

# **SAN JACINTO-TIZATE GEOTHERMAL POWER PROJECT**

**(NI-L1057)**

## **PROJECT ABSTRACT**

PENSA, a company organized under the laws of the Republic of Nicaragua, and its majority shareholder, SJPIC, are seeking financing for the second phase of the development of the San Jacinto-Tizate geothermal resource near the municipality of León, Nicaragua. PENSA is currently operating a 10 megawatt (MW) geothermal back-pressure power plant (the “B/P Unit”), and will expand generation capacity in two, 36 MW phases, Phase 1 and Phase 2. Upon completion of Phase 2, the 10 MW B/P Unit will be decommissioned, unless otherwise allowed by the Ministry of Energy and Mines (“MEM”). Phase 1 of the expansion is currently underway, involving construction of the powerhouse and installation of a 38.8 MW (gross) Fuji steam turbine at a cost of \$152.2 million. Phase 2 consists of the drilling of additional production and injection wells, the building of steamfield infrastructure, and installation of an identical 38.8 MW turbine at a total cost of \$177 million, including \$20 million allocated for cost overruns, as required by the Phase 2 lenders. The combined activities of Phase 1 and Phase 2 are the “Project”. IDB proposes to provide a senior loan of up to \$40 million to PENSA and SJPIC, as co-Borrowers, to partially finance the Project, which will be co-financed by a group of multilateral lenders and development finance institutions. Phase 1 and Phase 2 will be operated as one integrated project.

PENSA has a 20-year PPA with DISNORTE and DISSUR, the local, privatized power distributors owned by Unión Fenosa. The GNI and Unión Fenosa signed a memorandum of understanding, ratified through legislative decree in February 2009, aimed at improving the quality of service and resolving the financial and technical problems that have affected the financial performance of DISNORTE/DISSUR.

An EIA was completed in 2008 for the combined Phase 1 and Phase 2, which was approved by MARENA. All required environmental permits for both phases have been obtained.

The development of renewable energy resources is a priority of the GNI. Recent laws have created incentives for renewable energy projects and established minimum levels of renewable contracts for the distribution companies. Furthermore, the base-load nature of geothermal energy makes it particularly effective in offsetting the use of fossil-fuel based electricity sources and reducing carbon emissions. Upon completion of Phase 2 of the Project, PENSA will operate a net 72 MW base-load plant that will be among the lowest marginal cost producers in Nicaragua. The Project will increase Nicaragua’s overall power generation capacity, and will represent approximately 8% of the Country’s total installed capacity. Finally, as only the second operating geothermal power plant in Nicaragua, the Project will demonstrate the viability of geothermal energy production and will help to stimulate additional investment in the sector.