

PROJECT SHEET 31

NIGER

Title: National dispatch center: preliminary design for integrating REN

Amount: 80k€

Category: SE4All On-grid TA

Request from: Nigelec

Context

Niger's energy consumption is one of the lowest in the world. It is structurally dominated by biomass which, in 2014, represented 78% against 19% for petroleum products and 3% for electricity.

Very few households have access to electricity. The rate of access to electricity is estimated at around 13% (NIGELEC 2019), with significant disparities between urban and rural areas, and between the capital Niamey and other urban centers. The access rate is less than 1% in rural areas, and varies in small towns between 20% and 40%, and is around 50% in Niamey.

Seeing (i) the large number of ongoing projects aimed at significantly increasing electricity production capacity, in particular through intermittent production, and (ii) the need for planning and regulation of national and regional energy sources, the project of a National Control Center (CCN) is considered strategic for the country.

Two studies are planned within the framework of the NELACEP project of the World Bank on a National Control Center (Dispatching) and the Central Control Office of Niamey. The first would then be financed with funds made available by AFD and the second by the World Bank.

Technical assistance

The AFD study is placed in the context of this project and the present study aims to provide additional information on the design of the national control center and the implementation of its financing.

More precisely, the technical assistance aimed at:

- Preparing technical feasibility and design
- Preparing economic and financial analysis

Status & impacts

Completed in November 2018.

- AFD granted a 27 million loan to the Republic of Niger for the dispatching center.
- The call for tenders for the construction of the national dispatch center has been launched and is divided in 4 different packages:
 - Package 1: SCADA/EMS : Attributed to General Electric, the contract is effective since 21/12/2021 and the first phase of detailed design is on-going
 - Package 2: Substation remote control: attributed to Shanghai Electric/Vicom, the contract was signed on 17/12/2021 and will be effective shortly.
 - Package 3: The first tender did not allow attributing the contract. The bidding process had to be relaunched and is ongoing.
 - Package 4: Building construction: attributed to Shanghai Electric/Vicom, the contract was signed on 17/12/2021 and will be effective shortly.

Final report available on request.



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A facility to develop innovative projects in renewable energy and boost electrification on the African continent.

The AFD Group, with the support of the European Union, has set up the "African Renewable Energy Scale-Up facility" (ARE Scale Up facility) to boost private sector investment in on-grid and off-grid renewable energy production in Africa.

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