



Executive Summary

Federal Government Economic Recovery and Growth Plan

Given the critical role of power supply in socio-economic development and the development of all sectors of Nigeria's economy, the Federal Government Economic Recovery and Growth Plan 2017 – 2020 ("ERGP"), founded upon medium-term structural reforms, has prioritized the reform of the power sector infrastructure in order to diversify Nigeria's economy. Key power-related objectives of the ERGP include:

1. Achieving the constant delivery of operational capacity by 2020 through enhancing the existing installed capacity available for generation, addressing gas supply issues, completing major gas infrastructure lines for power, encouraging small-scale renewable energy projects, and building more power generation capacity.
2. Improving the Nigerian Bulk Electricity Trading Plc ("NBET") financial capacity to support the electricity market.
3. Strengthening the governance and institutional capacity of sector agencies.
4. Improving the commercial viability of generation, transmission and distribution companies.

Power Sector Reforms

The quest by the Federal Government of Nigeria ("FGN") to implement sustainable reforms to the power sector dates back to the National Electric Power Policy in 2001, with the unbundling and subsequent privatisation of electricity generation and distribution companies in 2013. While power sector reforms, including the Electric Power Sector Reform Act of 2005 ("EPSRA") and the 2010 Roadmap for Power Sector Reforms ("The Roadmap") serve to facilitate a competitive, efficient, private sector-led power sector – three years after privatization, the sector still faces infrastructure, liquidity and governance challenges that require specific strategic interventions by the Federal Government of Nigeria. For this reason, the Federal Government initiated the May 2016 *Roadmap of Incremental, Steady and Uninterrupted Power Supply*. The 2016 Roadmap, with its related deliverables like improvements in sector governance, meter supply, eligible customers and mini-grid regulation, dovetail into a comprehensive electricity market intervention by the Federal Government – the Power Sector Recovery Programme ("PSRP"). The Power Sector Recovery Programme was designed on this basis and aims to reset the Nigerian Electricity Supply Industry ("NESI"), while enhancing the 2016 Roadmap.

Power Sector Constraints and Challenges

With the reforms still unable to achieve a regime of fully effective contracts, the following challenges have created the need for a market reset: infrastructure constraints associated with gas, generation, transmission and distribution; insufficient end user tariffs; sector tariff shortfalls between January 2015 and December 2016 of ₦420 billion; slow pace of loss reduction and load rejection by DisCos; and sector governance challenges. Collectively, these challenges have discouraged private sector investment in the sector and, thus, continue to impede Nigeria's economic development.

What is the Power Sector Recovery Programme?

The Power Sector Recovery Programme ("PSRP") is a series of policy actions, operational, governance and financial interventions to be implemented by Federal Government of Nigeria over the next five (5) years to restore the financial viability of Nigeria's power sector, improve transparency and service delivery, resolve consumer complaints, reduce losses and energy theft and **RESET** the Nigerian

Electricity Supply Industry for future growth. The Federal Government of Nigeria developed the PSRP in collaboration with the World Bank Group. Holistically, the objectives of the Power Sector Recovery Programme are to i) Restore the sector's financial viability; ii) Improve power supply reliability to meet growing demand; iii) Strengthen the sector's institutional framework and increase transparency; iv) Implement clear policies that promote and encourage investor confidence in the sector; and v) Establish a contract-based electricity market.

Power Sector Recovery Programme Components

The PSRP is comprised of components /reform actions in four groups of interventions – financial, operational/technical, governance, and policy interventions.

I. Financial interventions to fully fund historical and future sector deficits:

1. **Establish sustainable and appropriate electricity tariffs:** Define a tariff adjustment trajectory, so that tariffs cover the revenue requirement of efficient service provision by 2021. Establish the revenue requirement of DisCos and transmission (TCN), and consistently apply tariff adjustments according to the defined tariff trajectory with automatic adjustments as service delivery improves.
2. **Dimension and commit to fully-fund projected sector deficits due to tariff shortfall from 2017 until 2021:** Develop a Financing Plan to fully-fund the shortfall (the difference between sector's revenue requirement and revenue under effective tariffs based on a defined tariff trajectory) until tariffs attain cost recovery levels, and support sector liquidity.
3. **Clear historical deficits due to tariff shortfall as part of the Financing Plan:** Include in the Financing Plan the funding of historical deficit due to tariff shortfall (NGN 420 billion shortfall from January 2015 to December 2016).
4. **Secure financing sources:** Identify and secure domestic and external financing sources to cover the total funding requirements in the Financing Plan up to 2021.
5. **Clear historical MDA debts and automate future payments:** Ensure MDA historical debts are paid and implement a payment mechanism for future electricity bills.
6. **World Bank funding:** The World Bank Group has expressed its willingness to assist the FGN in preparing and supporting the PSRP. The World Bank has indicated potential support for the Programme totalling up to US\$ 2.6 billion.

II. Operational / technical interventions:

7. **Baseline power generation, transmission and distribution:** Ensure minimum baseline power supply of 4,500 MWh/Hour is guaranteed and distributed daily from 2018 to achieve grid stability and phase out operational shortages.
8. **Improve DisCo performance:** Improve DisCo performance by employing a balanced approach of incentive regulation, monitoring and enforcement, aimed at ensuring aggressive ATC&C loss reduction (e.g. through a metering programme, upgrade of distribution and transmission interface networks) and improving operational efficiency. Develop, and implement when necessary, credible Business Continuity Plans.
9. **Adequate gas supply for power generation:** Address major issues constraining gas availability to the power sector, notably pipeline vandalism, arrears due to gas suppliers and lack of payment security for gas deliveries.

III. Governance interventions:

10. **Restore proper sector governance:** Appoint qualified persons to the Boards and management of related government agencies and DisCos to represent Government interest.
11. **Improve sector transparency:** Assessment and regular publication of key operational and financial indicators of market participants (GenCos, TCN and DisCos) and the sector.
12. **Make contracts fully effective:** Promote and encourage a shift towards an effective contract based market, which promotes competition and performance.

13. **Clear communication of PSRP:** Develop and implement a comprehensive communication strategy for the PSRP with bespoke outreach to the various groups of stakeholders including industry, lawmakers and citizens.
14. **PSRP Implementation Monitoring Team (PSRP IMT):** A dedicated team has been set up to coordinate and monitor the implementation of the PSRP. This team reports to His Excellency, the Vice President. The team will monitor and evaluate implementation and results of the PSRP, address unexpected developments or delays, and inform the public in general. Inter-agency working groups will support the team in interventions that require coordinated actions and inputs from several agencies, including inter-agency teams for the review of the Financing Plan and the development and implementation of a Least Cost Development Plan (LCDP).

IV. **Policy interventions**

15. **Fiscal and monetary policies aimed at encouraging private sector investments:** Increase awareness of fiscal and monetary policies pertaining to the power sector such as duty waivers, and pioneer status.
16. **Increase electricity access:** Implement off-grid and renewable energy solutions, and creation of a framework for off-grid development plan including mini-grids and solar home systems.
17. **Economic procurement of power:** In order that additional generation capacity requirements are assessed and phased-in carefully, institutionalize the LCDP by designating a Ministry/agency with the responsibility for LCDP preparation and regular updates, as well as enforce governance arrangements that define roles and responsibilities of relevant agencies for ensuring that future investments are made consistent with the LCDP.

Action Steps Towards PSRP Intervention Implementation

- I. **Establish sustainable and appropriate electricity tariffs:** The government will implement an electricity tariff trajectory that ensures sustainable tariffs over five (5) years and commit to fund historical and future sector deficits (2017 – 2021).

Action steps towards implementation include:

1. NERC issues Guidelines for DisCos to prepare Performance Improvement Plans (PIP) as part of MYTO Major Review (Reset).
2. NERC finalizes and approves after consultation, refinement of the MYTO methodology for determining the revenue requirement of DisCos and for TCN, taking into consideration FGN tariff policy, inputs by the System Operator and, including procedures and formulae for periodic adjustment.
3. TCN files for new MYTO revenue requirement following the revised methodology, including the transmission investment plan, for NERC review, consultation and determination.
4. Each DisCo prepares and submits to NERC the PIP covering the requirements and procedures in NERC guidelines.
5. NERC reviews the tariff application (based on their revenue requirement) filed by each DisCo following the MYTO methodology, including the PIP, and the setting of performance baselines and targets, and carries out consultation/hearing.
6. NERC issues the MYTO order for each DisCo and for TCN.
7. NERC monitors implementation of approved PIP, and of performance results compared to baseline and targets to evaluate improvement of each DisCos, and reports in its website for each DisCo progress in implementation of the PIP and evolution of performance compared to baseline and targets.
8. Automatic adjustments (minor reviews) are implemented as required in the methodology subject to the tariff trajectory policy during the tariff period, for each DisCo and for TCN.

- II. **Dimension and commit to fully fund future projected sector deficits due to tariff shortfall from 2017 until 2021:** Develop and execute a plan to fully fund the required Electricity Market Support due to revenue shortfall, until tariffs attain cost recovery levels from 2017 to 2021

Action steps towards implementation include:

1. Develop and update the Financing Plan to ensure that the Plan remains fully funded to cover all Tariff shortfalls.
2. Analysis of fiscal sustainability and contingent liabilities of the sector and analysis of the multiplier effect of the proposed government support.
3. Develop the detailed funds flows mechanism for the payment of tariff shortfalls on monthly basis.

III. **Clear historical deficits due to tariff shortfall:** Clearing historical accumulated sector revenue deficits (2015 to 2016) as part of the Financing Plan.

Action steps towards implementation include:

1. A process for settlement of deficits due from DisCos in net payable positions to be agreed between the DisCos, NBET and the MO, and communicated to the Ministry of Finance (FMoF), Ministry of Budget & Planning and the Ministry of Power, Works and Housing (FMoPWH).
2. Prepare a liability management strategy for NELMCO.

IV. **Secure financing sources:** Identify and secure domestic and external financing sources to cover the total funding requirements estimated in the Financing Plan during 2017-2021

Action steps towards implementation include:

1. Secure funding for historical debt and future revenue shortfalls until tariffs are appropriate and sustainable.
2. Secure funding to address system constraints such as transmission/distribution interface bottlenecks.
3. The PSRP Implementation Monitoring Team (PSRP IMT) reviews and updates the Financing Plan on a quarterly basis, with the support of the multi-agency financing working team.
4. Central Bank of Nigeria (CBN), NBET and FMoPWH to ensure timely payment to GenCos.
5. FMoF and Budget Office to ensure adequate funding provision and timely disbursements.
6. The initial Financing plan is approved.
7. Analysis of fiscal sustainability and contingent liabilities of the sector and the multiplier effect of the proposed plan.
8. The annual 2018 FGN budget to include the FGN Budgetary Contribution provision per the MTEF.
9. PSRP IMT with the multi-agency financing team reviews and updates quarterly the Financing Plan to reflect revenue shortfall and have a fully funded Financing Plan.
10. The PSRP is updated each year to incorporate the updated Financing Plan, and the FSP/MTEF is updated accordingly.
11. For each Fiscal Year (FY), the FGN annual budget submitted to the NASS includes the FGN budgetary contribution needed as specified in the Financing Plan.

V. **Clear historical MDA debts and automate future payments:** Ensure MDA historical debts are paid and implement a payment mechanism for future electricity bills.

Action steps towards implementation include:

1. Historical debt of MDAs is cleared.
2. Government issues a directive specifying the mechanism to ensure timely payment of electricity bills by all MDAs and its implementation timetable.
3. Implementation of Government directive to ensure regular payment for power consumed and encourage energy efficiency at all MDAs.
4. On a monthly basis, DisCos informs NERC any late or non-payment by each customer that is a MDA, and the accumulated debt.

5. NERC informs the FGN and reports in its website progress in payment by MDAs and in implementation of the mechanism in the directive.

VI. **World Bank funding:** The World Bank has expressed its willingness to assist the Federal Government in preparing and supporting a credible Power Sector Recovery Programme. The World Bank has indicated potential support totalling up to US \$2.5 billion.

Actions steps towards implementation include:

1. World Bank to clarify their internal processes to the Government on these projects.
2. The Government to fulfil the Conditions Precedent set by the World Bank in order to ensure timely drawdown and utilization of the funds.

VII. **Baseline power generation, transmission and distribution:** Ensure minimum baseline power supply of 4,500 MWh/Hour to the national grid is distributed daily from 2018 to achieve grid stability and phase out operational shortages.

Action steps towards implementation include:

1. Identification and prioritisation of power plants to be supported to achieve the minimum 4,500 MWh/Hour baseline.
2. TCN prepares transmission expansion plan and submit for approval to NERC as part of the MYTO reset process.
3. TCN publishes in its website the approved transmission expansion plan.
4. NERC monitors progress in TCN implementation of the transmission investment plan approved in the tariff order, and publishes quarterly/annually in its website.
5. Each year the System Operator prepares an annual generation operation plan, including an assessment of expected transmission and system security constraints.
6. Each year, TCN updates transmission expansion plan.

VIII. **Improve DisCo Performance:** The long-term sustainability of the country's power sector is highly correlated to the performance of the DisCos; their ability to collect revenue from customers for electricity consumed and aggressively reduce the high ATC&C losses is critical.

Action steps towards implementation include:

1. NERC to ensure that each DisCo commences and updates a complete customer database, to identify their customers and commence metering programme.
2. NERC reviews and approves the PIP for each DisCo.
3. NERC monitors each DisCo's progress in implementation of PIP, and evolution of performance indicators, and enforcing compliance with committed investments.
4. NERC to finalise business continuity regulation after consulting with stakeholders including investors and management of DisCos.
5. Based on approved targets and baseline in MYTO reset for each Disco, BPE updates Performance Agreements with private investor of each DisCo, to incorporate key performance indicators in MYTO reset and clarify each party's obligations and the consequence(s) for failure to perform.
6. BPE monitors Performance Agreements based on information provided by NERC and assesses compliance.

IX. **Adequate gas supply for power generation:** Maintaining gas supply for power generation to support 4,500 MW of thermal generation capacity is critical to ensuring stability and sustainability of electricity delivery.

Action steps towards implementation include:

1. Strategic level engagement led by His Excellency, the Vice President with Minister of State for Petroleum and 9 state governors to identify critical development priorities for each state in the region.
2. Operational engagement by representatives of various MDAs, including the Office of the Vice President to convert the region's development priorities into specific projects.
3. Ownership stakes by host communities in oil and gas assets to create incentives to safeguard these assets.
4. Engaging host communities to secure assets in their townships.
5. Completion of critical projects in the affected Niger Delta communities.
6. Full disbursements of NEMSF to ensure historical debts are paid to gas suppliers.
7. Ministry of Petroleum Resources to develop clear plan on gas vandalism prevention strategy.
8. Project manage the delivery of key gas pipeline infrastructure (including the Ob-Ob pipeline) to ensure that gas is readily available where it is needed.

- X. **Restore proper sector governance:** Restore proper sector governance to improve investor confidence.

Action steps toward implementation include:

1. Current BPE directors in DisCo Boards are replaced by qualified independent professionals through a transparent process.
2. Identification and appointment of qualified board of sector agencies including NBET, TCN, NELMCO, NEMSA, NDPHC, and REA.
3. Provide extensive and continuous training for FGN board representatives.
4. FGN to put in place a special police department or provide DisCos with required police staff to help them enforce payment discipline. Engage State Governments to use local courts to adjudicate energy offences.

- XI. **Improve sector transparency:** Regular publication of key operational and financial information on the power sector

Action steps toward implementation include:

1. At the end of each fiscal year, NERC publishes on its website: (i) audited financial statements of GenCos, DisCos, NBET and TCN; (ii) NERC monitoring report.
2. Quarterly, NERC publishes in its website operational and financial (market settlement) data of DisCos and TCN, and operational data of GenCos, the System Operator and the Market Operators.
3. FGN manages a centralised website (NESISTATS) that provides up to date information and a feedback loop to check the progress and activities of the PSRP.

- XII. **Make contracts become fully effective:** Encourage and support a fully effective contract based market that promote competition and performance.

Action steps towards implementation include:

1. Each year, System Operator prepares an operational plan of generation based on economic dispatch of planned available generation, within system constraints, and demand forecast developed in consultation with DisCos.
2. The System Operator updates after six months the annual generation operation plan.
3. In coordination with NERC, NBET designs a plan for the phased activation of PPAs and GSAAs to meet the baseline generation capacity of 4,500 MWh/Hour and the operational plan of the System Operator.

4. NERC issues order to NBET on allowable power purchase costs to DisCos in vesting contract invoices.
5. NBET makes vesting contracts effective up to invoice cap in NERC order, subject to DisCo posting required LC.
6. Each year, NBET increases the PPAs level of activation.

XIII. **Clear communication of PSRP:** Develop and implement a communication strategy for the PSRP implementation that will facilitate stakeholder engagement and outreach to the public.

Action steps towards implementation include:

1. Implementation of a communications strategy that promotes understanding and buy-in of the PSRP by all sector stakeholders. This would involve core messages for key stakeholders, stakeholder engagements, and media communications with the public.
2. Engage the services of a reputable communications firm that will lead the communications strategy implementation and tactical activities of the nationwide PSRP campaign to build public confidence and trust in the Government's plans.
3. The Power Sector Communications Team (PSCT), comprising of MDA media and communications representatives, will be a critical vehicle to execute various aspects of the communications and stakeholder engagement strategy.
4. Engagement of all arms of government (Executive, Judiciary): This is required to promote and facilitate knowledge building and alignment within Government.

XIV. **PSRP Implementation Monitoring Team:** A dedicated implementation monitoring team has been set up to coordinate and monitor the implementation of the PSRP and report to His Excellency, The Vice President.

Action steps towards implementation include:

1. Identify the critical roles for the PSRP Implementation Monitoring Team.
2. Commence the resourcing process to identify and recruit suitable candidates.
3. Commence onboarding process and inaugurate team members.
4. Organize and operationalize a multi-agency financial team.
5. Organize and operationalize a multi-agency LCDP team.

XV. **Fiscal and monetary policies:** Increase awareness of fiscal and monetary policies relevant to the power sector e.g. duty waivers, pioneer status, capital importation, and foreign exchange policy, in order to encourage private sector investments

Action steps towards implementation include:

1. Review and update existing policies and incentives to ensure alignment with PSRP objectives.
2. NBET to develop simplified templates for IPP key project documents.
3. Recommend measures for adoption across PSRP interventions.

XVI. **Increase electricity access (using off/on-grid solutions):** Implement off-grid and renewable energy. Create a framework for the off-grid development plan including mini-grids, and solar home systems.

Action step towards implementation include:

1. Impact analysis on DisCo and GenCo businesses.
2. Developing a framework for eligibility.
3. NERC to finalize consultation with stakeholders on the framework for eligibility.
4. NERC to release regulation on Eligibility.
5. Review existing policy frameworks to determine their adequacy.
6. Develop strategy document that outlines the goals and approaches for off-grid solutions.
7. Set targets of rural electrification access in line with Government's overall electricity objectives.

8. Conclude the consultation process for the mini-grid regulation and Eligibility.
9. Develop blueprint for the REA PMU structure.
10. Develop work plan for the implementation of the REA PMU actions.
11. Increase electricity access by implementing off grid renewable energy solutions: Rural Mini Grids, Standalone Home Solutions (SHS), IPPs for federal universities and teaching hospitals.

XVII. **Economic procurement of power:** Promote least cost generation entry and ensure competitive procurement of power.

Action steps towards implementation include:

1. The FGN issues a policy/strategy to guide generation mix, including targets on renewable energy resources and interconnections.
2. Each year, the System Operator prepares demand projection based on Grid Code and Market Rules, working closely with DisCos, following which NERC reviews and approves.
3. Each year, the Market Operator prepares the generation adequacy report established in the Market Rules, based on the System Operator Load Projection approved by NERC.
4. A planning multi agency working group is established, led by the System Operator and under the oversight and coordination of the Ministry of Power, Works and Housing, to prepare the generation expansion plan based on demand projection scenarios and generation mix policy.
5. In coordination with the Least Cost Development Plan (LCDP) team and standards established in the Grid Code, the System Operator together with TCN develops the transmission expansion plan.
6. The LCDP with the generation expansion plan and the System Operator transmission expansion plan are submitted to NERC, for review and approval.
7. The LCDP is reviewed annually.
8. Clarify the entity responsible for the preparation of the LCDP.
9. NERC updates its power procurement regulations adjusted to establish that new generation capacity is procured competitively and consistent with the generation expansion in approved LCDP.
10. NBET prepares the standard bidding documents for competitive procurement of new generation, consistent with NERC regulations.
11. Based on generation adequacy report and the LCDP, NERC assesses the need for new generation entry and authorized tender for new power procurement.

Conclusion

By successfully identifying, assessing and mitigating all risks associated with the Power Sector Recovery Programme, the policy actions and financial, operational and governance interventions implemented by the Federal Government of Nigeria and supported by the World Bank Group and other development partners will be effective in resetting the Nigerian Electricity Supply Industry and addressing prevailing power sector challenges.

For more information, go to www.mypower.ng