

Environmental and Social Data Sheet

Overview

Project Name:	TRANSMISSION LINE YACYRETA
Project Number:	20110275
Country:	PARAGUAY
Project Description:	The project concerns the construction of a 500kV, 360 km high voltage transmission line between Villa Hayes (close to Asuncion, the capital) and Yacyreta hydro power plant and expansion of three 500/220 kV substations. The project includes a power loss reduction component through the installation of electronic meters in the distribution network.
EIA required:	yes
Project included in Carbon Footprint Exercise:	no

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

Due to its size and technical characteristics the project, if located within the EU, would fall under Annex I of Directive 2011/92/EU, requiring full EIA. The financiers (IADB and EIB) environmental procedures, and national legislation have required full EIA to be implemented; the promoter has produced an ESIA study and disclosed it to the public. The final environmental permit has not yet been issued. Detailed Environmental and Social Management Plan (ESMP) and final Resettlement Action Plan (RAP) are not yet issued. Based on the available ESIA documentation and the result of the public consultation the Bank considers the project acceptable under its guidelines. The Finance Contract will contain appropriate conditions that enable to follow up the completion of the ESIA process to the satisfaction of the Bank.

The project is a standard transmission line, situated mainly (over 80%) on flat, agricultural land and regarding these sections the environmental or social concerns are limited to visual impact of the line and land expropriations for the tower sites. In the area close to Yacyreta dam and reservoir, the line crosses the Parana River and is situated for 2 km section inside of Yacyreta nature reserve (as is the hydro power plant itself). In the section where the line is approaching Asuncion the line crosses more densely populated areas. On the final 26 km stretch of the line close to Asunción, the line utilizes the towers that are being built in the context of Itaipu-Villa Hayes line.

The commercial or “nontechnical” power loss reduction component will be targeting low voltage customers through the installation of 625.000 electronic meters, either for new connections or for the replacement of aging electric power meters that are prone to metering errors and subject to tampering or fraud.

These electronic meters will be targeted at various types of customers. Firstly, they will target around 50.000 families currently living in 322 informal settlements around the country. For these clients, who currently have illegal or no connection to the network, the project will subsidize new connections (including meters) for these clients. This will have a very positive social impact as it will integrate these customers in the distribution network, regularize their status and provide them with access to an affordable and stable source of energy which will lead to economic development and social integration. The Finance Contract will contain conditions to ensure that the Promoter uses an appropriate methodology for approaching

these settlements, reducing the risks of social disruption and ensuring community engagement in the whole process.

Around 300.000 electronic meters will be installed in customers currently benefitting from the social tariff and the rest will mainly benefit residential customers.

Environmental and social conditions prior to the first disbursement:

- The promoter shall provide the final environmental permit of the project.
- The promoter shall provide a detailed Environmental and Social Management Plan (including the labour standards of the contractors) to the satisfaction of the Bank
- The promoter shall provide a Resettlement Action Plan to the satisfaction of the Bank.
- The promoter shall provide to the Bank a detailed line route examination report that records the completion status of re-construction of dwellings and other resettlements, and reports the land acquisition of the line corridor prior to the start of the line works and first disbursement.
- The promoter shall provide from SEAM (Environmental Authority) a confirmation that the integrity of Yacyreta Nature Reserve is maintained with the compensation methods of ESMP.
- The promoter shall provide a detailed description of the plan and intervention logic for electricity connections in informal settlements to the satisfaction of the Bank, prior to start of the implementation of the project in these settlements.

Undertaking:

The construction or clearance works shall not start on any line section where the line route right-of-way acquisitions have not been reported to and accepted by the Bank.

Environmental and Social Assessment

Environmental Assessment

The national legislation regarding environmental assessments is based on laws 1561/200 (Instrumento rector de la institucionalidad ambiental) and 294/93 (De evaluacion de impacto ambiental), and under these legislations the competent authority SEAM issues environmental permits and sets out environmental conditions for transmission projects. The ESIA of this project has been prepared by consultants financed by IADB. The process has included public consultation, held October-November 2012. The line routings were revised according to the results of the ESIA to a route that avoided environmentally sensitive areas and required fewer dwellings to be removed / reconstructed. As the Yacyretá power plant is already inside the Yacyretá nature reserve, it could not be avoided that the transmission line will cross the nature reserve for 2km.

The ESIA, with the results of the public participation, has been submitted to SEAM, but the final environmental permit has not yet been issued. The ESIA included the appropriate identification of the impacts, but the ESMP in the document was only the outline, and the detailed ESMP is considered to be established when the conditions required by SEAM are issued in the permit.

There does not exist a line routing possibility to avoid crossing Yacyreta Nature Reserve, as the hydro plant itself is in that reserve. The line routing that has been chosen follows the existing lines and is resulting to a loss of 2 ha of secondary forest. This loss is not considered significant to the integrity of the reserve. The SEAM as competent authority will include compensatory measures that it deems necessary into the conditions of the environmental permit to fully preserve the integrity of the reserve.

The main negative environmental and social impacts of high voltage transmission lines and substations are typically the visual impact of the towers and conductors, collisions of avifauna, expropriation of land and right-of-way for the structures, as well as the disturbances and nuisances during the construction.

The mitigating measures include line visibility mapping, bird diverters and line routing changes. The expropriation of the land will be done prior to the start of the works (identification of the households carried out as part of the line route identification) and right-of-way does normally not require the affected people to move out from their land; the houses are normally re-built outside of the right-of-way. Right-of-way is normally 40 m by width.

The project is strengthening renewable hydro generation plants connections to the network and reducing transmission losses. Project is enabling the increasing consumption to be supplied from sustainable sources.

Social Assessment

The ESIA of the project identifies 42 dwellings that need to be relocated or resettled from the line route. Relocations along transmission line on agricultural land will not require resettlement of the affected people into new areas. The agriculture can continue on the line corridor, and the dwellings will be re-constructed outside the line corridor. The Resettlement Action Plan related to these relocations/resettlements has not yet been developed. The project will not lead to negative impacts on local employment, health or social equality. The project is not expected to affect vulnerable groups or sites of cultural heritage. The promoter is public enterprise that applies acceptable labour standards. The labour standards of the contractors are required to be addressed in ESMP.

The commercial or “nontechnical” power loss reduction component will be targeting low voltage customers through the installation of 625.000 electronic meters, either for new connections or for the replacement of aging electric power meters that are prone to metering errors and subject to tampering or fraud. These electronic meters will be targeted at three types of customers: those currently living in informal settlements (estimated at 50.000), those benefitting from social tariffs (approximately 300.000) and the rest will be targeted at mainly at residential customers.

The project will have a very positive social impact for those potential customers currently living in 322 informal settlements around the country, which are estimated at 50.000. These families currently have illegal or no connection to the network, the project will subsidize new connections (including meters) for these clients and will incorporate them as beneficiaries of the social tariff. The existing tariff (\$ 8 cts /kWh) which is already low, is receiving subsidies from 25% up to 75% for those who benefit from the social tariff, leading to an affordable expenditure of around \$5 / month for electricity.

These settlements currently suffer power outages and their integration in the distribution network will regularize their status and provide them with access to an affordable and stable source of energy which will lead to economic development and social integration.

The Promoter has already worked successfully in previous programs with informal settlements, and has developed an internal methodology for working with the population. However, due to the high number of settlements included in this program, the Promoter is requested to present a detailed description of the plan and intervention logic for electricity connections in informal settlements, prior to start of the implementation of the project in these settlements.

Public Consultation and Stakeholder Engagement, where required

Public consultation was carried out under the EIA process. The process included consultation meetings in main population centres along the line route. The ESIA process has included NGOs consultation (for example Birdlife regarding avifauna assessment). The line routing was amended as a result of the ESIA process to be more environmentally and socially acceptable. The public consultation meetings results indicated generally acceptance of the project. Most common questions were related to compensations, local employment and to electromagnetic fields.

Other Environmental and Social Aspects

None