KEY DEVELOPMENT ISSUES AND OUTCOMES

1. The development objectives of the proposed Project are to improve the availability and reliability of electric power in Nigeria mainly by supporting gas supply contracts through Partial Risk Guarantees (PRGs) and complementary investments in transmission and distribution systems. The project will assist the Government of Nigeria (GON) in delivering more reliable power and creating a healthier power sector. The proposed project will result in five distinct economic benefits: 1) incremental, reliable and improved quality of gas supply; 2) reduction of power losses from generation, distribution and the electrical grid; 3) improved power quality and reliability, 4) improved financial health of PHCN (by helping PHCN increase generation and income). 5) enhanced customer satisfaction. Benefit estimates are conservative since they do not include environmental gains from rehabilitating inefficient power plants or productivity and competitiveness improvements.

2. The project will rehabilitate existing transmission and distribution infrastructure so that the increased power generated from the increased supply of can reach people. Poor infrastructure in the power sector is a key constraint to growth in Nigeria. Shortfalls in the availability of power (an average of 3000MW generated against an estimated demand of 10000MW) have meant that around 60 million people continue to live in the dark and average annual per capita power consumption of power is among the lowest in the world. Poor access to power has forced companies to invest in self-generation, diverting substantial resources away from other more productive uses. By some estimates, self-generated power now substantially exceeds public sector-delivered power forcing about 90% of the population and almost all private enterprises to provide self generation.

3. No large scale or irreversible environmental impacts result from the project. There is no land acquisition. Potential environmental impacts are associated with the safety risks of existing gas pipelines and the rehabilitation of existing electrical transmission substations and distribution networks. Any possible risks will be addressed through pipeline integrity studies and environmental and social management plans (ESMPs). The Project supports government actions to minimize the adverse environmental impact of the gas pipeline and power stations.
Sector Background.

4. The current level of power generation is often constrained by inadequate gas supplies to power plants. Nigeria’s oil reserves, the world’s seventh largest, are effectively controlled by five major International Oil Companies (IOCs) who produce associated gas during extraction of oil. So far, low gas price has inhibited IOCs to invest in gas gathering and processing equipment to supply the domestic market. FGN has announced a phased price increase to domestic gas suppliers, and at the same time it has introduced a Domestic Supply Obligation and bilateral contracting between gas suppliers and consumers. These steps are expected to bring commercial discipline in the gas sector and FGN is seeking support for implementation of the gas sector strategy. IDA will provide Partial Risk Guarantees to gas suppliers to guarantee payments by PHCN for gas purchases.

5. The World Bank will make available funds to PHCN to improve capacity to transmit the additional power generated consequent to the increase in the supply of gas. The proposed investment will also result in reducing the transmission and distribution losses and increasing PHCN’s revenues. These investments and the implementation of the multi-year tariff order (MYTO), recently announced by FGN, will further add to PHCN’s revenues and its ability to meet its contractual obligations to pay for gas. The Bank credit will target investments, technical assistance, including capacity building to allow for timely decision making.

6. Reforms in the power sector since 2005 include: Enactment of the Electric Power Sector reform (EPSR) provided for more efficient operation in the sector. The act led to (a) unbundling of the Power Holding Company of Nigeria (PHCN) into 18 companies (6 generating, 1 transmission, and 11 distribution); open access to the grid; bilateral contracts between power producers and main power users, and competition among power producers; (b) Initiating the National Integrated Power Project (NIPP) to generate about 2,700 MW of additional power, and related transmission and distribution infrastructure; (c) Promoting access to electricity in rural areas (d) development of a Renewable Energy Master Plan; and (e) Establishing the Nigeria Electricity Regulatory Commission (NERC) as an independent regulatory agency to ensure efficient and equitable growth of the electric power sector. The Act allows for open access to the grid, bilateral contracts between the power producers and the main power users, and competition among power producers.

7. Results from these reforms have so far been modest: (a) an increase in monthly revenues collection from N 2.8 billion to N7.75 billion; (b) an increase in metered customers from 40 to 67%; (c) reduction in system losses from an average of 45% to around 34%. There is substantial room for improvement and the sector is still far from financial sustainability. Implementation delays and cost overruns have plagued the publically-funded NIPP and the expected increase in power generation has not taken place. Private sector investment in both generation and distribution has remained limited because of utilities poor track record in meeting payment obligations.

Role of the World Bank and Development Partners

8. **Rationale for World Bank involvement:** 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. While the Bank cannot commit all the resources needed to revitalize the sector (estimated investments of US$20 billion during the next 10 years), it can play a pivotal role in assisting the Government in achieving these objectives. The World Bank Group proposes
to make a “knowledge” contribution through financing of best practice demonstration projects that can be replicated and scaled up to improve service delivery. WBG is also proposing to help catalyze private investment by supporting reforms and mitigating risks through Partial Risk Guarantees.

9. **Preliminary description**: The operational features of the proposed project are:

(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. The project proposes to provide up to US$250 million (IDA allocation of US$62.5 million) in PRGs to support a series of gas contracts to meet the supply obligations of the (IOCs);

(b) Complementary IDA Credits of US$ 175.0 million will fund 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.

(c) Technical assistance of US$12.5 includes legal and institutional support for capacity building to implement environmental and social safeguards; and research to improve overall efficiency in the sector.

10. **Safeguard policies that might apply**

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
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<tbody>
<tr>
<td>Environmental Assessment (OP/BP 4.01)</td>
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<td>Projects on International Waterways (OP/BP 7.50)</td>
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<tr>
<td>Piloting the Use of Borrower Systems to Address Environmental and Social Issues in Bank-Supported Projects (OP/BP 4.00)</td>
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11. NEGIP has been classified in EA Category B as there are no large-scale, significant or irreversible impacts because no significant new infrastructure will be built by the project. Potential environmental impacts consist of: (i) the public health and safety risks involved in transporting gas through existing pipelines; (ii) the rehabilitation and upgrading of existing electric transmission, distribution substations and distribution networks.

12. Safeguards for the PRG component are addressed through pipeline integrity studies for existing lines that will supply gas to the PHCN power plants under contracts supported by PRGs. The first of these has been completed; it is an update of the integrity study for the Escravos-Lagos Pipeline System (ELPS) that was prepared in 2000. Additional studies will be carried out in accordance with the ESMF whenever new

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* The PRG IDA allocation is 1/4th of Guarantee amount coverage. The IDA allocation is in column two in the financing plan table on page 8.

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties’ claims on the disputed areas.
PRGs are identified. Integrity studies are not disclosed for reasons of security. Safeguards for the investment component will be handled by preparing Environmental and Social Management Plans (ESMPs) (i) prior to appraisal for those sites to be financed in the first 2 years; and (ii) according to the project’s Environmental and Social Management Framework (ESMF) for sites to be financed in future years.

13 IOC’s or gas companies delivering gas to PHCN power plants with the backing of Bank PRGs will see new market opportunities not only for export and for firm domestic consumption but also possible future growth in domestic consumption. For any new gas well drilling or extensions to gas collection systems they might undertake, IOCs will abide by Nigerian regulations. Bank resources through Technical Assistance will help the Government to evaluate and improve their application to gas production facilities.

14. The proposed Project is not funding activities that would cause any form of land acquisition or restriction of access to livelihoods. The potential social impacts of the project’s activities will be small-scale, site-specific and easily remediable. While increased availability and reliability of electric power would have positive social impacts, possible negative impacts could be: (i) minor for rehabilitation and operation of electrical transmission and distribution infrastructure; and (ii) moderate for the public health and safety risks involved in transporting gas through existing pipelines under PRGs.

15. The proposed Project is aware of the political economy of Niger Delta and is fostering consultation(s) with stakeholders during the preparation, appraisal, and the implementation of the Project. The proposed power sector stakeholders’ forum will provide a channel for stakeholders to review implementation, raise concerns, and seek answers.

16. Tentative financing

Source: ($m.)
BORROWER/RECIPIENT 0
International Development Association (IDA) 187.5
PRG of US$250 million 62.5
Total 250

17. Contact point
Contact: Prasad V. S. N. Tallapragada
Title: Senior Energy Specialist
Tel:(202) 458-5600
Fax: (202) 473-5123
Email: ptallapragada@worldbank.org