PROJECT ABTRACT

NOVEMBER 12, 2015

Country:	Panama
Sector:	Energy
Project Name:	Costa Norte Gas-fired Thermal Power Plant and LNG Regasification Terminal
Project Number:	PN-L1123
Borrowers:	Gas Natural Atlántico S. de R.L. ("GNA") (power plant SPV) and a to be named SPV (LNG Regas Terminal SPV) joint and several borrowers established under the laws of Panamá
Sponsors:	The AES Corporation and Inversiones Bahia Ltd.
Proposed A Loan:	Up to US$200,000,000

PROJECT OVERVIEW

Panama's recent economic growth and improvements in competitiveness have implied a sustained growth in energy demand in the order of 6% annually[1]. During the same period, much of the generating capacity added was from conventional liquid fossil fuel sources[2]. As a result, the conventional thermo-electric share of the power generation mix grew from 31% in 2000 to 45% in 2014[3]. At the same time, Panama has suffered from adverse hydrologic conditions and congestion in the power transmission system lines, causing further upward pressure on energy prices.

Energy demand is expected to continue to grow in the foreseeable future and to reach 17,745 GWh by 2024 from 9,021 GWh in 2014, an annual increase of 7%. In order to meet this increased demand, the installed capacity will need to increase from 1,529 MW in 2014 to approximately 2,700 MW by 2024[4].

In addition to an insufficient amount of installed capacity, the Panamanian electricity system also faces a number of challenges that reduce the competitiveness and reliability of the system, including low reserve margin, low average thermal energy availability and high risk for unavailability, as well as high vulnerability to low hydrology (See Annex III). Moreover, the recent incorporation of non-conventional renewable energy sources[5] has increased the requirement for baseload capacity in order to

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1 INE/ENE Panama Energy Sector Note 2015-2019, May 2015

2 Primarily bunker C, heavy fuel oil and coal

3 http://www.asep.gob.pa/images/electricidad/estadisticas/II_semestre_2014/OFERTA.pdf; http://www.asep.gob.pa/electric/oferta2000.html

4 "*Estudio de Planificación Indicativa de la Expansión de la Generación y Transmisión Regional de los Países de América Central*", Consejo de Electrificación de América Central, Noviembre 2014

5 NCRE includes wind, solar and run-of-the-river (ROR) hydrogeneration (usually of small scale).

provide a reserve of energy and to maintain grid stability to complement the intermittent nature of NCRE sources.

With this in mind, in 2012, the GOP recognized the potential benefit of introducing a cleaner fossil fuel, such as natural gas, into Panama for use in generation plants as well as in other sectors, and established incentives to promote it. Law 41 was passed, establishing a regimen of licenses and fiscal incentives to stimulate the development of natural gas-fired electricity generation plants[6].

In addition, in order to (i) address the lack of a reliable supply of base load energy, (ii) meet growing electricity demand and (iii) complement the current and anticipated contribution of renewable energy generation to the system, in January 2015, *Empresa de Transmisión de Energía S.A.* ("ETESA")[7], convoked, on behalf of the 3 distribution companies[8], two public auctions for the purchase of a total of 700 MW of firm capacity. On September 9, 2015, AES, through its subsidiary Gas Natural Atlántico S. de R.L., together with local partner *Inversiones Bahía*, won the first auction for 350 MW and was granted 10-year power purchase agreements ("PPA") from the distribution companies beginning approximately April 1, 2018.

PROJECT DESCRIPTION

The project, located in the Province of Colon 80 km to the northwest of Panama City, consists of the design, construction and operation of a 170,000 m^3 LNG tank and regasification terminal as well as a 381MW (net) combined cycle natural gas fired power plant and approximately 15 km transmission line connected to the national grid ("SIC") (the terminal and the power plant, together, the "Project"). The Project has an estimated total cost of up to US$900 million and will supply approximately 3,000 GWh per year of electricity.

The regasification terminal will include a jetty and associated pipeline to transfer LNG from the vessels to the storage tank. The power plant will be the anchor customer of the regasification terminal, using around 25% of the terminal's total capacity. The project has secured an LNG contract with an international supplier, who will deliver it using full scale ships (~155,000 m^3) to the Project. The LNG will then be stored in a LNG storage tank with regasification converting the LNG into natural gas. The Project will have a 10-year take or pay contract for the fuel supply.

The Project will contribute to a more competitive, cleaner and more reliable energy matrix in Panama, by creating long term availability of natural gas and increasing natural gas-based power capacity to be supplied to the grid.

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6 The Bank, through INE/ENE, has supported the GOP's National Secretary of Energy by developing a study regarding alternative strategies for the introduction of natural gas and other associated gases.

7 100% state-owned enterprise responsible for the expansion and operation of the transmission system and the operation and administration of the electricity market

8 Empresa de Distribución Eléctrica Metro-Oeste, S.A. ("EDEMET"), Empresa de Distribución Eléctrica Chiriquí, S.A. ("EDECHI") and Elektra Noreste, S.A. ("ENSA")

DEVELOPMENT IMPACT

The Project will have the following development results: (a) increase baseload power available to the SIC by 381MW; (b) increase the share of natural gas in Panama's energy matrix in lieu of other fossil fuels; (c) increase Panama's supply of LNG[9]; (d) enable the system to efficiently utilize intermittent renewable energy sources; (e) create direct and indirect jobs; and (g) potentially abate greenhouse gas emissions.[10]

IDB'S ADDITIONALITY

The Bank will provide and help mobilize long term financing in terms adequate to this type of infrastructure. The Bank will also play a cohesive role among the multitude of actors involved in the Project's complex structure, as well as serve as an anchor for the Project's financing at its current stage of development. In addition, the IDB's participation fosters high environmental and social (E&S) international standards through compliance with IDB policies and the incorporation of international best practices, benefitting from the Bank's past experience in other LAC countries in this type of projects.

PROJECT CONTRIBUTION TO IDB OBJECTIVES

The Project directly addresses one of the strategic goals outlined in the GCI-9 of fostering development through the private sector, and, specifically the sector priority of Infrastructure for Competitiveness. It is fully aligned with: (i) the current IDB Country Strategy for Panama (2010-2014), specifically with the objective of reducing energy costs and improving energy efficiency; (ii) the proposed IDB Country Strategy for Panama (2015 - 2019)[11] in particular with the strategic objective of deepening logistical services, the efficiency and the connectivity of productive infrastructure by supporting electricity generation; and (iii) the GOP's stated objective[12] of supporting reliable energy supply expansion and power generation matrix diversification, as well as production cost and carbon emission reduction. The Project complies with the Minimum Performance Criteria set out in the IDB's Liquid and Gaseous Fossil Fuel Power Plant Guidelines.

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9 There are currently no LNG regasification terminals in Panama.

10 It is assumed that heavy fuel oil and bunker C-based energy generation will be replaced/avoided.

11 The proposed Country Strategy with Panama (2015-2019) was approved in QRR and is to be presented for approval by the Board in December 2015

12 Plan Estratégico del Gobierno 2015-2019, December 2014