on the analysis of prevention and management programs for occupational and road accidents, spills of hazardous substances, fires and possible wildlife attacks (in particular, snakes).

- f. **Monitoring and Review.** Criteria will be established to evaluate the programs that the contractor adopts to manage the identified risks. The evaluation will focus on the forms of monitoring that the contractor adopts, and the analysis of the feedback and improvement processes.
- g. **Stakeholder Engagement.** The main social actors have been identified in the Environmental Analysis. The land easement is imposed by UTE using a communication protocol, by which the owners or occupants of the affected properties are informed directly and whose objective is to establish agreements. For this, two public communication and dissemination events will be held in the cities of Salto and Tacuarembó, scheduled for November 29 and December 6, respectively. The presentations will include an environmental analysis, the imposition of easements, and an exchange with interested parties.

The contractor must develop an external communications and grievance handling mechanism for the affected communities during the construction stage.

4.2 Labor and Working Conditions

- a. **Working Conditions and Management of Worker Relationships.** The Project will respect the labor legislation in force in Uruguay, which includes policies that prohibit discrimination (including by gender), child labor, unpaid work and forced labor, following ILO standards.

The Project will use local labor for its construction. The union that corresponds to the construction workers is the National Single Union of Construction (SUNCA). According to Uruguayan legislation, all workers have mandatory accident insurance, as well as medical insurance with family coverage. The setting of remuneration and other benefits is determined by the Salary Council corresponding to the sector.

- b. **Occupational Health and Safety.** Occupational health and safety aspects are covered by the contractor's risk and impact evaluation and management system.
- c. **Workers Engaged by Third Parties.** Workers hired by third parties have the same rights and obligations as workers hired directly, with the principal contractor being responsible for enforcing their risk and impact assessment and management system, as well as national legislation.
- d. **Supply Chain.** All the services, supplies and materials used in the development of the Project will come from established formal companies, both domestic and foreign, thus minimizing the labor risks inherent in the supply chain.

4.3 Resource Efficiency and Pollution Prevention

- a. **Resource Efficiency**
 - i. **Greenhouse Gases.** The type of construction does not foresee a significant impact on the generation of greenhouse gases. The greatest use of energy corresponds to the transport

of materials and machinery used in construction. The contractor will be asked to calculate the greenhouse gases generated during construction.

According to the energy matrix of Uruguay, during the operation stage, the transmission of energy will imply a greater availability of energy from renewable sources for internal use and export.

- ii. Water Consumption. The main water consumption will be for the preparation of the concrete at the base of the towers, and for the watering of the roads to avoid the generation of dust. The contractor must demonstrate that the origin of the water is from authorized sources.
- b. Pollution Prevention
- i. Wastes. Solid and liquid waste management during construction will be specified in the contractor's management programs and must comply with national legislation and departmental regulations. Likewise, the contractor must establish procedures to minimize atmospheric emissions (combustion gases from trucks and machines, dust and particles) and noise.
 - ii. Hazardous Materials Management. The handling and storage of hazardous products during construction (fuels, lubricants, solvents, etc.) will be specified in the contractor's management programs. Work waste that may be contaminated with traces of hydrocarbons or other hazardous substances, will be collected separately and disposed of as hazardous waste through an authorized manager.

4.4 Community Health, Safety and Security

- a. Community Health and Safety. The risks associated with the construction stage will be contemplated in the contractor's environmental and social evaluation and management system as part of the risk and impact identification process, and the measures to mitigate said risks must be identified in the plan. Risk mitigation measures should emphasize signaling of work areas and heavy traffic concentration points, as well as traffic planning together with the competent authorities to implement additional safety measures.
- b. Security Personnel. In case of hiring security and surveillance personnel, the companies must be regulated by Law 19.721.

4.5 Land Acquisition and Involuntary Resettlement

- a. General. The Project will not generate resettlement or displacement of people or economic activities. The 500 kV HVL will have a 40 m easement strip on each side of its axis, and the 150 kV will have a 30 m easement strip on each side of its axis. Said easements will be imposed on 263 rural properties following Decree-Law 10,383 of 1943, which allows the permanent occupation of the area necessary for the towers and limits the buildings, construction of wells, windmills, antennas, and the existence or planting of trees of big size. UTE has a communication protocol to inform the imposition of easements to the owners or occupants of the affected properties.
 - i. Project Design. The limitations imposed by the easement regulations were taken into consideration in design the layout of the HVL. For this purpose, the layout was adjusted in such a way to move the line away from homes and other existing constructions (more

than 100m from the axis of the line) looking for areas of low population density, avoiding high value-added enterprises, as well as commercial forest plantations that could involve cutting down trees. The low population density allows an adequate layout without the need to relocate people.

- ii. Compensation and Benefits for Displaced Persons. The law establishes that the owners of the land must be compensated for the damages that are a consequence of the easement. The expropriation corresponds only to those properties whose value of affectation is comparable to its total value. For the Project, the only expropriation planned is of the property where the Chamberlain substation will be located, which consists of a rural land of 28 hectares without constructions.

- b. Displacement. The Project does not generate physical or economic displacements.

4.6 Biodiversity Conservation and Natural Habitats

- a. General. The selection of the path was made considering the avoidance of lands protected by law, marshes and lowlands, native and riparian forests along rivers and streams. To minimize affecting the latter, it was sought to cross the forests perpendicular to the watercourse, reducing the path over them and avoiding as far as possible the location of towers within the forest.

The HVL does not pass through any protected area included in the National System of Protected Areas (SNAP, for its acronym in Spanish). However, the line partially crosses two Important Bird Areas (IBAs): that of San Antonio, near the city of Salto; and that of Campos del Tapado on the border of the departments of Salto and Paysandú. According to the bibliography, the first of these areas presents four species of birds with some degree of conservation risk, and the second area has seven species, one of which is in danger of extinction according to the IUCN Red List.

- b. Protection and Conservation of Biodiversity. The species mentioned above are grassland birds, whose main risk is the possible loss of habitat. They are not considered species with a significant risk of collisions against the HVL. For this reason, it was sought to facilitate access through the existing roads, minimizing the opening of new roads, and in cases where it is necessary to do so, it will seek to disturb the environment as little as possible so that there is a rapid recovery of vegetation cover. This precaution also considers terrestrial species that could be affected. Notwithstanding the foregoing, the possibility of placing flight deterrents on guard cables in those passages of the line that are considered corridors of bird species with collision risks will be analyzed. The risk of electrocution in 500 kV lines is almost nil since the distance between phases, as well as between a phase and ground, is large enough to avoid it.
- c. Modified, Natural and Critical Habitat. Mostly the HVL easement strip corresponds to modified habitats, except for riparian forests in rivers and streams, which will be preserved by locating the towers outside them.
- d. Supply Chain. The only materials of local non-industrial origin correspond to the aggregates and quarry materials necessary for manufacturing the cement of the foundations. The supplier of these materials must have authorizations from the National Environmental Agency (DINAMA, for its acronym in Spanish) to carry out the extractions.

4.7 Indigenous Peoples

The Project will not affect indigenous peoples.

4.8 Cultural Heritage

In the layout of the HVL, the proximity to known sites of historical or archaeological interest was avoided, although its possible existence is not ruled out. An archaeological survey will be carried out to rule out possible findings at the location of the foundations of the towers, which could imply moving some of the structures or the opening of access roads.

The archaeological study will be complemented by a Construction Archaeological Control (CAC) that will be carried out during the execution of the Project.

5 Environmental and Social Action Plan (ESAP). Attached in a separate document.

6 Contact Information For project inquiries, including environmental and social questions related to an IDB Invest transaction please contact the client (see **Investment Summary** tab), or IDB Invest using the email divulgacionpublica@iadb.org. As a last resort, affected communities have access to the IDB Invest Independent Consultation and Investigation Mechanism by writing to mecanismo@iadb.org or MICI@iadb.org, or calling +1(202) 623-3952.

C. Files to be Uploaded

- Informe de Avance de Estudio de Impacto Ambiental LAT Tacuarembó Salto, Noviembre 2019, Estudio de Ingeniería Ambiental.
- Plan de Manejo Ambiental – LAT Tacuarembó Salto, UTE
- Tacuarembó-Salto Green Transmission Line. Environmental and Social Action Plan (ESAP).