Early Warning System

IIC-12009-03 Atlantic II - Lagoa do Barro



Quick Facts

Countries	Brazil
Specific Location	Piauí
Financial Institutions	IDB Invest (IDBI)
Status	Proposed
Bank Risk Rating	В
Voting Date	2017-05-09
Borrower	Lagoa do Barro
Sectors	Energy
Investment Type(s)	Loan



Project Description

Lagoa do Barro wind power project (the "Project" or "LdB") will add 195 MW of renewable energy to the Brazilian electricity system, thus directly supporting the Government of Brazil's ("GoB") priorities to ensure a stable long-term electricity supply and the diversification of its energy matrix with the expected addition of around 10 GW from renewable sources by 2018. The Project consists of the construction of 8 adjacent wind farms totaling 195 MW and its associated facilities in the state Piaui, located in the Northeast of Brazil.The 8 wind farms of the LdB cluster had their energy contracted in the Leilao de Energia Proveniente de Novos Empreendimentos de Geracao (New Energy Auction or "LEN") auction A-5 of 2014.

The Project will benefit from a 20-year R\$ denominated power purchase agreement ("PPA") at fixed average price of around R\$139.9/MWh (~US\$55.3/MWh) as of November 2014, indexed to inflation (IPCA), signed with the system distribution companies ("DisCos"). The DisCos pay the generation companies through the Chamber of Electricity Energy Commercialization (Camara de Comercializacao de Energia Eletrica or "CCEE"- Electricity Clearing House) which is the institution that intermediates the energy contracts between the DisCos and the generation companies. Electrical studies were presented to the relevant authorities, which provided a favorable opinion to the Project's interconnection specifications for the assigned node.

The Borrower is expected to enter into turn-key EPC contracts covering civil works, equipment and turbines from first-tier manufacturers and a long-term O&M contract for at least the life of the IDB Group Ioan. The Project has an estimated [18]-month construction period, with construction starting by the first semester of 2017. Wind resource has been assessed by Aeroespacial and Inova Energy based on a four year on-site wind measurements at 120m hub height. The Project has a capacity factor of over 50% and estimated annual energy production at P90 of 997 GWh/year, with expected 5,107 equivalent hours.Transaction Structure and Financing Highlights.

Development Impact: The Project will have positive developmental impacts, such as: (i) adding 195 MW of renewable capacity to the Brazilian grid and thus decreasing thermal and hydro generation reliance; (ii) reducing carbon emissions; (iii) assisting a growing private-sector company in the Brazilian power sector, positioned to promote the much needed consolidation of the market segment related to small and medium-sized renewable energy projects; and (iv) improving the sites' local infrastructure and increasing local income.

ENVIRONMENTAL REVIEW

The Project has been preliminary classified as Category B (High Risk) operation according to the IIC's Environmental and Social Sustainability Policy. The project categorization will be confirmed based on the results of the environmental and social due diligence, when more information is available. The Project is located in the Caatinga biome, of predominantly dense shrubs with emerging trees, combined with converted agricultural land. The project site overlaps with three areas of permanent conservation: a 30 meter corridor along water bodies, slopes over 45 degrees and mountaintops. The project will require deforestation of mountaintops, which in turn require a permit from SEMAR with its associated compensation measures.

The Project prepared an EIA's or RIMA (Relatorio de Impacto Ambiental - Complexo Eolico Piaui) issued on May 2015. The RIMA was prepared for a wind farm complex consisting of 10 adjacent wind farms with 83 turbines totaling 255-MW, occupying an area of 3,494 hectares. The 83 km-long 230/500kV transmission line from the Lagoa do Barro 1 substation to the Sao Joao do Piaui substation was not included in the RIMA and will require a separate impact assessment.



Investment Description

IDB Invest (IDBI)

The estimated total cost of the Project is of up to R\$1.3 billion, which will be financed through (a) an IDB Group Partial

Guarantee for the senior loan until financial completion and/or (b) an IDB Group Guarantee for the debentures to improve their risk profile and pricing or (c) a long-term loan with a 15-year door-to-door tenor and a grace period of up to [36] months. It is estimated that the IDBG participation will amount of up to R\$430 million. The financial plan will be completed with the participation of one local development institution, as well as equity contributions for around 70/30 debt-to-equity ratio. The Project will be required to meet the customary debt sizing criteria applied to wind projects, DSCR 1.30x for P9010-yearsand 1.00x for P991-year. The IDBG Guarantee is expected to have a tenor of up to 12 years. The project will have the security package customary for this type of project finance transactions.



Contact Information

ACCOUNTABILITY MECHANISM OF IIC

The Independent Consultation and Investigation Mechanism (MICI) is the independent complaint mechanism and fact-finding body for people who have been or are likely to be adversely affected by an Inter-American Development Bank (IDB) or Inter-American Investment Corporation (IIC)-funded project. If you submit a complaint to MICI, they may assist you in addressing the problems you raised through a dispute-resolution process with those implementing the project and/or through an investigation to assess whether the IDB or IIC is following its own policies for preventing or mitigating harm to people or the environment. You can submit a complaint by sending an email to MICI@iadb.org. You can learn more about the MICI and how to file a complaint at http://www.iadb.org/en/mici/mici,1752.html (in English) or http://www.iadb.org/es/mici/mici,1752.html (Spanish).