BACKGROUND

Mindful of the need to pool their energy potential, the Governments of the Republic of the Congo and the Republic of Gabon decided to interconnect their electrical networks and electrify towns and localities along the high-voltage lines.

The Grand Poubara and Imboulou electrical connection project, classified among CEMAC's priority integrative projects, responds to the desire of the two countries to optimize the use of their energy resources through the integration of electrical power generation, transmission, and distribution infrastructure.

Connecting electrical networks is a factor of development and the emergence of economic and commercial exchanges. It will accelerate integration and reduce the energy divide in the two countries.

The development of the energy sector is at the forefront of the priority axes of the CEMAC Regional Economic Program. The implementation of an energy efficiency policy is a priority area of this Program.

PROJECT DESCRIPTION

The project consists of a transmission line of approximately 350 km long and three associated 400/225/110/63 kV substations. The main characteristics of the project are as follows:
- a transmission line, double circuit (V = 400 kV; L = 346 km, Capacity = 2x1300 MVA - a new substation (400/110/30 kV) in Okoyo, in the Republic of the Congo,

- the modernization and extension of the existing substation (400/225/63/10.5 kV) in Moanda (COMILOG) in Gabon,

- the modernization and extension of the existing substation (400/225/30 kV) in Djambala, in the Republic of the Congo,

- compensation by shunt reactance.

OBJECTIVES

The overall objective of the project is: (i) to reduce the energy deficit of the countries concerned and (ii) to improve the living conditions of people as well as the quality of the socioeconomic environment by

promoting access to electricity and the availability of affordable electrical energy. The specific goals include: (i) increasing the electrification rate of each country, (ii) developing cross-border electrification, (iii) developing income-generating activities, and (iv) improving the living conditions of people in the project area of influence.

Feasibility studies are available.

PROJECT COST

The cost of the project is estimated at 145.8 million euros while the funding mobilized is 20.615 million euros. The funding sought stands at 125.185 million euros.

The project will be carried out in two separate lots, using a "turnkey" contract as follows:
- Lot 1: Moanda-Okoyo-Djambala 400kV interconnection line,
- Lot 2: Construction of the new THT departure substation in Okoyo and the extension of the existing substations in Moanda and Djambala.

EXPECTED RESULTS

The project is expected to improve the availability of a reliable and sustainable source of electricity, which will result in strong economic growth and serve as a catalyst for new investments.

NEPAD ELIGIBILITY

The Grand Poubara and Imboulou electrical connection project and associated electrical lines are in line with NEPAD's priorities.

PROJECT VIABILITY

Financial analysis made it possible to assess the financial solidity of the project by studying its monetary flows.

Financial indicators, such as net present value, the internal rate of return, and the length of payback period, were assessed taking into account the need to meet the financial obligations to which the project will have to comply.

The results of the financial analysis show that even in the "low load" scenario, the project is financially viable with a positive NPV (+67.7 million euros), an IRR (12.4 percent) higher than cost-weighted average capital (12 percent), and with a payback period (13 years) less than the duration of the project (25 years).

BACKGROUND

The CEMAC subregion has immense hydroelectric potential that it aims to develop and interconnect the electricity networks of member states in order to create a regional electricity market.

The Cameroon-CAR electricity interconnection project stems from the desire of the two countries to optimize the use of their energy resources by integrating their electricity generation, transmission, and distribution infrastructure. It aims to connect electricity networks in the towns of Bertoua in Cameroon and Boali in the CAR to allow low-cost access to electricity for the two towns and neighboring localities.

Communities face difficulties operating businesses and generating income, a challenge that hampers efforts to reduce poverty. In addition, unequal access to electrical energy prevents them from fully realizing the potential associated with their human capital and makes them more vulnerable to climate change, natural disasters, and pandemics.

At the regional level, the project is in line with the regional integration strategy advocated by the Central African Economic and Monetary Community (CEMAC), one of whose goals in the energy sector is to move from a compartmentalized community space to an integrated space, with the establishment of a program to interconnect the electricity networks of Central African countries to guarantee sufficient supply in each state. This will also allow countries to access a plurality of offers enabling them to arbitrate between resorting to local production and purchasing electrical energy to optimize their electrical energy mix.

The connection of electrical networks is a factor of development and the emergence of economic and commercial exchanges. It will accelerate integration and reduce the energy shortage in the two countries.

PROJECT DESCRIPTION

The project consists of: (i) building and strengthening the electricity transmission networks between the towns of Boali (CAR) and Bertoua (Cameroon) and (ii) rehabilitating and extending the distribution networks, including the connection of localities crossed by the lines.

OBJECTIVES

The overall goal of the project is: (i) to reduce the energy deficit of the countries concerned and (ii) to improve the living conditions of people as well as the quality of the socioeconomic environment by promoting access to electricity and the availability of affordable electrical energy.

Specific goals include: (i) increasing the electrification rate of each country, (ii) developing cross-border electrification, (iii) developing income-generating activities, and (iv) improving the living conditions of people in the project area of influence.

PROJECT COST

The cost of the project is estimated at 49.234 million euros. As part of its fundraising efforts, CEMAC has already mobilized an amount of 11.448 million euros. The funding gap stands at 37.746 million euros.

EXPECTED RESULTS

The main expected results are: (i) the reduction of energy costs, (ii) the rehabilitation and strengthening of production units, (iii) the rehabilitation and extension of the distribution networks, and (iv) the improvement of the living conditions of people.

Strengthening regional electricity interconnection is particularly important for growth, job creation, and economic transformation. The project will play a crucial role in improving access to electricity for people living along the line, thereby helping to reduce inequalities.

NEPAD ELIGIBILITY

The project is part of the cross-border electrification program set up by the Union of Electricity Producers, Transporters and Distributors in Africa (UPDEA) and the Central African Power Pool (PEAC), whose vision is to exploit the hydroelectric potential of the region to “satisfy all forms of demand through efficient and prosperous energy boulevards and electricity markets.” The implementation of this project meets NEPAD’s goals.

PROJECT VIABILITY

Results of the financial analysis show that even in the “low load” scenario, the project is financially viable with an Internal Rate of Return of 13.52 percent, above the weighted average capital cost of 12 percent.