Dominican Republic Adds to Power Capacity With New Gas-Fired Plant

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February 22, 2023

Vanderweil provided MEP/FP power & utilities engineering design services for the SIBA Energy Plant.



The first phase of a new natural gas-fired power plant has been brought online in the Dominican Republic (DR), a project designed to support demand for electricity across the island nation.

The SIBA Energy plant, located in Boca Chica in Santo Domingo province, is owned by a consortium led by SIBA Energy Corp. The group includes the Haina Electricity Generating Co. (EGE Haina), SGN Energia, and Monte Rio Power Corp. The plant in its initial configuration has 210 MW of generation capacity. It will be further developed as combined cycle plant, with 280 MW of capacity when additional energy is produced from the recovery of exhaust heat from the turbines.

The power station features 12 gas-fired Titan model turbines that also can operate on diesel and hydrogen fuels. The turbines are manufactured by Solar Turbines, a subsidiary of the Caterpillar group. Officials with EGE Haina said the turbines are modular units that will operate with limited environmental impact, producing only about 11% of the maximum carbon emissions allowed by DR regulations.

The first phase of the plant was inaugurated Feb. 21 in a ceremony led by DR President Luis Abinader.

Flexible Units

"This plant comes to support the Dominican electrical system with silent, flexible units and impressive response capacity," said Luis Mejia Brache, president of SIBA Energy and vice president of EGE Haina. Brache noted that the turbines have a rapid-start design, with the flexibility to operate in blocks. EGE Haina in a news release said the plant is "an ideal addition to the national electricity system, as it can contribute to meeting the growing

demand for electricity and to modulate the needs of peaks in demand, to complement the generation of renewable energies and to act as a reserve for emergencies due to failures and scheduled maintenance of other plants."

Brache said the SIBA consortium has invested \$225 million in the plant, and said the facility "is the product of the government's vision for the sustainable electrical development of the Dominican Republic; of the trust and commitment of the shareholders in the future of the Dominican nation; the support of government and municipal authorities; as well as the financiers who have made it possible to have the necessary resources."

Additional funding for the project comes from the Free Closed Investment Fund for the Development of Dominican Infrastructures I, managed by the Sociedad Administradora de Fondos de Inversión Universal, SA (AFI Universal). The international financial entity CIFI Asset Management acts as the financing manager.

Elena Vivella de Paliza, representing Monte Rio Power, said, "Equipment suppliers, engineers and contractors and subcontractors have done a great job breaking records for the installation of a power plant of this magnitude in the country. All while they have assured us of a well-done construction, complying with all safety and quality standards".