

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: AB6974

Project Name	Nigeria Electricity and Gas Improvement Project (add. financing)
Region	AFRICA
Sector	General energy sector (90%);Oil and gas (10%)
Project ID	P126182/P126190
Borrower(s)	FEDERAL GOVERNMENT OF NIGERIA
Implementing Agency	TRANSMISSION COMPANY OF NIGERIA
Environment Category	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
Date PID Prepared	February 6, 2012
Date of Appraisal Authorization	February 1, 2012
Date of Board Approval	March 29, 2012

1. Country and Sector Background

1. Historically, Severe Power Supply Shortages and Poor Service Provision - Although one of the world's largest oil producers and possessing the eighth largest gas reserves worldwide, Nigeria continues to suffer from a chronic shortage of generation capacity. In addition to this supply deficit, the transmission and distribution networks suffer from severe capacity constraints exacerbated by years of poor maintenance brought about by inadequate funding from tariffs and poor revenue collection rates. On aggregate, nearly one out of every two units¹ of electricity generated is lost due to technical and commercial losses and outright theft before the revenues are recovered and re-injected into operations and maintenance. These deficiencies have resulted in approximately 55 percent of the country's population living without access to electricity and the remaining 45 percent suffering from poor quality of service with multiple power cuts each day. In the recently released Nigeria Investment Climate Assessment, 83% of Nigerian business owners consider a lack of electricity the biggest obstacle to doing business.² Nigerian businesses experience an average of 239 hours of power outages per month, accounting for nearly 7% of 'lost sales'³.

2. Nigeria's Roadmap to Power Sector Reform, Initial Steps – Against this challenging background of a deeply-rooted power sector crisis, the FGN took the politically-bold step of acknowledging the sector woes and the policy missteps that led to them. The Government also acknowledged the impact of the sector deficiencies on the country's economic development and the everyday lives of ordinary Nigerians. To help reverse this situation, the FGN issued in August 2010 the Roadmap to Power Sector Reform that outlines specific short-, medium- and

¹ Average Technical losses are estimated by FGN to 21% of energy sent out; Non-technical losses such as electricity theft estimated to 11% and; commercial losses estimated to 12% of billed amounts.

² Compare this to 14% of Indonesia businesses and 28% of Kenya businesses

³ Investment Climate Assessment (2011)

long-term goals of a comprehensive reform program. The program aims to address the root-causes of the sector's poor performance, commencing with implementing cost-reflective tariffs to ensure the sector's financial health and addressing mismanagement of the sector's generation, transmission, and distribution infrastructure. In order to ensure sustained political commitment to this reform agenda, implementation of this program is being led by the highest level of government.

3. Although much still needs to be done, FGN is making significant inroads towards realizing its sector reform targets and the strong political commitment behind the reform program and the improved coordination by the different governmental entities involved has led to **tangible improvements in the power supply situation**. Some promising results include:

- **Improved Grid Stability:** With the introduction of 300 MW of “spinning reserve,” the grid's ability to absorb minor shocks (such as emergency shutdown of a generation plant or transmission disconnections) has improved. The number of grid collapses has also been reduced from an average of about 40 per annum to 18 during 2011.
- **Improved Power Sector Supply:** Nigeria set a new all-time record in available grid supply in September 2011 with an available supply of 4300 MW (including spinning reserve).
- **Accelerated Completion of NIPP Plants:** Recognizing the inherent lag before benefits from the private power generation begin to materialize, concerted efforts have been made to accelerate execution of the NIPP power plants. The first plant, Olorunsogo, was commissioned in late 2010 and is producing 300 MW (at reduced capacity due to gas infrastructure constraints and a lack of a fully committed long term Gas Supply Agreement). It is expected that NDPHC would be able to commission 2-3 power plants per year over the 2011-14 period as prevailing transmission and gas supply constraints are gradually addressed.

2. Objectives

4. The development objectives of the proposed Project will remain to: (i) improve the availability and reliability of gas supply to increase power generation in existing public sector power plants; and (ii) improve the power network's capacity and efficiency to transmit and distribute quality electricity to the consumer. This will be achieved mainly by supporting gas supply contracts through Partial Risk Guarantees (PRGs) and complementary investments in transmission and distribution systems. The proposed project will bring the following distinct economic benefits, inter alia: (i) improved quality and reliability of gas supply; (ii) reduction of losses (technical and non-technical); (iii) improved power quality and supply reliability, (iv) avoided captive generation, (v) improved financial health of PHCN/TCN, and (vi) enhanced customer satisfaction.

3. Rationale for Bank Involvement

5. FGN has requested the World Bank's assistance to increase the availability and reliability of power, increase electricity access, support gas market development, and improve the financial sustainability of the sector. Given its longstanding relationship and substantial policy dialogue with the country, the WBG is in a unique position to assist the Government to catalyze private investment in the sector by supporting reforms and mitigating risks through an appropriate package of instrument aimed at addressing the prevailing private sector concerns in the gas sector.

6. NEGIP and the proposed Additional Financing continue to be fully aligned with the Country Partnership Strategy (CPS), which focuses on three themes to transform and diversify Nigeria's economy. Key among these themes is maintaining growth in the non-oil related sectors of the economy. The CPS recognizes that "a binding constraint common to the diversification of the economy into agriculture, manufacturing, and service sector, and to reducing poverty is infrastructure, in particular, energy and roads." Given the magnitude of investments needed, private sector participation is and will continue to be vital to achieving these objectives.

4. Description

7. NEGIP, originally approved by the Board on June 16, 2009 and effective on July 21, 2010, consists of a US\$ 200 million credit and a US\$ 400 million PRG (US\$ 100 million actual IDA commitment) operation. It includes three components as follows:

- a) Support for domestic gas-to-power contracts by means of IDA Partial Risk Guarantee (PRG) to insure Government payment risks for the private sector (US\$ 400 million).
- b) Complementary IDA Credits for investments in transmission and distribution systems to enable the delivery of more power to consumers, and develop "best practice" projects in distribution to gradually reduce losses and subsidies (US\$ 180 million).
- c) Technical assistance for legal and institutional support for capacity building to implement environmental and social safeguards; and research to improve overall efficiency in the sector (US\$ 20 million).

8. The proposed additional financing for a total amount of US\$300 million will increase the scope of the PRG component; enable the scaling-up of the transmission and distribution component under the project as well as; additional technical assistance activities aimed at supporting Government institutions during the privatization process. The proposed changes are summarized as follows:

- Extension of the Project Closing Date to enable completion of Project implementation from December 31, 2014 to December 31, 2017.

- Increase in the scope of the PRG component to cover nominated NIPP power plants. The expanded Project would provide additional PRGs in the aggregate amount of US\$ 200 million (IDA allocation of US\$ 50 million). These PRGs would replicate the PRG structure designed under NEGIP.
- Increase in the scope of the transmission and distribution investment component to alleviate grid congestion and increase power supply.
- Increase in the scope of the Technical Assistance component to support the Power Sector reform as outlined in the Roadmap and to ensure relevant sector institutions are adequately equipped to deliver the required results.
- The Project Development Objective (PDO) will remain unchanged. However, key monitoring indicators, including baseline data and targets, will be revised to reflect the restructuring of the project and the project delays in effectiveness

5. Financing

Source:	(\$ million)
Borrower/Recipient	0
International Development Association (IDA)	100
PRG of US\$200 million (IDA)	50
Total	150

Note: The PRG IDA allocation is 1/4th of Guarantee amount coverage

6. Safeguard Policies (including public consultation)

9. The proposed additional activities do not change the environmental category of the project (Category B). One additional safeguards policy, OP 4.12 *Involuntary Resettlement* is triggered as a precautionary measure because, although no land acquisition is anticipated for investments in Component 2, it cannot be said with certainty that there will be none. Supervision of the safeguards arrangements established for NEGIP and NEDP has shown them to be effective and has confirmed that the PMU's Environmental Resettlement and Social Unit (ERSU) has satisfactory capacity to properly implement an ESMF and an RPF.

7. Contact point

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