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THE WORLD BANK

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INTERNATIONAL DEVELOPMENT ASSOCIATION

PROGRAM APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 548.9 MILLION

(US$750.0 MILLION EQUIVALENT)

TO THE

FEDERAL REPUBLIC OF NIGERIA

FOR THE

POWER SECTOR RECOVERY OPERATION

June 1, 2020

Energy and Extractives Global Practice
Africa region

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2020)

Currency Unit	=	Nigerian Naira (₦/NGN)
US$1	=	₦360 (CBN Official FX Rate)
US$1	=	SDR 0.73185012

ABBREVIATIONS AND ACRONYMS

ACTU	Anti-Corruption and Transparency Units
AFD	French Development Agency *(Agence Francaise de Developpement)*
AfDB	African Development Bank
ATC&C	Aggregate Technical Commercial and Collection
BOF	Budget Office of the Federation
BPE	Bureau of Public Enterprise
CBN	Central Bank of Nigeria
COVID-19	Coronavirus Disease
CPS	Country Partnership Strategy
CRPD	Company Risk Profile Database
DFID	Department for International Development, United Kingdom
DG	Director General
DISCO	Distribution Company
DLI	Disbursement Linked Indicator
DLR	Disbursement Linked Result
DMO	Debt Management Office
EIRR	Economic Internal Rate of Return
EFCC	Economic and Financial Crimes Commission
ERGP	Economic Recovery and Growth Plan
ESSA	Environmental and Social System Assessment
EU	European Union
FGN	Federal Government of Nigeria
FM	Financial Management
FMOE	Federal Ministry of Environment
FSP	Fiscal Strategy Paper
FX	Foreign Exchange
GDP	Gross Domestic Product
GENCO	Generation Company
GHG	Greenhouse Gas
GIFMIS	Government Integrated Financial Management Information System
GRS	Grievance Redress Service
GWh	Gigawatt Hour
IBRD	International Bank for Reconstruction and Development
ICPC	Independent Corrupt Practices and Other Related Offences Commission
IDA	International Development Association
IERD	International Economic Relation Department
IFC	International Finance Corporation
IFR	Interim Financial Reports
IFRS	International Financial Reporting Standards

IPF	Investment Project Financing
IPSAS	International Public Sector Accounting Standards
IPP	Independent Power Producer
IVA	Independent Verification Agency
JICA	Japan International Cooperation Agency
LCDP	Least Cost Development Plan
M&E	Monitoring and Evaluation
MDAs	Ministries, Departments, and Agencies
MDBs	Multilateral Development Banks
FMFBNP	Federal Ministry of Finance, Budget and National Planning
MIGA	Multilateral Investment Guarantee Agency
FMoP	Federal Ministry of Power
MTEF	Medium-term Expenditure Framework
MYTO	Multi-Year-Tariff-Order
MWh	Megawatt Hour
₦/NGN	Nigerian Naira/Naira
NASS	National Assembly
NBET	Nigerian Bulk Electricity Trading Company
NBS	National Bureau of Statistics
NERC	Nigeria Electricity Regulatory Authority
NESREA	National Environmental Standards and Regulations Enforcement Agency
NIPP	National Integrated Power Project
NPV	Net Present Value
OAGF	Office of the Accountant General
OAuGF	Office of the Auditor General for the Federation
PAF	Payment Assurance Facility
PAP	Program Action Plan
PDO	Program Development Objective
PEF	Program Expenditure Framework
PforR	Program for Results
PIP	Performance Improvement Plan
PMU	Project Management Unit
PPA	Power Purchase Agreement
PPSD	Project Procurement Strategy for Development
PSRO	Power Sector Recovery Operation
PSRP	Power Sector Recovery Program
REA	Rural Electrification Agency
RFQ	Request for Quotation
SDR	Special Drawing Rights
SPD	Standard Procurement Document
STEP	Systemic Tracking and Exchange in Procurement
TA	Technical Assistance
TCN	Transmission Company of Nigeria
TEM	Transitional Electricity Market
TSA	Treasury Single Account
UNCAC	United Nations Convention Against Corruption

WB	World Bank
WBG	World Bank Group
WTP	Willingness to Pay

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FEDERAL REPUBLIC OF NIGERIA

Power Sector Recovery Operation

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PAD DATA SHEET

Nigeria

Power Sector Recovery Operation
Program for Results (PforR)

PROGRAM APPRAISAL DOCUMENT

Africa Region
Energy and Extractives Global Practice

Basic Information

Date:	June 23, 2020	Sectors:	Energy and Extractives
Country Director:	Shubham Chaudhuri		
Practice Manager:	Ashish Khanna		
Regional Vice President:	Hafez M.H Ghanem		
Program ID:	P164001		
Team Leaders:	Ani Balabanyan Yue Man Lee		

Program Implementation Period:	Start Date: 6/23/2020	End Date: 6/30/2023
Expected Financing Effectiveness Date:	9/30/2020	
Expected Financing Closing Date:	6/30/2023	

Program Financing Data

[ ] Loan	[ ] Grant	[ ] Other
[X] Credit		

For Loans/Credits/Others (US$ Million):

Total Program Cost:	2,624	Total Bank Financing:	750
Total Co-financing:	1,434	Financing Gap:	440

Financing Source	**Amount (US$ Million)**
BORROWER/RECIPIENT	978
IBRD	
IDA	750
Others (Central Bank of Nigeria)	456
Financing Gap	440 (to be funded through an additional financing to this operation or other sustainable sources of financing)
Total	2,624

Borrower: Federal Republic of Nigeria

Responsible Agency (PforR component): Federal Ministry of Finance, Budget and National Planning

Contact: Ben Akabueze	Title:	Director General of Budget Office

Responsible Agency (TA/IPF component): PMU of the Budget Office of Federation/PSRP Secretariat

Expected Disbursements (in US$ Million)

Fiscal Year	2020	2021	2022	2023					
Annual	0	426	162	162					
Cumulative	0	426	588	750					

Program Development Objective(s)

The Program Development Objective (PDO) is to improve the reliability of electricity supply, achieve financial and fiscal sustainability, and enhance accountability.

Compliance

Policy

Does the program depart from the CPF in content or in other significant respects?	Yes [ ] No [X]
Does the program require any waivers of Bank policies applicable to Program-for-Results operations?	Yes [ ] No [X]
Have these been approved by Bank management?	Yes [ ] No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ] No [X]

Overall Risk Rating: High

Legal Covenants

Name	Recurrent	Due Date	Frequency
PSRP Finance and Policy Oversight Committee	No	December 31, 2021	Once

Description of Covenant
The Recipient shall, no later than three (3) months after the Effective Date, establish and thereafter maintain throughout the implementation of the Operation, a PSRP Finance and Policy Oversight Committee ("OC") with functions, composition and resources satisfactory to the World Bank. (Financing Agreement, Schedule 2, Section I, A, 1.1(a)).

Name	Recurrent	Due Date	Frequency
PSRP Finance Technical Committee	No	December 31, 2021	Once

Description of Covenant
The Recipient shall, no later than three (3) months after the Effective Date, establish and thereafter maintain throughout the implementation of the Operation, a PSRP Finance Technical Committee ("TC") with functions, composition and resources satisfactory to the World Bank. (Financing Agreement, Schedule 2, Section I, A, 1.2(a)).

<table>
<tr><td>Name</td><td>Recurrent</td><td>Due Date</td><td>Frequency</td></tr>
<tr><td>PSRP Secretariat</td><td>No</td><td>December 31, 2021</td><td>Once</td></tr>
<tr><td colspan="4">Description of Covenant
The Recipient shall, no later than three (3) months after the Effective Date, establish and thereafter maintain throughout the implementation of the Operation, a PSRP Secretariat (“PSRP Secretariat”) within the Budget Office with functions, composition and resources satisfactory to the World Bank. (Financing Agreement, Schedule 2, Section I, A, 1.3(a)).</td></tr>
<tr><td>Name</td><td>Recurrent</td><td>Due Date</td><td>Frequency</td></tr>
<tr><td>Independent Verification for the Program</td><td>No</td><td>December 31, 2021</td><td>Once</td></tr>
<tr><td colspan="4">Description of Covenant
No later than ninety (90) days after the Effective Date, the Recipient shall: (i) recruit an independent verification agency or independent verification agencies, as the case may be, under terms of reference(s) satisfactory to the World Bank (“Independent Verification Agent(s)” or “IVA(s)”), to be responsible for preparing and providing verifications reports in accordance with the Verification Protocol, certifying the achievement of those DLI/DLRs indicated to be verified by such independent verification agency or agencies in the Verification Protocol; and (ii) furnish the verification reports to the World Bank in such scope and in such details as the World Bank shall request. (Financing Agreement, Schedule 2, Section I, D, 2(a)).</td></tr>
<tr><td>Name</td><td>Recurrent</td><td>Due Date</td><td>Frequency</td></tr>
<tr><td>Annual Work Plan and Budget for the Project</td><td>No</td><td>October 31, 2021</td><td>Once</td></tr>
<tr><td colspan="4">Description of Covenant
The Recipient shall furnish to the Association, as soon as available, but in any case not later than November 30 of each year, the annual work plan and budget, for their review and approval; except for the annual work plan and budget for the Project for the first year of Project implementation, which shall be furnished no later than one month after the Effectiveness Date. (Financing Agreement, Schedule 2, Section I, E, 1(b)).</td></tr>
<tr><td>Name</td><td>Recurrent</td><td>Due Date</td><td>Frequency</td></tr>
<tr><td>Performance Agreements of DISCOs</td><td>No</td><td>December 31, 2021</td><td>Once</td></tr>
<tr><td colspan="4">Description of Covenant
The Recipient shall ensure that the allowance parameters on aggregate technical, commercial and collection losses, operating and capital expenditures in the Performance Agreements are not extended beyond their current expiration date of December 31, 2021. (Financing Agreement, Schedule 2, Section V, 1).</td></tr>
<tr><td colspan="4">Legal Conditions</td></tr>
<tr><td>Type</td><td colspan="3">Effectiveness</td></tr>
<tr><td colspan="4">Description of Condition
The Additional Conditions of Effectiveness consist of the following, namely that the Operations Manual has been adopted in accordance with the provisions of Section I.C of Schedule 2 to the Financing Agreement. (Financing Agreement, Article V, 5.01).</td></tr>
<tr><td>Type</td><td colspan="3">Disbursement</td></tr>
<tr><td colspan="4">Description of Condition
With respect to Category (8) in the financing withdrawal table of Schedule 2, Section IV, A of the Financing Agreement no withdrawal shall be made for payments made in respect of the Project prior to the Signature Date. (Financing Agreement, Schedule 2, Section IV, C).</td></tr>
<tr><td>Type</td><td colspan="3">Disbursement</td></tr>
<tr><td colspan="4">Description of Condition
No withdrawal shall be made: (a) in respect of the Program, under Categories 1 through 7, until NBET and NERC shall have executed Subsidiary Agreements in accordance with Section I.B of Schedule 2 of the Financing Agreement. (Financing Agreement, Schedule 2, Section IV, B, 1 (a)).</td></tr>
</table>

Type	Disbursement

Description of Condition
No withdrawal shall be made: (b) on the basis of DLRs achieved prior to the Signature Date, except that withdrawals up to an aggregate amount not to exceed SDR 130,272,148 may be made on the basis of DLRs G1.1, G.2.1, 1.1, 2.1, 3.1, 4.1 and 5.1, achieved prior to this date but after May 1, 2019. (Financing Agreement, Schedule 2, Section IV, B, 1 (b)).

Team Composition

World Bank Staff

Name	Title	Specialization	Unit
Ani Balabanyan	Lead Energy Specialist	Task Team Leader	IAFE1
Yue Man Lee	Senior Economist	Co-Task Team Leader	EA2M2
Pedro Antmann	Lead Energy Specialist	Team Member	IAFE4
Nataliya Kulichenko	Lead Energy Specialist	Team Member	IAFE4
Jaeyoung Jin	Senior Energy Specialist	Team Member	IAFE4
Muhammad Abba Wakil	Energy Specialist	Team Member	IAFE4
Tu Chi Nguyen	Energy Economist	Team Member	IMNE1
Saeeda Sabah Rachid	Lead Financial Management Specialist	Financial Management	EA2G2
Frank Anthony Fariello	Lead Counsel	Legal Issues	LEGAM
Eucharia Nonye Osakwe	Financial Management Specialist	Financial Management	EA2G2
Adebayo Adeniyi	Senior Procurement Specialist	Procurement	EA2RU
Amos Abu	Senior Environmental Specialist	Environmental Issues	SAFE1
Michael Gboyegal Ilesanmi	Social Development Specialist	Social Development	SAFS1
Alexandra Bezeredi	Lead Social Development Specialist	Social Development	SAFS4
Sarosh Sattar	Senior Economist	Poverty Analysis	EA2PV
Emilija Timmis	Country Economist	Team Member	EA2M2
George Ferreira Da Silva	Finance Analyst	Team Member	WFACS
Heather B. Worley	Senior Strategy and Operations Officer	Communication	IEEES
Steven James Mortimer Clarke	Young Professional	Team Member	IAFE4
Inka Ivette Schomer	Operations Officer	Gender	IEEES
Marie-Claudine Fundi	Senior Program Assistant	Team Support	IAFE4
Sarah Farnuwa Tangalu	Team Assistant	Team Support	AFCW2

Non-World Bank Staff

Name	Title	City
Lucky Erhaze	Environmental Consultant	
Aibek Baibagysh Uulu	Poverty Consultant	
Jenny Helena Dangre	Legal Consultant	

I. STRATEGIC CONTEXT

A. Country Context

1. **National elections were held in Nigeria in 2019, for the sixth consecutive time since its return to democracy in 1999.** The incumbent president won the presidential elections and was sworn in for a second term on May 29, 2019. The current administration campaigned on three fundamental tenets: accelerating economic growth, fighting corruption and improving security with the ultimate objective to lift 100 million people out of poverty in 10 years.

2. **In 2019, Nigeria continued recovering from the 2016 recession, with annual 2019 growth strengthening marginally to 2.2 percent.** The collapse of global oil prices during 2014–2016, combined with lower domestic oil production, led to a sudden slowdown in economic activity. Nigeria's annual real gross domestic product (GDP) growth rate, which averaged 7 percent from 2000 to 2014, fell to 2.7 percent in 2015 and -1.6 percent in 2016. Growth slowly rebounded in 2017, leveling about 2 percent in 2018-2019. Growth was primarily driven by the services sector (50 percent of the economy), especially telecoms, with positive contributions from agriculture, which, however, remains affected by ongoing conflicts and is weather-dependent. Non-oil industry growth was slow, constrained by lack of private sector credit growth, high cost of financing, weak domestic demand, and insufficient/unreliable power supply[1]. Policy and regulatory uncertainty impeded domestic and foreign investment. Without acceleration in structural reforms to build a competitive and diversified economy, growth was expected to hover just above 2 percent over the medium-term, but highly vulnerable to oil sector shocks.

3. **Nigeria's economy will be severely affected by the global economic disruption caused by the Coronavirus disease (COVID-19).** The extraordinary oil-price shock has profoundly affected the Nigerian economy, downgrading its growth outlook by 5-10 percentage points in 2020. Under a scenario of oil prices averaging US$30/bbl, a relatively contained COVID-19 spread in Nigeria and continuation of current policies, Nigerian economy is projected to contract by 3 percent in 2020. Falling domestic demand (sensitive to oil-dollar liquidity) will contract the non-oil economy, despite the Central Bank of Nigeria's (CBN) attempts to scale-up targeted interventions. Only agriculture is expected to positively contribute to growth in 2020. With current trade policies, including foreign exchange (FX) restrictions and land border closure[2], contracting imports could limit the widening of the current account deficit despite rapidly contracting exports, softening the negative impact from the capital account on the external reserves. External capital flows will likely follow the global flight to safety, adding to the pressures on external reserves and the nominal exchange rate. The situation resembles the one Nigeria faced in 2015-2016, when oil prices fell sharply, but this time Nigeria has fewer fiscal buffers (for example, the Excess Crude Account is depleted) and other policy instruments to cushion the adverse effects of any shocks. Two key risks may aggravate Nigeria's outlook: further or protracted fall in oil prices and domestic spread of COVID-19.

4. **COVID-19 and its economic impact will have deeply negative implications for employment and household income.** Prior to the crisis, Nigeria's poverty-reduction efforts already faced major challenges, as the rate of population growth (estimated at 2.6 percent) persistently outpaced economic growth rates and job creation remained weak. In 2019, 85 million Nigerians (40.1 percent of the population) lived below the poverty line. In 2018, Nigeria's unemployment rate was already high by regional standards at 11

[1] World Bank Enterprise Surveys, World Bank Doing Business, Central Bank of Nigeria (CBN) 'January 2020 business expectations survey report'

[2] Introduced in August 2019, it intended to reduce smuggling, protect domestic producers and address security concerns.

percent, having risen from 5 percent in 2015.[3] Following the COVID-19 economic shock, unemployment and poverty are expected to increase.

5. **Even before the COVID-19 pandemic, low revenues, rising debt service and large public subsidies limited the fiscal space for productive investments in infrastructure and human capital.** At 8 percent of GDP in 2018-2019, Nigeria's general government revenues were very low by the standards of comparable countries. Consequently, general government expenditures were very small relative to the size of the economy (12 percent of GDP, about half the level expected for its level of development), and unable to meet the needs of its growing population. Oil revenues were volatile and reduced by sizeable deductions (including for the unbudgeted petrol subsidy), while growth in non-oil revenues (about 4 percent of GDP) was constrained by slow tax policy and administration reforms. Public debt was relatively modest as a share of GDP (20-25 percent) but had been rising due to sustained fiscal deficits. With low revenues and high domestic interest rates, the Federal Government of Nigeria (FGN) was spending a significant share of its revenues to service its debt (since 2016, FGN spends an estimated 60 percent of its revenues to pay interests on its debt). Unproductive, regressive subsidies (main ones being fuel and power) further limited fiscal space for productive investments in infrastructure and human capital. The annual power sector tariff shortfalls requiring FGN funding reached ₦524 billion (US$1,720 million) in 2019, equivalent to 0.4 percent of GDP and 11 percent of FGN revenues.

6. **The economic impact of COVID-19 will further reduce Nigeria' fiscal envelope. With the oil price outlook of US$30/bbl,** government oil revenues are projected to fall by over 70 percent and reduce general government revenue towards ~5 percent of GDP. This sudden drop in revenue comes just when fiscal resources are urgently needed to contain the COVID-19 outbreak and stimulate the economy. In response to the oil shock and the COVID-19 health risks, the FGN has prepared an Amended 2020 Budget to reassess funding and reprioritize expenditures. While the exigencies of the COVID-19 crisis will require higher borrowing, public debt is sustainable in a variety of shock scenarios, though in the short-term falling government revenues challenge liquidity indicators (interest payment to revenue ratio is likely to rise), which are expected to improve over the medium term as the Government resumes its revenue-mobilization reforms.

7. **The CBN has led convergence across nominal exchange rates[4].** Before the oil-price shock, the CBN kept the IEFX rate - market-reflective window for most private-sector transactions - within a narrow band, intervening occasionally to smooth market fluctuations. The official rate, applied to government transactions has been stable since 2016, at about 20 percent below the IEFX rate. To stabilize the balance of payments after the March 2020 oil-price shock, which was accompanied by a surge in capital outflows, the CBN adjusted the official exchange rate from ₦305/US$ to ₦360/US$, narrowing the spread across CBN exchange rates from 20 to 5 percent. The CBN also stopped intervening in the IEFX window to allow the rate to slide in response to market dynamics. In April 2020 the CBN committed to moving to a more

[3] Unemployment rates quoted follow the International Labor Organization's definition, applied to National Bureau of Statistics (NBS) data. Using Nigeria's national definition of unemployment, the unemployment rate was 23 percent in 2018.

[4] Before March 2020, there was the Investors and Exporters Forex Window (to which the parallel rate is aligned, trading at around ₦360-365/US$); the CBN official rate (₦307/US$), the Retail Secondary Market Intervention Sales (SMIS) and the Wholesale SMIS (₦330-360/US$). The FGN budget is, notionally, based on ₦305/US$, but the dollar-denominated revenues (primarily, oil and gas) are converted at the effective rate of about ₦325/US$). The spread between the official and the parallel market rates has declined from over 70 percent in early 2017 to 20 percent since June 2017. Following the oil price shock, in mid-March 2020, CBN devalued the official rate to ₦360, and allowed IEFX rate to move to ₦380-399/US$.

flexible exchange rate regime and limited its interventions to smoothing large exchange rate fluctuations and avoiding foreign-exchange rationing[5].

8. **Helped by tight monetary policy, annual inflation dropped from a high of 16.5 percent in 2017 to 11.4 percent in 2019 but is expected to increase in 2020.** The rate is expected to rise to 13.8 percent throughout 2020 as pre-COVID-19 trade policies (e.g., closure of overland borders) continue, along with foreign-exchange restrictions, depreciation of the exchange rate, and the adjustment of electricity tariffs. As these short-term effects taper off and obstacles to domestic production are gradually overcome, in the medium-term inflation should ease. Monetary policy remains complicated by CBN's engagement in quasi-fiscal operations: allocating development finance to priority sectors (including agriculture and micro, small and medium enterprises) using subsidized loans and monetizing the fiscal deficit[6]. Since 2017, the FGN has borrowed from the CBN a total of ₦1,301 billion (US$3,614 million) to fund market shortfalls in the power sector under the 'Payment Assurance Facility' (PAF). Overall, CBN loans to the power sector total ₦2 trillion (US$5,556 million), equivalent to 6 percent of CBN's balance sheet.

Table 1: Selected Economic Indicators, 2015-2020

	2015	2016	2017	2018	2019e	2020f	2021f
Real GDP growth, at constant market prices (percent)	2.7	-1.6	0.8	1.9	2.2	-3.2	1.7
Agriculture (percent)	3.7	4.1	3.4	2.1	2.4	2.4	2.8
Industry (including oil) (percent)	-2.2	-8.9	2.1	1.9	2.3	-10.1	2.4
Oil Industry (Oil GDP)	0.1	-5.0	0.6	2.4	4.6	-10.6	2.8
Non-oil Industry	-5.4	-14.4	4.7	1.1	0.9	-9.7	2.1
Services (percent)	4.8	-0.8	-0.9	1.8	2.2	-2.9	0.9
Inflation (Consumer Price Index, 12-month average) (percent)	9.0	15.7	16.5	12.1	11.4	13.8	12.4
Current account balance (% of GDP)	-3.2	0.7	2.8	1.3	-3.8	-3.5	-0.6
Goods & services exports (% GDP)	10.1	9.5	13.5	17.1	15.6	7.6	9.8
Goods & services imports (% GDP)	14.8	11.6	13.6	18.0	22.5	12.9	12.8
Fiscal balance (consolidated government, percent of GDP)	-3.2	-3.8	-4.0	-4.2	-4.4	-5.5	-4.9
Government Revenue	7.5	5.9	6.7	8.1	8.4	5.3	6.0
Government Expenditure	10.7	9.7	10.7	12.3	12.8	10.8	10.9
Debt (general government, percent of GDP)	14.2	17.3	19.1	20.9	23.7	30.0	32.4

Source: NBS, CBN and World Bank staff projections.

9. **The Government of Nigeria at both the federal and state-levels are preparing comprehensive programs in response to the COVID-19 pandemic, as well as simultaneous economic and fiscal shocks.** These include measures to contain the outbreak, prepare for a more severe outbreak, and economic stimulus packages that protect the lives and livelihoods of the poor from the impact of the economic recession and disruption. Based on requests from the Government, the World Bank is preparing a multi-

[5] IMF. 2020. "Request for Purchase Under the Rapid Financing Instrument—Press Release; Staff Report; And Statement by the Executive Director for Nigeria." April. Washington, D.C.: International Monetary Fund.

[6] Federal Government (net) use of the overdraft facility from the central bank is estimated at 3-4 percent of GDP in 2019.

pronged package of emergency support of between US$2.5 billion and US$3 billion[7] to finance public health activities, provide immediate fiscal relief to FGN, protect core functions of States and support them to mitigate economic impact and recover.

10. **Power sector recovery supported by this operation is critical for the FGN's response to the COVID-19 pandemic and the simultaneous economic and fiscal shocks.** The need to stop the bleeding of fiscal resources and start turning around a dysfunctional power sector has long been viewed by all parties - the Government, the electric supply industry, the private sector and international partners - as one of the most critical development priorities for Nigeria. The fiscal pressures on the Government with government revenues projected to fall by 3 percent of GDP or more in 2020 have made the needed reforms in the power sector more urgent. The operation will help the Government redirect large fiscal resources from regressive tariff subsidies towards critical crisis-responsive and pro-poor expenditures. In 2019, tariff shortfalls reached ₦524 billion (US$1.72 billion), equivalent to 0.4 percent of GDP and more than the ₦428 billion spent on Health. The Federal Government financing gap in 2020 is currently estimated at US$8.1 billion and it would increase by US$1.0 billion in the absence of implementation of Power Sector Recovery Program (PSRP) and the Power Sector Recovery Operation (PSRO). In addition, the sector recovery efforts focused on ensuring regulatory and policy predictability, providing incentives for efficiency in operations while enforcing payment discipline across the supply chain are critical for maintaining the "lights on" through continued generation of electricity.

11. **During the recovery period, improving power sector performance will be central to unlocking economic growth, particularly in the non-oil sectors of manufacturing and services.** The annual economic losses caused by Nigeria's unreliable power supply have been estimated at ₦10.1 trillion or about 2 percent of GDP[8]. Nigeria ranks 131st with respect to the overall ease of doing business in the World Bank's Doing Business 2020, with getting access to electricity ranked as one of the major constraints. With respect to getting electricity, Nigeria ranks 171st globally, out of the 190 countries surveyed, and 33rd among 46 Sub-Saharan Africa countries.

12. **Ensuring access to reliable electricity supply is important for poverty alleviation.** With 47 percent of the population (97 million people) lacking access to grid electricity, Nigeria has the largest access deficit in Sub-Saharan Africa and the second largest in the world, after India. For the bottom 40 percent, access to grid electricity is lower at about 31 percent nationwide. The average annual per capita electricity consumption of Nigeria is 147 kWh, which is a fifth of the average low middle-income country consumption. Of the households connected to grid electricity, most experience blackouts daily, as well as frequent voltage fluctuations. As a result, 40 percent of households with access to electricity use generators and many rely on other non-grid sources such as solar home systems, solar lantern/lighting systems, rechargeable batteries, etc. Low income-households resort to candles and flashlights for lighting and firewood for cooking, which are inefficient and potentially harmful to their health and the environment. Insufficient energy impacts all Nigerians, however, the burden of ensuring access to energy (through using or collecting traditional fuels) often falls predominantly on women.

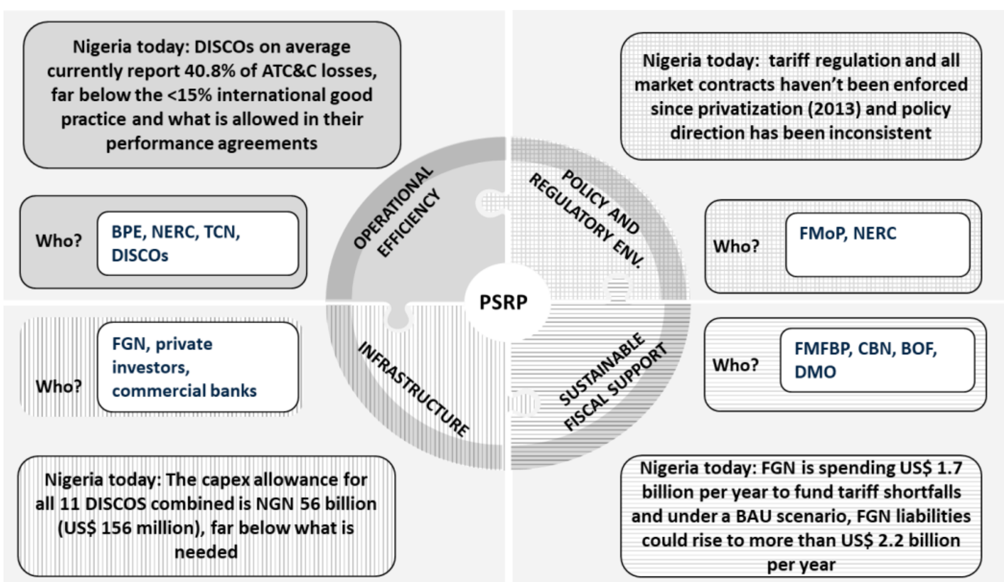
[7] Including an US$82 million health pandemic response program (P159040, REDISSE) and a complementary COVID-19 Strategic Preparedness and Response Program (P173980, US$115 million); the Federal Government (COFFER) DPF (P173993 US$1.5 billion); the States' Fiscal Transparency, Accountability and Sustainability (SFTAS) PforR additional financing (P174042, US$750 million); and a new state-level Nigeria COVID-19 Action Response and Economic Stimulus (CARES) PforR (P174114, US$750 million), which will support livelihoods and the recovery of economic activity.
[8] Power Sector Recovery Plan, FGN (2017).

B. Sectoral and Institutional Context[9]

13. **Nigeria's power sector is unbundled and largely privately-owned.** Following the passage of the Electric Power Sector Reform Act (2004), the sector was unbundled into six generation companies (GENCOs), eleven distribution companies (DISCOs) and the Transmission Company of Nigeria (TCN). The privatization of the DISCOs and GENCOs was completed in 2013. Three of the five thermal GENCOs (that use natural gas as fuel) were sold in their entirety to new owners, while three hydro GENCOs were concessioned to private operators. TCN has remained a fully government-owned monopoly. In the current stage of market development, known as the Transitional Market, the Government-owned Nigerian Bulk Electricity Trading Company (NBET) fulfills the role of bulk trader. NBET buys electricity from GENCOs, including Independent Power Producers (IPPs), under Power Purchase Agreements (PPAs) and resells it to DISCOs under Vesting Contracts.

14. **The transition from a publicly-owned to largely privately-owned power sector did not bring the expected outcomes and the sector is under severe stress.** The causes for the stress are interlinked and the result of the sector's key stakeholders - Government ministries and agencies, Nigeria Electricity Regulatory Commission (NERC), and the private sector falling short of their expected contributions for achieving sector turnaround. As a result, there is a lack of trust between key stakeholders and among the general public with respect to power sector improvement (Figure 1). A credible reform process would require an integrated approach of resolving regulatory and policy failures, establishing a credible and fiscally sustainable financing plan by the FGN to ensure full funding for tariff shortfalls, implementation of comprehensive Performance Improvement Plans (PIPs) by DISCOs with approved capital expenditure and specified business continuity arrangements for dealing with DISCOs that would fail.

Figure 1: Key Challenges of Nigeria's Power Sector



Note: ATC&C losses are the aggregate technical commercial and collection losses; BPE is the Bureau of Public Enterprise; FMFBNP is the Federal Ministry of Finance, Budget and National Planning (FMFBNP), BOF is the Budget Office of the Federation; DMO is the Debt Management Office.

15. **Tariff policy has limited the implementation of the regulatory and contractual framework of the power sector that, in turn, have hindered the sector's sustainable operation**. The tariff policy (the Multi-

[9] Annex 1 includes more detailed description of the power sector and the challenges it faces.

Year Tariff Order or MYTO) was at times delayed, often due to external factors (e.g. litigation), resulting in the deterioration of the financial situation of sector companies (especially DISCOs) and in the inability to enforce contractual obligations on majority privately-owned GENCOs and DISCOs since privatization in 2013. It has also created a lack of clarity on the end-date of loss reduction and capital expenditure targets in the Performance Agreements of DISCOs, which are input parameters used in the MYTO.

16. **The power sector, in particular distribution, is operationally inefficient with high losses.** The sector's aggregate technical, commercial and collection (ATC&C) losses are extremely high, with DISCOs reporting on average 41 percent in 2019, versus 26 percent allowed in NERC's MYTO (allowed losses are based on the targets in DISCOs' Performance Agreements). These high losses are exacerbated by inadequate metering of end-use customers and non-settlement of electricity bills by many Ministries, Departments and Agencies (MDAs) of the Government across the three tiers - Federal, State and Local. The high losses coupled with lack of payment discipline by DISCOs (and weak enforcement of payment discipline by NBET and NERC) result in DISCOs' low remittances to NBET (about 29 percent for 2018 invoices of NBET that are not adjusted for tariff shortfalls).

17. **Occasional delays with the implementation of MYTO and limited regulatory enforcement have prevented the much-needed investments in infrastructure**. DISCOs' poor financial viability has severely constrained their access to commercial financing. Without access to financing, DISCOs have not progressed with essential investments in metering and rehabilitation of distribution networks, resulting in continued poor service delivery. Moreover, the annual capital expenditure allowance in current MYTO, which is set on the basis of Performance Agreements, is ₦56 billion (US$156 million) for the eleven DISCOs combined, far below what is needed for improving the operational performance of DISCOs.

18. **Power sector shortfalls are rising and are fiscally unsustainable**. From 2015 to 2019, the tariff shortfalls – the difference between allowed tariffs and cost-reflective tariffs, which the FGN is responsible for funding, increased significantly as allowed tariffs stayed flat while the cost-reflective tariff increased due to FX depreciation and inflation. In 2019, with tariffs at only 56 percent of cost-reflective levels, the annual tariff shortfall was estimated at ₦524 billion (US$1,718 million). Tariff shortfalls between 2017-2019 totaled ₦1,249 billion (US$4,095 million) (Table 2). This situation is not fiscally sustainable and takes away resources for human and physical capital investment – in 2019 the FGN budget was only ₦428 billion (US$1,403 million) for health and ₦650 billion (US$2,131 million) for education.

Table 2: Cost-reflective Tariff, average allowed tariff and annual tariff shortfalls

	2017	2018	2019	2020	2021	2022	2023	Total
	Historical Years			Projected Inaction Scenario				2017-2023
Tariff shortfalls ₦ billion	322	403	524	606	768	822	887	4,332
Tariff shortfalls US$ billion	1.1	1.3	1.7	1.7	1.9	2.1	2.2	12.0
Tariff shortfalls % of GDP	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	
Cost-reflective tariff ₦	47.5	50.4	54.5	56.3	58.5	58.8	59.5	
Average allowed tariff ₦	30.8	30.7	30.7	30.7	30.7	30.7	30.7	

Note: Conversion of tariff shortfalls to US$ uses the predominant FX rate in the effective MYTO: CBN official FX rate of 305 for 2017-2019 and 360 for 2020. For 2021-2023 a "blended" FX rate of 396 is assumed.

19. **To ensure GENCOs and gas suppliers received sufficient payments to continue generating electricity, the FGN has borrowed from the CBN a total of ₦ 1,301 billion (US$3,614 million) since 2017.** The debt service obligations for the CBN PAF is a significant fiscal burden on FGN, at ₦ 198 billion (US$550 million) per year from 2020 to 2027 per the original agreed term-sheet. The original PAF was unconditional

and was used by NBET to supplement the remittances of DISCOs and ensure at least 80 percent payment to GENCOs. The PAF expansion (approved by the FGN in May 2019) is conditional and underpinned by an Accountability Framework. The disbursement conditions of the Accountability Framework are based on the PSRP approved by the FGN in March 2017. As the funding under the PAF expansion is expected to be fully used by mid-2020, the FGN will need alternative, more sustainable sources for financing tariff shortfalls that are on budget and fiscally affordable.

20. **The significant fiscal resources spent on funding tariff shortfalls disproportionately benefit the (relatively) rich**. While access to grid electricity of the poorest 40 percent, ranked by per capita household expenditures, is 37 percent, 68 percent of the richest 60 percent reported access to the grid. Living in more affluent neighborhoods, the top 60 percent also experienced fewer outages, and spent almost twice as much on electricity as the bottom 40 percent. As a result, the fiscal expenditure on tariff shortfalls largely benefits the rich. Eighty percent of the fiscal expenditure on tariff shortfalls benefits the richest 40 percent of the population, while only eight percent benefits the bottom 40 percent, and less than 2 percent benefits the poorest 20 percent (Figure 2).

Figure 2: Grid connection and distribution of current tariff shortfall funding among residential customers

Source: NBS Survey Data

21. **The FGN cannot afford inaction.** If the issues discussed above are not addressed, the fiscal burden of the sector will continue to rise and the sector will continue to seriously hinder economic growth. Table 2 above illustrates the projected outcomes for 2020-2023 under an inaction scenario: annual tariff shortfalls will total ₦3,082 billion (US$7,937 million) with aggregate tariff shortfalls for 2017-2023 reaching over ₦4.3 trillion (US$12.0 billion). COVID-19, decline in oil prices and the economic downturn projected for Nigeria will likely further aggravate the precarious financial situation of the power sector (Box 1) making the need for action even more urgent.

22. **There is a broad political consensus and strong commitment to start turning around the sector through implementing critical actions of the PSRP, some of which have already been taken**. The PSRP contains comprehensive measures for restoring the sector's financial viability, improving service delivery and reducing its fiscal burden. Progress in the implementation of the PSRP has been mixed to date. Given the urgency to address the multiple challenges in the sector, the FGN has chosen to focus on implementing the critical actions of the PSRP in all four areas necessary for the sector's turnaround: a) policy and regulatory environment; b) fiscal and financial sustainability; c) operational efficiency; and d) network infrastructure. Under the current administration, the World Bank has engaged intensively on a continuous basis with the leadership of the Office of the President (both the Office of the Chief of Staff and the Office of the Vice-President) and with the Federal Minister of Finance, Budget and National Planning (FMFBNP), the Federal Ministry of Power (FMoP), NERC and the Governor of the CBN led to a broad political consensus across fiscal/finance and sectoral agencies over the critical actions of the PSRP for the immediate/recovery phase and the proposed operation. The Government has already made significant

progress in all four areas of critical PSRP in 2019-2020, including approval of the PSRP Financing Plan by the Presidency. Many of the important regulatory actions, such as NERC requiring DISCOs' to prepare and implement PIPs, issuance of order to cap estimated billing and launching the extraordinary MYTO review to set new conditions for DISCOs and TCN, will not be easy to reverse. There is also wide agreement in the Government that improvements in sector performance are necessary conditions for any further public funding, i.e. no further unconditional funding. The releases of CBN PAF are now conditional on actions consistent with the prior results and DLIs of the PSRO.

Box 1: Potential risks and impact from COVID-19, economic downturn and decline in oil prices on power sector shortfalls in 2020

COVID-19 impacts are still unfolding in Nigeria and, at this stage, its impacts on the power sector are uncertain. However, the movement restrictions put in place since late March, 2020, the decline in oil prices and the economic downturn that Nigeria is projected to experience, risks worsening the power sector's already precarious financial situation.

Globally, and in many other countries of Sub-Saharan Africa, the COVID-19 impacts on the power sector have been related to a reduction in electricity demand and the associated reduction in sector revenues; deterioration of collections from end-consumers of their electricity bills while payments to Independent Power Producers are largely fixed in their nature. At the same time, there has been a reduction in fuel cost, particularly for those power sectors and utilities that largely rely on imported fuel.

Nigeria has not experienced a major change in demand and the volume of energy sent out to DISCOs (the average volume of energy sent out was 4,022 MWh/h from March 1 to May 7, 2020 compared with the average 4,080 MWh/h during the same period in 2019) because of large unserved demand and shift in demand from industrial and commercial customers to residential customers. As a result of this and majority of GENCOs being paid on a "take and pay" basis, the energy supply costs have not imposed an additional financial burden on the power sector. Fuel cost reductions are also not relevant for Nigeria since the fuel costs for the majority of GENCOs were at subsidized prices pre-COVID-19.

Therefore, the main risks for the Nigerian power sector in 2020 that are difficult for the FGN to mitigate are: (i) the shift in demand from industrial and commercial customers to residential customers; (ii) deterioration of electricity bill payments to DISCOs; and (iii) FX rate depreciation as a result of continuing low international oil prices. The table below shows the expected impact from simulations of these three risks on the power sector tariff and non-tariff shortfalls.

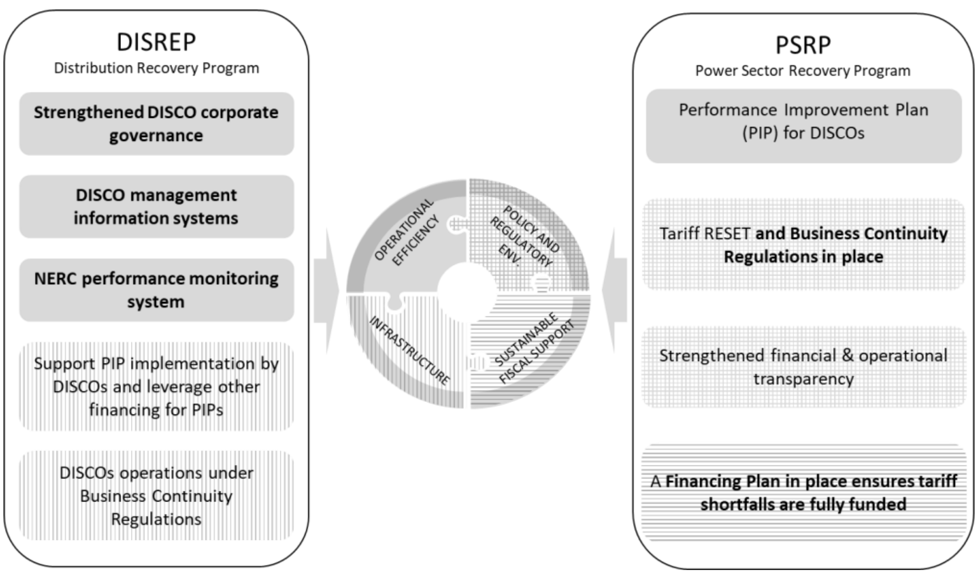
The 2020 PSRP Financing Plan has set a ceiling of ₦380 billion for new tariff shortfalls in 2020 to be funded. In a scenario of several of these risks materializing simultaneously, new tariff shortfalls in the power sector for CY2020 may increase by ₦115 billion and non-tariff shortfalls of over ₦250 billion may emerge.

Risk Factors	Assumptions	Expected Impact in 2020
1) Demand impact: shift in demand from industrial/commercial to residential customers	• **Base Case:** Tariff increase consistent with PSRP Financing Plan • **Risk Scenario**: Same tariff increase for different customer classes as in the Base Case, but overall tariff revenues 20 percent lower due to the shift in the demand from higher tariff industrial and commercial customers to lower tariff residential customers	• Annual tariff shortfalls increase by ₦72 billion - from ₦380 billion in the Financing Plan to ₦452 billion in 2020
2) Collection impact: reduction in collection rate	• **Base Case:** ATC&C losses at 20 percent in 2020 as per the NERC MYTO allowance • **Risk Scenario:** ATC&C losses of 41 percent	• Annual non-tariff shortfalls of ₦254 billion

3) FX rate depreciation	**Official FX rate component of the MYTO** • **Base Case:** Jan-Mar 2020: ₦305/US$ Apr-Dec 2020: ₦360/US$ • **Risk Scenario:** Jan-Mar 2020: ₦305/US$ Apr-Jun 2020: ₦360/US$ Jul-Dec 2020: ₦396/US$	• Annual tariff shortfalls increase by ₦43 billion

23. **The World Bank proposes to support the critical PSRP through a programmatic engagement starting with the proposed operation.** The programmatic engagement will involve a series of operations under two streams: PSROs and Distribution Recovery Operations to holistically address all four areas of critical PSRP. The PSROs will help establish policy, regulatory, contractual and financing conditions for power sector companies to improve performance while the Distribution Recovery Operations will support the improvement of DISCOs' operational performance, service delivery and governance. The proposed operation, the first PSRO, will focus on the distribution segment of the power sector's value chain since this segment currently represents the largest constraint to service delivery. Such a programmatic approach will help provide sizable World Bank support to the FGN for the implementation of the critical PSRP and the execution of the Financing Plan, while phasing it with the implementation progress of the PSRP and achievement of results. Each subsequent operation in the series will be extended only if satisfactory progress is made in the previous operation.

Figure 3: World Bank's Proposed Programmatic Engagement



C. Relationship to the CPF and Rationale for Use of Instrument

24. **The Program is consistent with, and aligned with, the World Bank's Country Partnership Strategy (CPS) for FY2014-2017[10] which was extended by the second Performance and Learning Review[11] (PLR) through FY2019.** By strengthening the accountability of the power sector and improving the reliability of electricity supply, the Program will support the focus area of "increasing installed power

[10] Report Number 82501; April 30, 2014.
[11] Report Number 126702; December 3, 2018.

generation and transmission capacity and improving the efficiency and governance of electricity delivery" under the CPS cluster I ("The federally-led structural reform agendas for growth and jobs"). Aligned with the outcome indicator set out in the CPS, the Program aims to reduce the losses of privatized DISCOs. The Program is also in line with the Country Partnership Framework (CPF) covering FY2020-2024 that is currently under preparation.

25. **By improving the availability and reliability of electricity, the Program contributes to the World Bank's twin objectives of reducing poverty and boosting shared prosperity.** Of the households connected to grid electricity, most experience blackouts on a daily basis, as well as frequent voltage fluctuations. Low-income households often resort to candles and flashlights for lighting and firewood for cooking, which are inefficient and potentially harmful to their health and the environment. The lack of reliable electricity also undermines small home-based businesses, impacting women as much as men: in 2013, 58 percent of nonfarm enterprise owners were women, and over 40 percent of these businesses were based in homes[12]. At the same time, low security of supply negatively affects economic activities more generally: with two-thirds of firms experiencing power outages and having to rely on generators as their back-up source, electricity is more expensive than it would be from the grid, resulting in an average loss of 11 percent of annual sales.[13]

26. **The proposed Program establishes the institutional and policy pre-requisites for attracting private financing in the sector and is consistent with the "Maximizing Finance for Development" approach.** In a 2018 survey of private investors and financiers for Sub-Saharan Africa, investors and financiers ranked power sector-specific policy and regulatory environment as the most important consideration for their investment and financing decisions[14]. The Program builds on the lessons of World Bank Group (WBG) engagement in the power sector of Nigeria whereby supporting private sector-led generation projects did not produce improved performance outcomes due to lack of improvement of distribution segment, which is critical for the off-take of electricity and the overall financial health of the sector. The Program focuses on consistent implementation of policy and regulatory framework, enforcement of contracts and achievement of financial viability in the distribution segment, which should help improve the overall creditworthiness of the sector and sector companies and establish a track record of sustainable operation, thus restoring eroded investor confidence and unlocking much-needed financing across the power sector value chain (e.g. commercial financing from local and international capital markets, as well as public financing from different development finance institutions). Improving conditions could also facilitate additional International Finance Corporation (IFC) and Multilateral Investment Guarantee Agency (MIGA) engagement in the sector.

27. **The Program supports strengthening Nigeria's fiscal and debt transparency by helping transition government financing for power sector tariff shortfalls to sustainable, on-budget sources**. The Program supports the successful implementation of the PSRP Financing Plan, which will strengthen debt transparency by replacing off-budget CBN financing with more sustainable and transparent sources of direct FGN budgetary contribution and the PSRO from 2020 onwards (once the current CBN facility is depleted by mid-2020).

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[12] World Bank (2016). Federal Republic of Nigeria Poverty Work Program: Poverty Reduction in Nigeria in the Last Decade. Washington, DC: World Bank.

[13] The Enterprise Survey, 2014.

[14] The respondents to the survey were 51 private developers and financiers active in Sub Saharan Africa. In their responses, the respondents identified sector specific policy and regulatory risks as more important than overall country political and macro-economic risks or overall sectoral context. Predictability of cash flows was assigned the highest importance by the respondents among the regulatory and policy issues.

28. **By addressing the security of supply and price distortion, the proposed Program supports key priorities of Nigeria's Intended Nationally Determined Contribution (INDC) to mitigate greenhouse gas (GHG) emissions.** Specifically, by improving service delivery, the Program will help displace diesel-based electricity self-generation with grid-connected gas-based thermal power and hydropower generation. In addition, the Program will reduce GHG emissions by reducing losses in the distribution network through the implementation of PIPs of DISCOs. The Program will also help reduce the gas flaring, which currently exceeds 10 percent of gas production, by assuring timely and full payments to oil producers for gas supply and thereby providing financial incentives for them to invest in the infrastructure to supply the gas they currently flare in the domestic market. It is estimated that GHG emissions will, as a result, decrease by 5.0 million tCO2 over the course of the Program (2020-2023).

29. **The proposed Program will support regional trade and strengthen Nigeria's role in the West Africa Power Pool**. In the short-term, the Program will help address gas constraints and improve the financial situation of GENCOs, enabling electricity exports by utilizing the stranded generation capacity (facilitated through the North Core-Dorsale Nord Regional Power Interconnector Project (P162933) approved in FY19). In the medium- to long-term, the Program will improve the overall investment environment of the sector through the comprehensive reforms and institutionalizing of the investment planning, thus enabling private investments in new generation, which can contribute to Nigeria's exports.

30. **The proposed Program complements the WBG large and diverse engagement in Nigeria's power sector** supporting Nigeria achieve increased access to reliable and modern electricity supply consistent with the World Bank's flagship Energy Access Leap initiative for Sub-Saharan Africa for IDA 19 and IDA 20. The Program supports improvement in grid connected energy access by supporting an enabling regulatory, policy and financing framework necessary for private DISCOs to increase access to reliable supply of electricity. It is complemented by the ongoing lending operation in transmission that helps address key transmission constraints for energy access. It is also complemented by the proposed distribution recovery operation that will support loss reduction and improved service delivery for grid connected distribution. The World Bank supports off grid electrification for households, education facilities and micro, small and medium enterprises through off-grid clean energy solutions (mini-grids and solar home systems). This programmatic support to energy sector is built on the country platform approach where Nigeria specific solutions are developed using global knowledge and experience.

Table 3: WBG Program (ongoing and planned) in the Power Sector

Sector Challenges	WBG Instrument	World Bank financing	Status
Inconsistent implementation of policy and regulatory framework, large and fiscally unaffordable tariff shortfalls and lack of payment discipline of Discos	World Bank lending to support implementation of critical policy, regulatory and institutional measures of the PSRP necessary to improve reliability of electricity supply, improve power sector financial viability and accountability and reduce the fiscal burden of the sector (the PSROs, P164001)	US$750 million (with potential extension to US$3 billion as per current FMFBNP request)	In preparation
Poor operational performance and weak governance of DISCOs and	World Bank lending to strengthen the quality and reliability of power supply to customers by improving the operational	US$500 million (with potential extension to US$1 billion)	In preparation

Sector Challenges	WBG Instrument	World Bank financing	Status
lack of infrastructure investment	and commercial performance of DISCOs through funding for PIP implementation and strengthen their governance (Nigeria Distribution Sector Recovery Program, P172891)		
Transmission constraints, including for regional trade	• World Bank lending for the rehabilitation and refurbishment of transmission infrastructure to enhance system stability (Nigeria Electricity Transmission Project, P146330) • World Bank lending for construction of a new transmission infrastructure for increased electricity trade among Nigeria, Niger, Benin and Burkina Faso in the West Africa Power Pool (North Core/Dorsale Nord Regional Power Interconnector Project, P162933).	Aggregate of US$486 million for Nigeria Electricity Transmission Project and North Core Regional Interconnector Project	Ongoing
Generation and gas supply constraints	• IFC debt and equity investments to support private brownfield and greenfield investments in power generation and domestic gas supply. • MIGA political risk insurance to support private investments in power generation and domestic gas supply. • International Bank for Reconstruction and Development (IBRD) guarantee support for private investment in power generation (Nigeria Power Sector Guarantees Project, P120207 and Nigeria Power and Gas Improvement Project, P114277). • Technical assistance for gas policy development.	US$868 million IFC direct or mobilized financing, US$492 million MIGA guarantee and US$237 million IBRD guarantee to date[15]	Ongoing
Low access to electricity	World Bank lending to support investment in off-grid electrification to increase access in primarily rural areas (Nigeria Electrification Project, P161885).	US$350 million	Ongoing

31. **PforR financing is identified as the most relevant instrument for the proposed operation.** Investment Project Financing (IPF) would not be suitable for this operation, as the proposed Program

[15] IFC has provided loans of US$80 million and mobilized US$213 million of third-party direct foreign investment loans for the 459 MW Azura Edo Project, a private power project for which IBRD is providing up to US$275 million in guarantees (debt and liquidity), and MIGA is providing US$492 million in guarantees to cover commercial bank debts, equity, and interest rate hedging. IFC has also invested in domestic gas producer Seven Energy (equity of US$75 million and anchor investor in a US$500 million bond), and MIGA has provided a US$200 million guarantee to Seven Energy for its investment in Accugas Ltd. An IDA guarantee in the amount of US$112 million in support of the gas sales agreement between Accugas and the 560 MW Calabar power plant that is publicly owned became effective on September 22, 2017.

focuses on critical sector-wide reforms, rather than specific investments. Development Policy Financing would also be inappropriate, as it would not permit measures to strengthen implementation constraints and ensuring results-based financing arrangements for Program funding, which are important for ensuring the PSRP Financing Plan is funded to ensure that new tariff shortfalls are financed, and no new arrears are accumulated. The PforR instrument ensures channeling of funds though a rule-based and transparent mechanism. Furthermore, given the FGN's strong commitment to implementing critical actions of the PSRP, the PforR instrument allows the WBG to align its operation with the FGN's program. Through the Disbursement Linked Indicators (DLIs), which require the achievement of verifiable outcomes and outputs, the PforR framework strengthens the focus on results and provides leverage to promote stronger performance standards, institutional accountability, and payment discipline throughout the sector value chain. Finally, by utilizing the existing fiduciary and safeguards systems (with support as necessary to strengthen institutional capacity), the PforR instrument will not introduce additional burden on Government systems.

32. **The PforR instrument is also viewed by the FGN as the most appropriate instrument of support to sustainably implement major turnaround in the power sector.** The FGN views the PforR as more effective in building ownership and aligning the incentives and efforts of different stakeholders by bringing them together to focus on achieving a set of common, clearly defined, measurable results. The PforR has been successful in engaging the most senior leadership, who focus on outcomes and results, and who view the PforR with its clearly defined results and verification process as a way of strengthening internal accountability within Government and their own monitoring and evaluation (M&E) systems.

33. **The PSRO draws upon a key lesson from the implementation of other PforRs in Nigeria by having an IPF technical assistance (TA) component** to provide specific support to the agencies responsible for achieving the results, to the PSRP Secretariat/ Project Implementation Unit (PIU), and for the independent verification of the results. The component allows a closer working relationship between the World Bank, the implementing agencies, the PSRP Secretariat/PIU in ensuring that inputs are well-designed, and that sufficient quality assurance is provided, including on the verification of the results.

II. PROGRAM DESCRIPTION

A. Government program

34. **The FGN has been implementing the Economic Recovery and Growth Plan (ERGP) since 2017 in response to the 2016 recession.** The ERGP sets out to restore macroeconomic stability in the short-term and to undertake structural reforms, infrastructure investments and social sector programs to diversify the economy and set it on a path of sustained inclusive growth over the medium- to long-term. It had an ambitious target of achieving 7 percent real annual GDP growth by 2020, to be initially driven by the oil sector and then increasingly by strong non-oil sector growth.[16] So far, progress on implementation of the plan has been mixed with outcomes stronger in some areas than in others**.**

35. **The FGN recognizes the critical role of the power sector in Nigeria's economic development.** "Ensuring energy sufficiency" is one of the key priorities of the ERGP for 2017-2020. The PSRP originally approved by FEC in 2017 aims to: a) restore the sector's financial viability; b) improve power supply reliability; c) strengthen the sector's institutional framework and increase transparency through the publication of key operational and financial data; d) implement clear policies that promote and encourage investor confidence in the sector; and e) establish a contract-based electricity market.

[16] Following missed ERGP growth targets in 2017 and 2018, the growth target for 2020 in the Government's medium-term expenditure framework was moderated to 2.9 percent.

36. **The PSRP seeks to de-risk the power sector for private investment through a comprehensive package of financial, operational, governance, and policy interventions.** The PSRP embraces the role of the Government and public funding in meeting the revenue requirement of the largely privatized power sector until end-user tariffs are adjusted to fully cover sector's revenue requirement, and in improving sector operational efficiency until private financing is unlocked for investments, particularly in the distribution segment. To that end, the financial interventions of the PSRP aim to fully fund 2015-2019 historical tariff shortfalls and new tariff shortfalls (till the sector reaches financial self-sustainability), so that sector companies receive their required revenue. The PSRP's operational/technical interventions aim to ensure that DISCOs' performance and electricity supply improve. Strengthening sector governance and transparency, enforcement of contracts, and the communication of reforms are the major priorities of the PSRP's governance interventions. Policy interventions aim to implement policies to encourage private sector investments, increase electricity access and manage costs by ensuring that new generation capacity is procured competitively on the basis of a Least Cost Development Plan (LCDP).

Figure 4: PSRP Interventions

Group 1: Financial interventions to fully fund historical and future sector deficits	Group 2: Operational/technical interventions	Group 3: Governance interventions	Group 4: Policy interventions
• Establish sustainable and appropriate electricity tariffs. • Dimension and commit to full-fund projected sector deficits due to future tariff shortfalls until cost recovery. • Clear historical deficits due to tariff shortfall as part of the Financing Plan. • Secure financing sources and enforce payment discipline throughout the supply chain. • Clear historical MDA debts and automate future payments.	• Ensure a minimum of 4,500 MW of generation capacity is available daily. • Support improved DISCO performance to encourage private sector investment. • Guarantee adequate gas supply for power generation.	• Restore sector governance. • Improve sector transparency. • Make contracts effective. • Clearly communicate PSRP reforms. • Establish PSRP Implementation Monitoring Team.	• Implement fiscal and monetary policies. • Increase electricity access. • Promote least cost generation entry and ensure competitive procurement of power.

37. **The FGN has decided to focus on critical actions of the PSRP for 2020-2022 with high-level oversight to ensure coordination and alignment.** The implementation progress of the PSRP has been mixed to date as certain important actions have been incompletely implemented or delayed. Notably, the revenue requirement of sector companies was not adjusted consistently based on MYTO minor reviews (automatic adjustments were not consistently implemented) and the first PSRP Financing Plan was not executed as planned[17]. Given the implementation progress and complexity of the PSRP, the FGN decided to pursue the critical actions of the PSRP ("Critical PSRP") in the next three years (2020-22) to ensure a phased and more focused effort. The Critical PSRP focuses on the distribution segment of the power sector, which is the largest constraint to the sector's sustainable operation. It covers four integrated areas necessary for the sector's turnaround: (i) policy and regulatory environment; (ii) fiscal and financial sustainability; (iii) operational efficiency; and (iv) network infrastructure. The critical PSRP implementation

[17] The first PSRP Financing Plan prepared in November 2017 was included in the MTEF/Fiscal Strategy Paper (FSP) 2018-2020 and 2018 FGN Budget. However, the source of funds did not materialize beyond the CBN PAF as the World Bank PSRO was put on hold. The use of funds deviated significantly as planned as source of funds were lower leading to new arrears accruing as new 2017-2019 sector shortfalls were not fully funded.

is overseen by the Office of the President. Such high-level leadership and oversight ensure concerted effort of key ministries and agencies, including the FMFBNP, FMoP, CBN; NERC, NBET, Bureau of Public Enterprises (BPE), and TCN.

38. **The FGN has made substantial progress in implementing the Critical PSRP. NERC has implemented several critical measures providing regulatory clarity to DISCOs while enforcing their license obligations**. Key measures undertaken so far by NERC include: (i) issuance of the Guidelines for DISCOs' preparation of PIPs and preparation and submission of PIPs by ten DISCOs; (ii) explicit recognition and removal of new tariff shortfalls from payment obligations of DISCOs through "minimum remittance threshold" orders; (iii) enforcement of DISCOs' license obligations, in particular their payment obligations, resulting in DISCOs making full payments since July 2019[18]; (iv) launching of the MYTO extraordinary tariff review to incorporate PIPs and reset new performance parameters for DISCO; (v) together with BPE establishing business continuity arrangements for DISCOs in case of NERC's license intervention; and (vi) issuing of an order to cap the volume of electricity that DISCOs can bill to unmetered customers.

39. **A multi-agency committee under the leadership of the FMFBNP prepared an updated/2020 PSRP Financing Plan, which was approved by the FGN on April 2, 2020.** The 2020 PSRP Financing Plan quantifies the FGN funding required by the sector for 2020-2027 (use of funds) to cover historical and new tariff shortfalls, including the repayment of the CBN PAF, and identifies the sources of funds. The Financing Plan uses credible and realistic macro and sectoral assumptions, consistent with the 2020 MYTO. As part of the PSRP Financing Plan, the FGN approved a total funding envelope of ₦380 billion (US$1.056 billion) for covering new tariff shortfalls in 2020 and NERC will need to adjust end-user tariffs to fit this envelope. NERC has issued an order indicating that it will carry out the next MYTO minor review, including adjustment of end-user tariffs on July 1, 2020 consistent with the PSRP Financing Plan. The FGN and NERC have also approved a set of measures to mitigate the impact of tariff adjustments on poor households, which are feasible to implement and do not increase revenue uncertainty for DISCOs (discussed in Poverty and Social Impact Assessment). Finally, the FGN approved FMFBNP to proceed with the preparation of the first PSRO based on a set of critical PSRP actions, which are all captured in the DLIs.

B. Program Development Objectives and key results

40. **The Program's Development Objectives (PDO) are to improve the reliability of electricity supply, achieve financial and fiscal sustainability, and enhance accountability.** Consistent with the PSRP, the PSRO seeks to achieve these development objectives by helping the power sector to establish a track record of sustainable performance, thus unlocking private financing for the sector.

41. The PSRO supports results in three areas: (i) reliability of electricity supply is improved[19]; (ii) financial and fiscal sustainability is achieved; and (iii) accountability is enhanced. The following outcome indicators will be used to measure achievement of the PDO:

- **PDO Indicator 1:** Annual electricity supplied to the distribution grid increases;
- **PDO Indicator 2:** Annual tariff shortfalls decline, and new tariff shortfalls are funded from non CBN sources once the PAF is depleted; and
- **PDO Indicator 3:** Public awareness about ongoing power sector reforms and performance increases, and public awareness about ongoing power sector reforms and performance among women increases.

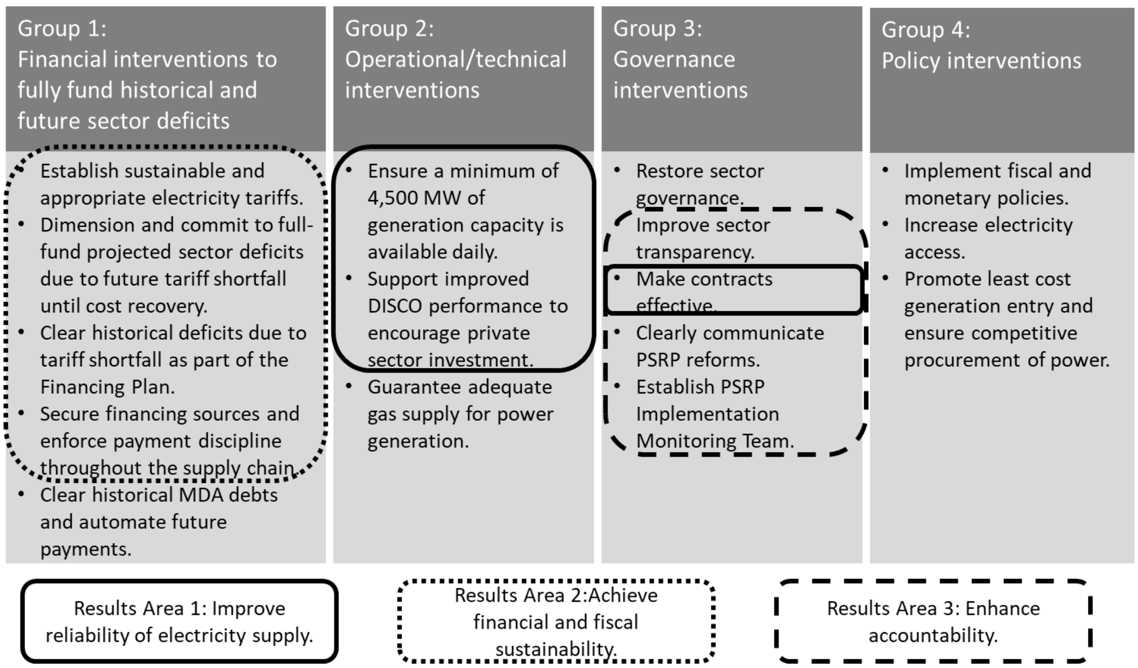
[18] In October 2019, NERC gave notice of its intention to cancel licenses of 8 DISCOs, which had failed to meet the minimum remittance payment order issued in July 2019. According to NERC, all DISCOs have paid up and complied with the order.

[19] This increase in reliability will be achieved through enforcement of existing contracts and regulations and will entail no investment in the rehabilitation or construction of infrastructure.

C. PforR Program Scope

42. **The Program is a hybrid with two components, a PforR and an IPF.** The PforR component will support the implementation of the Critical PSRP that the FGN has prioritized for implementation in 2020-2022. The IPF component will finance TA to key sector agencies to support their implementation of the DLIs and overall capacity building.

Figure 5: Program Boundaries



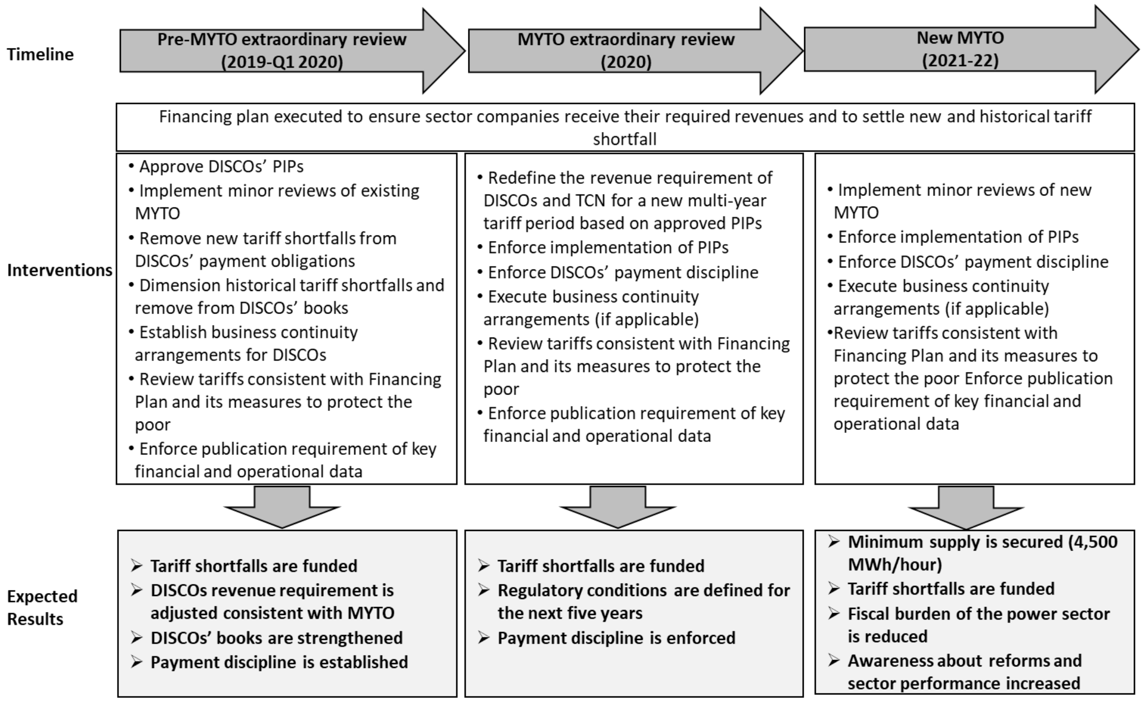
43. **Underlying the PforR design are the sector "Reset" and the receipt of full revenue requirement by the power sector companies through the Financing Plan.** These two measures are essential for de-risking private financing by transitioning the sector to a contract-based market; establishing greater transparency and accountability; and improving the sector's service delivery and operational efficiency.

44. **The Reset is a key milestone of the critical PSRP and will define new conditions for the sector companies based on the current situation of the sector.** Even in well-functioning power sectors, a Reset is part of the process of determining the power sector revenue requirement at the end of a multi-year tariff period. It is particularly important in the context of the Nigerian power sector, as the sector situation has significantly evolved since the privatization of DISCOs. As a result, the targets set in the existing Performance Agreements[20] and the parameters of the NERC's current MYTO, which sets the revenue requirements of DISCOs and TCN, are not reflective of the actual sector situation. The PSRO, therefore, is designed around the Reset process, which includes three distinct phases – before the MYTO extraordinary review, MYTO extraordinary review (which will set revenue requirement of DISCOs and TCN for a new multi-year tariff period), and implementation of the new MYTO – with associated interventions to gradually bring the sector to a sustainable state characterized by improved service delivery, larger financial self-sustainability, enforcement of contracts and regulations, and transparency. NERC has initiated the process of Reset by mandating DISCOs to prepare PIPs and initiating the MYTO extraordinary

[20] The Performance Agreements, which define baseline and target performance parameters, were signed between the BPE and the owners of DISCOs after the privatization.

review, which is expected to complete by December 31, 2020, and the new MYTO will be effective for 2021-2025.

Figure 6: Power Sector Interventions and Results



45. **To ensure that the Reset is implemented effectively, it is necessary to de-link the power sector conditions of the past from the conditions of the future.** The ending of allowance parameters for operating and capital expenditures and ATC&C losses in DISCOs' legacy Performance Agreements are critical for this. These parameters were set to expire in December 2019 but were extended to December 2021 by declaring two years as mutual non-performance. The FGN has committed not to extend the parameters in these Agreements further. NERC, as part of MYTO extraordinary review, will define new performance parameters for DISCOs from January 2022. Therefore, although the new MYTO will be effective beginning 2021, the allowances for capital expenditure and losses for DISCOs will be adjusted only for 2022-2025. In addition to allowing the sector to have a fresh start, the Reset is important for delineating institutional responsibilities between NERC and BPE. Once the Performance Agreement targets end, NERC would be responsible for performance monitoring and enforcement of DISCOs on the basis of approved PIPs and new performance parameters.

46. **The receipt of revenue requirements by power sector companies is essential to breaking the vicious cycle of poor sector financial performance, which prevents the enforcement of contractual and regulatory obligations and results in poor service delivery.** The sector is projected to reach self-sustainability by 2022, when a number of PSRP measures – operational efficiency improvement, enforcement of payment discipline and tariff adjustment – are expected to lead to the convergence of the sector's revenue requirement and tariff revenue (allowed tariffs times volume of energy delivered). In the interim (2020-2022), the Government has committed to fund the difference between the revenue requirement and tariff revenue i.e. the tariff shortfalls. This will allow sector companies to meet their contractual obligations and will build trust and confidence in the sector, including among private investors

and financiers. To that end, the Government has developed a Financing Plan for 2020-2027 to cover the new tariff shortfalls of the sector and to clear the historical tariff shortfalls.

47. **The three Results Areas of the PSRO support measures to ensure an effective Reset, receipt of revenue requirement by sector companies, and the enforcement of contracts and regulations on that basis.** In addition, the PSRO results support measures (clearly separated from the Reset) to address legacies of the past.

Results Area 1: Improve reliability of electricity supply

48. **The PSRO includes a set of measures to ensure that at least 4,500 MWh/hour of electricity is supplied to the distribution grid from 2022[21].** This is the minimum level of supply necessary for grid stability and the reduction of system outages. The experience of the Nigerian power sector indicates that this level of supply ensures more reliable service delivery and significantly improves customers' payments of electricity bills. As a result, DISCOs' collections against electricity bills increase at this level. This level of power supply requires no new investment in infrastructure and is expected to be achieved through the enforcement of existing contracts and regulations.

49. **The PSRO helps address the constraints in the distribution segment.** This will be achieved through well-defined and detailed PIPs prepared by DISCOs and approved and enforced by NERC. The priority measures in the PIPs will include the incorporation of Management Information Systems (MIS) to support efficient, transparent and accountable execution of operations in all business areas of DISCOs; phased deployment of consumption meters in accordance with the concept of "market segmentation"; and measures to enhance billing and collection arrangements. NERC will include the funding requirements of the PIPs in determining the revenue requirement of DISCOs at the time of the MYTO extraordinary review, while exercising tight regulatory oversight over the implementation of PIPs by DISCOs.

50. **The PSRO will also support establishing business continuity arrangements in DISCOs to ensure uninterrupted service.** Given the weak operational and financial situation of many DISCOs and, most importantly, weaknesses in their governance and management, several of DISCOs may continue not complying with their license and contractual obligations, particularly their obligation to pay and to implement PIPs, and may, therefore, be subjected to NERC's license intervention. While this process may eventually result in a positive outcome of reorganizing and restructuring DISCOs and ensuring they have competent management, in the short-term, NERC and BPE need to ensure that transitory management team(s) will be appointed immediately after the exit of DISCO(s) management to assume operational management of DISCOs and ensure continuity of electricity supply to customers.

Results Area 2: Achieve financial and fiscal sustainability

51. **The financial sustainability of sector companies is critical to enforcing their contractual and regulatory obligations and improving service delivery.** It is also the basis for strengthening the balance sheets of sector companies, especially DISCOs, to enhance their ability to attract private financing.

52. **The PSRO supports the establishment, regular updating and execution of the PSRP Financing Plan, which aims to ensure tariff shortfalls are fully funded** through sources of funding other than the CBN (once the existing PAF is depleted) and that there is a path to cost recovery to reduce the fiscal burden of the sector significantly over the short-to-medium-term.

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[21] As DISCOs implement PIPs, which incorporate management information systems (among other elements), it will become possible to measure electricity supply reliability through end-consumer level indicators of duration and frequency of outages.

53. **The PSRO also supports tariff adjustments accompanied by measures to protect the poor and enforcement of payment discipline to support the implementation of the PSRP Financing Plan.** Specifically, the PSRO supports the implementation of end-user electricity tariff adjustments consistent with the new tariff shortfall ceilings set in the PSRP Financing Plan accompanied by measures to protect the poor. It also supports the removal of new and historical tariff shortfalls from DISCOs payment obligations and books. Finally, it supports full and timely payments of DISCOs to NBET and to TCN, which is critical for strengthening payment discipline and reducing non-tariff shortfalls, which could undermine the financial health of the overall power sector, even though these are not FGN's responsibilities.

Results Area 3: Enhance accountability

54. **Strengthening sector accountability and transparency are the foundations for the successful implementation of the PSRP and its sustainability.** Over time, strengthened accountability should translate to increased operational efficiency, including the reduction of technical, commercial and collection losses.

55. **The PSRO supports measures to improve the financial and operational transparency of DISCOs.** Specifically, the Program involves the timely publication of the International Financial Reporting Standards (IFRS) audited financial statements of DISCOs. It also involves NERC's publication of key operational and financial performance data of the sector on a quarterly basis, including data on electricity supply hours. These measures will improve the credibility of the sector, as well as the investment environment.

Excluded activities

56. **The Program expenditure does not support any investment-related activities and rather aims to improve service delivery by strengthening the power sector financial viability and accountability.** The PforR expenditure framework is the PSRP Financing Plan of the FGN and does not include procurements. The specific PSRP interventions which have been excluded from this Program include fiscal and monetary incentives (e.g. tax holidays, duty waivers); as well as investments in increased electricity access (electrification) and the rehabilitation of transmission and distribution infrastructure. Complementary World Bank IPF and PforR operations under preparation support investments in electrification and the alleviation of transmission and distribution network constraints.

Partnership Arrangement

57. **Development partners have been consulted regarding Program design.** Donor activities in the power sector are coordinated through the Development Partner Power Sector Working Group. Development partners meet regularly to exchange information regarding their various activities in the sector and to discuss pertinent issues of power sector policy with the Government. The World Bank has coordinated with development partners throughout the Program design and preparation and plans to continue doing so during its implementation. The World Bank has also consulted with the IMF regarding the macroeconomic and fiscal linkages of the PSRO, including the exchange rate policy, the CBN PAF, and the overall fiscal and debt implications of the Financing Plan.

58. **Development partner programs address several components of the Critical PSRP and are complementary to WBG support.** Department for International Development, United Kingdom (DFID) provides extensive TA and currently supports NERC with strategy and communication of regulatory reforms as well as co-funds the forensic audit of DISCOs. USAID provides TA and transaction support through Power Africa with a focus on distribution and off-grid access. Power Africa currently provides TA to NERC, FMFBNP and the Office of the President for PSRP coordination and M&E. The French Development Agency (*Agence Française de Développement,* AFD) supports investments in transmission

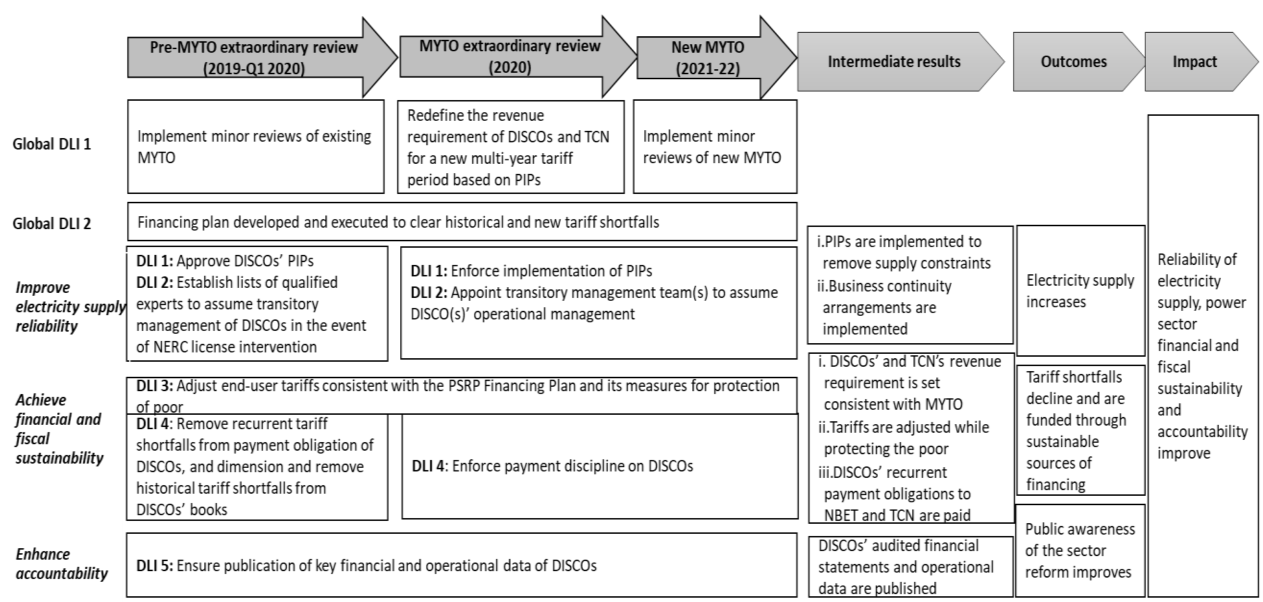
infrastructure, and training and capacity building for privatized DISCOs to help access financing. AFD/European Union (EU) support to DISCOs has been crucial in their preparation of PIPs and other strategic planning. The African Development Bank (AfDB) supports the strengthening of transmission infrastructure and off-grid energy access in close coordination with the World Bank. It is poised to provide parallel financing for distribution PIP investments along with the World Bank as part of the next stage of PSRP implementation. The Japan International Cooperation Agency (JICA) supports transmission investments and rehabilitation of hydropower plants. A number of other development partners are supporting electrification initiatives, where the World Bank engagement supports establishment of enabling policy and regulatory framework critical for all development partner supported activities.

D. Disbursement Linked Indicators and Verification Protocols

59. **The disbursements under the proposed PSRO will be governed by a set of seven DLIs, consisting of two Global DLIs and five standard DLIs.** The DLIs articulate the actions necessary to recover the sector and set it on the path to financial and operational sustainability. The two DLIs which are most critical to the success of the Program – ensuring that DISCOs' and TCN's revenue requirement is set through the consistent implementation of semi-annual MYTO minor reviews and a MYTO extraordinary review; and establishing and executing a credible, fiscally affordable and sustainable PSRP Financing Plan to fully cover tariff shortfalls – have been designated as Global DLIs. Disbursements of the five standard DLIs can only be completed upon verification that both Global DLIs have been achieved. The two Global DLIs trigger not only the disbursement of the funding allocated to them (accounting for 42 percent of the total allocation) but also disbursement against other DLIs achieved in parallel. This framework provides incentives to ensure that the PDOs are achieved.

60. **The DLIs are structured around the three key Results Areas and serve as milestones in achieving the development objectives of the Program.** The DLIs are also selected based on the feasibility of monitoring and verifying their achievement and are phased according to the three distinct periods of Reset: pre-MYTO extraordinary review, MYTO extraordinary review and post-MYTO extraordinary review.

Figure 7: Theory of Change: Disbursement Linked Indicators and Expected Results



Global DLIs

61. **The two Global DLIs are the DLIs which are most critical to the success of the PSRP and the long-term stability of the Nigerian power sector.** Specifically:

- **Global DLI 1 (NERC sets revenue requirement for TCN and DISCOs based on MYTO Minor Reviews and a MYTO Extraordinary review)** involves setting the revenue requirement of DISCOs and TCN through the consistent implementation of semi-annual MYTO Minor Reviews (automatic adjustments of revenue requirement to reflect changes in key parameters including energy sent out and exchange rate[22]) before and after the MYTO Extraordinary Review and implementation of the MYTO Extraordinary Review for DISCOs and TCN. MYTO extraordinary review will be carried out in 2020 and will cover the period of 2021-2025; it will redefine allowances for ATC&C losses, operating expenditure and capital expenditure of DISCOs based on the approved PIPs from January 2022 when the Performance Agreement targets of DISCOs end[23]. As part of the MYTO Extraordinary Review, DISCOs' allowances for operating and capital expenditure will be revised based on the approved PIPs and subsequent MYTO Minor Reviews will convert the US$-denominated portion of DISCOs' allowances for operating and capital expenditure at the prevailing NAFEX rate in order to more accurately reflect the revenue requirement of DISCOs[24].
Climate co-benefits: This DLI relates to the efficient pricing of electricity and is expected to contribute to the reduction of carbon emissions due to the anticipated demand response. It is considered part of the Multilateral Development Banks' (MDB) list of eligible mitigation activities under Category 9.1 "Efficient pricing of fuels and electricity (efficient end-user tariff)."

- **Global DLI 2 (A credible and fiscally sustainable PSRP Financing Plan is approved and executed to fully cover tariff shortfalls)** requires that a PSRP Financing Plan for 2020-2027 is in place and executed to fund new and historical tariff shortfalls. The PSRP Financing Plan will need to be updated regularly to be consistent with the effective MYTO[25] and reflect changes in key parameters, including energy sent out and the FX, and to remain fiscally affordable and sustainable. The PSRP Financing Plan will be updated annually and issued by the FMFBNP setting the ceiling for total new tariff shortfalls (to guide the MYTO reviews and tariff adjustments) and the uses of funds and sources of funds for the forthcoming year. The PSRP Financing Plan will also need to be implemented with at least 80 percent of new annual tariff shortfalls estimated in the PSRP Financing Plan[26] settled every year through financing from sources other than CBN once the existing PAF is depleted.

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[22] Currently the MYTO is not underpinned by one single exchange rate as it reflects the different contractual arrangements in the sector, including the prevailing PPAs of GENCOs, with most but not all PPAs referenced to the CBN official rate. The allowances for DISCOs' operating and capital expenditure is also currently converted using the CBN official rate, although this is not stipulated as part of their Performance Agreements.

[23] For 2021, the revenue requirement of DISCOs will be set based on the allowances for ATC&C, operating expenditure and capital expenditure set in the existing Performance Agreements.

[24] The NAFEX rate will apply for the 6-month duration of the MYTO semi-annual minor reviews i.e. eliminating intra-MYTO NAFEX risk. The move to NAFEX for DISCOs' allowances for operating and capital expenditure in 2021 means no pressure on revenue requirements in the current year/2020. Also, the upward pressure on revenue requirement will be offset by the revision downwards of the share of DISCOs' allowances for operating and capital expenditure indexed to US$ (currently capital expenditure is assumed at 100 percent - assumptions not changed since 2012).

[25] As the PSRP Financing Plan will be updated annually - by the end of the year to be effective start of the following year – it will be consistent with the MYTO review, effective 1 January, but not necessarily consistent with MYTO reviews in-year, although there will be coordination between the MYTO reviews in-year with the prevailing Financing Plan through the PSRP Finance Technical Committee.

[26] There are many sources of risks to the PSRP Financing Plan that may result in new tariff shortfalls for the year being higher than estimated, including changes in key parameters such as energy sent out and FX rate between MYTO semi-annual reviews, and

Climate co-benefits: The Financing Plan dimensions power sector tariff shortfalls and involves tariff adjustment trajectory towards full cost recovery. Since tariff revenues are not sufficient to pay for both upstream generation and transmission as well as for downstream capital and operational expenditure to implement the PIPs, the DLI requires that a Financing Plan is in place and executed to cover tariff shortfalls. It entails both tariff increases and other sources to finance the PIPs to reduce losses (including technical losses) and substantially improve the efficiency of distribution activities. The DLI, therefore, contributes to two eligible mitigation activities: (i) Category 9.1 "Efficient pricing of fuels and electricity"; and (ii) Category 3.3 "Improvement in utility-scale energy efficiency through efficient energy use, and loss reduction, or resource efficiency improvements."

The disbursements of the five regular DLIs for each of the years 2020-22 are contingent upon the achievement of the conditions articulated for Global DLIs 1 and 2 in each year.

Results Area 1: Improve reliability of electricity supply

62. **DLIs 1 and 2 aim to resolve key regulatory gaps to ensure that minimum baseline power generation of 4,500 MWh/hour is distributed daily from 2022 onwards.** Specifically:

- **DLI 1 (*Implementation of approved PIPs is enforced*)** supports tighter regulatory oversight over DISCOs through PIPs, so that distribution constraints are removed, and operational performance improves. The first disbursement (prior result) will be triggered upon NERC's approval of DISCOs' PIPs. Post-approval, disbursements will be triggered each year upon verification that NERC semi-annually monitors (through issuance of reports) and enforces the achievement of outputs in DISCOs' PIPs.
  Climate co-benefits: This DLI supports the implementation of actions to reduce losses (including technical losses) and substantially improve the efficiency of activities in distribution. Greater distribution efficiency and reliability will make customers less dependent on expensive and diesel generators. Hence it is aligned with the MDB list of eligible mitigation activities under Category 2.1 "Retrofit of […] distribution systems to reduce […] technical losses" and Category 3.3 "Improvement in utility-scale energy efficiency through efficient energy use, and loss reduction, or resource efficiency improvements."

- **DLI 2 (*Business continuity arrangements are implemented for DISCOs*)** supports the establishment of business continuity arrangements in the event of one or more of DISCOs' license intervention by NERC due to DISCOs' non-adherence to their license obligations. The first disbursement will be triggered upon the establishment of qualified lists of experts who would assume transitory management of DISCOs' operations in the event of license intervention. The second disbursement will be triggered upon implementation of the business continuity arrangements during an entire year, i.e. appointment of transitory management teams to assume operational management of DISCOs that have NERC's license intervention.

Results Area 2: Achieve financial and fiscal sustainability

63. **In addition to Global DLIs 1 and 2, DLIs 3 and 4 aim to restore the financial and fiscal sustainability of the sector.** Specifically:

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within the MYTO period. Given that there is very limited flexibility to increase the sources of funds available in-year, especially for 2020, there could be new tariff shortfalls unfunded even with concerted efforts of the FGN to implement the Financing Plan. Therefore, the program provides some flexibility by requiring the estimated amount of new tariff shortfalls to be funded on-time (no arrears) but also allowing rollover to the next year the unfunded part of actual new tariff shortfalls. But the government will have to clear the unfunded part of the actual new tariff shortfalls, which are known with certainty, next year, alongside next year's estimated new tariff shortfalls.

- **DLI 3 (End-user electricity tariffs are adjusted consistent with the PSRP Financing Plan, including its measures for protection of the poor)** pertains to end-user electricity tariff adjustments in a socially sustainable manner. The first disbursement will be triggered upon implementation of tariff adjustments in 2020 consistent with the tariff shortfall ceiling for CY2020 set in the 2020 PSRP Financing Plan and implementation of mitigation measures for the poor. The mitigation measures will involve maintaining an affordable lifeline tariff (keeping the tariff for the first residential consumption block unchanged) and enacting an order to cap the estimated billing for unmetered residential customers (which represent poorer households connected to the grid). The capping of estimated bills will be a short-term mitigation measure for tariff increases till the full roll-out of metering through the implementation of PIPs. The subsequent disbursements will be triggered upon implementation of tariff adjustments and measures to protect the poor consistent with the updated PSRP Financing Plan(s).
  Climate co-benefits: This DLI is linked to Global DLIs 1 and 2 and also contributes to climate mitigation through efficient pricing of electricity.

- **DLI 4 (Payment discipline is enforced on DISCOs to reduce non-tariff shortfalls)** supports strengthening of DISCOs' books by explicitly recognizing that tariff shortfalls (both new and historical) are not their obligation; and, on that basis, enforcing DISCOs' payment obligations to NBET and TCN. The first disbursement will be triggered upon removal of new tariff shortfalls from the payment obligations of DISCOs and approval of a mechanism to remove historical tariff shortfalls from DISCOs' books. The subsequent disbursements will be triggered upon verification that a minimum level of NBET's and TCN's aggregate annual invoices to DISCOs are settled, or upon verification that NBET and TCN have activated DISCOs' payment guarantees and/or NERC has taken actions consistent with its regulations following DISCOs' non-payment or partial payment.
  Climate co-benefits: This DLI is linked to Global DLI 2 and DLI 1 as the three form the full enforcement and financing mechanisms of the PIPs. By removing historical and new tariff shortfalls from DISCOs' books, it recovers the financial solvency of DISCOs so that they can make the necessary investments to implement the PIPs. In addition, enforcement of DISCOs' payment discipline is part of the enforcement mechanism of the PIPs. DISCOs are allowed to keep the revenue requirement (operating and capital expenditures and allowed losses as determined by the PIPs) to reduce the high losses (including technical losses) and improve the efficiency of distribution activities to bring them in line with the targets contained in the PIPs. If the aggregate losses by a DISCO are higher than the target, the DISCO would incur financial losses. This creates an incentive and helps to enforce investment by DISCOs to reduce losses in their distribution systems. The DLI is therefore aligned with the MDB list of eligible mitigation activities under Category 2.1 "Retrofit of […] distribution systems to reduce […] technical losses" and Category 3.3 "Improvement in utility-scale energy efficiency through efficient energy use, and loss reduction, or resource efficiency improvements."

Results Area 3: Enhance accountability

64. **DLI 5 supports measures to strengthen the accountability of the sector.** Specifically:

- **DLI 5 *(Financial and operational transparency of DISCOs is improved)*** supports the strengthening of the financial and operational transparency and accountability of the distribution segment through the publication of key information. In each year of the Program, it will be triggered upon publication of the IFRS audited financial statements of DISCOs and quarterly publication of key operational and financial data of the power sector.

E. Capacity Building and Institutional Strengthening

65. **Capacity building and institutional strengthening at key sector agencies are important parts of the operation's IPF component.** TA in the amount of US$20 million will be provided through this operation to ensure continued capacity building and support to key sector agencies that currently receive support through the TA components of other World Bank-funded operations. The TA will be designed as an IPF (see Annex 10). A request for financial support is also submitted to the Energy Sector Management Assistance Program (ESMAP) to extend co-financing of US$5 million for this component of the operation. Specific areas of TA will include:

a) Assistance to NERC to strengthen its capacity to effectively exercise its regulatory oversight over sector companies. Particularly support in the form of technical advice and recommendations based on best practices in international experience relevant to Nigeria will be provided to:
   (i) Monitoring DISCOs' implementation of PIPs;
   (ii) Design and implementation of a public communication campaign for the market transition to financial self-sustainability;
   (iii) Institutional assessment of NERC's capacity and, based on identified gaps, capacity building and institutional strengthening;
   (iv) Socio-economic survey of electricity consuming households and disaggregation of households based on income level and gender;
   (v) Strengthening of NERC's capacity for regulatory monitoring through information management tools for collecting, managing and analyzing data from regulated companies and training;
   (vi) Strengthening NERC's capacity for instituting economic merit order dispatch, including software and training.
b) Support to NBET in strengthening its procurement capacity and internal audit function, and in enhancing its corporate resource management software.
c) Support BPE in incorporating the PIPs in post-privatization performance monitoring of DISCOs, implementing business continuity arrangements and building its implementation capacity.
d) Capacity-building to the FMoP for strengthening its capacity for planning and the mandate of its gender focal point.
e) Assistance to the Debt Management Office (DMO) with the assessment and management of contingent liabilities.
f) Support to the PSRP Secretariat with PSRP implementation monitoring and coordination, and
g) Design and implementation of a public communication campaign to raise awareness about the PSRP.

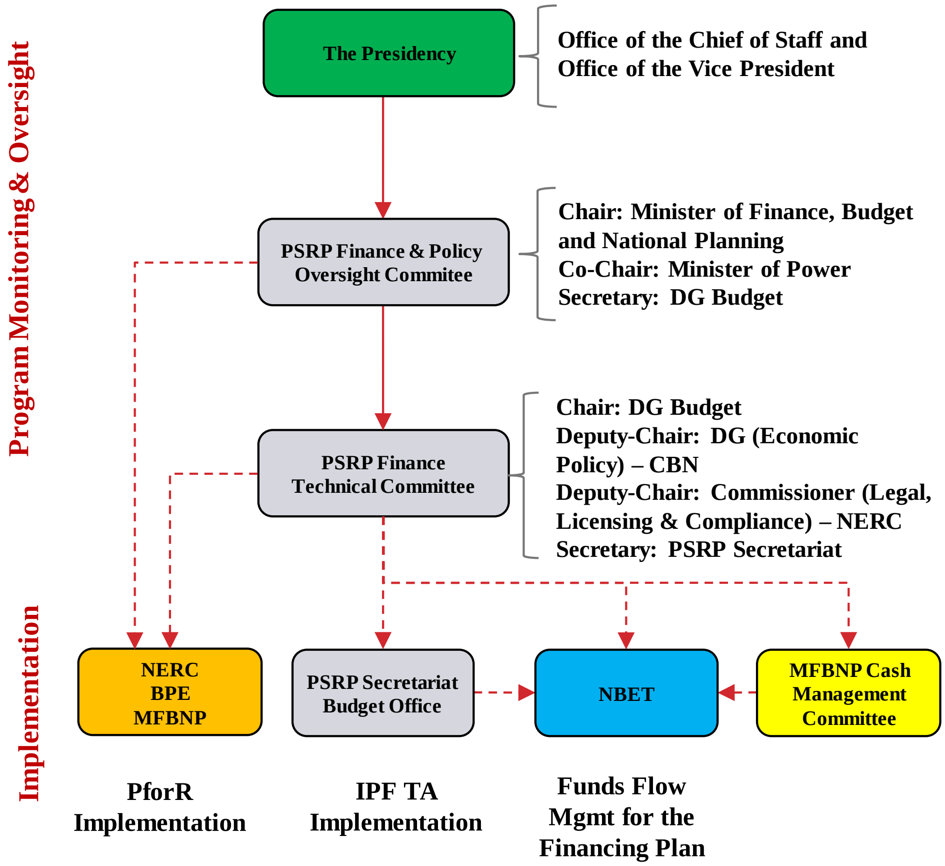
III. PROGRAM IMPLEMENTATION

A. Institutional and Implementation Arrangements

66. **Successful implementation of the PSRP and the PSRO requires robust governance and implementation arrangements, given the complex inter-agency dependencies of many of the PSRP interventions and the need for changed behaviors in key MDAs.** The arrangements described below reflect the focus of the PSRO on strengthening the regulatory environment and fiscal sustainability of the sector and the implementation of the PSRP Financing Plan.

67. **Program Monitoring and Oversight Arrangements**

Figure 8: Governance and Implementation Arrangements



a. **PSRP Finance and Policy Oversight Committee** chaired by the (Federal) Minister of Finance, Budget and National Planning with the (Federal) Minister of Power as co-Chair and Director General (DG) Budget as Secretary. The Committee members will include the heads of all relevant MDAs (NERC, NBET, BPE, DMO, Budget Office of the Federation (BOF)) and designated officials from the Presidency. This committee will carry out the strategic oversight of PSRP/PSRO implementation. The Chairs of the Oversight Committee will report to the Presidency (Office of the Chief of Staff and Office of the Vice President) providing updates and escalating issues requiring attention. The Oversight Committee will meet once every quarter for strategic oversight of the PSRO implementation.

b. **PSRP Finance Technical Committee** chaired by the DG Budget with NERC Commissioner on Legal, Licensing &. Compliance, and CBN DG on Economic Policy as deputy-chairs. The technical committee will be supported by the PSRP Secretariat. The Committee members will include senior management-level representatives of MDAs (NERC, NBET, BPE), as well as the FMFBNP (BOF, DMO, International Economic Relation Department (IERD), Special Advisor Power) and officials from the Presidency. The PSRP Finance Technical Committee will monitor the implementation of Critical PSRP actions supported by the PSRO and the PSRO DLIs linked to these actions, including the oversight of the PSRP Financing Plan (tracking/monitoring and updating), key regulatory actions and coordination of the PSRP Financing Plan with the MYTO reviews. The Technical Committee will also monitor the verification process and disbursements against achieved DLIs. The Technical Committee will convene monthly.

c. **PSRP Secretariat** established in the BOF at FMFBNP and reporting to the DG Budget. The Secretariat will carry out day-to-day monitoring and coordination of PSRO implementation and facilitate the work of the Steering and Technical Committees, including the updating and the monitoring of the execution of the Financing Plan

68. **Implementation arrangements.** The implementation arrangements for both the PforR and IPF components of the operation will leverage the existing institutions while building capacity, as needed.

a. **PforR component DLI achievement:** NERC will play the leading role in the implementation of the Program and the associated achievement of the majority of the results and DLIs. FMFBNP (specifically BOF) will be responsible for updating of the PSRP Financing Plan. BPE and NBET will also have important roles in achieving the results and DLIs. To ensure NERC's and NBET's compliance with the Financing Agreement, Operations Manual and the World Bank's Anti-Corruption Guidelines[27], the FMFBNP will enter into subsidiary agreements with each of them. These agreements will be a condition for disbursement under the PforR component.

b. **Fund flow management for the PSRP Financing Plan including the PSRO PforR funds:** Once the CBN PAF expansion is depleted (estimated June 2020), the Financing Plan will have two main sources of funds: (1) FGN budgetary contributions; and (2) the World Bank PSRO funds (for which FMFBNP is the Borrower). The key entities with roles in the fund flows are the following:

   (i) **FMFBNP: The Cash Management Committee**, chaired by the (Federal) Minister of Finance, Budget and National Planning meets at least quarterly to determine releases from the FGN budget to all MDAs, based on cash availability. For the FGN budgetary contribution, the Committee would also make the releases from the FGN budget to NBET. The World Bank PforR funds would not be subject to the Cash Committee process; instead it would be directly disbursed to a dedicated NBET account for PforR funds to execute the Financing Plan.

   (ii) **FMFBNP: The PSRP Secretariat situated in the BOF and reporting to DG Budget** would have three key roles:
   - Submit the withdrawal application for the World Bank PSRO PforR component once: 1) the World Bank has taken the decision to disburse after the independent verification of the DLIs; and 2) NBET makes a request for disbursement.
   - Monitor the execution of the Financing Plan by NBET against the agreed protocols and approved Financing Plan.
   - Support the Technical Committee to update the Financing Plan, at least once a year.

   (iii) **NBET:** As the bulk trader purchasing electricity from GENCOs and selling it to DISCOs, NBET will be the entity receiving different sources of funds to execute the approved Financing Plan i.e. make regular (monthly) payments to GENCOs for the tariff shortfall portion of the GENCOs invoices (both new and historical arrears) and make CBN debt service payments. NBET has to follow predefined agreed protocols - little discretion will be allowed – in deciding how best to use the different sources of funds to make payments to the different uses of funds. NBET will report back on the execution of the Financing Plan to the PSRP Secretariat and DG Budget.

c. **IPF component for TA:** The PSRP Secretariat will also be responsible for the implementation of the TA component. The Secretariat will function as a PIU for the TA component with financial management (FM) and procurement responsibilities. The BOF has recently established a PIU for the Fiscal Governance and Institutions Project (P163540). Instead of establishing the Secretariat as a separate

[27] Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results Financing," dated February 1, 2012, and revised July 10, 2015.

PIU, the existing PIU will be expanded (with additional resources and skills) so that it can support both FGIP and the PSRO.

B. Results Monitoring and Evaluation

69. **The PSRP Secretariat will have the primary responsibility for M&E of the PSRP and the critical set of actions supported by the PSRO.** NERC also has an important regulatory oversight (and associated monitoring) role over the performance of the sector companies. As part of the broader support that the World Bank is providing to NERC, capacity-building and implementation support are being provided to ensure effective oversight over the implementation of contractual and regulatory responsibilities by the sector companies. The results framework of the PSRO will serve as a basis for establishing the tracking framework for the PSRP as well as building M&E capacity within the Secretariat.

70. **The Secretariat is responsible for collating the monitoring reports prepared by NERC and other agencies and sharing with the World Bank.** The World Bank is supporting strengthening of the Secretariat and the hiring of a dedicated program manager.

71. **The Secretariat will hire the independent verification agency (IVA), on terms of reference acceptable to the World Bank, to verify the achievement of DLI results.** Some of the IVA functions may be performed by the independent financial auditor of NBET based on an expanded scope that would be agreed with the World Bank. The Secretariat will hire the IVA from the TA component of the operation following the World Bank procurement procedures. The IVA will be hired following advanced procurement so as to be in place soon after the Program's effectiveness. The scope and details of the IVA reports will need to be satisfactory to the World Bank.

C. Disbursement Arrangements

72. **IDA credit disbursement for the PforR component of the operation will be triggered upon the verified achievement of the disbursement-linked results (DLRs) for the Program.** DLRs are the specific results to be achieved for each DLI presented in Annex 3. The PSRP Secretariat will make arrangements for the independent verification of the achievement of the Results. Reports of the verification agent will be submitted to the World Bank. The World Bank will use the Report to determine eligible disbursements based on the DLRs achieved, retaining the final decision to disburse. The allocated amounts, targets and requirements for achievement, and deadlines for achievement for each DLR are detailed in Annex 3. An amount of up to US$178 million may be disbursed for prior results, i.e. DLRs achieved on or after May 1, 2019, but before signing of the Financing Agreement. Disbursement for all DLRs can take place as soon as, but not earlier than, the verified achievement of both global DLIs in that year, in addition to their own verified achievement. Some DLRs are scalable, with funds being disbursed in proportion to the achievement of the DLR as per the formula specified in Annex 3.

73. **Disbursement arrangements for the PforR component**: The IDA credit proceeds of the PforR component will be disbursed to the Program account. Funds will only be available for drawdown after the World Bank has communicated a decision regarding the extent to which prior results or DLRs have been met and the amount of corresponding amount of disbursements to the PSRP Secretariat. Once a funding request is made by NBET, the PSRP Secretariat will proceed to prepare and submit a withdrawal application to the World Bank.

74. **Disbursement arrangements for the TA component:** The PSRP Secretariat will establish and operate both a US dollar-denominated segregated designated account (DA) alongside a Naira account. The World Bank will disburse the funds for the TA component into the US dollar-denominated DA at the CBN. On a need basis, funds will be transferred to the Naira account from which Naira payments will be

made. After disbursement of the initial advance, replenishment of the US$ DA will be on the basis of Statement of Expenditures, to be submitted every month to the World Bank. The ceiling of the DA will consider the forecast for three months.

IV. ASSESSMENT SUMMARY

A. Technical

75. **The PSRP is a living document that gets updated as the implementation unfolds.** Some elements of the PSRP cannot be fully detailed until further insight is gained through regulatory actions. For example, the forensic review of DISCOs, DISCOs' future payments to NBET and TCN, and DISCOs' implementation of PIPs will guide the preparation of DISCO reorganization and restructuring plans, as needed.

76. **The current PSRP exhibits several strengths.** The design of the PSRP is anchored in extensive analytical work, including review of the power sector institutional and regulatory framework; analysis of gas and transmission infrastructure gaps; financial analysis of the power sector and power sector companies; financial modeling of power sector companies to determine historic and future cash flows; legal review of key sector contracts and agreements; and analysis of fiscal space. Other strengths of the PSRP involve its focus on resetting market conditions for the sustainable operation of the sector and the de-risking of private investment (rather than the pursuit of ambitious investment goals); its embrace of the role of the public funding in a largely privatized sector to ensure that sector companies receive their revenue requirement; and its strong focus on stakeholder engagement and communication.

77. **Six specific areas of the PSRP needed to be further detailed and strengthened**: (i) the determination of the revenue requirement of DISCOs and TCN; (ii) monitoring and management of the Financing Plan risks; (iii) DISCO turnaround plan to build incentives, together with tighter regulatory oversight and accountability, to address distribution constraints; (iv) tariff adjustment policy and measures to protect the poor; (v) communication and stakeholder engagement; and (vi) governance and implementation arrangements of the PSRP.

78. **The PSRO seeks to address these shortcomings and risks** by (i) linking the determination of the sector revenue with the MYTO Extraordinary Review and MYTO Minor Reviews; (ii) defining the process for the PSRP Financing Plan approvals and periodic updates; (iii) supporting DISCOs' PIPs that will be included in determining DISCOs' revenue requirement and enforced for implementation, strengthening business continuity arrangements for DISCOs, and removing recurrent and new tariff shortfalls from DISCOs' books; (iv) defining annual tariff adjustment needs based on ceiling for new tariff shortfalls set in the Financing Plan(s) and establishing measures to protect the poor; (v) emphasizing consultations and communication throughout the implementation of PSRP; as well as (vi) strengthening of governance arrangements for PSRP implementation oversight and inter-agency coordination.

79. **The Program expenditure framework is the PSRP Financing Plan approved by the Presidency, which aims to restore financial viability to the sector while reducing the fiscal burden on the FGN.** The PSRP Financing Plan uses credible and realistic macro and sectoral assumptions, consistent with the effective MYTOs[28]. The use of funds in the PSRP Financing Plan is limited to those related to tariff shortfalls (new and historical). Ensuring that tariff shortfalls are funded is critical for ensuring fuel (gas) supply and

[28] As the Financing Plan will be updated annually - by the end of the year to be effective start of the following year – it will be consistent with the MYTO review, effective 1 January, but not necessarily consistent with MYTO reviews in-year, although there will be coordination between the MYTO reviews in-year with the prevailing Financing Plan through the PSRP finance technical committee.

for maintaining the infrastructure throughout the supply chain, which, in turn, is necessary for improving reliability of electricity supply. The PSRP Financing Plan reduces the annual fiscal burden on the FGN of these tariff shortfalls by having a clear path to reach cost recovery by 2022 (when there are no more new tariff shortfalls) and improves fiscal and debt sustainability. Successful implementation of the PSRP and Financing Plan is estimated to lower annual FGN fiscal expenditure and gross financing needs by 0.5 percent of GDP by 2022, compared to a no-PSRP scenario. The projected FGN debt stock at the end of 2023 is estimated to be 1.5 percent of GDP lower in the PSRP scenario than in the no-PSRP scenario (Annex 4). Successful implementation of the PSRP Financing Plan will also contribute to debt transparency and reducing the level of quasi-fiscal activities of CBN by replacing CBN PAF financing with more transparent sources of funds from 2020 onwards, once the current PAF is depleted (projected by mid-2020). The impact from the implementation of the PSRP and Financing Plan on fiscal responsibility is also positive by supporting the clearance of tariff shortfall arrears and allowing FMFBNP to meet debt service obligations from 2021 onwards for the CBN PAF, which was used to fund historical tariff shortfalls.

80. **There are many sources of risks to the PSRP Financing Plan that could result in new tariff shortfalls for the year being higher than estimated**, including changes in key parameters such as the energy sent out and the FX rate[29] during the year - between MYTO semi-annual reviews and within a MYTO period. The FGN will need to proactively take measures to mitigate the risks and impact. While the FX rate is not controlled by the sector, ensuring that FX-denominated sources of funds, including the PforR, is converted at NAFEX will provide a natural (even if partial) hedge in the event of FX depreciation. Critical PSRP actions should reduce the risk of the volumetric shock (energy delivered to DISCOs) materializing. If new tariff shortfalls look to exceed the ceiling set in the PSRP Financing Plan, the FGN could take one or combination of the following actions: (i) increase allowed tariffs; (ii) delay settlement of historical tariff shortfalls; and (iii) identify additional sources of funds. To reduce the risk of the need for much higher contingency funds than provided for in the Financing Plan, implementing critical PSRP actions to increase the operational efficiency and payment discipline of DISCOs is important. However, the risk that uses of funds - in particular new tariff shortfalls - being higher than estimated for the year remain high. Together with the limited flexibility to increase the sources of funds available in-year, especially for 2020, there could be unfunded new tariff shortfalls even with concerted effort to implement the PSRP Financing Plan. Therefore, the PSRO should incentivize the full implementation of the PSRP Financing Plan while providing some flexibility by requiring the estimated amount of new tariff shortfalls to be funded on-time (no arrears) but also allowing the unfunded part of actual new tariff shortfalls to be rolled over and funded next year.

81. **The PSRP Financing Plan will need to be updated regularly to be consistent with the effective MYTO and reflect changes in key parameters to remain credible and fiscally sustainable.** The PSRP Financing Plan will need to be regularly monitored and updated formally at least annually by the Technical Committee with the support of the PSRP Secretariat. Every year, the Minister of Finance will approve the updated PSRP Financing Plan and issue the Plan to NERC and other sector agencies setting the ceiling for new tariff shortfalls to guide tariff adjustments, and laying out the uses of funds and sources of funds for the first year (later years are treated as indicative). The annual updating of the PSRP Financing Plan – which will be a requirement for achieving Global DLI 2 - will be an important mechanism in ensuring that the Plan adjusts to risks materializing so that it remains accurate, credible and fully funded. Global DLI 2

[29] Currently the MYTO is not underpinned by one single exchange rate as it reflects the different contractual arrangements in the sector, including the prevailing PPAs of GENCOs, with most but not all PPAs referenced to the CBN official rate. The DISCOs' allowances for operating and capital expenditure are also currently converted using the CBN official rate, although this is not stipulated as part of their performance agreements. The Program supports movement to the use of NAFEX to convert DISCOs operating and capital expenditure allowances from Jan 2021 onwards.

also requires new tariff shortfalls to be funded from non-CBN financing (beyond the current PAF) so that in ensuring the PSRP Financing Plan remains fully funded, the sector does not use unsustainable sources of funding.

82. **The Program expenditure framework is the total use of funds in the PSRP Financing Plan for the period 2020-2022.** A detailed description of the PSRP Financing Plan is in Annex 1. Table 4 shows the total uses of funds and sources of funds for the period 2020-2022. The Financing Plan/Program expenditures will not finance any infrastructure construction. The uses of funds allowed are to (1) fund new tariff shortfalls; (2) clear historical tariff shortfalls, including arrears and debt service payments of PAF, which was used as bridge financing by FMFBNP to fund most of the tariff shortfalls during 2017 to the first half of 2020[30]; and (3) provide a limited amount of contingency funding (for non-tariff shortfalls). The new and historical tariff shortfalls are assessed as the difference between the revenue requirement of the sector, determined based on NERC's effective MYTO, and the allowed tariff revenue. The FGN's financing of the tariff shortfalls will supplement DISCOs' remittances to NBET to ensure that GENCOs receive timely settlements of their invoices.[31] A total of US$2,604 million of financing is estimated to be required in the Financing Plan Base Case.

Table 4: The 2020 PSRP Financing Plan Base Case, 2020-2022

Use of Funds /Program Expenditure Framework	₦ Billion	US$ Million**	%
New (2020-2022) tariff shortfalls	440	1,208	46%
Historical (2015-2019) tariff shortfalls			
Historical tariff shortfall arrears	79	199	8%
CBN PAF Debt Service Payments	455	1,150	44%
Contingency funds* in the event of NERC's license intervention of DISCOs	19	48	2%
Total Expenditure Requirements	**993**	**2,604**	
Source of Funds 2020-2022	**₦ Billion**	**US$ Million**	**US$ %**
CBN PAF (debt-domestic)	164	456	18%
FGN direct budgetary contribution (debt-mixed)	380	978	38%
IDA PforR - initial financing (debt – external)	275	730	28%
IDA PforR – potential additional financing	174	440	17%
TOTAL	**993**	**2,604**	

*The contingency is intended only in the event of NERC's license intervention of DISCOs; it is equivalent to about 3 months of payment amount of 5-6 DISCOs to NBET to ensure payments to GENCOs.
**₦/US$ FX rate used for conversion to US$ in the table: 360 for 2020, 396 for 2021-2022.

83. **The Government has identified financing sources to fund the Program expenditure requirement, with World Bank financing potentially accounting for 45 percent of the financing.** The IDA contribution of US$730 million – the initial financing for the PforR component under this operation –

[30] PAF was used to complement DISCOs' remittances to NBET and ensure 80 percent payment to GENCOs in 2017 and 2018. NERC has dimensioned historical tariff shortfalls for each DISCO in its July 2019 MYTO minor review and clarified that DISCOs remain liable for under-payments to NBET that are above the historical tariff shortfalls. Hence, PAF payments have been accounted for historical tariff shortfalls only while historical non-tariff shortfalls remain DISCOs' payment obligation. Total PAF payments 2017-2029 of ₦1,127 billion is less than the total tariff shortfalls incurred of ₦1,249 billion leading to accumulation of arrears during that period.

[31] DISCOs will recover their revenue requirement through the end-user tariff by retaining their revenue requirement from the tariff and remitting the difference between the tariff revenue and their revenue requirement to NBET. The shortfall between the revenue requirement and tariff revenue will hence accumulate with NBET and be funded through the PSRP Financing Plan.

accounts for 28 percent of the total financing. The other funding sources are the remaining funds from the CBN PAF (18 percent) and direct FGN budgetary contribution (38 percent), which is expected to be financed as part of the FGN fiscal deficit. The remaining 17 percent of the financing is still to be secured. In the Financing Plan, the FGN has currently assumed that the financing gap will be covered through an additional financing to this operation while continuing to look for alternative, credible sources of funds as it is interested in using additional World Bank financing for sector investments. Any additional financing from this operation will be conditional upon satisfactory implementation progress.

84. **The cost-benefit analysis finds that the Program will generate substantial economic benefits to Nigeria's economy**. The main economic benefits are related to the provision of additional electricity supply to the electricity consumers and the displacement of expensive diesel-based self-generation. In the base case scenario, the Economic Internal Rate of Return (EIRR) of the "with Program" scenario is 41.2 percent with a Net Present Value (NPV) of US$1,337 million, using conservative estimates of average Willingness to Pay (WTP) for electricity in Nigeria. The EIRR includes local and global environmental benefits with incremental returns to the Program of 7.8 percentage points and NPV of US$303 million. The detailed analysis, including sensitivity and background of assumptions used, is in Annex 4.

B. Fiduciary

85. **A Fiduciary Systems Assessment (FSA) of the Program was prepared, consistent with the World Bank Policy, Directive, and Guidance Notes for "Program-for-Results Financing".** The FSA concludes that the procurement and FM systems capacity and performance are adequate to provide reasonable assurance that the Program funds will be used for the intended purposes, with due attention to transparency and accountability, subject to appropriate mitigation measures for risks identified and included in the Program Action Plan (PAP).

86. **The fiduciary risk for the Program is assessed as Substantial.** The FSA has identified significant risks along with measures to mitigate such risks. The risk mitigation measures will be managed through the methodical implementation of the PAP. With the move towards ensuring fiduciary controls and payment discipline, the Program will reinforce existing controls and strengthen existing institutional arrangements. The areas for strengthening for NBET include internal audit, upgrading accounting system for segregation of different types of payments under the Program Expenditure Framework (PEF), removing the backlog in external audit reports, ensuring that quality external auditors are appointed, and ensuring that existing legal contracts are enforced.

87. **The management of funds applied to the PEF will be with NBET, in coordination with the PSRP Secretariat, using the entity's systems and processes which are generally in good operating order.** Governance arrangements for both the sources of funds and the uses of funds under the PEF involve different stakeholders. Protocols and steps involved in each have been prepared in detail and included in this document (appendix to Annex 5). A separate Program account will be established for NBET in the Treasury Single Account (TSA) with CBN for receipt of IDA credit proceeds and the FGN budgetary contributions towards the PEF. NBET's accounting system will be upgraded to ensure that segregated records are maintained for the different PEF expenditure lines.

88. **The existing systems for budgetary planning, budget preparation, budget execution, accounting, internal controls, funds flow, financial reporting, and external audit will be adapted for Program implementation**. In general, NBET's annual budget preparation follows the national budget calendar and processes and is working well. Internal controls and procedures are in place. An internal audit unit is staffed with experienced professionals but largely involved in pre-payment audits. The Program will support capacity building to move internal audit work towards a risk-based approach that

can identify systemic improvements to address any deficiencies in the expenditure management system. Accounting software is in use for recording and financial reporting. Management accounts are produced every quarter.

89. **The PEF does not entail procurements**. Nevertheless, as part of the TA, the Program will help NBET strengthen its procurement practices for new generation projects.

90. **Annual entity audited financial statements, including the operations of the DAs to be established for payments under the PEF, will be submitted to the World Bank** alongside audited financial statements for the TA within six months of the end of the government fiscal year. Review of the Program account and eligibility of PEF expenditures will be specifically included in the ToRs of external auditors. Currently, NBET has a backlog of five years of audits, which is on track for clearance by September 30, 2020.

91. **A five-year National Anti-corruption Strategy was adopted in 2017 and a report on the peer review for United Nations Convention Against Corruption (UNCAC) released recently concluded that the legal and institutional anti-corruption framework is robust**. Anti-Corruption and Transparency Units (ACTU) established within Federal MDAs are the nodal anticorruption agency at the departmental level and are responsible for the prevention of corruption and preliminary investigations. An ACTU was inaugurated in NBET in 2019 by the Independent Corrupt Practices and Other Related Offences Commission (ICPC). It is headed by the General Counsel for NBET. Only one complaint was received in 2019 and no broader actions were taken. In 2020, resources have been provided in the NBET budget for a program of activities by the ACTU covering awareness, training and prevention. ACTU report on their investigations to the ICPC with a copy for information to the Permanent Secretary of the MDA. For NBET this would be the FMoP.

C. Environmental and Social

92. **The Program is expected to have potential environmental and social benefits, particularly through enhanced reliability of supply and improved accountability.** By improving the reliability of the electricity supply, the Program will allow businesses and households to avoid reverting to diesel-based self-generation and traditional fuels, which are inefficient and potentially harmful to their health and the environment. This, in turn, will reduce air pollution and GHG, which contributes to climate change. Increased grid-based electricity generation will also increase the consumption of natural gas and thus reduce gas flaring, as natural gas produced in association with crude oil is flared when it cannot be utilized in power generations. Through improved service delivery, as well as strengthened governance and communication, the Program should strengthen the relationship between electricity consumers and DISCOs and improve overall trust in the sector.

93. **The potential environmental risks associated with the Program are expected to be small.** An Environmental and Social System Assessment (ESSA) was carried out to assess the existing Government systems and capabilities to plan, monitor, and report on environmental and social management measures and address social and environmental issues associated with the Program (see Annex 6 for details). The ESSA has identified additional key measures to help the relevant agencies overcome gaps related to environment, social, and safety aspects and improve their systems on safeguards management. Some of these key measures were selected to be part of the PAP and DLIs. The improved electricity supply promoted by the Program is within the existing physical capacity of the sector and does not entail new investments. Hence, the Program does not involve Category A activities, which could have environmental and social impacts that are large-scale, irreversible, sensitive, diverse, cumulative or precedent setting. The ESSA was disclosed on May 16, 2020.

94. **Overall, the Nigerian environmental systems for handling environmental impacts are relatively strong, although enforcement can be enhanced.** Nigeria has adequate environmental policies, guidelines and legal and regulatory systems. However, existing laws and regulations present some challenges, such as multiple regulations, overstretched regulatory authorities, weak monitoring, inadequate and mismanaged funding, and a low degree of public awareness. To address these limitations, the agencies responsible for the review and enactment of the Environmental Impact Assessment Act and System will receive TA under the operation to strengthen their capacity for carrying out their statutory mandate of environmental regulations and enforcement in a more effective and efficient manner.

95. **Tariff reviews would need to be accompanied with measures to protect the poor and build public trust.** Dissatisfaction with previous tariff reforms has led to some high-profile court cases and localized demonstrations. Currently, the combination of unreliable supply and DISCOs' practice of estimating customers' consumption (in the absence of metering) has resulted in a breakdown of trust between DISCOs and their customers. The approval and implementation of capped billing for unmetered customers should be a major step in addressing estimated billing and preventing possible overbilling by DISCOs, making bills more predictable and, on average, by reducing the bills of unmetered customers even with tariff adjustments. The implementation of PIPs by DISCOs should help improve service delivery and ensure rollout of metering, allowing grid-connected poor residential customers to benefit from the affordable tariff set for the first 50kWhs of consumption.

96. **Government systems regarding stakeholder engagement and grievance redress exist but need strengthening to address the social risk.** In principle, there is already a strong Government commitment to robust stakeholder and grievance redress mechanisms at both the federal and state levels; NERC has established call centers and a website for customer complaints; and DISCOs are committed to improving transparency and stakeholder management processes. In practice, there is a disconnect between NERC guidelines and DISCOs' implementation; there are mixed messages from NERC regarding disconnection for nonpayment of bills; the inclusivity of the consultation process is contested; and DISCOs' local offices show a limited capacity to respond to customers. Implementation of PIPs, therefore, is critical to accelerate deployment of meters and to strengthen their capacity to provide high-quality customer service, with responsive staff and clear procedures for all customer interactions (e.g. billing, repairs, complaints, connections/disconnections). To assist this process, NERC must be clearer about its regulations and enforce them (e.g. for estimated billing and nonpayment). NERC and DISCOs should strengthen (i) the grievance redress mechanisms by building on current NERC initiatives to increase the number of staff and training of staff; (ii) stakeholder management systems to inform customers of changes in services, such as advance notice of power outages and tariff increases; and (iii) the capacity of consumer and civil society organizations to improve their social accountability skills.

97. **Gender.** Gender equality, specifically engaging both men and women as employees, entrepreneurs and consumers can strengthen power sector companies' business and social performance, better anchoring them in their operating environment. As Nigeria continues to invest in and reform the power sector, it is essential to develop and implement policies that create a more gender-inclusive power sector across issues such as employment, entrepreneurship and customer relations. The importance of this is reflected in the draft revised National Energy Policy of 2013, which pays specific attention to gender gaps in energy needs and use, impacts of energy use, resource ownership and participation in the energy sector. Related to the issue of inclusivity of consumer engagement above, this highlights the need to ensure that women's groups are well-represented throughout the stakeholder consultation processes and that women are informed and targeted in the information provided on the sector reforms regarding aspects such as core power sector issues, creating trust in the governance process and creating

mechanisms for women to provide meaningful feedback and enable their participation in two-way public dialogue.

98. **Grievance Redress.** Communities and individuals who believe that they are adversely affected as the result of a Bank-supported PSRO, as defined by the applicable policy and procedures, may submit complaints to the existing program grievance redress mechanism of the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaints to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For more information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

C1. Poverty and Social Impact Assessment

99. **The Government and NERC envisage measures to protect unmetered households from facing arbitrary and variable electricity bills till the metering is fully rolled out.** In the short-term, NERC has published an order that establishes a cap on the volume of electricity that DISCOs can bill unmetered households. Though on average the bill will be capped at 100 kWh, this will vary by service area[32]. NERC estimates that the capping will, on average, reduce the volume of energy billed by half while also making the bills more predictable and less variable. In the medium-term, the issue will be addressed through the rollout of metering as part of DISCOs' implementation of PIPs.

100. **Tariff increases may marginally reduce the real incomes of one in four households, most of whom are concentrated in the top 60 percent of households ranked by total household expenditures per capita.** Due to the capping of bills for unmetered households, tariff increases implemented consistent with the PSRP Financing Plan will affect only metered households, which, according to NERC estimates, are around 47 percent of households connected to the grid. Since only 56 percent of households are connected to the grid, this means that around 25 percent of households would be impacted. To maintain the tariff shortfall ceiling set in the approved 2020 PSRP Financing Plan, the average tariff is expected to increase in 2020, while retaining the lifeline tariff for R1[33] customers unchanged. Such an increase is estimated to raise monthly electricity bill on average by ₦1,143 resulting in 1.3 percent reduction of metered households' welfare measured in terms of increase in the share of electricity expenditure in overall household expenditure. [34] More than 80 percent of households that are metered and will be impacted by tariff increases are estimated to be in the top 60 percent.

[32] Caps are defined based on average metered consumption in each service area of DISCOs. As a result, service areas with more limited metered consumption, which generally include poorer households, will have lower caps than the areas with larger metered consumption.

[33] Residential customers are segmented into 4 classes (R1-R4). R2 form the majority of residential customers. Other customer classes are industrial and commercial.

[34] The impact is simulated on the reported spending of households since actual consumption is not measured in the household survey; however, payment is relatively high among metered households (80 percent according to NERC). The simulated direct impact is usually amplified by indirect impacts, i.e., upward changes in the prices of other consumer goods, such as food. In the absence of an input-output table for Nigeria, the indirect impacts could not be simulated but they would be generally lower than in other countries due to high reliance of industrial and commercial customers on diesel generators as a back-up to unreliable grid electricity.

101. **The impact of tariff increases on metered poor households will be even more limited**. Consistent with the MYTO, the tariff increase to be applied to each customer class, including R2 customers, will be proposed by each DISCO and will be further differentiated by service areas with all customer classes in areas receiving better quality of supply (measured by hours of supply at the 11kV feeder level) paying higher tariffs compared to the tariffs paid by the same customer classes in areas with poorer quality of supply. Such an approach should ensure that poorer households that usually reside in areas with more limited hours of supply pay lower tariffs. However, since the specific levels of tariffs are unknown at this time, these differentiated impacts are not incorporated in this analysis. Similarly, while it is known that metered households are generally higher income households, this analysis assumes that the share of metered and unmetered households among the poor households is the same as for the overall connected households since the household survey does not differentiate metered and unmetered households. As a result, the estimate of the impact of the tariff increase on poor metered households should be treated as an upper bound estimate. Given that only one in three households in the bottom 40 percent are connected to the grid, only 17 percent are metered. About four percent of poor households are metered R1 customers who will not experience tariff increase. Thus, only 13 percent of poor households who are metered R2 customers will face tariff increase with their electricity bill estimated to increase by ₦730 per month on average, compared with around ₦1200 for the top 60 percent of households.

102. **The remaining households, and the majority of the poor, will see no impact or even a drop in their electricity bills.** As previously mentioned, the unmetered households will benefit from a cap on the volume of electricity bills introduced by NERC order. While protecting all unmetered households, capping of bills will be particularly beneficial to the poor, who, at the absence of grid-electricity alternatives (other than expensive generators), faced financially risky situation due to month-to-month variability of electricity. Even with the tariff increase, unmetered households will on average see their monthly electricity bills decrease by ₦800, and this will apply to more than half of households in the bottom 40 percent connected to the grid. Table 5 summarizes the impact of tariff increase on the total households and on the bottom 40 percent of households depending on their connection and metering status. As the Table indicates, for the bottom 40 percent of households, 67 percent will not be impacted by tariff increases because they are either not connected to the grid or will enjoy the unchanged R1 tariff, 20 percent (unmetered households) will see a reduction in electricity bills, and 13 percent (metered households) will see an increase in electricity bills. On overall basis, only a quarter of Nigeria's households will see an increase in their electricity bills, out of which 5 percent of households belonging to the bottom 40 percent.

103. **Fiscal savings from subsidy reforms are large and could be used to mitigate the negative direct impact or improve the delivery of key services to the poor more broadly.** The proposed program is expected to reduce government funding of tariff shortfalls significantly - around ₦226 billion/US$ 628 million in 2020, compared to a no tariff increase scenario. If targeted properly, a fraction of this saving could be used to mitigate the adverse direct welfare effects of tariff increase for poor households and improve the equity of subsidy reforms. The FGN's new cash transfer program could be used for this purpose. However, another and possibly better use of funds would be to expand primary health and education services to the poor and develop basic physical infrastructure. Nigeria's socio-economic indicators are low due to the lack of adequate spending in areas that benefit the poor.

Table 5: Estimated Direct Welfare Impact of Tariff Increase and Capping Measure across Households

			Share (%) of Total Households					
			Scenario 1: Share of metered households is uniform across income groups		Scenario 2: Share of metered households is proportional to connection rate		Scenario 3: Share of metered households is concentrated in the top 60 percent	
Household segments	NOT connected to grid	Metered R1 customer	Unmetered	Metered	Unmetered	Metered	Unmetered	Metered
Total	43.9%	1.5%	29.8%	24.8%	29.8%	24.8%	29.8%	24.8%
Bottom 40%	25.5%	1.5%	7.7%	5.3%	10.5%	2.6%	13.1%	0.0%
Top 60%	18.5%	0.0%	22.0%	19.5%	19.3%	22.2%	16.7%	24.8%
	Projected increase in electricity bills (₦ PER MONTH)							
Total	N.A.	0	-803	1,143	-803	1,143	-803	1,143
Bottom 40%	N.A.	0	-803	730	-803	730	-803	730
Top 60%	N.A.	0	-803	1,215	-803	1,215	-803	1,215

D. Risk Assessment

104. **The risks to achieving the PDO and associated results are rated as High.** This is due to substantial risk in fiduciary and high ratings in six risk categories: Political and Governance; Macroeconomic; Sector Strategies and Policies; Institutional Capacity for Implementation and Sustainability; Stakeholders; and Operational risks associated with distribution constraints.

105. **Though there is a strong Government commitment to the PSRP, Political and Governance risk is rated High.** This is the result of the high degree of coordination required among MDAs to ensure the successful implementation of the Program. Many of the Program supported measures have significant inter-linkages that require high-level oversight and coordination to ensure the concerted effort of MDAs. The Program, thus includes a strong emphasis on governance arrangements, ensuring the highest-level oversight by the Office of the President, and on clearly delineating MDAs' roles and responsibilities. Program implementation includes measures to strengthen stakeholder engagement and transparency. However, this risk cannot be fully mitigated, and residual risk remains high.

106. **Macroeconomic risk is rated High, as a result of the significant uncertainty over key macro-fiscal parameters and the heightened macro risks related to COVID-19.** In 2020**,** COVID-19, decline in oil prices and the projected economic downturn for Nigeria will likely further aggravate the precarious financial situation of the power sector (as described in Box 1) making it challenging to implement the PSRP Financing Plan undermining progress towards the PDO of strengthening financial and fiscal sustainability. Even without the challenges of COVID-19, the macroeconomic risks are high. The revenue requirements of power sector companies, and thus the tariff shortfall, are sensitive to changes in macroeconomic parameters, in particular the FX rate, where further movements are likely given: 1) several FX windows still operate in Nigeria; and 2) Nigeria's external sector is still reliant on oil so oil shocks (production or price) will put pressure on the FX. FX depreciation is reflected in the MYTO Minor Reviews and will increase the revenue requirements of the sector and the cost-reflective tariff going forward[35]. Without tariff

[35] Currently the MYTO is not underpinned by one single exchange rate as it reflects the different contractual arrangements in the sector, including the prevailing PPAs of GENCOs, with most but not all PPAs referenced to the CBN official rate. The DISCOs' operating and capital expenditure allowances are also currently converted using the CBN official rate, although this is not stipulated as part of their performance agreements. The Program supports movement to the use of NAFEX to convert DISCOs'

adjustments, the new tariff shortfalls of the sector will increase, creating a gap in the PSRP Financing Plan. In addition, nearly 40 percent of the financing for the PSRP Financing Plan is expected to come from direct FGN budget appropriations. While the Federal Government Supplementary Budget 2020 is expected to reflect emerging fiscal realities (particularly lower oil price and production), further revenue shortfalls are possible from deeper recession and business discontinuity in revenue collection if there is a more severe spread of COVID-19 in Nigeria. Such revenue shortfalls would make it challenging for the FGN to fully execute the 2020 FGN budget contribution to the PSRP Financing Plan even with the high degree of political commitment and prioritization for the power sector. A slow recovery would also reduce the FGN's ability to execute the direct budgetary contributions to the Financing Plan for 2021 and beyond. Mitigation measures for these risks include (i) drawdown of the FGN budgetary contributions in the beginning of each quarter as an advance to mitigate the budget execution risk; (ii) conversion of the PSRO financing proceeds at NAFEX to provide a natural hedge against NAFEX rate movements; (iii) regular updating of the PSRP Financing Plan so that FGN can respond to increased tariff shortfalls as a result of changes in the macro-fiscal parameters (e.g. through more aggressive tariff adjustment, postponing the settlement of historical tariff shortfall arrears, raising additional financing from other sources[36] for the PSRP Financing Plan). However, the residual risk after all mitigation measures remains high.

107. **Sector Strategies and Policies risk is rated High, as a result of inconsistent enforcement of existing policies and regulations.** Existing power sector strategies, policies, and regulations are generally consistent with international good practices, but enforcement is limited. The PSRP has a strong emphasis on enforcement, which is further reinforced by the PSRO results and DLIs. Also, the consistent implementation of MYTO on the basis of extraordinary review and minor reviews and establishment and execution of Financing Plan, which are critical for the enforcement of other key sector policies and regulations, are designated as global DLIs. However, the residual risk remains high as tariff revisions are politically sensitive and are especially challenging in the face of severe economic and human impact of COVID-19 anticipated for Nigeria.

108. **Institutional Capacity for Implementation and Sustainability risk is rated High, due to capacity gaps at MDAs.** These risks are being mitigated through the provision of TA for capacity-building and implementation support. To address the risk of operation's slow down or sustainability, governance structures and mechanisms to institutionalize the monitoring, coordination, and oversight of the PSRP are being put into place. However, the residual sustainability risk remains high.

109. **Fiduciary risk is rated Substantial, due to risks of release of budgetary contributions and the use of Program expenditure for purposes other than those specified in the PSRP Financing Plan.** The main areas of fiduciary risk to the Program include (i) unpredictability in the timing and amount of release for the FGN budgetary contributions towards the PEF; (ii) diversion of funds under the PEF for payments other than those specified in the PSRP Financing Plan (e.g. payments to GENCOs from the PEF that are above and beyond new and historical tariff shortfalls); and (iii) timely production of audited financial statements of NBET. To address these risks, the DG Budget, as part of the Cash Management Committee, shall recommend the inclusion of FGN's annual budgetary contributions to the PEF in the list of priority releases and for these releases to be made quarterly in advance. Approval of the Minister for FMFBNP who chairs the Cash committee will contribute towards mitigating this risk. In addition, the use of the funds under

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operating and capital expenditure from January 2021 onwards. GENCOs costs will remain based on the FX rate in prevailing PPAs/contracts. The pass through of a FX depreciation is not immediate or automatic as the MYTO review is only done semi-annually. The extent of the pass through will also depend on which FX rate is depreciating.

[36] The budget process allows for mid-year adjustment. Small increases in the shortfall can be addressed through contingency budget. Larger increases that require budget revision will require supplementary budget approval by the National Assembly, hence will be challenging.

the Financing Plan, the Program expenditure framework, will be monitored and managed through monthly reports to the PSRP Secretariat and the use of a clear payment protocol. More importantly, Global DLI 2 incentivizes the approval and implementation of the Financing Plan which forms the basis of the PEF.NBET has already engaged auditors for clearing backlog of audit reports and shall ensure that annual audits are conducted timely. During the life of the Program, these will have an enhanced scope to cover the Program funds managed by NBET. Nevertheless, the residual risk remains substantial due to systemic concerns regarding FM, procurement, fraud, and corruption.

110. **Stakeholder risk is rated High, due to potential disagreements among stakeholders,** including (i) electricity customers who would be paying higher tariffs as the tariffs gradually reach cost recovery; (ii) legislative body that may refuse to approve the annual budget allocations for covering the tariff shortfall; (iii) MDA officials and staff who will have to adjust to the new regulatory environment with greater scrutiny and transparency and who may have vested interests in the sector. These risks are being mitigated through Program governance arrangements, extensive stakeholder engagement and a national communication campaign throughout the implementation of key PSRP actions to increase stakeholder awareness of the PSRP and their buy-in. However, given the sensitive reform measures required and the multitude of stakeholder interests that could be impacted, residual stakeholder risk remains high.

111. **Operational risk linked to distribution constraints is rated High.** The Program's objectives will not be achieved if the existing constraints in the distribution segment are not addressed. The Program thus has a strong focus to incentivize improved performance by DISCOs and to strengthen regulatory oversight and accountability. In addition, the World Bank will support the implementation of DISCOs' PIPs together with DISCOs' governance and capacity strengthening through the parallel stream of operation(s). However, distribution turnaround is complex and the residual risk remains high.

E. Program Action Plan

112. **Based on technical, fiduciary, environmental and social assessments, a set of actions are identified to improve the likelihood of achieving Program outcomes.** These actions are included in the Program Action Plan (Annex 8) and, some of them are also part of the DLIs. The TA will support the implementation of many of these actions. Key actions involve:

- The revenue requirements of TCN and DISCOs will be set for a new multi-year tariff period (2021-2025) based on DISCOs' approved PIPs and the key performance parameters will be fully redefined from January 1, 2022. NERC will carry out this process (the MYTO Extraordinary Review) through extensive consultations and public hearings.
- The allowance parameters for operating and capital expenditure and ATC&C losses specified in the Performance Agreements of DISCOs will end on December 31, 2021 without extension to allow resetting of key performance parameters and the delineation of roles and responsibilities between NERC and BPE.
- The implementation of PIPs by DISCOs will be monitored and enforced by NERC.
- Business continuity arrangements will be strengthened to ensure qualified transitory management teams takeover DISCOs' operation in case of DISCOs' license intervention by NERC.
- Scope and implementation arrangements of a phased quality of service-based tariff regime will be defined initially measuring supply hours on the basis of service hours of 11 kV feeders outgoing from 33/11 kV substations of DISCOs supplying service areas and transitioning to end-customer level measurement of supply hours once DISCOs implement Outage Management Systems as part of their approved PIPs.

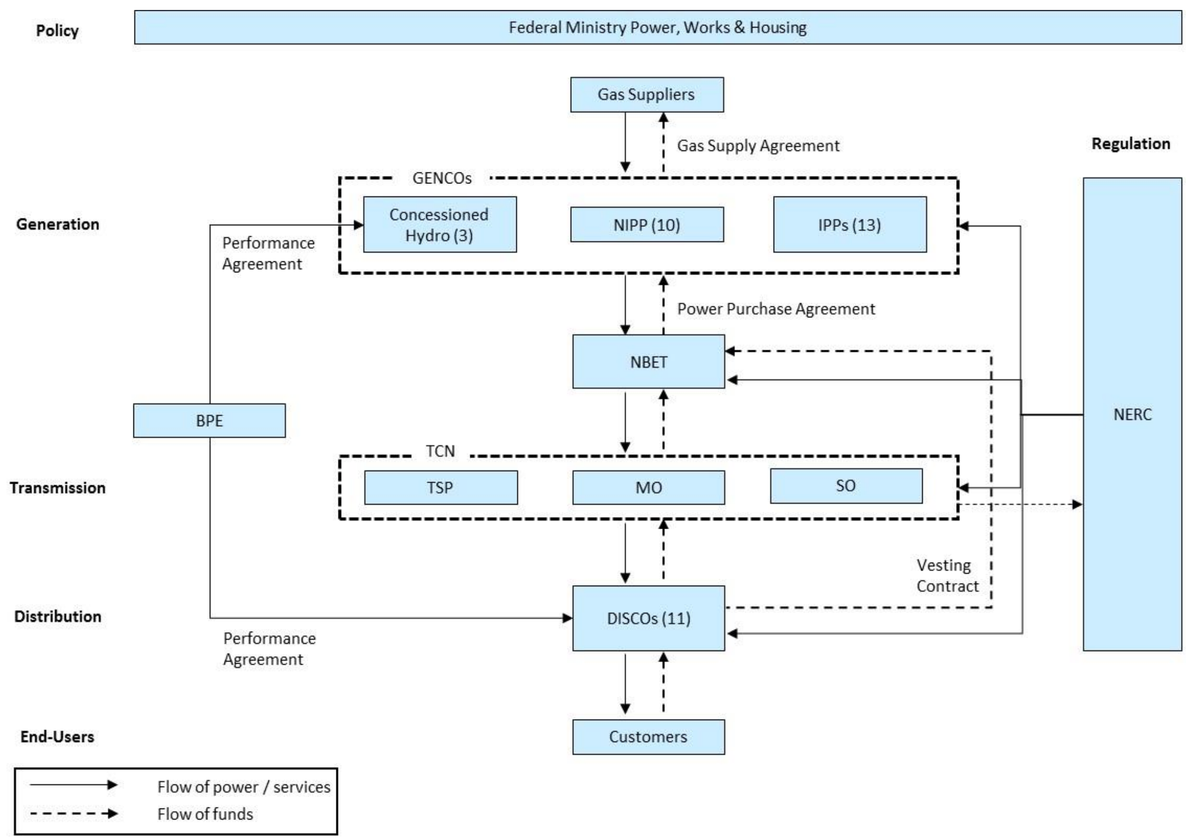
- Historical tariff shortfalls will be cleared from DISCOs' books through a mechanism approved by the FMFBNP.
- New tariff shortfalls from 2020 onwards will not generate payables DISCOs books through approval and implementation of a NERC Order. Prioritization of FGN budget appropriation releases related to the Program funding; the funds to be released into the Program Account in quarterly tranches in advance.
- Payment protocols prepared for all uses of funds identified in the Financing Plan will be approved for adoption by the Minister of Finance, Budget and National Planning to ensure that the uses of funds are transparent and in accordance with the Financing Plan.
- Tariff adjustments will be accompanied by measures to protect the poor households. For 2020 and 2021, the mitigation measures would need to consider the lack of metering and lack of well-targeted social assistance programs.
- Critical PSRP implementation will be accompanied by extensive public communication and stakeholder engagement to generate larger acceptance and buy-in for reforms. Additionally, stakeholder feedback mechanisms will be established as part of the communication campaign and critical PSRP implementation progress will be periodically reported through a dedicated website. This will be followed by a nationally representative survey to measure public awareness.
- The PSRP Finance and Policy Oversight Committee and the PSRP Finance Technical Committee will be set up to ensure adequate strategic and technical oversight over the PSRP/PSRO implementation and ensure the multi-agency coordination.
- The PSRP Secretariat will be established to support the day-to-day implementation of the Critical PSRP/PSRO, facilitate the work of the Finance and Policy Oversight and Technical Committees, including the updating and monitoring of the implementation of the Financing Plan.

Annex 1: Detailed Program Description

A. Program Background and Context

1. **Nigeria's power sector is unbundled and largely privately owned.** The National Electric Power Policy (2001) and the resulting Electric Power Sector Reform Act (2004) removed the monopoly of the vertically integrated National Electric Power Authority and unbundled it into six GENCOs, eleven DISCOs, and the TCN. The BPE completed the privatization of the DISCOs and GENCOs in 2013. The FGN retained 40 percent ownership in the DISCOs via the BPE. Three of the five thermal GENCOs (that use natural gas as fuel) were sold in their entirety to new owners while the FGN retained 51 percent ownership in one and 30 percent in another. Three hydro GENCOs were concessioned to private operators by BPE. TCN has remained a fully government-owned monopoly transmission service provider, though it was initially operated by the private sector under a four-year management contract that ended in 2015.

Figure 1-1 Nigeria Power Sector Institutional Structure and Contractual Arrangements



2. **Following privatization, the power sector was expected to evolve in four stages; the sector is currently at the second, Transitional Electricity Market (TEM), stage.** The four reform stages are: (i) the Interim Period, which started in November 2013 and was characterized by the allocation of sector cash flow deficits across all market participants before expected tariff reviews; (ii) the TEM, characterized by a government-owned public company, Nigerian Bulk Electricity Trading Plc (NBET), actively trading bulk power as a buyer from GENCOs and IPPs and reselling to DISCOs under Vesting Contracts that allocate a percentage of the capacity and energy output from one or more GENCOs to the relevant DISCO; (iii) the Medium Term Electricity Market, characterized by bilateral contracts between GENCOs and DISCOs (NBET ceases to exist at this stage and its PPAs with GENCOs are novated to DISCOs); and (iv) the Final Market,

with bilateral contracts between electricity buyers and sellers at all levels, and a central balancing mechanism through the creation of a spot electricity market. On January 31, 2015, the NERC effectively declared TEM by order, without all the pre-requisites for TEM in place. As a result, the power market has been operating on a "best-effort" basis with a lack of enforcement of contracts and regulations. Given the current state of the power sector, further stages of market evolution beyond the TEM are not likely to be reached in the near future.

3. **Electricity service delivery is poor with serious repercussions for the Nigerian economy and citizens**. The average annual per capita electricity consumption of Nigeria (147 kWh) is a fifth of the average low middle-income country consumption (736 kWh) and a twentieth of the global average consumption (3,298 kWh). The unreliable power supply results in an unwillingness to pay by consumers, drives industries to pursue off-grid alternatives, and causes economic losses in excess of US$28 billion annually (the PSRP estimate). Nigerian businesses experience 239 hours of power outages per month on average, accounting for nearly seven percent in lost sales. Most private enterprises are forced to resort to self-generation at a higher cost, both to themselves and to the economy (about US$0.20-0.25 per kWh, compared to the current grid-based tariff of US$0.11 per kWh). In the Nigeria Investment Climate Assessment, 27.2 percent of Nigerian business owners considered a lack of electricity the biggest obstacle to doing business.

4. **The underlying causes of poor service delivery are the serious challenges of the power sector.** The principal challenges include: (i) inconsistent implementation of policy and regulatory framework; (ii) rising and fiscally unsustainable tariff shortfalls that have not been fully funded in the past; (iii) lack of investments and associated constraints; and (iv) operational inefficiencies throughout the supply chain and particularly in distribution. Many of these challenges are interlinked. Lack of consistent implementation of policy and regulatory framework (particularly the Multi Year Tariff Order-MYTO) and lack of FGN financing to fully fund tariff shortfalls have resulted in the poor financial situation of sector companies, including DISCOs. Without ensuring that sector companies receive their revenue requirement, NERC and other sector agencies have not enforced the license and contractual obligations of sector companies. Lack of revenues and accountability has led to a lack of investments by DISCOs to maintain their existing assets and invest in new assets. This, in turn, has resulted in poor operational efficiency and service delivery. Poor service affects customers' willingness to pay, and causes difficulties in raising tariffs and enforcing collections, further worsening the financial situation of the sector.

5. **Lack of cost-reflective tariffs and associated low remittances of DISCOs necessitated FGN financing that has become a significant fiscal burden.** End-user tariffs reached cost recovery only for a brief period since the initial MYTO 2 was introduced in 2012. Since then, end-user tariffs have fallen below cost-recovery due to their inadequate adjustment for inflation, exchange rate, and the actual amount of energy delivered. The cumulative tariff shortfalls for 2015-19 are estimated at ₦1,678 billion. Tariff shortfalls and high ATC&C losses led to DISCOs' low remittances to NBET, which have been under 30 percent for the past three years. To ensure that GENCOs continue supplying electricity, the FGN through the CBN extended a total of ₦1,301 billion (US$3.61 billion) of PAF lending to NBET, across two phases, to support payments to GENCOs and gas suppliers between 2017-20. The PAF repayments are borne by the FGN and have become a significant fiscal burden (to reach ₦198 billion or US$550 million annually from 2020-2027 as per original agreed terms). PAF ensured payment of 80 percent of GENCOs invoices, including 90 percent payment to their gas suppliers. The first phase of the PAF funding for the sector was "unconditional" i.e. not linked to sector performance improvement that would sustainably reduce sector financial deficits. However, the second phase extension of PAF (approved by the Federal Executive Council of Nigeria in May 2019) includes an accountability framework, linking disbursements of PAF to implementation of reform milestones and achievement of specified performance indicators. While PAF

did not distinguish tariff shortfalls in 2017 and 2018 and the first half of 2019 (before the minimum remittance orders by NERC) and covered the market shortfalls (tariff and non-tariff shortfalls), NERC has dimensioned historical tariff shortfalls for each DISCO in its July 2019 MYTO minor review and clarified that DISCOs remain liable for under-payments to NBET that are above the historical tariff shortfalls. Hence, PAF payments have been accounted for historical tariff shortfalls only while historical non-tariff shortfalls remain DISCOs' payment obligation. Note that total PAF payments 2017-2019 of ₦1,127 billion is less than the total tariff shortfalls incurred of ₦1,249 billion, thereby leading to the accumulation of arrears during that period.

6. **Lack of investments and resulting constraints in the supply chain result in unreliable electricity supply.** The installed power generation capacity is approximately 13 GW; consisting of 2 GW of hydro and 11 GW of gas-fired power plants. However, mechanically available capacity is only around 7 GW, and, on average, less than 4 GW was dispatched over the last four years, largely due to constraints in gas supply and distribution. Gas supply constraints are primarily the result of a lack of investment because of a lack of timely and full payments by the power sector to gas suppliers. The causes of distribution constraints are multiple: (i) lack of investments in distribution networks; (ii) congestion at the transmission and distribution interface to satisfy the differentiated demand growth; and (iii) DISCOs' disconnection of feeders where the collection loss is higher. The capacity of the primary transmission network (330 kV) is not at present a constraint; however, the transmission system is operating well-below international reliability and security standards.

7. **The operational and commercial performance of the DISCOs since privatization has been dismal.** The privatization was carried out without adequate measures to address the fundamental challenges of the sector (Box 1-1). The sector ATC&C losses are high; averaging 41 percent in 2019, versus 26 percent projected in the tariff regulation/order. DISCOs need to make significant investments in network improvement and expansion to attain the contractual targets set in their Performance Agreements (including for reducing ATC&C losses). The poor financial situation of the DISCOs, coupled with their highly leveraged balance sheets, has severely constrained DISCOs' ability to access commercial financing. Local commercial banks are reluctant (and in some cases, unable) to extend further financing to the DISCOs due to their high exposure to the power acquisition companies during the 2013 privatization round. The privatized assets were purchased with significant leverage (assumed to be 70 percent debt and 30 percent equity), with most of the debt provided by the local commercial banks. International lenders and investors also do not have an appetite for financing, as the sector is nascent and lacks the requisite mitigation arrangements necessary to meet their risk acceptance criteria. Some of the DISCOs may need to be restructured/refinanced, depending on the extent of their financial and operational nonperformance.

8. **Weak governance and inadequate enforcement of contracts further undermine the sector's financial and operational performance**. Overall, the legal, regulatory and institutional framework in Nigeria is comprehensive and in accordance with international good practices. The content of regulations, in particular the Grid Code, Distribution Code and the Market Rules, includes mechanisms to improve performance. The tariff methodology is also overall adequate, allowing for full recovery of costs and incorporating incentive-based regulation. However, poor governance and associated weak transparency and accountability, together with overlapping roles and responsibilities of different agencies, lead to a lack of enforcement of laws, regulations and contracts. The latter, in turn, renders the sector dysfunctional with a lack of payment discipline, high losses and poor service quality and reliability.

Box 1-1: Lessons Learned in the Privatization of the Distribution Companies

The combination of nascent regulatory institutions and hastily completed DISCOs' privatization did not bring the much-expected performance improvement, but rather, the opposite:

- Change of ownership without accompanying measures to address sector fundamentals proved to be dysfunctional. There were numerous areas of inherited weakness in the distribution subsector prior to privatization, including lack of sector commercialization and high technical and collection losses;
- One of the original flaws of the privatization process was the sale of sector companies to high net worth Nigerians with no managerial and technical experience in the power sector;
- The privatization of the last mile was done rapidly without customer enumeration, asset mapping, or a reliable estimate of the baseline losses for each DISCO, resulting in a major deviation of the actual loss reduction trajectory from what was stipulated in the Performance Agreements signed between BPE and DISCOs. At end 2019, the DISCOs' ATC&C losses were 40.8 percent, as compared to the 32.1 percent stipulated in the Performance Agreements;
- The acquisition was funded with high (70 percent) leverage and the loans were US dollar denominated. The steep depreciation of the Naira in 2016 significantly increased the repayment requirement. Although the acquisition loans were in the parent companies' books, the DISCOs retained more cash after meeting their own operating expenses to fund the repayments. In 2016, DISCOs only remitted 29 percent of amounts owed to NBET. This resulted in arrears in payments to GENCOs and to their suppliers (including gas suppliers), which in turn impacted the reliability of supply;
- An overhaul of the tariff methodology (MYTO 2) in 2012 provided a framework for cost-reflective tariffs that mobilized private sector participation later that year. However, MYTO provisions were not applied systematically. Particularly, the recent major Naira depreciations were not passed on through retail tariffs, severely weakening the financial viability of the DISCOs. As a result, DISCOs are now in a precarious financial situation and have no access to commercial borrowing. Moreover, lack of cost recovery did not allow enforcement of key contracts with DISCOs;
- The prolonged absence of leadership at NERC and the inadequate sector institutional framework resulted in weak regulatory enforcement over DISCOs' deteriorating performance and violation of wholesale payment discipline. The term of the previous NERC commissioners expired in December 2015. The new commissioners were appointed only in February 2017.

B. The Government Program

9. **On March 7, 2017, the FGN launched the national ERGP for the period 2017-2020.** This Plan establishes a program to restore short-term macroeconomic stability, and outlines the structural reforms, infrastructure investments, and social sector programs necessary to diversify Nigeria's economy and support sustained, inclusive growth over the medium- and long-term. The ERGP acknowledges the fundamental role of the power sector in the development of the Nigerian economy; thus, "ensuring energy sufficiency (power and petroleum products)" is one of its five key priorities.

10. **The PSRP was designed to meet the goals of the ERGP by resetting the power sector for sustainable operation.** Specifically, the key objectives of the PSRP are to a) restore the sector's financial viability; b) improve power supply reliability to meet growing demand; c) strengthen the sector's institutional framework and increase transparency; d) implement clear policies that promote and encourage investor confidence in the sector; and e) establish a contract-based electricity market. The PSRP comprises four groups of interventions: financial, operational/technical, governance, and policy.

11. **The financial interventions outlined in the PSRP aim to restore the financial viability of the sector by fully funding historical and future tariff shortfalls and enforcing payment discipline.** The PSRP envisages measures to contain costs and carefully manage contingent liabilities to ensure the affordability of tariffs, which will be increased in a phased manner to reach full cost recovery by 2021. During the transition, the gap between tariff revenues and required revenue (i.e. the "recurrent tariff shortfall") will be fully funded by the Government to ensure that no further deficit is accumulated. Additionally, the PSRP outlines measures to eliminate deficits from 2015-2016, including arrears from MDAs. Plans to automate future payments from MDAs and establish the PAF from CBN as an interim financing solution/bridge financing to assist NBET in meeting payment obligations to GENCOs during 2017-2018[37] are also articulated in the PSRP.

12. **The operational/technical interventions in the PSRP aim to improve the reliability of power supply.** Specifically, the PSRP includes measures to ensure that a minimum baseline power generation of 4,500 MWh/hour is guaranteed and distributed daily to support the stability of the grid and minimum service quality. To that end, these interventions aim to promote improved DISCO performance through the design of balanced incentives to ensure ATC&C loss reduction (e.g. metering programs, upgrades of distribution and transmission interface networks), DISCO financial restructuring and recapitalization, and the implementation of credible business continuity plans. Addressing gas supply vandalism through the strategic engagement of high-level government officials, operational engagement of relevant MDA representatives, and engagement with host communities through ownership-sharing programs is also key to improving the reliability of supply.

13. **The third group of the PSRP interventions include measures to strengthen the governance of the sector.** Critical to this component is the PSRP's goal of making key contracts and regulations effective. Additionally, the PSRP calls for the appointment of qualified Boards to all Government agencies and the appointment of qualified Government representatives to the Boards of DISCOs; improved sector transparency; the development and implementation of a clear communications strategy for the PSRP; and the establishment of a dedicated team (the PSRP Secretariat) to coordinate and monitor the implementation of the PSRP.

14. **The final group of interventions pertains to policy.** The PSRP aims to increase electricity access by implementing off-grid renewable energy solutions in rural communities. Additional policy interventions support improvements in the investment climate, including economic procurement of generation capacity pursuant to an LCDP and clarification of the monetary and fiscal policies that provide incentives for private investments in the power sector.

15. **After a period of stalled implementation, the FGN has demonstrated strong ownership and commitment to implementing its critical actions.** PSRP implementation is overseen by the Presidential Administration and led by the MFNBP. Such high-level leadership and oversight ensure a concerted effort of key ministries and agencies, including the FMFBNP; FMoP; CBN; NERC; NBET; BPE; and TCN. Some of the important steps taken so far include NERC issuance of the Guidelines for DISCOs' preparation of PIPs and preparation and submission of PIPs by ten out of eleven DISCOs; explicit recognition and removal of tariff shortfalls from payment obligations of DISCOs through "minimum remittance thresholds" established by NERC together with enforcement of DISCOs' payment discipline; updating of the Financing Plan to ensure full funding for sector's tariff shortfalls till it reaches self-sustainability under the leadership

[37] In Q4 2016, the FGN was alarmed by the complete shutdown of power plants in the eastern network, due to non-payment of gas invoices by GENCOs. GENCOs were unable to pay for gas supplied due to low payments from DISCOs through NBET. To prevent a complete shutdown in the market, FGN developed an interim financing solution by establishing a ₦701.9 billion PAF from CBN in March 2017 that could provide assured (no risk) financing for 2017 and 2018, while a long-term holistic solution through the PSRP and the Financing Plan could be developed and put in place.

of FMFBNP (see Section C); initiation of the extraordinary tariff review to incorporate PIPs and new performance parameters for DISCOs.

C. Government Program: The 2020 PSRP Financing Plan approved by the Presidency

16. **The 2020 PSRP Financing Plan (the Financing Plan) has been prepared by a multi-agency technical committee, led by the FMFBNP.** The technical committee contained members from the NERC, CBN, NBET, BPE, FMFBNP, the BOF, and the DMO.

17. **The 2020 PSRP Financing Plan contains uses of funds, sources of funds, analysis of fiscal costs and risk scenarios.**

- **The Use of Funds.** The Financing Plan contains the estimate of the funding requirements to fully cover the new annual tariff shortfalls of the sector from 2020 until cost recovery is achieved, the settlement of historical tariff shortfall arrears (2015-2019), and the debt service payments of the CBN PAF. The use of funds also includes a limited amount of contingency funds to cover minimum remittances due from DISCOs that have license interventions. The financing envelope for new annual tariff shortfalls of the sector from 2020 onwards have been established by the FGN. The new and historical shortfalls for each year are assessed as the difference between the revenue requirement of the sector, determined based on NERC's effective MYTO, and the allowed tariff revenue.
- The Financing Plan does not currently include the future investment needs of the power sector and any public financing of the investments.
- **The Source of Funds.** The three sources of funds identified currently in the PSRP Financing Plan are the remaining proceeds of the CBN PAF, the annual FGN direct budgetary allocations, and financing from the World Bank using the Program-for-Results instrument (World Bank PSRO PforR component).
- **Analyses of the associated fiscal costs:** Public expenditures and gross financing needs and the impact of the debt financing on public debt stock.
- **Analyses of a Base Case and a set of alternative risk scenarios.**

18. **The 2020 PSRP Financing Plan covers the period 2020-2027 but 2021-2027 figures are indicative and will need to be updated.** The 2020 PSRP Financing Plan is underpinned by the 2020 MYTO based on a set of macro and sectoral assumptions/projections (including FX rate and volume of energy delivered) which may change over the period and affect funding requirements. The sector's revenue requirement will be reviewed and recalculated through the semi-annual MYTO Minor Reviews. It will also be recalculated and reset by the planned MYTO extraordinary review (to be effective January 2021), which will also affect funding requirements. Therefore, the Financing Plan requires periodic review – monitored on a quarterly basis and formally updated at least annually to ensure that it remains accurate, credible, and fully funded. This 2020 PSRP Financing Plan approved by the FGN underpins the financing to the sector for fiscal/calendar year 2020. The 2021 version of the PSRP Financing Plan should be prepared and presented for the FGN approval before the end of 2020.

19. **The PSRP Financing Plan is developed based on principles of credibility and realist; completeness, fiscal affordability and sustainability; and social sustainability.**

- **Credible and realistic** by being consistent with the MYTO effective on January 1 of the first year of the Plan. The MYTO should use realistic macro and sectoral assumptions to determine sector revenue requirements and cost-reflective tariff;

- **Complete** so that there are no financing gaps for the whole period and for every year i.e. sources of funds are equal or higher to the uses of funds and no new tariff shortfall arrears are planned to be accumulated;
- **Fiscally affordable and sustainable** by limiting the use of funds to tariff shortfalls (while taking regulatory actions to enforce payment discipline to reduce non-tariff shortfalls), having a clear path to cost recovery (when there are no tariff shortfalls to fund), respecting the limited fiscal space in determining the size of the direct FGN budgetary allocation, and replacing CBN PAF financing with less expensive, longer-term concessional financing; and
- **Socially sustainable** by describing the measures to mitigate the impact of tariff adjustments on poor households.

<u>Key assumptions in estimating the new tariff shortfalls in the PSRP Financing Plan (Base Case)</u>

20. **The calculation of the new tariff shortfalls (2020 onwards) in the PSRP Financing Plan is based on the difference between the Revenue Requirement as determined in the MYTO and allowed tariff revenues.** The Revenue Requirement is underpinned by assumptions on the exchange rate, the volume of energy sent out and delivered to DISCOs and inflation, and the allowance on ATC&C losses**.**

- ***Exchange rate:*** The Revenue Requirement is very sensitive to the exchange rate because the wholesale cost of electricity is priced in US dollars and represents over 50 percent of the sector's Revenue Requirement. The higher the exchange rate i.e. the weaker the Naira, the higher the Revenue Requirement and the higher the cost-reflective tariff. Currently the MYTO is not underpinned by one single exchange rate as it reflects the different contractual arrangements in the sector, including the prevailing PPAs of GENCOs, with most but not all PPAs referenced to the CBN official rate. The DISCOs allowances for operating and capital expenditure are also currently converted using the CBN official rate, although this is not stipulated as part of their Performance Agreements;
- ***Volume of energy sent out and delivered*** impacts the Revenue Requirement and collected sales. Lower volume of energy has the net effect of increasing the cost-reflective tariff;
- ***Domestic inflation*** impacts operating expenses of service providers so higher inflation would increase the Revenue Requirement;
- ***ATC&C loss allowance*** has a major impact on the revenue requirement; higher allowance means higher revenue requirement.

21. With the objective of having a credible and realistic Financing Plan, the key current (2019) MYTO parameters were reviewed and revisions made to the energy sent out and FX MYTO parameters from 2020 onwards as shown in Table 1-1.

Table 1-1: 2020 PSRP Financing Plan Base Case/MYTO Assumptions 2020-2023

2019	2020	2021	2022	2023	Notes
Exchange Rate (₦/US$)					
Until 31 Mar 2020: ₦305/US$	From 1 Apr 2020: ₦360/US$	NAFEX/ Assumed at ₦396/US$	NAFEX/ Assumed at ₦396/US$	NAFEX/ Assumed at ₦396/US$	As part of the MYTO Extraordinary Review, the proportion of DISCOs' operating and capital expenditure allowances indexed to US$ will be revised to reflect current reality and the MYTO Minor Reviews effective January 2021 onwards will convert the US$-denominated portion of DISCOs' operating and capital expenditure allowances at the prevailing NAFEX rate in order to more accurately reflect the revenue requirement of DISCOs[38]. 2019 and 2020 shows the predominant FX rate in the effective MYTO: CBN official FX rate of 305 for 2019 and 360 for 2020 from 1 April. For 2021-2023 projections a "blended" FX rate of 396 is assumed.
% annual increase in energy sent out					
	5%	5%	5%	5%	Current MYTO assumes a 30 percent increase from 2019 to 2020 which is overly ambitious, when average annual growth has been 4 percent in the past four years. Agreed revision: Assume a more conservative 5 percent annual increase from 2020 onwards.
Revenue Requirement (₦ Bn)					
1,196	1,367	1,613	1,717	1,829	
Average Allowable ATC&C loss (%)					
25.89	20.27	15.98	15.60	15.60	Equals the allowable ATC&C losses in current DISCO Performance Agreements. For 2022 and 2023 the allowed ATC&C loss levels will be adjusted based on the ATC&C allowance that NERC will define as part of MYTO Extraordinary Review
Collected Sales (GWh)					
21,897	24,829	27,575	29,185	30,745	Equals ((1 - ATC&C loss %) *Energy delivered to DISCOs))
Cost-Reflective Tariff Average (₦/kWH)					
54.61	From 1 Apr:56.34	58.51	58.83	59.50	Equals Revenue Requirement/Collected Sales

<u>The 2020 PSRP Financing Plan (Base Case): Use of Funds and Source of Funds</u>

22. **The 2020 PSRP Financing Plan approved by the Presidency envisages a significant reduction of new tariff shortfalls to levels that are fiscally affordable.** FGN has approved a total funding envelope of ₦380 billion (US$1,056 million) for new tariff shortfalls in 2020. On this basis, NERC is expected to review

[38] The NAFEX rate will apply for the six-month duration of the MYTO semi-annual minor reviews i.e. eliminating intra-MYTO NAFEX risk. The move to NAFEX for DISCOs' operating and capital expenditure allowance in 2021 means no pressure on revenue requirements in the current year/2020. Also, the upward pressure on revenue requirement will be offset by the revision downwards of share of DISCO's operating and capital expenditure allowance indexed to US$ (currently Capex is assumed at 100 percent - assumptions not changed since 2012).

end-consumer tariffs. The envelope for total new tariff shortfalls in 2021 is ₦60 billion. The FGN aims to reach full cost recovery by 2022, i.e. no more new tariff shortfalls. This results in a total of ₦440 billion of new tariff shortfalls during 2020-2023, which is the maximum amount affordable, given the current parameters of the Financing Plan. It is important to note that the projected tariff increases needed to keep tariff shortfalls at ₦60 billion in 2021 and zero in 2022 and 2023 may change post-MYTO extraordinary review and subsequent minor reviews to reflect deviations in the key parameters from the Base Case.

Table 1-2A: 2020 PSRP Financing Plan Base Case new tariff shortfalls 2020-2023

		2019	2020	2021	2022	2023	2020-23
INACTION Scenario – No Tariff Increase	NEW tariff shortfalls ₦ Billion	524	606	768	822	887	3,082
Financing Plan Base Case	NEW tariff shortfalls ₦ Billion	524	380	60	0	0	440

Table 1-2B: 2020 PSRP Financing Plan Base Case estimated new tariff shortfalls and sources of funds for 2020, by quarter

₦ Billion	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021*
2020 Use of Funds: NEW tariff shortfalls incurred	127	159	47	47	
2020 Use of Funds: NEW tariff shortfalls cumulative	127	286	333	**380**	
2020 Source of Funds available					
CBN PAF (remaining)		164			
2020 FGN direct budgetary contribution (amended budget)			79		
World Bank PSRO Prior Results disbursed in CY2020**				64	
World Bank PSRO 2020 Results disbursed in Q12021***					73
2020 Source of Funds available cumulative	0	164	246	308	**380**

Notes: *Q4 2020 tariff shortfalls are due to be settled in Q1 2020. **assumes maximum amount of prior results of US$178 million achieved **assumes ₦73 billion out of ₦88 billion (maximum 2020 results achieved and disbursed) is used towards funding Q3 and Q4 2020 tariff shortfalls in Q1 2020.

23. **The total future uses of funds and the total sources of funds from 2020 to 2027 is ₦2,527 billion (US$6,477 million):**

- **The uses of funds** comprise of ₦2,068 billion of existing obligations incurred over the past 5 years, ₦440 billion of NEW tariff shortfalls in 2020-2021 and ₦19 billion of contingency funds to be set aside in 2021. By 2027, historical tariff shortfalls arrears should be cleared and the CBN PAF fully repaid.
- **The sources of funds** comprise ₦164 billion of remaining PAF (no further expansion once depleted in 2020), ₦1,130 billion of FGN direct budgetary contribution and ₦1,233 billion (the residual) from World Bank PSRO and other sources of funding. Beyond this first US$750 million PSRO operation, the FGN is looking for alternative, credible sources of funds as it is also interested in using further World Bank financing for sector investments. Any additional financing from this operation will be conditional upon satisfactory implementation progress.

Table 1-3A: Use of Funds

USE OF FUNDS	2020-2022	2020-2027
1. Funding of new tariff shortfalls From 2020 onwards annual tariff shortfalls are to be paid when due i.e. no new arrears are accumulated. Annual tariff shortfalls will be determined by the difference between allowed tariffs and cost-reflective tariffs – a FGN policy decision.	**₦440 billion (US$1,208 million)**	**₦440 billion (US$1,208 million)**
2. Clearance of historical tariff shortfalls: ***2.1 Tariff shortfall arrears*** Tariff shortfalls from 2015-2019 not yet funded i.e. arrears total ₦551 billion. Under the PSRP, priority is given to fully funding new tariff shortfalls. Thus, clearance of these arrears will only start in 2022. ***2.2 Debt servicing of CBN PAF*** Full payment of annual debt servicing (no arrears), based on agreed term sheets (note 1) • Interest: 5 percent • Tenor: 96 months	a. **₦79 billion (US$199 million)** • ₦79 bn in 2022 b. **₦455 billion (US$1,150 million)** • Zero in 2020 • ₦258 bn in 2021 • ₦198 bn in 2022	a. **₦551 billion (US$1,392 million)** • ₦79 billion per year, 2022-2026 • ₦158 billion in 2027 b. **₦1,516 billion (US$3,829 million)** • Zero in 2020 • ₦258 billion in 2021 • ₦198 billion per year, 2022-2026 • ₦270 billion in 2027
3. Contingency Funds For limited payment of non-tariff shortfalls to cover minimum remittances due from Discos that have license interventions (note 2)	**₦19 billion** (US$48 million)	**₦19 billion** (US$48 million)
TOTAL ESTIMATED USE OF FUNDS	**₦993 billion (US$2,604 million)**	**₦2,527 billion (US$6,477 million)**

Notes:
(1) Original terms are a two-year grace period, principal repayment over eight years, starting 2020. However, FGN has asked for 2020 interest and principal repayments to be delayed by 1 year, to start in 2021.
(2) Three months of minimum remittance payments for five worst-performing DISCOs is estimated at ₦16.6 billion.

Table 1-3B: Sources of Funds

SOURCE OF FUNDS	2020-2022	2020-2027
1. CBN PAF • The ₦600 billion expansion is assumed to be fully disbursed by mid-2020 as the Accountability Framework disbursement conditions are met • No further expansion of PAF (note 1)	**₦164 billion (US$456 million)**	**₦164 billion (US$456 million)**
2. FGN direct budgetary contributions (note 2) • Annual ceilings as per FMFBNP guidance on fiscal affordability included in the Financing Plan • Financed as part of the budget deficit	**₦380 billion (US$978 million)** • ₦80 billion in 2020 • ₦150 billion per year, 2021-2022	**₦1,130 billion (US$2,873 million)** • ₦80 billion in 2020 • ₦150 billion per year, 2021-2027
3. World Bank PSROs (note 3) • Total amount requested to ensure total sources of funds equals uses of funds • Potentially up to a total of ~US$ 3 billion over 2020-2027 through a programmatic series of PforRs • The 1st PSRO starts disbursing in 2020 Q3 once the PAF is disbursed • World Bank PSRO proceeds assumed to be converted at the NAFEX rate	**₦450 billion (US$1,170 million)**	**₦1,233 billion** (~US$3.1 billion)
TOTAL ESTIMATED SOURCE OF FUNDS (note 4)	**₦993 billion (US$2,604 million)**	**₦2,527 billion (US$6,477 million)**

Notes:

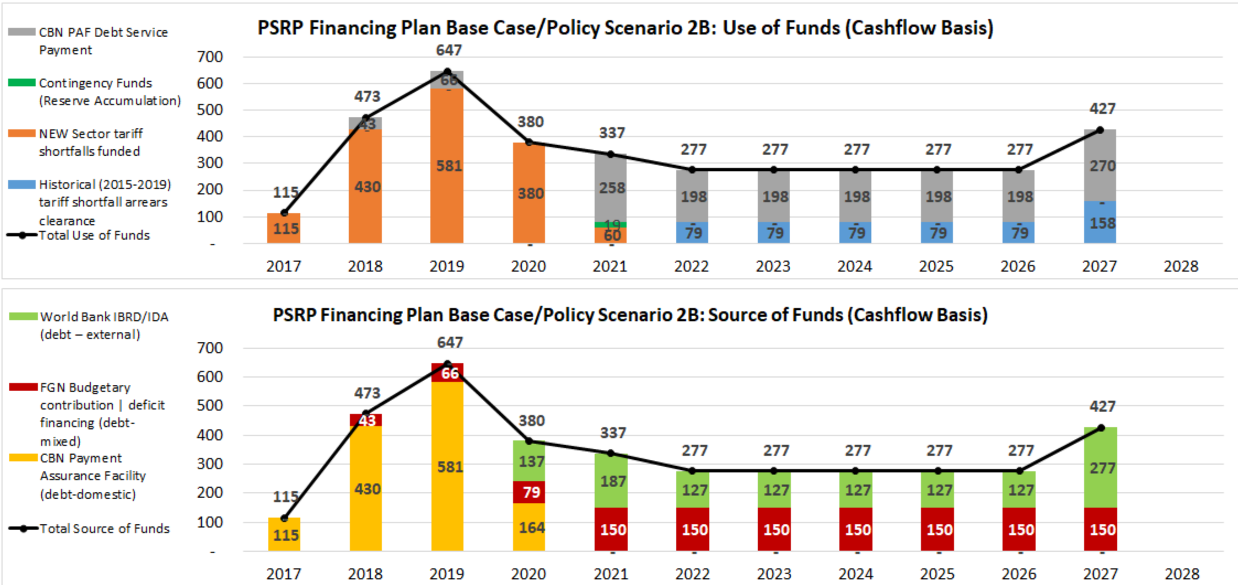
(1) CBN PAF: The FGN and CBN's preference is to end the reliance on the PAF and transition to more sustainable sources (FGN budgetary contribution and World Bank PSRO), hence the assumption of no expansion once the additional ₦600 billion is depleted.

(2) FGN direct budgetary contributions: (a) ₦80 billion for 2020 is included in the approved 2020 FGN budget; and (b) as the 2020 FGN budget would be in deficit even without the budgetary contribution to the PSRP, the Financing Plan treats the direct budgetary contribution as being financed as part of the general budget deficit, through a mix of domestic and external debt instruments

(3) World Bank PSRO: The initial financing amount for the first PSRO is US$750 million of which US$730 million supports the Financing Plan for the period 2020-2022 with potential for US$ 440 million of additional financing, depending on performance. The second PSRO operation will be conditional upon satisfactory implementation progress of the first operation. As the disbursements of the PforR component of the PSRO occur upon achievement of critical PSRP actions/results, there is a risk that the PSRO may not fully disburse or may be delayed in disbursement if FGN does not achieve the results within the target timelines.

(4) Other sources of financing: It is possible that additional sources of funds, e.g., sector-specific bonds, are identified and included in future updates of the Financing Plan.

Figure 1-2: Base Case PSRP Financing Plan for 2020-2027, ₦ Billion



Fiscal Expenditures and Gross Financing Requirements

24. **To assess the fiscal costs of the PSRP Financing Plan for the FGN, it is necessary to include the estimated debt service payments associated with the FGN borrowing incurred to finance the additional FGN direct budgetary contribution.**

- To estimate the total fiscal expenditure requirements, the interest payments of the CBN PAF and the debt financing of the FGN Direct Budgetary Contribution are added to the clearance of historical tariff shortfall arrears, the funding of the new tariff shortfalls, and the contingency funds. The total fiscal expenditure requirements for 2020-2027 are estimated at ₦1,686 billion (US$4,358 million).
- To estimate the total gross financing requirements, the principal repayments/amortization of the CBN PAF and the debt financing of the FGN Direct Budgetary Contribution are added to the expenditure requirements. The total gross financing requirements for 2020-2027 are estimated at ₦2,943 billion (US$7,532 million).

Table 1-4: Fiscal Expenditures and Gross Financing Requirements

PSRP Financing Plan (Base Case)	**2020-2027 ₦ Billion**
Historical (2015-2019) tariff shortfall arrears clearance	**551**
NEW (2020-2027) tariff shortfalls and contingencies	**459**
Interest Payments (CBN PAF & FGN Budgetary Contribution)	**675**
TOTAL Fiscal Expenditure Requirements	**1,686**
Amortization (CBN PAF & FGN Budgetary Contribution)	**1,257**
Total Gross Financing (inc. amortization) Requirements	**2,943**

Risk Scenarios

25. **The main source of risks to the PSRP Financing Plan is from assumptions deviating significantly from the Base Case scenario that increases the new tariff shortfalls to be funded or impact the amount of contingency funds required**. Three ongoing risk scenarios have been identified[39] in addition to the COVID-19 risks in 2020 outlined in Box 1 and summarized in Table 1-5.

Table 1-5: Summary of Risk Scenarios

Risk Scenario	Assumptions	Expected Impact
1) FX Depreciation against the US$	• **Base Case:** assume a blended FX rate of ₦396/US$ for use of funds and source of funds from 2021 onwards • **Risk Scenario:** Annual FX depreciation of 10 percent from 2021 onwards, based on the differential between NGA and US CPI (~10 percent)	• FX depreciation would result in higher revenue requirement and in turn higher cost-reflective tariff. • If allowed tariffs remain the same as in the Base Case, this would lead to **higher new tariff shortfalls (2021-2023)**
2) Volumetric Shock: Lower amount of energy delivered to DISCOs	• **Base Case:** 5 percent annual increase in energy sent out and energy delivered • **Risk Scenario:** 0 percent increase in energy sent out and energy delivered	• Lower amount of energy delivered to DISCOs would result in the revenue requirement split over lower energy units with resulting higher unit cost or cost-reflective tariff. • If allowed tariffs remain the same this would lead to **higher new tariff shortfalls**
3) Failure by DISCOs to achieve allowable/target ATC&C losses in the MYTO i.e. actual ATC&C is significantly higher	• **Base Case:** as per the MYTO which reflects the performance targets in DISCO contracts. • **Risk Scenario:** Average ATC&C remains at the average ATC&C loss level reported by DISCOs in July 2019 of 40 percent. This could be due to a lack of effort from DISCOs as well as a lack of underlying performance improvements.	• If actual ATC&C is higher than allowable ATC&C losses, the difference is **non-tariff shortfalls**, which are the responsibility of DISCOs, not the FGN. • However, if non-tariff shortfalls are too high, they may undermine the ability of DISCOs to remit what they should to NBET i.e. they fail to comply with the MRT set by NERC. • This could lead to unexpected funding shortfalls to GENCOs**, requiring higher contingency funding from FGN**

26. **The impact on the size of the new tariff shortfalls and non-tariff shortfalls for the period 2020-2023 has been modelled as *if* there is no policy response**. For Risk Scenarios 1 and 2, this means allowed tariffs remain the same as the Base Case i.e. no additional tariff adjustments. For Risk Scenario 3, there are no policy and regulatory actions to close the gap between the allowable and actual ATC&C losses.

- Risk Scenario 1/FX depreciation with NO additional response would add ₦782 billion (US$1,975 million) of tariff shortfalls 2021-2023, relative to the Base Case.
- Risk Scenario 2/the volumetric shock scenario with NO additional response, would add ₦347 billion (US$879 million) of tariff shortfalls 2020-2023, relative to the Base Case.

[39] Other potential risks such as higher than expected inflation and full activation of the PPAs and gas supply agreements (thus increasing generation costs) were considered but considered posing a lower risk of materializing or expected to have relatively less impact if they do materialize.

- Risk Scenario 3/the no improvement in ATC&C loss scenario with NO additional response, would result in ₦1,772 billion (US$4,539 million) of non-tariff shortfalls 2020-2023, which will undermine the ability for DISCOs to remit the MRT orders to NBET.

D. World Bank Financed PSRO

27. **The proposed PSRO will support a sub-set of PSRP interventions for years 2020-2022 in the following three areas: improve reliability of electricity supply; achieve financial and fiscal sustainability; and enhance accountability.** These areas are complementary and will ensure that the power sector reaches self-sustainability as losses decrease, operational efficiency and service delivery improve, and tariffs are adjusted in a phased manner. These measures are also important for unlocking private financing for the sector by establishing a track record of the sector's sustainable performance.

28. **Underlying the PSRO design are two critical measures – setting the Revenue Requirement of the sector based on the MYTO Extraordinary Review and MYTO Minor Reviews and ensuring that the Revenue Requirement of the sector is fully funded.** The MYTO Extraordinary Review will involve resetting of the revenue requirement of TCN and eleven DISCOs based on DISCOs' approved PIPs and new performance parameters of DISCOs from January 2022 once the targets of the Performance Agreements end. The receipt of Revenue Requirement will be secured through the PSRP Financing Plan that the FGN has developed to ensure that tariff shortfalls are fully funded until the tariff revenue and revenue requirement of the sector eventually converge. The implementation of the MYTO Extraordinary Review and semi-annual MYTO Minor Reviews and the execution of the PSRP Financing Plan are the basis for enforcing contracts and regulations and putting the sector on a path of sustainability.

Table 1-6: Results Chain of the PSRO

PDO: Improve the reliability of electricity supply, achieve financial and fiscal sustainability and enhance accountability		
Results Area 1: **Improve reliability of electricity supply**	**Results Area 2:** **Achieve financial and fiscal sustainability**	**Results Area 3:** **Enhance accountability**
Global DLI 1: NERC sets revenue requirement for TCN and DISCOs based on MYTO Minor reviews and a MYTO Extraordinary Review		
Global DLI 2: A credible and fiscally sustainable PSRP Financing Plan is approved and executed to fully cover tariff shortfalls		
DLI 1: Implementation of approved PIPs is enforced **DLI 2:** Business continuity arrangements are implemented for DISCOs	**DLI 3:** End-user electricity tariffs are adjusted consistent with the PSRP Financing Plan, including its measures for protection of the poor **DLI 4:** Payment discipline is enforced on DISCOs to reduce non-tariff shortfalls	**DLI 5:** Financial and operational transparency of DISCOs is improved

E. Program Governance Structure

29. **The successful implementation of the PSRP requires the participation of stakeholders across the entire sector, and thus necessitates an adequate governance arrangement.** A multi-layer governance structure is being established to address the complex interdependencies and coordination required

between various stakeholders. It rests on an effective sector regulatory and contractual framework and overall monitoring and oversight arrangements of the PSRP.

30. **PSRP/PSRO monitoring and oversight arrangements will be structured in three layers,** including:

a. **PSRP Finance and Policy Oversight Committee** chaired by the Minister of Finance, Budget and National Planning with the Minister of Power as co-Chair and DG Budget as the Secretary. The Committee members will include the heads of all relevant MDAs (NERC, NBET, BPE, DMO, BOF) and designated officials from the Presidency. This committee will carry out the strategic oversight of PSRP/PSRO implementation. The Committee will meet once every quarter for strategic oversight of the PSRO implementation.

b. **PSRP Finance Technical Committee** chaired by the DG Budget with NERC Commissioner on Legal, Licensing and. Compliance, and CBN DG on Economic Policy as deputy-chairs. The technical committee will be supported by the PSRP Secretariat. The Committee members will include senior management-level representatives of MDAs (NERC, NBET, BPE), as well as the FMFBNP (BOF, DMO, IERD, SA Power) and officials from the Presidency. The PSRP Finance Technical Committee will monitor the implementation of critical PSRP actions supported by the PSRO and the PSRO DLIs linked to these actions, including the oversight of the Financing Plan (tracking/monitoring and updating), the key regulatory actions and ensure coordination between the Financing Plan and MYTO reviews. The Technical Committee will also monitor the verification process and disbursements against achieved DLIs. The Technical Committee will convene monthly.

c. **PSRP Secretariat** to be established in the BOF, FMFBNP, composed of technical experts and reporting to the DG Budget. The Secretariat will carry out day-to-day monitoring and coordination of PSRO implementation and facilitate the work of the Steering and Technical Committees.

31. **The PSRP Secretariat is the main interlocutor of the World Bank on behalf of the FGN.** The Secretariat will be the interlocutor for the World Bank in finalizing the results monitoring framework and verification protocols of the DLIs for the PSRO, all of which build on the objectives of the PSRP. The Secretariat will rely on the PIU of the BOF for the procurement and FM of the IPF component.

Annex 2: Results Framework Matrix

Results Areas	*PDO/Outcome Indicators*	*Intermediate Results (IR) Indicators*	*DLI #*	*Unit of Measurement*	*Baseline (2018)*	*End Target (2022)*
Results Area 1: Improve reliability of electricity supply	PDO Indicator 1: Annual electricity supplied to the distribution grid increases			GWh	23,722	39,420
		IR Indicator 1.1: PIPs of DISCOs are implemented to remove the constraints to supply in their networks	1	Percentage of implementation	0	30
		IR Indicator 1.2: Business continuity arrangements are implemented for DISCOs	2	Yes/No	No	Yes
Results Area 2: Achieve financial and fiscal sustainability	PDO Indicator 2A: Annual tariff shortfalls decline		G2	Billion ₦	2019: 524	0
	PDO Indicator 2B: New tariff shortfalls are funded from non CBN sources once the PAF is depleted		G2	Percentage tariff shortfalls funded	0	100 in 2020 and 2021
		IR Indicator 2.1: Revenue requirement of DISCOs is set consistent with semi-annual MYTO Minor Reviews and MYTO Extraordinary Review	G1	Yes/No	No	Yes
		IR Indicator 2.2: End-user electricity tariffs are adjusted consistent with FGN approved PSRP Financing Plans	3	Yes/No	No	Yes
		IR Indicator 2.3: Share of DISCOs' recurrent payment obligations to NBET that are paid	4	Percentage	29	90
		IR Indicator 2.4: Historical tariff shortfalls and associated interest are removed from DISCOs' books	4	Yes/No	No	Yes
Results Area 3: Enhance accountability	PDO Indicator 3A: Public awareness about ongoing power sector reforms and performance increases			Percentage	29	60
	PDO Indicator 3B: Public awareness about ongoing power sector reforms and performance among women increases			Percentage	23	40
		IR Indicator 3.1: Audited financial statements of DISCOs are published annually	5	Yes/No	No	Yes
		IR Indicator 3.2: Key operational and financial data for the power sector are published quarterly on NERC website	5	Yes/No	No	Yes

Monitoring and Evaluation Plan

Indicator Name (#)	Description	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection
1	The amount of electricity sold by NBET to DISCOs is increased	Annual	Market Operator	TCN monitoring reports	SECRETARIAT
1.1	The average percentage of the outputs of PIPs achieved by DISCOs	Annual	NERC	NERC's biannual monitoring report on progress in implementation of PIP by DISCOs	SECRETARIAT
1.2	Management of operations of DISCOs that have license interventions by NERC are handed over to transitory management teams appointed by BPE and approved by NERC.	Annual	BPE and NERC	NERC notices and BPE appointment documents	SECRETARIAT
2A	Annual tariff shortfalls assessed as the difference between revenue requirement of the power sector per effective NERC MYTO and tariff revenues (set tariffs times the volume of electricity collected) decline	Annual	NBET, NERC and BOF	NERC MYTOs; E-Collection account statements and NBET reports	SECRETARIAT
2B	Share of new tariff shortfalls that are funded from sources of financing which are on budget and not from CBN	Annual	NBET CBN and BOF	E-Collection account statements and NBET reports	SECRETARIAT
2.1	Revenue requirement of DISCOs is set consistent with semi-annual MYTO Minor Reviews and MYTO Extraordinary Review	Annual	NERC	DISCOs' MYTOs	SECRETARIAT
2.2	End-user electricity tariffs are adjusted consistent with the FGN approved PSRP Financing Plans	Annual	NERC and BOF	MYTO orders and FGN approval letters/memos	SECRETARIAT
2.3	Share of DISCOs' recurrent payment obligations to NBET paid	Annual	NBET, CBN and BOF	E-Collection account statements and NBET reports	SECRETARIAT
2.4	Historical tariff shortfalls (2015-2019) and associated accrued interest are removed from DISCOs' books	One time (2021)	NBET and BOF	FMFBNP orders and NBET financial statements	SECRETARIAT
3A	Share of the general public aware of the ongoing reforms and performance in the power sector	One time (2022)	Nationally representative survey	Nationally representative survey report	SECRETARIAT
3B	Share of women aware of the ongoing reforms and performance in the power sector	One time (2022)	Nationally representative survey	Nationally representative survey report	SECRETARIAT
3.1	Audited financial statements of DISCOs are published	Annual	NERC and DISCOs	DISCO or NERC website	SECRETARIAT
3.2	NERC publishes key operational and financial data for the power sector, including (i) energy sent-out by each GENCO (in kWh), the resulting invoices to NBET and NBET payments against these invoices, separately showing the share of payment settled by DISCO	Quarterly	GENCOs, DISCOs, TCN, and NBET	NERC, NBET, and DISCOs' websites	SECRETARIAT

Indicator Name (#)	Description	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection
	remittances and the share funded through the Financing Plan; (ii) energy delivered to each DISCO (in kWh), the resulting DISCO invoices and DISCO payments against these invoices; (iii) scheduled electricity supply hours for each DISCO				

Annex 3: Disbursement Linked Indicators, Disbursement Arrangements and Verification Protocols

	Total Allocated Amount	***As % of Total Financing Amount***	***Baseline (as of May 1, 2019)***	***Prior Results (since May 1, 2019)***	***Indicative timeline for DLI achievement***		
					2020	***2021***	***2022***
Global DLI #G1: NERC sets revenue requirement for TCN and DISCOs based on MYTO Minor Reviews and a MYTO Extraordinary Review ***No disbursements will be made under DLI 1,2,3 ,4 and 5 until this DLI is met, except for Prior Results***			TCN and DISCOs do not receive their full revenue requirement based on the MYTO and the MYTO parameters do not reflect current conditions of the sector.	DLR #G1.1: (i) NERC completes MYTO Minor Reviews under the existing MYTO and issues new MYTOs for each DISCO and TCN, consistent with the 2020 PSRP Financing Plan; and (ii) BPE issues a notice clarifying that the allowance parameters on aggregate technical, commercial and collection losses, operating expenditures and capital expenditures in the Performance Agreements are not extended beyond their current expiration date of December 31, 2021.	DLR #G1.2: NERC completes MYTO Extraordinary Review and issues new MYTO for the period 2021-2025 for each DISCO and TCN redefining allowances on CapEx, OpEx and ATC&C losses, consistent with the PIPs, effective from January 1, 2022.	DLR #G1.3: NERC completes semi- annual MYTO Minor Reviews under the existing MYTO and, if needed, issues new MYTOs for each DISCO and TCN to adjust their respective revenue requirements, effective from January 1 and July 1, 2021.	DLR #G1.4: NERC completes semi-annual MYTO Minor Reviews under the existing MYTO and, if needed, issues new MYTOs for each DISCO and TCN to adjust their respective revenue requirements, effective from January 1 and July 1, 2022.
Allocated amount:	US$150 million	21%		US$20 million	US$90 million	US$20 million	US$20 million
Scalability				No	No	No	No

	Total Allocated Amount	*As % of Total Financing Amount*	*Baseline (as of May 1, 2019)*	*Prior Results (since May 1, 2019)*	*Indicative timeline for DLI achievement*		
					2020	***2021***	***2022***
Global DLI #G2: A credible and fiscally sustainable PSRP Financing Plan is approved and executed to fully cover tariff shortfalls ***No disbursements will be made under DLI 1,2,3 ,4 and 5 until this DLI is met, except for Prior Results***			Tariff shortfalls of the sector are not fully funded.	DLR #G2.1: The Presidency approves the 2020 PSRP Financing Plan covering the uses and sources of funds to clear historical and fund new tariff shortfalls for 2020-2027.	DLR #G2.2: (i) FMFBNP issues the 2021 PSRP Financing Plan covering the uses and sources of funds to clear historical and fund new tariff shortfalls for 2021-2027, consistent with the MYTO effective on January 1, 2021; and (ii) Estimated shortfalls for Q1-Q3, 2020, set out in the 2020 PSRP Financing Plan, are funded from other sources than CBN, when the CBN PAF has been depleted. ***Basic target:*** G2.2(i) is achieved and 80 percent of the estimated tariff shortfalls for Q1-Q3, 2020, set out in the 2020 PSRP Financing Plan, are funded according to G2.2(ii).	DLR #G2.3 (i): FMFBNP issues the 2022 PSRP Financing Plan covering the uses and sources of funds to clear historical and fund new tariff shortfalls for 2022-2027, consistent with the MYTO effective on January 1, 2022; and (ii) Actual tariff shortfall incurred for Q1-Q3, 2020 not yet funded <u>and</u> estimated tariff shortfalls for Q4, 2020 and Q1-Q3, 2021, set out in the 2021 PSRP Financing Plan, are funded from other sources than CBN, when the CBN PAF has been depleted. ***Basic target:*** G2.3(i) achieved, 80 percent of the sum of (A) the actual tariff shortfalls incurred for Q1-Q3, 2020 not yet funded <u>and</u> (B) the estimated tariff shortfalls for Q4, 2020, Q1-Q3, 2021, set out in the 2021 PSRP Financing	DLR #G2.4 (i): FMFBNP issues the 2023 PSRP Financing Plan covering the uses and sources of funds to clear historical and fund new tariff shortfalls for 2023-2027, consistent with the MYTO effective on January 1, 2023; and (ii) Actual tariff shortfall incurred for Q1-Q4 2020 and Q1-Q3, 2021 not yet funded <u>and</u> estimated tariff shortfalls for Q4, 2021 and Q1-Q3, 2022, set out in the 2022 Financing Plan, are funded from other sources than CBN, when the CBN PAF has been depleted. ***Basic target:*** G2.4(i) achieved, 80 percent of the sum of (A) the actual tariff shortfalls incurred for Q1-Q4, 2020 and Q1- Q3, 2021 not yet funded <u>and</u> (B) the estimated tariff shortfalls for Q4, 2021, Q1-Q3, 2022, set out in the 2022 PSRP Financing Plan,

	Total Allocated Amount	*As % of Total Financing Amount*	*Baseline (as of May 1, 2019)*	*Prior Results (since May 1, 2019)*	*Indicative timeline for DLI achievement*		
					2020	***2021***	***2022***
					Stretch target: G2.2(i) is achieved and 90 percent of the estimated tariff shortfalls for Q1-Q3, 2020, set out in the 2020 PSRP Financing Plan, are funded according to G2.2(ii).	Plan, are funded according to G2.3(ii). ***Stretch target:*** G2.3(i) achieved, 100 percent of the sum of (A) the actual tariff shortfalls incurred for Q1-Q3, 2020 not yet funded <u>and</u> (B) the estimated tariff shortfalls for Q4, 2020 and Q1-Q3, 2021, set out in the 2021 PSRP Financing Plan, are funded according to G2.3(ii).	are funded according to G2.4(ii). ***Stretch target:*** G2.4(i) achieved, 100 percent of the sum of (A) the actual tariff shortfalls incurred for Q1-Q4 2020 and Q1-Q3, 2021 not yet funded <u>and</u> (B) the estimated tariff shortfalls for Q4, 2021 and Q1-Q3, 2022, set out in the 2022 PSRP Financing Plan, are funded according to G2.4(ii).
Allocated amount:	US$170 million	23%		US$30 million	Basic Target: US$50 million	Basic Target: US$30 million	Basic Target: US$30 million
					Stretch Target: US$60 million (US$50 million plus US$1 million per percentage point above 80 percent up to 90 percent)	Stretch Target: US$40 million (US$30 million plus US$0.5 million per percentage point above 80 percent up to 100 percent)	Stretch Target: US$40 million (US$30 million plus US$0.5 million per percentage point above 80 percent up to 100 percent)
Scalability				No	Yes	Yes	Yes

	Total Allocated Amount	*As % of Total Financing Amount*	*Baseline (as of May 1, 2019)*	*Prior Results (since May 1, 2019)*	*Indicative timeline for DLI achievement*		
					2020	***2021***	***2022***
DLI #1 Implementation of approved PIPs is enforced			Insufficient regulatory oversight over DISCOs' performance and associated investments.	DLR #1.1: NERC approves PIP for 2020-24 for each DISCO.	DLR #1.2: NERC issues semi-annual monitoring reports on each DISCO's achievement of the outputs set out in its approved PIPs for 2020 and, if there are deviations, undertakes actions in accordance with the Electric Power Sector Reform Act 2004 and applicable regulations.	DLR #1.3: NERC issues semi-annual monitoring reports on each DISCO's achievement of the outputs set out in its approved PIPs for 2021 and, if there are deviations, undertakes actions in accordance with the Electric Power Sector Reform Act 2004 and applicable regulations.	DLR #1.4: NERC issues semi-annual monitoring reports on each DISCO's achievement of the outputs set out in its approved PIPs for 2022 and, if there are deviations, undertakes actions in accordance with the Electric Power Sector Reform Act 2004 and applicable regulations.
Allocated amount:	US$135 million	18%		US$33 million	US$34 million	US$34 million	US$34 million
Scalability				Yes (US$3 million for each DISCO)	No	No	No

	Total Allocated Amount	***As % of Total Financing Amount***	***Baseline (as of May 1, 2019)***	***Prior Results (since May 1, 2019)***	***Indicative timeline for DLI achievement***		
					2020	***2021***	***2022***
DLI #2 Business continuity arrangements are implemented for DISCOs			Lack of framework to define how interim management of DISCOs will be established for DISCOs' whose licenses are subject to NERC intervention.	DLR #2.1: BPE establishes lists of qualified experts to assume the transitory management of DISCO(s) in the event of license intervention in 2020, by July 1, 2020.	DLR #2.2: BPE appoints and NERC approves transitory management and ensures takeover of operations of DISCO(s) subject to license intervention in 2020, or, in the absence of the need for license intervention, BPE updates the list of qualified experts that would assume transitory management of DISCOs in the event of license intervention in the future years, by January 1, 2021.		
Allocated amount:	US$30 million	4%		US$20 million	US$10 million		
Scalability				No	No		

	Total Allocated Amount	***As % of Total Financing Amount***	***Baseline (as of May 1, 2019)***	***Prior Results (since May 1, 2019)***	***Indicative timeline for DLI achievement***		
					2020	***2021***	***2022***
DLI 3: End-user electricity tariffs are adjusted consistent with the PSRP Financing Plan, including its measures for protection of the poor			End-user tariffs do not recover the full revenue requirement of the sector.	DLR #3.1: NERC issues (i) MYTO for each DISCO adjusting end-user electricity tariffs effective in 2020 consistent with the 2020 PSRP Financing Plan while maintaining the tariff for the first residential consumption block (households consuming less than 50kWhs per month) unchanged; and (ii) order to cap the billing for the unmetered customers to be effective April 1, 2020.		DLR #3.2: NERC issues MYTO for each DISCO adjusting end-user electricity tariffs effective in 2021 consistent with the 2021 PSRP Financing Plan including its measures for protection of the poor.	DLR #3.3: NERC issues MYTO for each DISCO adjusting end-user electricity tariffs effective in 2022 consistent with the 2022 PSRP Financing Plan including its measures for protection of the poor.
Allocated amount:	US$95 million	13%		US$35 million		US$30 million	US$30 million
Scalability				No		No	No

	Total Allocated Amount	*As % of Total Financing Amount*	*Baseline (as of May 1, 2019)*	*Prior Results (since May 1, 2019)*	*Indicative timeline for DLI achievement*		
					2020	***2021***	***2022***
DLI #4 **Payment discipline is enforced on DISCOs to reduce non-tariff shortfalls**			DISCOs are being billed for tariff shortfalls and payment discipline is not enforced on DISCOs for their lack of payment to NBET and MO/TCN.	DLR #4.1: (i) NERC issues MYTO for each DISCO defining the Minimum Remittance Threshold effective July 1, 2020; (ii) NERC determines 2015-19 historical tariff shortfalls for each DISCO and FMBNP approves a mechanism to remove historical tariff shortfalls and associated interest from DISCOs' books; and iii) NERC issues an Order to ensure that no new tariff shortfalls accrue in the financial records of DISCOs from 2020 and onwards.	DLR #4.2: At least 80 percent of the DISCOs' aggregate Q1-Q3, 2020 Minimum Payment Amount is paid to NBET and to TCN by January 1, 2021; or, if such payments are below 80 percent, there is evidence of either activation of DISCOs' payment guarantees by NBET, or action by NERC in accordance with the Electric Power Sector Reform Act 2004, by January 1, 2021.	DLR #4.3: At least 85 percent of DISCOs' aggregate Q4, 2020 and Q1-Q3, 2021 Minimum Payment Amount is paid to NBET and to TCN by January 1, 2022; or, if such payments are below 85 percent, there is either evidence of activation of DISCOs' payment guarantees by NBET, or action by NERC in accordance with the Electric Power Sector Reform Act 2004, by January 1, 2022.	DLR #4.4: At least 90 percent of DISCOs' aggregate Q4, 2021 and Q1-Q3, 2022 Minimum Payment Amount is paid to NBET and to TCN by January 1, 2023; or, if such payments are below 90 percent, there is evidence of either activation of DISCOs' payment guarantees, or action by NERC in accordance with the Electric Power Sector Reform Act 2004, by January 1, 2023.
Allocated amount:	US$110 million	15%		US$30 million	US$40 million	US$20 million	US$20 million
Scalability				No	No	No	No

	Total Allocated Amount	*As % of Total Financing Amount*	*Baseline (as of May 1, 2019)*	*Prior Results (since May 1, 2019)*	*Indicative timeline for DLI achievement*		
					2020	***2021***	***2022***
DLI #5: Financial and operational transparency of DISCOs is improved			Insufficient transparency about the financial situation and operational performance of DISCOs	DLR #5.1: NERC publishes on its website or through links to DISCOs' websites: (i) 2017 and 2018 IFRS compliant financial statements of DISCOs; and (ii) key operational and financial data of 2019 by September 30, 2020.	DLR #5.2: NERC publishes on its website or through links to DISCOs' websites: (i) 2019 IFRS compliant financial statements of DISCOs; and (ii) key operational and financial data of Q1-Q3, 2020 on a quarterly basis, by December 31, 2020.	DLR #5.3: NERC publishes on its website or through links to DISCOs' websites: (i) 2020 IFRS compliant financial statements of DISCOs; and (ii) key operational and financial data of Q4 2020 and Q1-Q3 2021 on a quarterly basis, by December 31, 2021.	DLR #5.4: NERC publishes on its website or through links to DISCOs' websites: (i) 2021 IFRS compliant financial statements of DISCOs; and (ii) key operational and financial data of Q4 2021 and Q1-Q3 2022 on a quarterly basis, by December 31, 2022.
Allocated amount:	US$40 million	5%		US$10 million	US$10 million	US$10 million	US$10 million
Scalability				US$0.5 million for publication of (i) for each DISCO and US$4.5 million for publication of (ii)	US$ 0.5 million for publication of (i) for each DISCO and US$4.5 million for publication of (ii)	US$0.5 million for publication of (i) for each DISCO and US$4.5 million for publication of (ii)	US$0.5 million for publication of (i) for each DISCO and US$4.5 million for publication of (ii)
Total Financing Allocated:	**US$730 million (US$700 million if only basic targets are met for Global DLI2)**	**100%**		**US$178 million**	**US$244 million (US$234 million if only basic target is met for Global DLI 2)**	**US$154 million (US$144 million if only basic target is met for Global DLI 2)**	**US$154 million (US$144 million if only basic target is met for Global DLI 2)**

DLI Verification Protocol Table

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/agency	**Verification Entity**	**Procedure**
G1	**NERC sets revenue requirement of TCN and DISCOs based on semi-annual MYTO minor reviews and a MYTO extraordinary review**	**G1.1 (i):** Pre-MYTO extraordinary review, NERC will carry out semi-annual minor reviews of the existing MYTO and issue MYTOs to adjust the revenue requirement of TCN and eleven DISCOs. The first minor review will be completed and new MYTOs issued for eleven DISCOs on July 1, 2020, which will: (a) ensure that the allowance for energy purchases reflects the charges specified in the PPAs, energy sales agreements and vesting contracts, including the exchange rates in those agreements/contracts; (b) contain volume of energy sent out assumptions that are consistent with the FGN approved 2020 PSRP Financing Plan; (c) be consistent with the total 2020 new tariff shortfall ceiling in the 2020 PSRP Financing Plan approved by the Presidency; and (d) be consistent with any NERC guidance/orders on economic dispatch of generation by the System Operator. **G1.1 (ii):** BPE will issue a notice on its website clarifying that the allowance parameters on operating and capital expenditure and ATC&C losses in the Performance Agreements will end on December 31, 2021. **G1.2:** MYTO Extraordinary Tariff Review will establish a new MYTO for the period of 2021-25 for each DISCO and TCN with the following scope and process to be followed by NERC. **Scope:** (a) review allowance for energy purchases of DISCOs and ensure it reflects the charges specified in the PPAs, energy sales agreements and vesting contracts, including the exchange rate in those agreements/contracts; (b) incorporate the approved PIPs; (c) redefine DISCOs' allowances for own operating and capital expenditure and ATC&C losses for 2022-25 consistent with the approved PIPs; (d) redefine the portion of DISCOs' and TCN's operating and capital expenditure allowance that are denominated in FX; (e) convert FX-denominated portion of the DISCOs' and TCN's operating and capital expenditure allowances at the NAFEX rate (or the FX rate DISCOs and TCN access FX at) at the beginning of each of	NERC	IVA	Secretariat shares NERC's MYTOs, MYTO model and additional documents necessary to assess if the MYTO methodologies have been adequately applied in determining the revenue requirement of DISCOs and TCN. The IVA verifies that: G1.1: the revenue requirement of DISCOs and TCN is determined consistent with the minor reviews of existing MYTO. G1.2: TCN's and DISCOs' revenue requirements are set and the new MYTOs are issued according to the specified scope and process. G1.3 and G1.4: revenue requirements for TCN and DISCOs are set consistent with the MYTO minor reviews.

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/agency	**Verification Entity**	**Procedure**
		the MYTO semi-annual review periods starting January 1, 2021 and applying that FX rate for the 6-month duration of the MYTO following each review; (e) contain volume of energy sent out assumptions consistent with demand projections in DISCOs' approved PIPs; (f) ensure consistency with the total annual new tariff shortfall ceiling in the updated PSRP Financing Plan(s); and (g) adjust the end-user tariff design. **Process:** (a) review the tariff applications of DISCOs and TCN prepared to incorporate PIPs; (b) prepare draft MYTOs for each DISCO and TCN for 2021-25; (c) disclose NERC's draft MYTOs for each DISCO and TCN and tariff filings prepared by each DISCO and TCN; (d) conduct a public consultation process (including at least one public hearing) for each DISCO and TCN; (e) finalize and approve the new MYTOs for each DISCO and TCN; and (f) prepare and disclose written responses to comments received during the hearings. **G1.3 and G1.4:** Post- MYTO Extraordinary Review, NERC will carry out semi-annual MYTO Minor Reviews and, when applicable, adjust TCN and DISCO Revenue Requirements by issuing MYTOs for TCN and DISCOs. The minor reviews will: (a) ensure that the cost of energy reflects the charges specified in the PPAs, energy sales agreements and vesting contracts, including the exchange rates in those agreements/contracts; (b) convert FX-denominated portion of the DISCOs' and TCN's operating and capital expenditure allowances at the NAFEX rate (or the FX rate DISCOs and TCN access FX at) at the beginning of each of the MYTO semi-annual review periods starting January 1, 2021 and applying that FX rate for the 6-month duration of the MYTO following each review; (c) contain volume of energy sent out assumptions that are consistent with demand projections in DISCOs' approved PIPs; (d) be consistent with the total annual new tariff shortfall ceiling(s) in the updated FMFBNP issued PSRP Financing Plan(s).			

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/agency	**Verification Entity**	**Procedure**
G2	**A credible and fiscally sustainable PSRP Financing Plan is approved and executed to fully cover tariff shortfalls**	**G2.1 (i)-G2.4 (i):** The following will be required: **Process for updating the PSRP Financing Plan:** On an annual basis, FMFBNP will formally issue an updated PSRP Financing Plan to the Presidency, MoP, NERC, NBET and the PSRP Oversight Committee and Technical Committee specifying the new annual tariff shortfall ceilings and the uses of funds and sources of funds going forward. The first year of the Plan is considered binding, the second year onwards of the Plan will be indicative. The first updated PSRP Financing Plan will be the 2021 PSRP Financing Plan, covering the years 2021-2027. **Scope of the PSRP Financing Plan** will include: (a) the uses of funds containing the estimate of the funding requirements to fully cover the new annual tariff shortfalls from 2020 until cost recovery is achieved, the settlement of historical tariff shortfall arrears (2015-2019), the debt service payments of the CBN PAF, and a limited amount of contingency funds to cover minimum remittances due from DISCOs that have license interventions; (b) the sources of funds; (c) analysis of fiscal costs; and (d) a set of risk scenarios together with mitigation measures. For the updated PSRP Financing Plans, new tariff shortfalls for the first year covered by that Plan will include: (i) the actual tariff shortfalls incurred in the previous year that were not yet funded/settled; and (ii) the new tariff shortfalls estimated for the first year. **The PSRP Financing Plan(s) would need to meet the following criteria**: (a) credible and realistic by being consistent with the MYTO effective on January 1 of the first year of the Plan; (b) complete so that there are no financing gaps for the whole period and for every year i.e. sources of funds are equal or higher to the uses of funds and no new tariff shortfall arrears are planned to be accumulated; (c) fiscally affordable and sustainable by limiting the uses of funds to tariff shortfalls, having a clear path to eliminating tariff shortfalls (cost	FMFBNP, NBET and PSRP Secretariat	IVA/ Independen t auditor	Secretariat shares a copy of the approved/issued PSRP Financing Plan and its updates together with the Excel file. Secretariat submits a report on the execution of the Financing Plan with supporting documentation on the actual sources of funds received and actual uses of funds made. The IVA verifies: (i) the scope of the Financing Plan; (ii) the adherence of Financing Plan to the specified principles; and (iii) the extent to which new tariff shortfalls are covered through financing sources other than CBN financing, once the CBN PAF expansion is depleted.

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/agency	Verification Entity	Procedure
		recovery), having the size of the direct FGN budgetary allocation consistent with the Medium-term Expenditure Framework (MTEF) and annual FGN budgets, and replacing CBN PAF financing with other sources of financing once the CBN PAF expansion is depleted; and (d) socially sustainable by describing the measures to mitigate the impact of tariff adjustments on poor households. **G2.2 (ii) – G2.4 (ii)**: The PSRP Financing Plan will need to be annually executed, i.e. at least 80 percent of the new tariff shortfalls identified in the Plan for the first year covered by the Plan will be funded through deposits in NBET's PSRP Program Account from sources of funds that exclude CBN financing beyond the current PAF expansion.			
1	**Implementation of approved PIPs (PIPs) of DISCOs is enforced**	**1.1:** NERC will approve PIP for each of the eleven DISCOs consistent with its Guideline for the Preparation of PIPs by DISCOs. **1.2-1.4:** Through special audits, NERC will monitor each DISCO's achievement of outputs of its approved PIP and issue semi-annual reports; in cases of deviations of the outputs from the approved PIP, undertake actions in accordance with the Electric Power Sector Reform Act 2004 and applicable regulations.	NERC	IVA	Secretariat will share the links to NERC's website that include semi-annual audit reports on NERC monitoring of DISCOs' achievement of outputs consistent with the approved PIPs and evidence of NERC's actions in accordance with the Electric Power Sector Reform Act 2004 and applicable regulations in cases of deviations. The IVA prepares a report on the adequacy of NERC's monitoring and enforcement.
2	**Business continuity arrangements are implemented for DISCOs**	**2.1:** BPE establishes and NERC approves lists of qualified experts on the basis of clearly specified job descriptions and minimum qualification requirements for the following positions: DG, Director of Operations, Commercial Director, Director of Planning, Director of Finances, and Director of Administration. **2.2:** In the event of NERC license intervention, management of operations of the DISCO is handed over to a transitory management	BPE and NERC	IVA	2.1 Secretariat will share the job descriptions, qualification requirements, and lists of qualified experts and BPE appointment and NERC approval documents. The IVA will verify that the list of qualified experts is

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/agency	**Verification Entity**	**Procedure**
		team appointed by BPE and approved by NERC. In the absence of NERC license interventions; BPE will update and NERC will approve an updated list of qualified experts on the basis of clearly specified job descriptions and minimum qualification requirements for the following positions: DG, Director of Operations, Commercial Director, Director of Planning, Director of Finances, and Director of Administration.			established consistent with the job description and minimum qualification criteria for each position. 2.2: In the event of license intervention, the IVA will verify that DISCO's management is taken over by the transitory management team. In the absence of license intervention, the IVA verification will be similar to 2.1
3	**End-user electricity tariffs are adjusted consistent with the PSRP Financing Plan, including its parameters measures for protection of the poor**	**3.1 (i):** NERC will issue MYTOs approving adjustments of end-user electricity tariffs effective in CY2020 consistent with the total annual 2020 tariff shortfall ceiling in the FGN approved 2020 PSRP Financing Plan. The adjustment will follow a public consultation process consistent with NERC regulations. The tariff for R1 customers (residential customers who consume below 50 kWh per month) will be kept unchanged in 2020 in accordance with the same Financing Plan. **3.1 (ii):** NERC will issue an order to cap the volume of electricity consumption (kWh) assumed in estimated billing as a temporary measure to protect the unmetered residential consumers. **3.2-3.3:** The updated 2021 and 2022 PSRP Financing Plan(s) will specify the total annual new tariff shortfall ceiling(s) and set of measures, including provisions in tariff structure and rates, for protecting the poor from tariff adjustments. NERC will issue MYTOs approving adjustments of end-user electricity tariffs effective in CY2021 and CY2022 consistent with the total annual new tariff shortfall ceiling(s) and the set of measures for protecting the poor specified in the updated PSRP Financing Plan(s). Each adjustment will follow a public consultation process consistent with NERC regulations.	NERC	IVA	Secretariat shares NERC MYTOs and documents on public consultation/hearing process followed (e.g. meeting minutes, invitations for public hearings, etc.). IVA verifies that tariff adjustments are consistent with the total annual new tariff shortfall ceiling(s) and the set of measures for protecting the poor specified in the updated PSRP Financing Plan(s).

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/agency	**Verification Entity**	**Procedure**
4	**Payment discipline is enforced on DISCOs to reduce non-tariff shortfalls**	**4.1 (i):** NERC will issue eleven MYTOs defining minimum remittance thresholds that each DISCO should pay to NBET. The thresholds will be set to remove new tariff shortfalls from 2020 onwards from DISCOs' payment obligations. **4.1 (ii):** NERC will determine aggregate tariff shortfalls for 2015-19 for each DISCO and the associated interest accrued, and FMFBNP will approve a mechanism that will clear payables to NBET related to 2015-19 historical tariff shortfalls and accrued interest from all eleven DISCOs' books. **4.1 (iii):** NERC will approve an Order to allow DISCOs to retain their revenue requirement as per effective MYTO and remove new tariff shortfalls (from 2020 onwards) from NBET invoices to DISCOs. **4.2-4.4:** A minimum percentage (80 percent in 2020, 85 percent in 2021 and 90 percent in 2022) of the aggregate minimum payment amount due from all DISCOs to NBET and TCN (for Q1-Q3 in 2020, Q4 2020-Q3 2021 in 2021 and Q4 2021-Q3 2022 in 2022) is paid by DISCOs to NBET and TCN by January 1 of the following fiscal year or, in the absence of this, there is evidence of NBET and/or TCN activating payment guarantees and/or NERC undertaking actions in accordance with the Electric Power Sector Reform Act 2004 and applicable regulations.	NERC, NBET, TCN and FMFBNP	IVA	Annually, Secretariat shares documentary evidence of NBET's and TCN's invoices, DISCOs' minimum remittance thresholds, DISCOs' payments made to NBET and TCN, activation of payment guarantees and NERC disciplinary action. The IVA verifies on an annual basis the extent of aggregate invoice amount that DISCOs paid to NBET and TCN by Jan 1 of the following year; if the payment is below target, the IVA verifies if NBET and/or TCN has activated payment guarantees and/or if NERC has undertaken disciplinary action.
5	**Financial and operational transparency of DISCOs is improved**	**5.1 (i)-5.4 (i):** DISCOs will annually publish on their websites their audited financial statements of the preceding year. The financial statements will be prepared in accordance with the IFRS. NERC will include links to the websites of sector companies where financial statements are published. **5.1 (ii)-5.4 (ii):** NERC will quarterly publish key operational and financial data of the same year that will at a minimum include: (a) energy sent out by each GENCO (in kWh), the resulting invoices to NBET, and NBET payments against these invoices; (b) the electricity delivered to each DISCO (in kWh), the resulting DISCO invoices, and DISCO payment against these invoices; (c) scheduled electricity supply for each DISCO (daily energy curve); and (d) amount of funding	NERC website	IVA	Secretariat shares the relevant link(s) to the websites that disclose the financial and operational information. IVA verifies that the information is disclosed in accordance with the description.

#	DLI	Definition/ Description of achievement	Protocol to evaluate achievement of the DLI and data/result verification		
			Data source/agency	Verification Entity	Procedure
		disbursed from all sources of the Financing Plan to cover the tariff shortfall of the sector. (a) and (b) will be published on NERC's website; (c) will be published on each DISCO's website; and (d) will be published on NBET's website. NERC will provide links on its website to sites where (c) and (d) are published. The links to (a-d) should also be available on mypower.ng website.			

Annex 4: Technical Assessment

A. Program Strategic Relevance

1. **Nigeria faces a power sector crisis both in terms of service delivery and the financial situation of the sector.** The sector has accumulated a sizable financial deficit, the 2017-2019 tariff shortfall alone amounted to ₦1,249 billion (US$4,095 million). This level of financial distress has paralyzed the sector and decreased the quality of service delivery. The limited power output, which has been largely less than 4,500 MW (the very minimum level necessary to prevent system collapse) in the last three years has resulted in sizable economic costs. As an example, the decline in power output from a peak of over 5 GW in March 2016 to less than 3.5 GW in early 2017 contributed to the contraction of economic activity by an estimated 1.5 percent in that year alone. Unreliable and poor quality of power supply has been consistently rated as a major constraint to doing business in the country (source: Nigeria World Bank Enterprise Survey), particularly for younger firms, exporters, and manufacturers. These institutions are the drivers of the growth of the non-oil and service industries, which are key to economic recovery.

2. **To address the crisis, the FGN prepared the PSRP, anchored in the national ERGP.** The Federal Economic Council approved the PSRP in March 2017. The PSRP consists of a series of policy, governance, operational and regulatory actions with the objectives of (i) restoring the financial viability of the power sector; (ii) improving power supply reliability to meet growing demand; (iii) strengthening sector governance and transparency; (iv) implementing clear policies that promote and encourage investor confidence in the sector; and (v) establishing a contract-based electricity market. Critical to achieving these goals is the FGN's financial support in covering the difference between the revenue requirement of the sector and the tariff revenue. Such support is necessary to break the vicious cycle of poor financial viability, inability to enforce contracts and regulations and poor service delivery, which impact consumers' willingness to pay higher tariffs and make the immediate adjustment of tariff difficult.

B. Technical Soundness

3. **Extensive analytical work underpins the design of the PSRP.** This includes review of the power sector institutional and regulatory framework; analysis of gas and transmission infrastructure gaps; financial analysis of the power sector and sector companies; financial modeling of power sector companies to simulate historic and future cash flows and accumulated debts of the sector under different tariff adjustment scenarios; legal review of the status of the key sector contracts and agreements; macroeconomic and fiscal space analysis. The important conclusions and recommendations of these analyses that informed the design of the PSRP include:

- The power sector is financially stressed due to high system losses of DISCOs, inadequate recovery of sector costs through tariffs, and low electricity volumes resulting from gas and distribution constraints. The deteriorating payment performance of the DISCOs has affected the financial viability of the entire supply chain.
- The power sector institutional and regulatory framework is comprehensive and in accordance to international good practices, but there has been little enforcement. Full enforcement may be difficult, given that current conditions considerably diverge from the conditions assumed in the key contracts and regulations.
- The main constraints for power evacuation and end-consumer delivery are bottlenecks in distribution followed by transmission constraints, and disruptions in the gas supply. Generation capacity is not a constraint; rather, the generation assets risk becoming increasingly stranded if these constraints, particularly in the distribution segment, are not addressed.

- The macroeconomic situation remains challenging, and the fiscal space is constrained. Hence, careful dimensioning and funding of the tariff shortfall of the sector is essential. Additionally, there is potential for contingent liability shock. To that end, contingent liabilities generated from the power sector should be carefully monitored and managed.

4. **In addition to the strong analytical underpinning, the preparation and initial implementation of PSRP has exhibited several other strengths.** Specifically:

- The PSRP has been prepared in close consultation with the WBG and other development partners, benefiting from lessons learned worldwide. It places a strong emphasis on stakeholder engagement, in particular the private sector, and public communication to generate consensus-building and acceptance of reforms.
- Based on the lessons learned from the past privatizations (see Box 1-1), the PSRP is focused on strengthening governance and the institutional framework to ensure that mechanisms to improve performance and efficiency in the power sector are fully enforced.
- In contrast to earlier Government strategies, the PSRP does not involve ambitious investment goals, but is rather focused on resetting market conditions to ensure efficient power system operation and to attract private investment.
- Overcoming earlier reluctance, the PSRP embraces the role of the Government in a privatized power market, including the role of public funding in meeting the revenue requirement of the privatized companies until tariffs are adjusted (in parallel with efficiency improvements of the sector) to eventually converge with the required revenue.
- The PSRP envisages a concerted effort by the Government to implement a comprehensive reform plan. To facilitate this, the PSRSP includes a detailed action plan with clear accountabilities identified for all sector agencies.

5. **The new Government, established after 2019 presidential elections, has demonstrated a strong commitment to implementing the critical actions of the PSRP, as evidenced by the recent implementation progress.** The Office of the President together with the Minister of Finance, Budget and National Planning and the Minister of Power carries out strategic oversight of the PSRP. Such high-level oversight and commitment have resulted in significant implementation progress in the last six months. Important achievements include:

- Establishing an Accountability Framework for the CBN PAF expansion that makes the CBN funding to the sector conditional upon the implementation of several critical actions of the PSRP.
- Issuing a Guideline for preparation of PIPs by DISCOs and submission of PIPs by ten of eleven DISCOs.
- Developing a Financing Plan for 2020-2027, which dimensions the financing needs at ₦2,527 billion (US$6,477 million) and has identified financing sources to fund these needs. The key policy decisions underpinning the Financing Plan have been approved by the FGN to ensure that the Financing Plan assumptions are credible and realistic. The FGN budgetary contribution for 2020 envisaged in the Financing Plan is included in the 2020 FGN budget approved by the National Assembly (NASS).
- Launching the process of MYTO extraordinary review that should be implemented in 2020 while clarifying through a publicly disclosed communique that the performance parameters in DISCOs' Performance Agreements will end by December 31, 2021.
- Explicitly recognizing that tariff shortfalls are not the payment obligation of DISCOs by approving minimum remittance shortfalls and enforcing DISCOs' payment discipline on that basis.

6. **The main shortcoming of the PSRP is the lack of details on some of the implementation mechanisms and the lack of results framework to track implementation progress.** Specifically, the

following six areas must be further detailed and strengthened: (i) determination of the revenue requirement of the sector; (ii) Financing Plan establishment and updates; (iii) DISCOs' turnaround plan; (iv) tariff adjustment; (v) stakeholder engagement and communication; and (vi) governance arrangements for the effective oversight of the PSRP.

Revenue requirement of the sector

7. **The FGN has assumed a commitment in the PSRP to promote the financial sustainability of the power sector.** To that end, the FGN and NERC have committed to set the revenue requirement of the sector companies based on consistent implementation of the MYTO.

8. **The PSRP does not elaborate on how the revenue requirement for sector companies will be determined.** The efficient revenue requirement of the sector is determined by NERC based on an (overall robust) incentive-based tariff regulation: the MYTO. The key assumptions and parameters of the current MYTO, which are based on Performance Agreements signed at the time of DISCOs' privatization, substantially diverge from the present realities of the power sector. This hinders the fulfillment and/or enforcement of regulatory commitments of DISCOs and undermines the dialogue between the sector companies, NERC and BPE regarding the way forward. The PSRP does not elaborate on how the revenue requirement of the sector should be determined, given these challenges.

9. **To address the above gaps, the Program supports a sector Reset together with the FGN clarification and commitment to end the targets of the Performance Agreements without further extension.** The implementation of the MYTO Extraordinary Review will clearly de-link the power sector conditions of the past from the conditions of the future. The targets in Performance Agreements of DISCOs will need to end without further extension on December 31, 2021 to allow defining new performance parameters for the sector. The MYTO Extraordinary Review will reset the revenue requirement of DISCOs based on approved PIPs and define new performance parameters from January 2022 when the targets of the Performance Agreements will have ended. The MYTO Extraordinary Review will also involve adjustments in the pass-through of GENCOs' costs, consistent with their contractual arrangements, and adjustments in the revenue requirement of TCN. The customer tariff structure will also be redefined to allow for full recovery of both fixed and variable costs in the electricity supply chain.

Financing Plan establishment and updates

10. **The 2020 PSRP Financing Plan (as detailed in Annex 1) aims to restore financial viability to the sector while reducing the fiscal burden on the FGN.** The Financing Plan uses credible and realistic macro and sectoral assumptions, consistent with the effective MYTOs[40]. The use of funds in the Financing Plan is limited to those related to tariff shortfalls (new and historical)[41]. Ensuring that tariff shortfalls are funded is critical for ensuring fuel (gas) supply and for maintaining the infrastructure throughout the supply chain, which, in turn, is necessary for improving reliability of electricity supply. The Financing Plan reduces the annual fiscal burden on the FGN of these tariff shortfalls by having a clear path to reach cost recovery by 2022 (when there are no more new tariff shortfalls) and improves fiscal and debt sustainability.

[40] As the Financing Plan will be updated annually - by the end of the year to be effective start of the following year – it will be consistent with the MYTO review, effective 1 January, but not necessarily consistent with MYTO reviews in-year, although there will be coordination between the MYTO reviews in-year with the prevailing Financing Plan through the PSRP finance technical committee.

[41] PAF was used to complement DISCOs' remittances to NBET and ensure 80 percent payment to GENCOs in 2017 and 2018. NERC has dimensioned historical tariff shortfalls for each DISCO in its July 2019 MYTO minor review and clarified that DISCOs remain liable for under-payments to NBET that are above the historical tariff shortfalls. Hence, PAF payments have been accounted for historical tariff shortfalls only while historical non-tariff shortfalls remain DISCOs' payment obligation.

11. **Successful implementation of the PSRP Financing Plan will also contribute to reducing the level of quasi-fiscal activities of CBN by replacing CBN PAF financing with more sustainable sources of funds from 2020 onwards.** The CBN operates several schemes of directed and subsidized lending and is active in the commercial space through ownership of local development financing institutions. It has also provided substantial financing of Government budget deficits in recent years and holds large amounts of Government debt. The World Bank and the IMF have been critical of CBN's quasi-fiscal financing and direct lending to the FGN since they impact negatively on financial sector development and interfere with the CBN's mandate of ensuring price stability. The CBN PAF was established in 2017 with an initial amount of ₦702 billion in February 2017 to provide immediate liquidity to the power sector in response to the shutdown of GENCOs in the eastern network as a result of non-payment throughout the power supply value chain - from DISCOs to NBET, from NBET to GENCOs and from GENCOs to gas suppliers. The CBN PAF was meant to be an interim/ bridge financing the FGN[42] until more sustainable source of financing could be secured. Due to the delays in PRSP implementation and lack of alternative financing materializing, including the World Bank PSRO which had originally been planned to become effective by the end of 2018, the FGN approved in May 2019 an expansion of the PAF of up to ₦600 billion. Both FMFBNP and CBN are committed to not extending the CBN PAF beyond its currently agreed terms and amount (₦1,301 billion in total). The Financing Plan identifies other sources of funds, including this operation, to take over once the current PAF is depleted (projected by mid-2020). The Program's support for the implementation of the PSRP and the Financing Plan is not an endorsement of the CBN's quasi-fiscal activities, rather the successful implementation of the PSRP (including the Financing Plan) and the Program is critical to FGN's plan to end its dependence on CBN financing for the sector.

12. **There are many sources of risks to the PSRP Financing Plan that could result in new tariff shortfalls for the year being higher than estimated and significant non-tariff shortfalls.** Beyond COVID-19 risks in 2020 described in Box 1, there are ongoing risks as described in Annex 1, if there is a devaluation or depreciation of the FX rate, volumetric shock (lower volumes of energy generated and supplied to the customers), and failure by DISCOs to achieve the allowable ATC&C losses in the MYTO, tariff shortfalls or the need for contingency funds would be higher than currently dimensioned in the Financing Plan. The FGN will need to proactively take measures to mitigate the risks and impact. While the FX rate is not controlled by the sector, ensuring that FX-denominated sources of funds, including the PSRO, is converted at NAFEX will provide a natural (even if partial) hedge in the event of FX depreciation[43]. Critical PSRP actions should reduce the risk of the volumetric shock materializing given that the current assumption of 5 percent annual increase is already deliberately conservative. In the event that the FX rate depreciates or there is a volumetric shock and tariff shortfalls increase, the FGN will have to take the following actions (one or combination): (i) increase allowed tariffs, (ii) delay settlement of historical tariff shortfalls; and (iii) identify additional sources of funds. To reduce the risk of high non-tariff shortfalls resulting in the need for much higher contingency funds, implementing critical PSRP actions to increase the operational efficiency of DISCOs is important. These include the following: (i) starting immediately stronger enforcement of payment discipline of DISCOs by NERC/NBET; (ii) approval and implementation of DISCOs' performance improvement plans (PIPs); (iii) establishing business continuity arrangements in case of

[42] With NBET the Borrower and FMFBNP being the guarantor. In effect the FMFBNP is the Borrower as all debt service payments are to be made by FMFBNP.

[43] Currently the MYTO is not underpinned by one single exchange rate as it reflects the different contractual arrangements in the sector, including the prevailing PPAs of GENCOs, with most but not all PPAs referenced to the CBN official rate. The DISCOs opex and capex allowances is also currently converted using the CBN official rate, although this is not stipulated as part of their performance agreements. The Program supports movement to the use of NAFEX to convert DISCOs opex and capex allowances from Jan 2021 onwards.

license intervention with DISCOs that continue to underperform. However, the risk that uses of funds - in particular new actual tariff shortfalls - being higher than estimated for the year remain high.

13. **Together with the limited flexibility to increase the sources of funds available for the year, there could be unfunded new tariff shortfalls** even with concerted effort to implement the PSRP Financing Plan. Therefore, the PSRO should incentivize the full implementation of the PSRP Financing Plan while providing some flexibility by requiring the estimated amount of new tariff shortfalls to be funded on-time (no arrears) but also allowing the unfunded part of actual new tariff shortfalls to be rolled over and funded next year.

14. **The Financing Plan will need to be updated regularly to be consistent with the effective MYTO and reflect changes in key parameters to remain credible and fiscally sustainable.** The Financing Plan will need to be regularly monitored and updated formally at least once a year by the Technical Committee with the support of the PSRP Secretariat. The Minister of Finance should approve the updated Financing Plan and issue the Plan to NERC and other sector agencies setting the ceiling for new tariff shortfalls to guide tariff adjustments, and laying out the uses of funds and sources of funds for the first year of the Plan (later years are treated as indicative). The annual updating of the PSRP Financing Plan – which will be a requirement for achieving Global DLI 2 - will be an important mechanism in ensuring that the Plan adjusts to risks materializing so that it remains credible, fiscally sustainable and fully funded. There should be a continuous strong coordination with NERC to ensure that the PSRP Financing Plan and MYTO Minor Reviews are consistent with each other as much as possible.

15. **The impact from the implementation of the PSRP and Financing Plan on fiscal and debt sustainability is expected to be positive, relative to a no-reform scenario.** Nigeria's total public debt stock at the end of 2019 is estimated at 23.7 percent of GDP (with FGN debt accounting for 19.7 percent of GDP). However, gross financing needs are sizeable (with FGN gross borrowing at 8.2 percent of GDP in 2019) and the FGN interest payments to revenue ratio is extremely high, due to the very low levels of Government revenues (rather than from the size of the debt stock itself). Table 4-1 shows the estimated impact of the critical PSRP and 2020 Financing Plan implementation (the PSRP reform scenario) on the FGN expenditure, gross borrowing and debt stock, relative to a no-PSRP reform scenario over the period 2020-2023. Under the PSRP reform scenario, the 2020 Financing Plan is implemented with tariff adjustments reducing the size of the tariff shortfalls and cost recovery being reached in 2022. World Bank concessional financing is also realized as critical PSRP actions are taken. Under a no-PSRP reform scenario, there are no tariff adjustments in the 2020-2023 period, so tariff shortfalls continue to rise. World Bank financing is also not realized as critical PSRP actions are not taken; the FGN has to fund shortfalls through general budget deficit financing (higher cost, shorter maturity). The PSRP reform scenario reduces the annual fiscal expenditure and gross financing needs relative to the no-PSRP reform scenario by 0.5 percent of GDP by 2022. The projected FGN debt stock at end of 2023 is 1.5 percent of GDP lower in the PSRP reform scenario than in the no-PSRP reform scenario. The estimated impact in this simulation does not include the positive impact that the PSRP should have on economic growth. Higher GDP growth will improve debt sustainability.

Table 4-1: Fiscal and Debt Sustainability Analysis

Fiscal and Debt Sustainability Analysis	2017	2018	2019	2020	2021	2022	2023
	All figures shown as share of GDP						
PSRP Reform Scenario/Implementation of Financing Plan							
Annual Fiscal Expenditure from power tariff subsidy	0.1	0.4	0.4	0.3	0.1	0.1	0.1
Annual Gross Financing from power tariff subsidy	0.1	0.4	0.4	0.3	0.2	0.2	0.2
Total Debt from power tariff subsidy (cumulative)	0.1	0.5	0.8	1.0	1.1	1.0	1.0
No PSRP-Reform Scenario/No Implementation of Financing Plan							
Annual Fiscal Expenditure from power tariff subsidy	0.1	0.4	0.4	0.4	0.6	0.6	0.6
Annual Gross Financing from power tariff subsidy	0.1	0.4	0.4	0.4	0.6	0.7	0.7
Total Debt from power tariff subsidy (cumulative)	0.1	0.5	0.8	1.2	1.6	2.1	2.5
Federal Government Fiscal and Debt Indicators							
Annual Fiscal Expenditure under the PSRP REFORM SCENARIO	5.7	6.3	6.8	5.7	5.8	5.9	5.6
Annual Fiscal Expenditure under the NO PSRP REFORM SCENARIO	5.7	6.3	6.8	5.8	6.2	6.4	6.1
Annual Gross Financing under the PSRP REFORM SCENARIO	6.6	6.5	8.2	11.2	13.2	15.6	17.1
Annual Gross Financing under the NO PSRP REFORM SCENARIO	6.6	6.5	8.2	11.4	13.6	16.1	17.7
Debt Stock under the PSRP REFORM SCENARIO	14.8	16.8	19.7	23.3	25.6	27.3	28.7
Debt Stock under the NO PSRP REFORM SCENARIO	14.8	16.8	19.7	23.5	26.2	28.3	30.2

Distribution turnaround

16. **The viability of the distribution segment is key for the sustainability of the power sector.** Since privatization, the operational and commercial performance of DISCOs has been poor. Despite inconsistent implementation of MYTO, DISCOs have been historically billed for tariff shortfalls accumulating large arrears to NBET with resulting deteriorating balance sheets and negative equity values for many DISCOs. Their poor performance has affected the financial viability of the entire value chain and been particularly detrimental to GENCOs. ATC&C losses in distribution were reported to be 41 percent in 2018. DISCOs have not made any significant investments to reduce losses and improve service delivery, and their remittances to NBET and TCN have been low.

17. **Since June 2017, DISCOs have started taking less energy than the available generation.** Unutilized generation due to load rejection (Box 4-1) is occurring on a continuous basis and at a scale of greater than 2,000 MW, limiting the average daily electricity sent out by power plants to less than 4,000 MWh/hour, and resulting in system collapses and poor service delivery.

Box 4-1: DISCOs' Load Rejection

DISCOs have started taking less energy than the available generation. Unutilized generation due to load rejection is occurring on a continuous basis (24/7) and at a scale of above 2,000 MW, as compared to approximately 3,500 MWh/hour average electricity sent out off the power plants.

Load rejection causes high frequency in the grid system (the standard frequency is 50 Hz with allowed variation of $\pm$0.25 Hz under normal operation and $\pm$1.25 Hz under transient disturbed conditions) and forces generators to shut down and/or to reduce their output to balance the load and maintain system stability.

Since July 2017, high frequency constraint (caused by DISCOs' load rejections) has been a persistent constraint, which often surpassed gas constraint. Widespread and incessant load rejections jeopardize the security of the grid supply system and result in increasing numbers of stranded generation assets.

The causes of load rejection are multiple: (i) lack of investment in the distribution networks; (ii) congestion at the transmission and distribution interface, which does not allow differentiated demand growth to be met (e.g. DISCOs request to increase electricity supply to selective feeders where the revenue is higher); and (iii) DISCOs' disconnection of feeders where the collection losses are high.

The system operating data suggests that generation is not the binding constraint at present. The system peak capacity could reach as high as 6,300 MW, should there be no major constraints in distribution networks in delivering electricity to the end users, and to a lesser extent, in the

18. **The PSRP does not elaborate a detailed plan for DISCO turnaround.** The PSRP adequately acknowledges and identifies the issues in the distribution sector but does not include a roadmap to address them. Also, not all eleven DISCOs may be able to turn-around their performance and may require further reorganization and re-privatization. The PSRP does not elaborate on how business continuity arrangements would be put in place for these DISCOs to ensure without disrupting electricity supply to consumers.

19. **To address the above shortcomings, the Program supports implementation of PIPs, strengthening of business continuity arrangements for DISCOs, and clearance of historical and new tariff shortfalls from DISCOs' books.** The planning and execution of PIPs, together with tighter regulatory oversight, will ensure incentives for improving performance of DISCOs. To that end, NERC has issued a detailed Guideline to DISCOs for the preparation of PIPs. The Guideline mandates that DISCOs' PIPs should focus on key factors negatively affecting its performance, such as lack of metering, high non-technical losses, poor collections, inexistence of reliable databases (customers and networks), and dilapidated condition of distribution network infrastructure. Once approved by NERC, the funding requirement of the PIPs will be part of the revenue requirement of DISCOs. NERC will exercise tight monitoring over DISCOs' implementation of the PIPs. In addition, the Program will support well-defined business continuity arrangements for DISCOs to ensure that qualified transitory management would be appointed expeditiously to ensure uninterrupted electricity supply to consumers. Finally, the Program supports actions that will remove historical tariff shortfalls from DISCOs books while ensuring that they do not accumulate payables for new tariff shortfalls.

Tariff adjustment and protection of the poor

20. **PSRP recognizes the need for end-user tariff adjustment**. One of the key objectives of the PSRP is to achieve financial self-sustainability of the sector through a combination of cost reduction and revenue increase measures. The latter involves increase in average end-user tariffs together with increase in billed electricity as the distribution constraints are addressed and losses reduce.

21. **PSRP does not define a tariff adjustment policy and measures to protect the poor**. PSRP does not clarify the tariff policy and end-user tariff adjustment trajectory pre- and post- Reset. It also does not define the measures that would need to accompany tariff adjustments to ensure that a basic level of electricity consumption remains affordable for the poor households.

22. **The Program addresses this shortcoming through the annual approval of the PSRP Financing Plan and design and implementation of mitigation measures for the poor households**. Annual FGN approval of the Financing Plan will include approval of financing envelope for new tariff shortfalls for the subsequent year, which will provide a framework for NERC on tariff adjustments. In addition, a lifeline (affordable) tariff will be maintained for the first consumption block of households (consumption of less than 50kWh per month). However, only metered households can take advantage of the low lifeline tariffs. Therefore, in the short term, NERC will also adopt an order that will cap the volume of estimated electricity bills for unmetered households, which generally are poorer than metered households.

Stakeholder engagement and communication

23. **The PSRP acknowledges the importance of engagement with key stakeholders and communication with the public for ensuring buy-in and the sustainability of the PSRP.** To that end, the PSRP delineates and maps the stakeholder groups that should be involved in the engagement. The multi-faceted stakeholder landscape identified in the PSRP includes the Government, MDAs, the NASS, private sector operators, the organized private sector, investors, civil society organizations, national and international media and the public. The PSRP also envisages M&E measures to assess the communications impact and effectiveness on the target audience. The M&E activities include public consultations, focus groups, and surveys to determine stakeholder perceptions; media monitoring; and the establishment of a public website, among other outreach activities.

24. **To enhance the effectiveness of stakeholder engagement and communication efforts, the PSRO will support messaging consistency and feedback mechanisms.** Key sector agencies, including NERC, BPE, and NBET, routinely engage with sector companies and other sector stakeholders. This engagement is not well-coordinated, leading to confusion and miscommunication regarding the PSRP. Additionally, the PSRP does not involve feedback mechanisms, which are essential for effective stakeholder engagement. The Program will involve: (i) development of a draft common script about the PSRP for key stakeholders to ensure consistent messaging about technical issues, and agreement with the key MDAs (NERC, BPE, NBET) on a final approved version; (ii) engagement between the PSRP Secretariat and key MDAs in a series of meetings with relevant stakeholders (DISCOs, GENCOs, NASS, judiciary, media and civil society groups) to convey the messages agreed in the common script and to seek their feedback; and (iii) ongoing consultations by NERC throughout the implementation of the Program, with particular focus on the Reset and end-user tariff adjustments.

Governance arrangements

25. **The PSRP includes a suite of measures to strengthen the governance, transparency and accountability of the power sector and sector companies.** Specifically, the PSRP articulates three principle measures: (i) improving the corporate governance of sector agencies; (ii) fostering sector transparency and accountability through regular disclosure of operational and financial information; and (iii) establishment of a dedicated PSRP Secretariat to carry out day-to-day monitoring and coordination of the PSRP implementation. In addition, the PSRP acknowledges NERC's central role in a sector dominated by private ownership and the need for its significant capacity building and increased effectiveness.

26. **The PSRO will support the further enhancement and strengthening of the governance measures of the PSRP**. Specific shortcomings and associated enhancements through the Program include:

- The Program will support the overall increased regulatory effectiveness of NERC. To that end, in addition to the targeted support that NERC will receive to implement the DLIs, the TA of the Program will support a regulatory review for NERC to identify overall gaps in its capacity that need to be filled. The TA in later years of the Program will support NERC addressing these gaps. The regulatory assessment will be conducted bi-annually.
- Given the comprehensive package of measures supported by the PSRP and their significant interdependencies, establishment of strong governance and implementation arrangements for implementation oversight is essential. PSRP Finance and Policy Oversight Committee will be established co-chaired by the Minister of Finance, Budget and Planning and the Minister of Power and represented by the heads of the MDAs to oversee the PSRP/PSRO implementation that will report to the Presidency. PSRP Finance Technical Committee chaired by the DG of the BOF and represented by the MDAs will be established to ensure multi-agency coordination of the Financing Plan updates and implementation of regulatory actions. The PSRP Secretariat will be established under the BOF of the FMFBNP to carry out day-to-day monitoring of PSRP implementation and support the Steering Committee and Technical Committee.

C. Program Expenditure Framework

27. **The Program expenditure framework is the total use of funds in the FGN-approved 2020 PSRP Financing Plan for the period 2020-2022.** A detailed description of the 2020 Financing Plan is in Annex 1. Table 4-2 shows the total use of funds and source of funds for the period 2020-2022. The Financing Plan/Program expenditures will not finance any infrastructure construction. The use of funds allowed are to: (1) fund new tariff shortfalls; (2) clear historical tariff shortfalls, including arrears and debt service payments of PAF, which was used as bridge financing by FMFBNP to fund almost all of the tariff shortfalls during 2017-2020; and (3) provide a limited amount of contingency funding (for non-tariff shortfalls). The new and historical tariff shortfalls are assessed as the difference between the revenue requirement of the sector, determined based on NERC's effective MYTO, and the allowed tariff revenue. The FGN's financing of the tariff shortfalls will supplement DISCOs' remittances to NBET to ensure that GENCOs receive timely settlement of their invoices.[44] A total of US$2,604 billion of financing is required under the Base Case.

28. **The Government has identified financing sources to fund the Program expenditure requirement, with World Bank financing potentially accounting for 45 percent of the financing.** The IDA contribution of US$730 million – the initial financing for the PforR component under this operation – accounts for 28 percent of the total financing. The other funding sources are the remaining funds from the CBN PAF (18 percent) and direct FGN budgetary contribution (38 percent), which is expected to be financed as part of the FGN fiscal deficit. The remaining 17 percent of the financing is still to be secured. In the Financing Plan, the FGN has currently filled the financing gap with additional financing from this operation but are still looking at alternative, credible sources of funds as they are interested in using additional World Bank financing for sector investments. Any additional financing for this operation will be conditional upon satisfactory implementation progress.

[44] DISCOs will recover their revenue requirement through the end-user tariff by retaining their revenue requirement from the tariff and remitting the difference between the tariff revenue and their revenue requirement to NBET. The shortfall between the revenue requirement of the sector and tariff revenue will hence accumulate with NBET and be funded through the Financing Plan.

Table 4-2: Financing Plan Use of Funds 2020-2022/Program Expenditure Framework

Use of Funds /Program Expenditure Framework	₦ Billion	US$ Million**	%
New (2020-2022) tariff shortfalls	440	1,208	46%
Historical (2015-19) tariff shortfalls			
Historical tariff shortfall arrears	79	199	8%
CBN PAF Debt Service Payments	455	1,150	44%
Contingency funds* in the event of NERC's license intervention of DISCOs	19	48	2%
Total Expenditure Requirements	**993**	**2,604**	
Source of Funds 2020-2022	**₦ Billion**	**US$ Million**	**%**
CBN PAF (debt-domestic)	164	456	18%
FGN direct budgetary contribution (debt-mixed)	380	978	38%
IDA PSRO PforR component- initial financing (debt – external)	275	730	28%
IDA PSRO – potential additional financing	174	440	17%
TOTAL	**993**	**2,604**	

*The contingency is intended only in the event of NERC's license intervention of DISCOs; it is equivalent to about 3 months of payment amount of 5-6 DISCOs to NBET to ensure payments to GENCOs.
**FX rate used for conversion to US$ in the table: 360 for 2020, 396 for 2021-2022

Efficiency of program expenditure

29. **The design of the MYTO, and the fact that it does not allow for the pass-through of sector inefficiencies to the sector revenue requirement, ensures efficiency of the PforR expenditure.** Electricity tariffs are regulated by NERC, based on MYTO methodology, which generates the final end-user tariff by adding the reasonable and efficient costs of the activities (generation, transmission, distribution and service provision) in the power supply chain. MYTO is an incentive-based rate of return methodology that is in line with international good practice. MYTO sets the five-year revenue requirement to ensure predictability of revenues for sector companies, while allowing for semi-annual tariff adjustments (minor reviews) in response to changes in the exchange rate, inflation rate and the fuel price. The revenue shortfall is assessed based on the revenue requirement of the sector determined by MYTO and the tariff adjustment scenario decided by the FGN.

D. Results Monitoring and Evaluation

30. **The PSRP Secretariat will need to establish a reporting and monitoring framework, which needs to be strengthened.** The PSRP's monitoring framework is a good tool to oversee PSRP implementation by various agencies. However, it is primarily focused on actions. Given the nature of the interdependencies of the PSRP, the system would benefit from a more consistent approach in translating actions into clear and measurable outcomes/results. Additionally, the PSRP Secretariat will need to define the trajectories/milestones through which it monitors and track performance improvements. The results framework of the Program defines data requirements and monitoring and verification protocols. As part of the World Bank's TA, the Secretariat will receive support to strengthen its M&E capacity.

E. Economic Analysis

31. **This section discusses the rationale for public financing of the Program, the valued added from World Bank support, and presents the analysis of the Program's development impact in terms of expected benefits and costs.**

32. This economic analysis is consistent with the World Bank guidelines[45].

33. **The analysis finds that the proposed Program will generate substantial economic benefits to Nigeria's economy by providing reliable power supply to the country and displacing expensive diesel-based self-generation.** In the base case scenario, the EIRR of the "with Program" scenario is 41.2 percent with a NPV of US$1,337 million, using conservative estimates of average WTP for electricity in Nigeria. The EIRR includes local and global environmental benefits with incremental returns to the Program of 7.8 percentage points and NPV of US$303 million.

Rationale for public provision and financing

34. **The poor financial situation of the power sector companies in Nigeria severely constrains their ability to access commercial financing.** Thus, companies across the value chain are deprived of the much-needed financing required to fund investments, and, more importantly, to meet their operating and maintenance expenses; they are therefore accumulating arrears.

35. **The PSRP aims to restore the financial viability of Nigeria's power sector while improving sector efficiency and service delivery.** It also seeks to de-risk the power sector in order to mobilize private sector investment. It envisages measures to contain costs and carefully manage contingent liabilities to ensure affordability of tariffs, which will be raised as service delivery improves over the period 2020-2023. During the transition period, the gap between tariff revenues and the required revenue of the sector will be fully funded by the FGN to enable a contract-based market.

36. **In this context, the Program expenditure will ensure that the revenue requirement of sector companies is fulfilled until tariffs converge with the required revenue.** By doing so, the Program will allow the sector to meet its contractual and regulatory obligations and functions without the further accumulation of debts and arrears. In addition, the Program involves measures to strengthen the governance of the sector. All these measures should restore confidence and facilitate access to commercial financing once the sector establishes a track record of contract enforcement and payment discipline.

Value added of the World Bank's support

37. **The World Bank has been assisting the FGN in preparing and implementing the PSRP through substantial advisory and analytical support for the identification of key challenges in the power sector and measures to address them.** In this context, the World Bank's support for the PSRP is expected to add value in the following ways: (i) World Bank financing will help ensure that measures to improve the financial viability of the sector are undertaken, keeping the ambitious PSRP on track and helping to maintain the credibility of the reform; and (ii) the World Bank's global presence and experience with implementation of power sector reforms will be helpful to FGN in incorporating international best practice to the process.

[45] This economic analysis is consistent with the following World Bank guidelines: Operational Policy and Bank Procedure, Program-for-Results, ii) Power Sector Policy and Investment Projects: Guidelines for Economic Analysis, iii) Social Value of Carbon in Project Appraisal, 2014 and iv) Discounting Costs and Benefits in Economic Analysis of World Bank Projects, 2016.

Methodology and assumptions

38. **The economic viability of the Program has been assessed through a cost-benefit analysis.** Net benefits for the Program were calculated by comparing total system costs and benefits for the "with Program" and "without Program" scenarios. A range of scenarios and sensitivities that meaningfully reflect the uncertainties of key input variables have been evaluated. The analysis includes a consideration of the relevant environmental and social externalities.

39. **The main assumptions are based on data from multiple sources,** including (i) data from the Advisory Power Team, Office of the Vice President, regarding generation capacity; (ii) data from the latest NERC MYTO model, regarding the operation of the power system in Nigeria, and (ii) data from the World Bank, regarding the macroeconomic and fuel costs. The economic analysis is limited to economic benefits and costs that can be quantified. Commonly recognized but non-quantified economic benefits[46] and opportunity cost for the implementing the Program, are excluded for the analysis.

40. **The economic analysis rests on the following assumptions**:

- ***Discount rate***. 6 percent. The World Bank's guidance[47] applies the Ramsey formula and recommends using a discount rate between 1 to 2 times the long-term growth rate of the country. However, Nigeria's average real GDP per capita over the last five years was less than zero percent and future projection over 2020-2023 is also close to zero percent, relatively low 2 percent discount rate is used in this analysis in the base case. NPV values for 2 percent and 10 percent discount rates are presented as a sensitivity analysis.
- ***Lifetime of Program***. Four years. The economic life of the Program is based on the PSRP period (2020-2023).
- ***Others***. Table 4-3 includes key assumptions applied in the economic analysis.

Table 4-3: Key assumptions

Item	Unit	Assumption
Discount Rate	[%]	6.0
Willingness to Pay (WTP)	[Usc / kWh]	13.0
Average Energy Sent Out (2020-23) – Without the Program	[MWh/hour]	3,963
Average Energy Sent Out (2020)	[MWh/hour]	4,161
Average Energy Sent Out (2021)	[MWh/hour]	4,370
Average Energy Sent Out (2022)	[MWh/hour]	4,588
Average Energy Sent Out (2023)	[MWh/hour]	4,817
Proportion of diesel self-generator replacement	[%]	100
Proportion of urban population	[%]	51.2
Exchange rate	[₦/US$]	360

Program Costs

41. **The main Program costs are the capital costs, incremental fuel and operating and maintenance (O&M) costs and negative externalities.**

[46] The additional economic benefits that are difficult to quantify include operating efficiency of the power system, potential promotion of renewable energy through the implementation of LCDP and efficient pricing of electricity.
[47] OPSPQ, Discounting Costs and Benefits in Economic Analysis of World Bank Projects, May 9, 2016.

- ***Capital costs***. Capital costs to meet incremental generation are assumed to be zero since more than 13 GW of installed capacity and approximately 7 GW of available capacity currently exist. Capital costs for transmission and distribution may be incurred to increase the efficiency of the system and DISCOs' performance. However, since the Program does not include investment for transmission and distribution, capital costs for transmission and distribution are assumed to zero, as well.
- ***Fuel costs***. Fuel cost for additional power generation is calculated based on the gas supply required to increase average energy generation from 4,161 MWh/hour in 2020 to 4,817 MWh/hour in 2023. Under the "without Program" scenario, the 3,963 MWh/hour of average energy sent out[48] is assumed for entire period. The gas is valued at the average price of gas in Europe, which serves as an estimate of economic opportunity cost of Nigerian gas. Gas prices are based on the World Bank's October 2019 commodity price forecasts.
- ***Operating and Maintenance costs.*** The operating and maintenance costs of generation, transmission and distribution to meet incremental generation constitute another economic cost under the "with Program" scenario. The O&M costs are estimated based on the TCN study[49] and data from the MYTO model. While additional fuel costs and O&M costs would be incurred in accordance with the additional power supply, it is assumed that total discounted costs for additional fuel and O&M costs would be incurred at the beginning of the Program for calculation of the EIRR.

Program Benefits

42. **The main Program benefits include additional electricity supplied to customers and avoided global and local externalities.**

- ***Additional energy generation*.** The Program will increase the average energy generated by 5 percent annually from 4,161 MWh/hour in 2020 to 4,817 MWh/hour in 2023. This translates into annual energy supply of 36,454 GWh in 2020 and 42,201 GWh in 2023. After taking into account the technical losses, the additional electricity made available to consumers in 2023 is 6,880 GWh. Table 4-4 presents the detailed energy balance of the Program.

Table 4-4: Energy Balance

Item	Unit	2020	2021	2022	2023
Without Program					
Average Energy Sent Out to grid	[MWh/h]	3,963	3,963	3,963	3,963
Annual Energy Sent Out to grid	[GWh]	34,718	34,718	34,718	34,718
Transmission losses	[%]	8.05	8.05	8.05	8.05
Distribution losses	[%]	7.45	7.45	7.45	7.45
Energy Sent Out to Customers	[GWh]	29,546	29,546	29,546	29,546
With Program					
Average Energy Sent Out to grid	[MWh/h]	4,161	4,370	4,588	4,817
Annual Energy Sent Out to grid	[GWh]	36,454	38,277	40,191	42,201
Transmission losses	[%]	8.05	8.05	8.05	8.05
Distribution losses	[%]	7.09	6.76	6.43	6.13
Energy Sent Out to Customers	[GWh]	31,142	32,818	34,578	36,426
Difference (With Program - Without Program)					

[48] This is estimated average energy sent out to the grid in 2019.
[49] Transmission Expansion Plan: Development of Power System Master Plan for the TCN, June 2017.

Item	Unit	2020	2021	2022	2023
Additional Energy Sent Out to Customers	[GWh]	1,596	3,272	5,032	6,880
Additional Energy Sent Out to grid	[GWh]	1,736	3,559	5,473	7,483

- ***Valuation of additional electricity made available.*** The additional electricity made available by the Program can be valued at the consumers' WTP for electricity supply. The WTP analysis is typically determined by computing the area under a derived demand curve during each year of the Program's life. The key parameters needed to determine the area under the curve include total demand in each year of the project, the price elasticity of demand, and the marginal tariff. However, given the difficulties in reliably establishing these parameters for Nigeria, this economic analysis uses estimates of average WTP for Nigeria of ₦23.37/kWh in 2012 prices translating into ₦45.1/kWh (13 USc/kWh) in 2018 prices from Oseni (2017)[50], which are based on surveys of 835 households in Lagos and Osun states in Nigeria. This is a conservative estimate of WTP for Nigeria, as it does not include industrial and commercial customers, which are likely to have a higher WTP for electricity than residential customers. This method of estimating the WTP also does not include a consumer surplus from electricity consumption. Given this uncertain estimate of WTP, sensitivity analysis has been carried out around this value, with the cost of diesel self-generation as the upper limit (₦115/kWh or 32 USc/kWh). The estimated WTP is applied to the additional electricity that is sent to distribution point. Thus, commercial loss and collection loss do not need to be accounted for in the benefit calculation.
- ***Global externalities***. Global externalities constitute another economic benefit of the proposed Program, given that the Program will lead to a decrease in use of diesel-based generators. The assumption in this analysis is that the additional electricity will go toward replacing diesel self-generation. GHG emissions of the mix of electricity supplied through the grid are lower than GHG emissions from diesel self-generation. The GHG emission factors for different sources of generation are given in Table 4-5.

Table 4-5: GHG emission factors of generation

Item	Unit	Gas	Diesel
IPCC default	[kg/GJ]	56	74
Converted to mmBTU	[kg/mmBTU]	53	70
Efficiency	[%]	50	40
Heat rate	[BTU/kWh]	7,200	8,530
Emissions	[kg/kWh]	0.38	0.60

- ***Avoided local externalities***. Local health damage costs resulting from NOx, PM10 and SO2 emissions from self-generation are greater in densely populated urban areas than in more remote rural areas, because diesel self-generation units in densely populated areas typically have low stacks and are rarely fitted with pollution controls. Moreover, particulate emissions, largely absent from gas, are particularly damaging to human health. As a result, local damage costs are lower under the "with Program" scenario than under the "without Program" scenario. While no reliable Nigeria-specific health damage study is available to estimate the local emission damage costs associated with electricity generation, a representative damage cost estimate for United States was scaled up by the

[50] Musiliu O. Oseni, Self-Generation and Households' Willingness to Pay for Reliable Electricity Service in Nigeria, Volume 38, Number 4 of The Quarterly Journal of the IAEE's Energy Economics Education Foundation. 2017.

ratio of purchasing power parity per capita GDP, resulting in a damage cost for US$712/ton, US$1,745/ton, US$847/ton for NOx, PM10, and SO2 respectively.

Table 4-6: Damage Cost

Variable	Unit	NOx	PM10	SO2
US Damage costs	US$/ton	7,460	18,280	8,870
US PPP per capital GDP	US$	55,681	55,681	55,681
Nigeria PPP per capita GDP	US$	5,315	5,315	5,315
Nigeria Damage Costs	US$/ton	712	1,745	847

Results

43. **The economic analysis demonstrates that proposed Program is economically viable.** The baseline economic return of proposed Program against the "without Program" scenario is 41.2 percent and NPV is US$1,337 million, including local and global environmental benefits, which added 7.8 percentage points, or US$303 million, to the economic return and NPV, respectively.

Table 4-7: Summary of the Economic Analysis

	Unit	Result
Economic Internal Rate of Return		
EIRR	[%]	33.5
EIRR+local externalities	[%]	36.8
EIRR+local externalities+global externalities	**[%]**	**41.2**
Composition of NPV		
Total costs	[US$ million]	(799)
Total benefits	[US$ million]	1,832
NPV (before environmental benefits)	**[US$ million]**	**1,033**
Local environmental benefits	[US$ million]	127
Global environmental benefits	[US$ million]	176
NPV (including environment benefits)	[US$ million]	**1,337**

Risks and Sensitivity Analysis

44. **Sensitivity analysis has been conducted against all key parameters that have a significant impact on the Program's economic rate of return.** These include the average willingness to pay, electricity supply disruptions and the discount rate.

- ***Average willingness to pay***. The additional electricity evacuated by the Program is valued based on surveys of residential households. Since actual WTP should ideally also take into account industrial and commercial customers, the values used in this economic analysis are subject to high uncertainty. The switching value for the WTP (to turn NPV to zero) is 3.5 USc/kWh.

Table 4-8: Sensitivity Analysis on discount rate

WTP (Usc/kWh)	NPV (US$ million)	EIRR (%)
3.5	0	-
7	491	17.7
13	1,337	41.2
32	4,014	96.4

- ***Electricity supply disruptions.*** Nigeria's electricity sector is vulnerable to supply disruptions. There is the possibility of disruptions in the supply of gas to generation plants on account of security conditions. Furthermore, due to load rejection from DISCOs, targeted evacuation supply capacity would not be achievable. There is risk that such conditions will continue in the future. The switching value for the average energy generated to make the NPV zero is a 12 percent decrease from the base case generation.

Table 4-9: Average Energy Generated Scenario

Ave. Ener. Gen. (MWh/h)	2020	2021	2021	2022
-12% from Base	3,647	3,830	4,021	4,222
-5% from Base	3,953	4,151	4,359	4,577
Base	4,161	4,370	4,588	4,817
+5% from Base	4,369	4,588	4,817	5,058

Table 4-10: Average Energy Generated Scenario

Electricity Supply	NPV (US$ million)	EIRR (%)
-12% from Base	0	-
-5% from Base	796	36.7%
Base	1,337	41.2%
+5% from Base	1,878	43.4%

- ***Discount rate.*** The choice of discount rate is a critical assumption that has a significant impact on the NPV of a project. As a result, a sensitivity analysis has been carried on the discount rates used in this analysis. The Table 4-11 shows the relationship between discount rates and NPV for the proposed Program.

Table 4-11: Sensitivity Analysis on discount rate

Discount Rate	NPV (US$ million)
2%	1,499
6%	1,337
10%	1,198

- ***Carbon emission value*. **In the World Bank's 2017 Guidance Note on Shadow Price of Carbon in Economic Analysis, carbon emissions are valued at "high" and "low" levels, starting US$80/ton and US$40/ton in 2020 and increasing US$100/ton and US$50/ton in 2030, respectively.

Table 4-12: Carbon emission price Scenario

Electricity Supply	NPV (US$ million)	EIRR (%)
Low (2017 Guideline)	1,337	41.2%
High (2017 Guideline)	1,513	45.5%

Annex 5: Fiduciary Systems Assessment

1. **A review of fiduciary systems applicable to the PEF was conducted, consistent with the World Bank Policy, Directive, and Guidance Notes for "Program-for-Results Financing".** The review concludes that the procurement and FM systems capacity and performance are adequate to provide reasonable assurance that the Program funds will be used for the intended purposes, with due attention to the principles of transparency and accountability, subject to appropriate mitigation measures for risks identified and included in the PAP. The FSA relies on the Technical Assessment's conclusions regarding the economy, efficiency and effectiveness of the PEF, which does not include procurable items.

Risk assessment

2. **The fiduciary risk for the Program is assessed as Substantial. The FSA has identified significant risks along with measures to mitigate such risks.** The risk mitigation measures will be managed through methodical implementation of the PAP. The main areas of fiduciary risk to the PEF include: (a) unpredictability in the timing and amount of release for the FGN budgetary contributions towards the PEF; (b) diversion of funds under the PEF for payments other than those specified in the Financing Plan (e.g. payments to GENCOs from the PEF that are above and beyond new and historical tariff shortfalls); and (c) timely production of audited financial statements.

3. **To reduce the risk that the annual FGN budgetary contributions to the PEF are not released, the DG Budget, as part of the Cash Management Committee, shall recommend the inclusion of FGN's annual budgetary contributions' to the PEF in the list of priority releases and for these releases to be made quarterly in advance.** Approval of the Minister of Finance, Budget and National Planning as the Chair of the Cash Management Committee will contribute towards mitigating this risk**.** Use of the funds for PEF will be monitored and managed through monthly reports to the PSRP Secretariat and the use of a clear funds flow protocol. Most importantly, Global DLI 2 incentivizes the approval and implementation of the Financing Plan which forms the basis of the PEF.

4. **With the move towards ensuring fiduciary controls and payment discipline the Program will reinforce existing controls and strengthen existing institutional arrangements.** The areas for strengthening for NBET include internal audit, upgrading accounting system for segregation of different types of payments under PEF, removing the backlog in external audit reports, ensuring that quality external auditors are appointed and ensuring that existing legal contracts are enforced. For the purpose of the Program, NBET's entity financial statements, which include the operations of the Program account, are considered acceptable with the incorporation of the required disclosures of all PEF line items, which will be subject to a specific audit opinion.

5. **While the PEF does not include expenditures by DISCOs, the Program supports their financial and operational transparency.** Hence, the World Bank will monitor associated risks, such as diversion of FGN funds received by DISCOs for systemic improvements, or diversion of funds received from consumers. Past practice has shown that there is a case where funds for stabilization from the CBN were diverted and corrective action has since been taken. To address the issue of necessary controls and oversight for adequately metering, billing and accounting the payments from end-consumers, management information systems will be incorporated as part of DISCOs' PIPs. The Program supports approval and enforcement of implementation of PIPs through DLI 1.

Scope

6. **The management of funds applied to the PEF will be with NBET in coordination with the PSRP Secretariat, using the entity's systems and processes which are generally in good operating order.** Governance arrangements for both the sources of funds and the uses of funds under the PEF involve different stakeholders as described in the section on funds flow. The existing systems for budgetary planning, budget preparation, budget execution, accounting, internal controls, funds flow, financial reporting, and external audit will be adapted for Program implementation

7. **NBET is a government business entity incorporated under the Companies and Allied Matters Act.** It reports to the FMFBNP with the Minister as the Chair of the Board. It is a central entity for settlement of payments in the power sector as it purchases electricity from GENCOs on the basis of PPAs and sells it to DISCOs on the basis of Vesting Contracts. NBET is also contractual party with the Market Operator (TCN) and pays the latter for electricity transmission, system operation and market operation services. After the Market Operator provides details of the energy supplied, NBET matches those with the invoices from the GENCOs and sends a payment invoices to DISCOs.

Review of Financial Management Arrangements

8. **The enabling institutional and legal framework for public financial management in Nigeria is contained in a variety of sources which cover most of the budget cycle.** Sources include the: (a) Constitution (Sections 80-89) – accounts, audit, and investigations; (b) Finance (Control & Management) Act of 1958; (c) Fiscal Responsibility Act (FRA) of 2007; (d) Federal Public Procurement Act of 2007; and (e) Freedom of Information (FoI) Act of 2011 – aiming to improve transparency and public accountability by providing for public access to non-sensitive official data. Despite continuing efforts, enactment of an Audit Act to provide financial and operational autonomy to the Office of the Auditor General of the Federation (OAuGF) remains outstanding. Performance of the legislature in its oversight function is also weak. Along with the subsidiary legislation, regulations, and operational and financial directives which dictate the day-to-day management and oversight of public finances, notwithstanding the long overdue enactment of audit law, it is concluded that the legal framework in place is acceptable.

9. **The FMFBNP and its respective agencies are the key institutions for governing public financial management in the Federal Government.** Other players include the NASS, the OAuGF, Office of the Accountant-General for the Federation (OAGF), Bureau of Public Procurement and CBN.

Planning and Budgeting

10. **NBET's planning and budget preparation system determines the service delivery framework through Unit plans and the preparation of financial estimates, based on the budget ceilings provided by the FMFBNP.** In general, NBET's annual budget preparation follows the national budget calendar and processes. After several years in which the federal budget approval process by the legislature was marred by delay, the federal budget for 2020 was approved before the start of the year. Following legislative approval of the federal annual budget appropriations, the OAGF makes quarterly transfers through the Government Integrated Financial Management Information System (GIFMIS) to NBET's sub-account in the TSA held with the CBN. As is the case with other budgetary entities, in each of the last three years, only a third of the annual appropriation has been released to NBET. Receiving counterpart funds for World Bank projects across the portfolio has been challenging.

Budget Execution

Treasury Management and Funds Flow

11. **The Federal Government transacts its budgetary spending through a TSA held with the CBN.** All budgetary resources are processed through the GIFMIS. Payments are made from individual MDAs' accounts that form part of the TSA with the CBN through a uniform electronic payment platform (REMITA) to finance budgetary expenditures.

12. **At NBET, the payments related to power contracts are managed by a Payment Committee.** The Payment Committee deliberations are transparent. The Committee, which comprises all the Heads of Departments, is chaired by the Managing Director and meets monthly to consider payments due to the GENCOs. Based on the agreements reached by the Payment Committee, payments are made to the GENCOs from the account with the CBN through the REMITA platform within 72 hours. The payments are published by NBET in two national newspapers and on its website. No delay in payment has been reported.

13. **The CBN PAF, under the payment assurance scheme, commenced disbursement in September 2017.** Disbursement under the payment assurance scheme is triggered by the submission of an application for drawdown on the PAF by NBET to the CBN to make PAF payments to GENCOs after these payments had been approved by the NBET Payment Committee. The application, which includes minutes of NBET Payment Committee meeting signed by the management of NBET and all supporting documents, is sent to the CBN directly by NBET. At the CBN, to mitigate delay in making payments from the PAF that could be occasioned by the unavailability of the CBN Governor, an approval in advance of subsequent disbursements has been put in place by the Committee of Governors. That is the process that was used for the ₦ 701 bn PAF I and that is the same process that is being used for the ₦ 600 bn PAF II. For FY 2020 NBET is also the agency that is going to be responsible for disbursing the budgetary allocation of ₦ 81 bn that is in the Federal Government 2020 Amended Budget consistent with the approved PSRP Financing Plan.

14. **The service standard for disbursing upon receipt of an application from NBET is 72 hours.** The CBN makes the payments directly to GENCOs and GASCOs, and credit advice is then sent to NBET. Subsequent payments to GENCOs and GASCOs are only made when previous payments have been acknowledged by GENCOs and GASCOs. This arrangement has been found to perform satisfactorily.

15. **The preceding experience with NBET's flow-of-fund arrangements have informed the Program's flow-of-fund enhanced arrangements.** For each use of fund specified in the PEF, clear protocols have been defined for the process leading up to the payment and then the subsequent monitoring. The governance arrangements around receipts and payments will be critical for ensuring that Program funds are used for intended purposes.

16. **Currently, NBET has a single sub-account within the TSA, referred to as e-Collection account. This captures deposits made by DISCOs and other sources and is also the source of funds for a range of operating expenditures.** For easier monitoring of the Program, an additional segregated DA, Program account, will be established for NBET in the TSA with the CBN. For the e-Collection account, NBET annually communicates with the OAGF in the last quarter to not take back funds from the FGN budgetary contribution citing the nature and purpose of the account. In the event that there may be any residual funds in the Program account from FGN budgetary contributions, the NBET shall work with the PSRP Secretariat to consider if a similar request is needed.

17. **IDA credit disbursement for the PforR component of the operation will be triggered upon the verified achievement of the DLRs for the Program.** The PSRP Secretariat will make arrangements for the independent verification of the achievement of the Results. Reports of the verification agent will be submitted to the World Bank. The World Bank will use the Report to determine eligible disbursements based on the DLRs achieved, retaining the final decision to disburse. The allocated amounts, targets and requirements for achievement, and deadlines for achievement for each DLR are detailed in Annex 3. An amount of up to US$178 million may be disbursed for prior results, i.e. DLRs achieved on or after May 1, 2019, but before signing of the Financing Agreement. Disbursement for all DLRs can take place as soon as, but not earlier than, the verified achievement of both global DLIs, in addition to their own verified achievement. Some DLRs are scalable, with funds being disbursed in proportion to the achievement of the DLR as per the formula specified in Annex 3.

18. **Disbursement arrangements for the PforR component**: The IDA credit proceeds of the Program results component will be disbursed to the Program account. Funds will only be available for drawdown after the World Bank has communicated a decision regarding the extent to which prior results or DLRs have been met and the amount of corresponding amount of disbursements to the PSRP Secretariat. Once a funding request is made by NBET, the PSRP Secretariat will proceed to prepare and submit a withdrawal application to the World Bank.

19. **FGN budgetary contributions for the PEF will also be released into the separate Program account.** Releases are authorized by the Cash Management Committee in the FMFBNP. To reduce the risk that the annual FGN budgetary contributions to the PEF are not released timely, it is recommended that these are made quarterly in advance. The DG Budget as the head of the PSRP Secretariat and head of the PSRP Technical Committee overseeing the execution of the Financing Plan, and member of the Cash Management Committee, will raise a request for the inclusion of the releases in the list of priority releases and for these to be made quarterly in advance. h.

Figure 5-1: Funds Flow for New and Historic Shortfalls

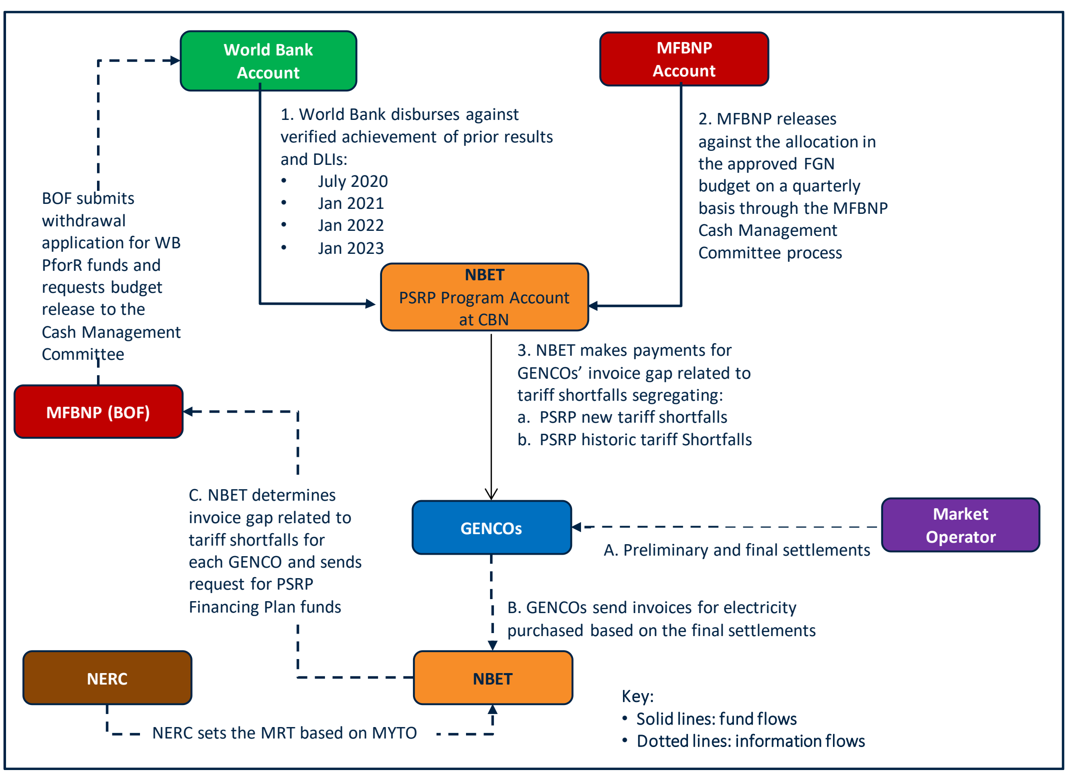


Figure 5-1: Funds Flow for CBN PAF Repayment

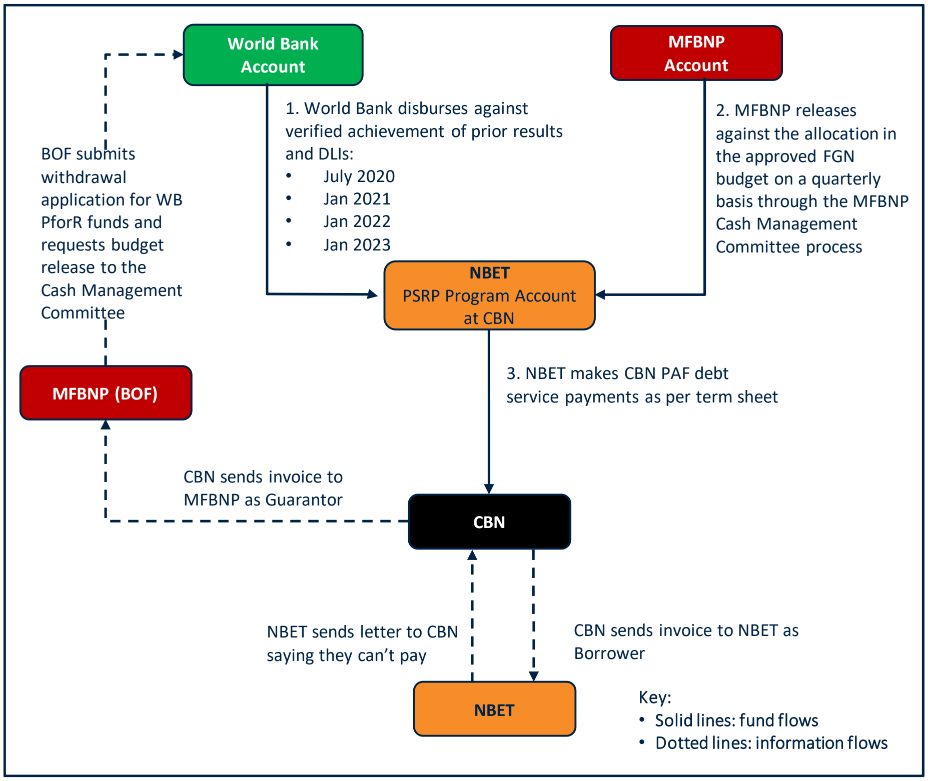
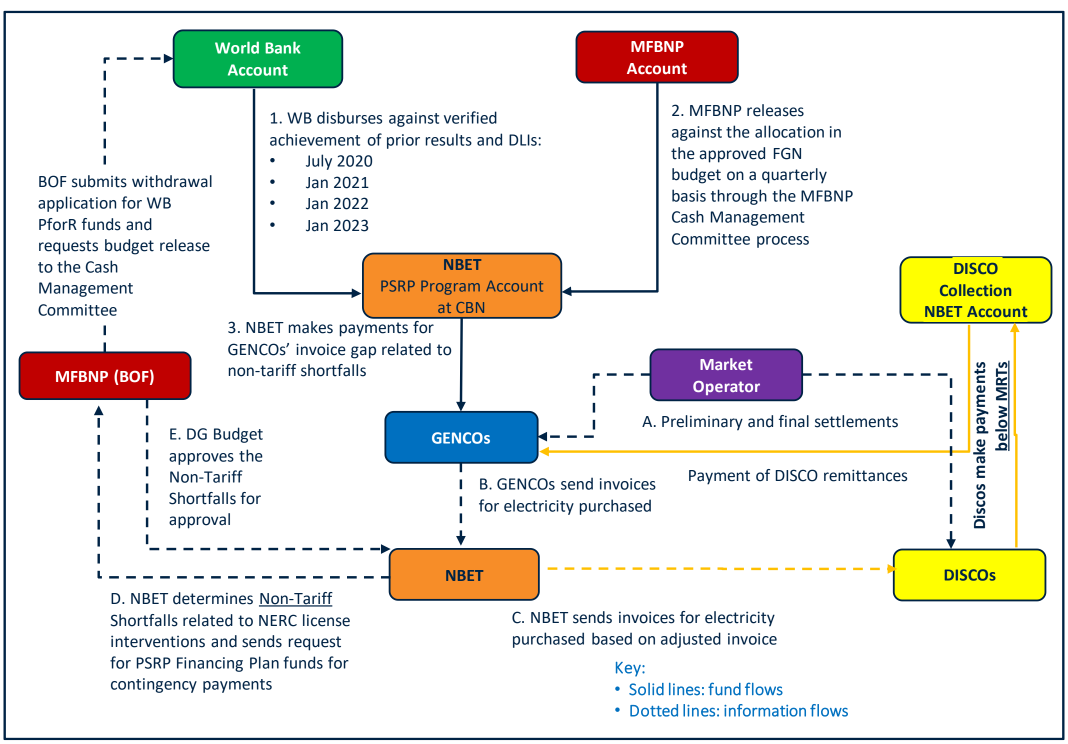


Figure 5-2: Funds Flow for Non-Tariff Shortfalls



Payment protocols for the following payments under PEF are in appendix to Annex 5:

a. Monthly payment of new tariff shortfalls;
b. Quarterly payment of restricted non-tariff shortfalls in the event of DISCOs' license interventions by NERC;
c. Annual payment of historical tariff shortfall arrears; and
d. Quarterly repayment of CBN PAF.

Accounting and Financial Reporting

20. **The system of accounting and financial reporting in NBET is well organized and performing satisfactorily.** An accounting application, Tally ERP, is utilized by NBET in accounting for and reporting on financial transactions. Quarterly Management Accounts are prepared and submitted to the NBET management within 30 days of the end of the relevant quarter. These are rendered timely and are of acceptable quality. To ensure that complete records are maintained for the different payments under PEF, Tally ERP will be upgraded to separately account for payments related to the PEF expenditure lines.

21. **NBET prepares its financial statements in accordance with IFRS.** The OAGF has adopted the International Public Sector Accounting Standards (IPSAS) accrual basis of accounting and financial reporting as of fiscal year 2016. NBET being an autonomous entity applies IFRS for its own reporting but transmits information to the OAGF for consolidation using the IPSAS accrual template on monthly basis.

22. **For the purposes of the Program, NBET will submit a monthly report of the operations of the Program account to the PSRP Secretariat within 30 days of the end of each month and an interim financial report (IFR) within 45 days of the end of each calendar semester to the World Bank.** The IFR will provide a summary of the activities of the Program account for the period covered, stating the sources and uses of funds. For the external assurance requirements of the Program, NBET's entity financial statements, with a detailed note providing the operations of the Program account and PEF line items, are considered acceptable and will be submitted within six months of the end of each fiscal year.

Procurement processes and procedures

23. **The PEF which comprises payments for tariff shortfalls and PAF debt servicing do not entail procurements.**

Sector Procurement Practices

24. **Under the PPAs between NBET and GENCOs, GENCOs receive a capacity charge to recover their fixed costs and investment and an energy charge to recover their variable costs.** For IPPs and privatized GENCOs, these charges were determined in the process of negotiation with NBET. All GENCOs operating in the power sector have been checked under the (i) Listing of Ineligible Firms and Individuals; (ii) Listing of Temporarily Suspended Firms and Individuals; and (iii) INT Company Risk Profile Database (CRPD). None of the GENCOs were found on any of the lists or databases.

25. The following laws/regulations govern competitive generation procurement in Nigeria: NERC 2014 Regulations for the Procurement of Generation Capacity and NERC 2014 Generation Procurement Guidelines which provides further explanation of the Regulations are in place for the Nigeria power sector.

26. **The 2014 Regulations for Procurement of Generation Capacity provide for the process to be used by a Buyer in procuring additional electric generation capacity.** The objectives of these regulations

are to (i) establish a systematic transparent and competitive process that provides reasonable assurance that a Buyer procures additional electric generation capacity at least cost to consumers, consistent with the approved generation expansion plans; (ii) ensure that the firms contracted to provide new capacity have the necessary capacity to carry the defined generation project to a successful completion; (iii) minimize opportunities for financial manipulation, fraud or corruption of any kind during the resource acquisition process; and (iv) facilitate the involvement of private sector in the provision of generation capacity to a Buyer, on the basis of rules that provide for certainty and transparency and fairness of the generation procurement process and its outcome.

27. **The regulations provide that solicitation for new generation capacity shall be based on the Annual Report of the System Operator approved by NERC if it indicates a requirement for additional generation capacity within the next twelve months.** A Buyer to whom approval has been given by NERC undertakes a competitive method for the procurement of the new generation capacity. The process includes, publication of expression of interest from qualified bidders, receipt and evaluation of expression of interest, issuance and evaluation of a request for proposals for and the execution of PPA. The regulations also provide for the publication of the outcome of the procurement in the publications in which the expression of interest was published.

28. **The regulations state that NERC shall provide a certificate to the Borrower that competitive procurement solicitation has been properly followed.** The regulations also provide that petitions in respect of the bidding process may be made by bidders to NERC. It appears that, there is a conflict of interest situation in this complaint mechanism if NERC having given a certificate to the procurement process is also to decide on the petitions having being part of the process by issuing a certificate to the procurement process. The complaints arising from the procurement should be handled by an independent party that has not participated in the procurement system. Apart from this weakness the regulations for competitive generation procurement is adjudged to be adequate.

Internal Controls

29. **NBET has a comprehensive set of internal procedures covering the functions of each department.** A Finance Operating Procedures Manual is in place and is applied for the work of the Finance Department. Similar guidance is also available for the Procurement function. As recently as December 2019, a review and update were done for the Financial Procedures but due to the absence of a Board, this document is awaiting approval. It was agreed that the updated document will be presented for approval by Management Committee in NBET and cleared for application pending formal approval by the Board.

30. **There is a separate Internal Audit unit which is well established. Staff is experienced and the work is being done regularly.** The Unit prepares periodic Internal Audit Reports. However, the work program for the Internal Audit unit is focused largely on conduct of pre-payment audits. There is a need to move towards risk-based approach which can identify systemic improvements that can address deficiencies in the expenditure management system. A key challenge will be separating the internal audit function from involvement in the expenditure processing cycle and providing independence to the role the internal auditors play. The latest internal audit report was for September 2019.

31. **To mitigate the weakness in internal control, financing will be provided under the TA Component to build the capacity of the internal auditors in use of a risk-based audit approach.** The capacity building will be further enhanced through the provision of an embedded consultant in the Internal Audit Unit that will support the transformation of the internal audit unit.

Program governance and anti-corruption

32. The assessment reviewed existing institutional and oversight systems and practices in Nigeria pertaining to 'Governance and Anticorruption' (GAC) and their applicability to the Program using the Governance framework principles of transparency, accountability and participation. The objective was to determine whether the existing institutions and processes were able to meet requirements of the Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results Financing, dated February 1, 2012, and revised July 10, 2015.

33. **The Nigerian Government in its bid to institutionalize the fight against corruption in the country, adopted a five-year National Anti-Corruption Strategy in July 2017.** The NACS focuses on prevention of corruption, public engagement, campaign for ethical reorientation, enforcement and sanctions and recovery of proceeds of corruption. The anti-corruption legal framework rests essentially on the criminal justice system and more specifically on the Corrupt Practices and other related offences Act, 2000, the Economic and Financial Crimes Commission (Establishment) Act, 2004, as well as on the UNCAC, ratified in 2004.

34. Additional pieces of legislation address conflict of interest, promote transparency (asset disclosure and freedom of information), and strengthen the governance of extractive industries (Nigeria Extractive Industries Transparency Initiative Act). A recent peer review of the implementation of the UNCAC in Nigeria concludes that its legal and institutional anticorruption framework is robust enough. Since the review, additional reforms introduced by the Federal Government like the prosecution of financial crimes, the management of recovered stolen assets and government overall transparency under the Open Government Initiative have further strengthened the anticorruption framework.

35. The Second National Action Plan (NAP II) for 2019-2021 on Open Government has seven Thematic Areas covering Fiscal Transparency, Extractive Transparency, Anti-Corruption, Access to Information, Citizens' Engagement and Empowerment, Inclusiveness and Service Delivery. The OAGF has launched a Transparency Portal[51] posting the daily log of payments made above certain thresholds by federal agencies.

36. **Public sector corruption is being actively prosecuted by the Federal Government at both the Federal and State levels with several State officials undergoing prosecution for corruption and their assets seized.** The law punishes both active and passive corruption, that is, both public officials and the private parties to the transaction. The definition of public officers under the Corrupt Practices Act extends to all elected and non-elected officials, at federal, state and local levels, in public administrations or state-owned enterprises. The Corrupt Practices Act sanctions conflicts of interests of public officers in charge of financial transactions. Public officers are also criminally liable for not reporting any unduly offered, promised, or granted gratification. Private individuals who have been solicited to pay a bribe to a public officer are also criminally liable for not reporting it to the ICPC or the police.

37. **Public officials are being prosecuted for false declaration of assets.** All public officers, including at State and Local Government, are constitutionally mandated to declare to the Code of Conduct Bureau their assets and liabilities on assumption and term of office, and every four years for permanent employment. Failure of declaration of assets may entail removal from office, disqualification from holding any public office, and forfeiture to the State of any property acquired through abuse of office or dishonestly.

38. **The Nigerian anticorruption institutional framework comprises multiple agencies at the Federal level, loosely coordinated by the President's Office (within the inter-agency task team on**

[51] www.opentreasury.gov.ng/

anticorruption). The jurisdiction of these various anti-corruption agencies extends to the State level. The Technical Unit on Governance and Anti-corruption Reforms (TUGAR), established in 2008 to monitor and evaluate anti-corruption and governance initiatives across all sectors in the country - is an important addition for corruption and governance risk assessment. The ICPC established in 2000 by the Corrupt Practices Act, has both a repressive and preventive role. The ICPC is in charge of criminal investigations. Membership of the Commission comprises of a chairman and 12 other members (two from each of the six geopolitical regions of Nigeria) – all nominated by the President and confirmed by the Senate. Allegations of corruption can be conveyed to the Commission by email or by phone and could also be conveyed to it indirectly through websites, such as BribeNigeria or Egunje (which publish statistics on the geographical and sectoral distribution of gathered allegations) run by NGOs. The Economic and Financial Crimes Commission (EFCC) created in 2004 is the nodal agency for anti-money laundering, financing terrorism, and other economic and financial crimes. Its role is complementary to that of ICPC. The EFCC investigates petty corruption. EFCC has an MOU that it has signed with the World Bank. In 2019 EFCC's performance was recognized by INT. EFCC has agreed to collaborate with the World Bank regarding putting in place, across the country, provisions to ensure that there are adequate anti-corruption and GRM measures.

39. **Other agencies contributing to anti-corruption include:** Public Complaints Commission (established in 1975) and Code of Conduct Bureau (created in 1990), essentially ensuring compliance by public officers of their legal obligations in the performance of their functions, including on asset disclosure. These agencies are mandated to collect data, monitor and evaluate governance and anticorruption initiatives across the three tiers of government, conduct corruption risk assessments, and provide policy advice on anticorruption. A National Prosecution Coordination Committee was inaugurated in 2016 to strengthen the capacity of the Nigerian Government to prosecute both high-profile criminal and corruption cases. The national anticorruption framework and agenda applies to all MDAs in Nigeria, each of which is expected to adopt MDA specific frameworks.

40. **ACTUs within Federal MDAs. ACTUs are the nodal anticorruption agency at the departmental level.** Their creation has been decided by the Head of Services on recommendation from the ICPC and are responsible for the prevention of corruption and preliminary investigations. An ACTU was inaugurated in NBET in 2019 by the ICPC. It is headed by the General Counsel at NBET. Only one complaint was received in 2019 and no broader actions were taken. In 2020, resources have been provided in the NBET budget for a program of activities by the ACTU covering awareness, training and prevention. They report on their investigations to the ICPC with copy for information to the Permanent Secretary.

41. **The privatization of DISCOs was done in November 2013, close to the end of the period of the Jonathan administration.** These companies were privatized to high net worth Nigerians with no managerial and technical expertise in the power sector. The two criteria used for selecting willing bids were ability to finance and highest reduction in ATC&C, which proved problematic, as at the time of privatization there were no reliable statistics regarding numbers of consumers of actual losses in the DISCOs. After a period of one year, loss reduction targets were specified in the Performance Agreements that private companies signed with BPE. When the Buhari Administration took office in 2015, the terms of NERC Commissioners were not renewed and there was no regulator for the electricity sector between December 2015 and February 2017.

42. **A new report on corruption in Nigeria was released in December 2019.**[52] As per findings of this report, the most common service sought when paying a bribe was a public utility service based upon feedback from 26 percent of respondents. The next highest was Administrative license or permit with 12

[52] UNODC et. all; "Corruption in Nigeria: Patterns and Trends" (December 2019).

percent of respondents. The electricity sector is particularly prone to corruption and the move to privatization has only partly improved the situation. The 2017 Survey of Benin DISCO showed that close to 62 percent of consumers had been asked to pay a bribe by utility staff.[53] The Program incorporates a series of actions and DLIs to enforce performance improvement plans, payment discipline, financial and operational transparency of DISCOs.

43. **The World Bank Anti-Corruption Guidelines apply to the Program-for-Results[54].** Additionally, grievance redress mechanisms will be implemented across key agencies involved in program implementation which will be undertaken by EFCC.

44. **The PSRP Secretariat will be the focal point for gathering information from all implementing agencies on any complaints or allegations of fraud and corruption related to the PSRP.** These complaints will be forwarded to the relevant anti-corruption or investigative agency for action. Update will be provided to the World Bank on the status. The information and update will be included in the semi-annual progress reports as per the template to be agreed as part of the protocol for the implementation of the World Bank's Anti-Corruption Guidelines. If there is nothing to report, the report will state as such. In the event that the World Bank decides to conduct an administrative review into allegations or other indications of fraud and corruption in connection with the Program, the PSRP Secretariat shall cooperate fully with the representatives of the World Bank and take all appropriate and timely measures to ensure full cooperation of relevant persons and entities subject to government jurisdiction in such investigation. If the World Bank were to find evidence of corrupt or other sanctionable practices, the World Bank, through the PSRP Secretariat, will refer the case to the ICPC (or other relevant agency) for investigation under the relevant laws. The protocol for the implementation of the World Bank's Anti-Corruption Guidelines will be annexed to the Operations Manual.

Auditing

45. **NBET, a government business entity, is statutorily audited by private sector auditors in line with the Companies and Allied Matters Act.** The latest available audited financial statement of NBET is for the year ended December 31, 2014, wherein an unqualified opinion was expressed by the external audit firm. Engagement of external auditors did not occur for several years leading to backlog of audit. The arrears of audited financial statements are attributable to absence of the NBET Board and funding. Auditors have been engaged for clearing the audit backlog and it is anticipated that the audit for the years up to 2019 should be completed no later than September 30, 2020.

46. The audit of the TA component to be implemented by BOF, will be conducted by external auditors with Terms of Reference acceptable to the World Bank.

47. Noting the Program boundary, the annual audited financial statements of NBET as an entity will be considered adequate to constitute the basis for the Program audit. The entity financial statements shall include a detailed note laying out the operations of the DA wherein the funds applied towards the PEF are received and expended per each of the PEF lines. This includes the funds under this Program from IDA and the FGN budgetary contribution. Review of this account for use of funds as intended and adherence to payment protocols will be included in the terms of reference of the external auditors. Separate audited financial statements will be submitted for the TA. Both sets of audited financial statements shall be submitted to the World Bank within six months of the end of the Government fiscal year.

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[53] SDN, "Electricity Sector Corruption Perception Index 2017: Promoting Accountability in Nigeria's Electricity Sector."

[54] Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results Financing," dated February 1, 2012, and revised July 10, 2015.

48. The external audit of the Program expenditures will be critical to providing the necessary assurance that the Program resources were appropriately used, with the requisite economy, efficiency and effectiveness towards achieving the Program goals. Accordingly, the external auditors will be required to issue an opinion on the eligibility for PforR financing of the recorded PEF expenditures, as follows: (i) the amount of new and historical tariff shortfalls that fully meet the agreed calculations parameters; (ii) the amount of PAF debt service payments that corresponds exclusively to tariff shortfalls that fully meet the agreed calculation parameters; and (iii) the amount of non-tariff shortfalls, restricted only to the event of DISCOs' license interventions by NERC. These PEF audited expenditures will be used as the basis for Program reconciliation i.e. calculating if the total disbursements from IDA are less than the total expenditures incurred over the Program life.

Procurement and Financial Management Capacity

49. The Finance and Accounts Department of NBET is endowed with adequately qualified and experienced staff in FM. The procurement function is similarly well managed and there are no vacancies in the approved organograms of both teams.

Appendix to Annex 5: PSRO Payment Protocols

Process 1: Assessment of Tariff Shortfall and Minimum Remittance Threshold (MRT) - Semi-annually

Day	Action	Responsible
By June 1, 2020 (and every six months from this date on)	NERC initiates the MYTO minor review: - The head of the Tariff Setting Unit assesses the revenue requirement for the next six months based on the MYTO minor/extraordinary review and estimates the tariff shortfall if there is no further tariff adjustment - The Commissioner for Market Competition and Rates Division shares the tariff shortfall assessment and the underlying MYTO model with the FMFBNP (DG Budget) and the PSRP Secretariat.	NERC: Commissioner for Market Competition and Rates division
+ 15 CDs after receiving NERC Tariff Shortfall assessment (performed on a semi-annual basis)	FMFBNP leads Financing Plan updating, approval and annual inclusion in the MTEF/FSP and FGN Annual Budget. - The PSRP Finance Technical Committee led by DG Budget with the support of the PSRP Secretariat reviews the PSRP Financing Plan based on NERC's assessed tariff shortfall and updates it, as necessary - The Minister of Finance, Budget and National Planning approves and issues the updated PSRP Financing Plan to the Presidency, MoP, NERC, NBET and the PSRP Oversight Committee and Technical Committee specifying the new tariff shortfall ceiling and the uses of funds and sources of funds going forward. The PSRP Secretariat shares the Financing Plan xls file, the Financing Plan write-up and the NERC MYTO model with the tariff shortfall assessment with the World Bank	FMFBNP: DG Budget
By July 1, 2020 By January 1, 2021 (and every six months from this date on)	NERC carries out MYTO minor review and establishes the MRTs of DISCOs for the following six months: - The head of the Tariff Setting Unit assesses the tariff adjustments required to be consistent with the tariff shortfall ceiling in the PSRP Financing Plan for the next six months - NERC issues the revised MRTs of DISCOs for the following six months based on the required tariff adjustments - Reconciliations are done between the MRT projected in the most recent period and the actual MRT due based on observed market conditions. Outstanding balances (due from or to Discos) will be incorporated into new MRT for the next six-month period except for those related to intra-MYTO movement of the NAFEX rate	NERC: Commissioner for Market Competition and Rates division

Process 2: Release of Budgetary Contributions - Quarterly

Days before the beginningof the quarter	Action	Responsible
CD 30	The PSRP Secretariat shares the required FGN budgetary contribution amount that needs to be released for the coming quarter together with supporting information that includes anticipated payment obligations and sources of funds with the DG Budget.	FMFBNP: PSRP Secretariat
CD 20	DG Budget determines the amounts to be used from each source of funds for meeting the payment obligations for the coming quarter and requests the Cash Management Committee to proceed with the release of the Budgetary Contribution for the coming quarter in advance (as well as any previous quarters if there is a delay in NASS approval of Budget) into DA at CBN.	FMFBNP: DG Budget
CD 10	Cash Management Committee deposits the Budgetary Contribution amount in the NBET account with the CBN opened for that purpose (the "CBN/NBET/FMFBNP Account").	FMFBNP: Cash Management Committee

Process 3: Release of World Bank PSRO PforR component funding – Annually

Day	Action	Responsible
July 30, 2020 January 30, 2021 (and each twelve months thereafter)	- BOF Project Management Unit (PMU) hires IVAs based on ToRs satisfactory to the World Bank - IVA verifies the achievement of the DLIs and sends its report with supporting documentation to the World Bank and FMFBNP - World Bank makes the annual disbursement of PforR funds (based on achievement of DLIs) into NBET's DA with the CBN opened for the payment of PforR proceeds (the "CBN/NBET/ PforR Account")	World Bank: Disbursement Officer for the PSRO [per the procedure described in the Disbursement Letter] NBET: [Responsible of establishing account with CBN]

Process 4: Payment of new Tariff Shortfalls – Monthly

Shaded rows indicate steps that reflect the regular invoicing and settlement cycle in the power market

Day	Action	Responsible
CD 01 - 30	GENCOs & GASCOs deliver service.	GENCOs & GASCOs
CD 31 - 50	Market Operator (MO) issues preliminary and final settlement statements.	MO
CD 51	GENCOs & GASCOs deliver invoices to NBET.	GENCOs & GASCOs
CD 52	NBET sends monthly invoices to DISCOs specifying the expected Minimum Remittance Payment (based on NERC MYTO Minor review with absolute amounts determined on the basis of MRT percentages set by NERC and invoice amount of each DISCO).	NBET: [Contract Management Office]

Day	Action	Responsible
CD 55	NBET assesses the Invoice Gap of each GENCO related to Tariff Shortfalls and sends GENCOs' and DISCOs' invoices together with its assessment of the Invoice Gap of each GENCO related to Tariff Shortfalls to the CBN, copying PSRP Secretariat and DG Budget in FMFBNP.	NBET: [Contract Management Office]
CD 66	DISCOs' invoices are due and paid directly into an NBET account with the CBN designated for that purpose (the "DISCO collection/NBET Account"). [Note that payments will be made simultaneously from Disco receipts and Tariff Shortfall from the Financing Plan]	DISCOs
CD 71	NBET instructs CBN to pay GENCOs the funds received from DISCOs and the Invoice Gap related to Tariff Shortfalls	NBET [Responsible]
CD 72	CBN on behalf of NBET pays GENCOs Invoice Gap related to Tariff Shortfall from CBN/NBET/FMFBNP and CBN/NBET/World Bank PforR Accounts and Payment received from DISCOs in the DISCO collection/NBET Account	CBN [Responsible]
CD 73	GENCO invoices are due	

Process 5: Non-Tariff Shortfalls (in the event of DISCOs' license interventions by NERC) – Quarterly

Day from end of the quarter	Action	Responsible
CD 10	In event of DISCO license intervention by NERC, PSRP Secretariat, in consultation with NBET, determines the amount of Non-Tariff Shortfalls to be paid to each GENCO for previous quarter within the ceiling approved in the Financing Plan and sends these to DG Budget for approval	FMFBNP: PSRP Secretariat
CD 15	DG Budget approves the amounts of Non-Tariff Shortfalls to be paid to each GENCO.	FMFBNP: DG Budget
CD 18	NBET instructs the amount that each GENCO should be paid for Non-Tariff Shortfalls consistent with DG Budget approval	NBET [Responsible]
CD 20	CBN on behalf of NBET pays GENCOs from the Program Account	CBN [Responsible]

Process 6: Repayment of CBN PAF - *Quarterly*

Shaded rows indicate steps that reflect the PAF repayment steps already followed

Day from end of the quarter	Action	Responsible
CD 05	CBN sends the invoice to FMFBNP as PAF guarantor, copying the DG Budget and PAF Secretariat.	CBN [Responsible]

Day from end of the quarter	Action	Responsible
CD 10	PSRP Secretariat advises DG Budget on the availability of funds in each of the CBN/NBET/FMFBNP and CBN/NBET/PforR Accounts and the proposed amount for PAF repayment.	FMFBNP: PSRP Secretariat
CD 12	DG Budget approves the proposed PAF repayment and instructs CBN to make the payment.	FMFBNP: DG Budget
CD 14	CBN transfers the amounts advised by the DG Budget from CBN/NBET/FMFBNP and CBN/NBET/World Bank PforR Accounts for CBN PAF Repayment.	CBN [Responsible]

Process 7: Payment of Historical Tariff Shortfall Arrears - *Annually*

Days after the year end	Action	Responsible
CD 15	At the end of the calendar year, the PSRP Secretariat confirms that all ongoing tariff shortfalls have been paid and if there are funds remaining in the CBN/NBET/FMFBNP and CBN/NBET/World Bank PforR Accounts and advises NBET about the availability of funds to cover Historical Tariff Shortfall arrears.	FMFBNP: PSRP Secretariat
CD 20	NBET prepares a schedule with the amounts to be paid to each GENCO based on the available funds advised by the PSRP Secretariat	NBET [Responsible]
CD 23	DG Budget approves the proposed amounts	FMFBNP: DG Budget
CD 24	NBET instructs CBN to pay GENCOs consistent with DG Budget approval	NBET [Responsible]
CD 26	CBN on behalf of NBET pays GENCOs from CBN/NBET/FMFBNP and CBN/NBET/World Bank PforR Accounts.	CBN [Responsible]

Annex 6: Summary Environmental and Social Systems Assessment

1. **The Environmental and Social Management System Assessment (ESSA) examines the Government's existing environmental and social management systems as relevant for the Program.** The ESSA is undertaken to ensure consistency with six core principles outlined in paragraph 8 of the "World Bank Policy for Program-for-Results Financing" to effectively manage Program risks and promote sustainable development. The scope of the ESSA includes the activities necessary to achieve the PDO, encompassed by the DLIs and Results Area Framework. Based on the gaps identified, the ESSA defines measures to strengthen the system and integrates these measures into the overall Program. Environmental and social impacts under the TA component of the Program are negligible and are addressed separately through the Integrated Safeguards Data Sheet (ISDS). The findings of the ESSA are summarized below.[55]

2. **The ESSA was prepared by the World Bank staff through a combination of reviews of existing Program materials and available technical literature; interviews with Government staff, NERC and sector experts; and field interviews with consumers and DISCOs and NGOs.** It also builds on the nation-wide survey conducted for the communications component of the Program.

A. Environmental Systems Assessment

3. **The Program is expected to generate some environmental and social benefits, which will result from improved power availability.** Review of MYTO and implementation of PIPs which will lead to efficient electricity pricing and reduction of technical and non-technical losses in electricity distribution will generate some climate co-benefits due to reduction in carbon emission. Efficient pricing, improved electricity supply, and performance improvement could also lead to reduced pollution due to reduction in the use of fossil fuels as well as reduction in the use of fuel wood, charcoal at household and business/industrial level for powering generators by households and businesses. This switch would also generate social benefits by improving reliable access to electricity for households and businesses and reduce the health impact associated with using traditional fuel sources (e.g. firewood, kerosene).

4. **The Program is not expected to entail significant adverse environmental risks and impacts, as defined under OP/BP 9.0 and related guidance notes.** The potential environmental risks are indirect, very limited and often negligible. This is because the Program activities do not imply any type of physical works; hence, the impacts are envisaged to be small-scale and site-specific, consistent with category B. Since the PSRO aims to increase electricity supply within the existing operating capacity of the sector by focusing on regulatory, governance, financing and institutional measures of the PSRP without the need for investments with substantial and irreversible safeguards impacts and risks, the environmental risks are expected to range from low to moderate. Activities that could have significant adverse impacts, are sensitive, diverse, irreversible, or unprecedented on the environment, and/or affected people are not eligible for financing and are excluded from the Program. Screening of risk will be part of the implementation of the ESMS for which training will be provided. As a result, the PSRO is not expected to impact the Core Principles 1 and 2 outlined in World Bank Policy and Directive for Program-for-Results Financing, respectively dealing with Environmental Sustainability and Natural Habitats and Physical Cultural Resources in an unprecedented manner.

5. **Overall, the environmental systems for handling such impacts and risks are relatively strong.** The Government and the power sector have generally good track record for complying with Nigeria EIA laws and World Bank safeguards policies in development operations. Specifically, national policies,

[55] The finalized ESSA was disclosed in country on May 16, 2020.

regulations and other legislation pertaining to environmental management are well-defined. Institutional systems identifying environmental protection procedures and legislation to be followed in the country are well-defined. The national EIA system (EIA Act No. 86 of 1992) provides a comprehensive legal and regulatory framework for environmental and social impact assessment that is broadly consistent with the Core Principle 1 of the World Bank Policy and Directive. The FMoP and Federal Ministry of Environment (FMOE) have experience with integrating rules and procedures for environmental and social management in individual projects generally. EIA capacity training for FMOE has been conducted under the World Bank's and other donors' existing programs.

6. **However, the ability of the relevant institutions to enforce the existent laws is rather weak and requires further strengthening.** The ESSA has assessed the institutional capacity of key sector institutions (FMoP, NERC, NBET, TCN, DISCOs, etc.), as well as the respective regional and local level counterparts, to plan, monitor, and report on environmental and social management measures and address social and environmental issues associated with the Program. It has identified additional key measures to help the relevant agencies overcome gaps related to environment, social, and safety aspects and improve their systems on safeguards management. Key measures were carefully selected to be part of the PAP and DLIs. Overall, these risks should be mitigated through a combination of capacity building of key sector institutions and monitoring and implementation support by the World Bank. The Government will be required to proactively inform the World Bank that the extant Nigeria EIA laws have been adhered to. Implementation will be closely monitored through routine Program reporting and occasional verification by the PSRP Secretariat and the World Bank. Strengthening the capacity of the regulatory and enforcement institutions and their staff, especially FMOE, NERC, and the National Environmental Standards and Regulations Enforcement Agency (NESREA), will also support effective implementation and enforcement of existing legal and regulatory frameworks guiding environmental management.

B. Social Systems Assessment

7. **The social benefits of the Program relate to improved social welfare and trust.** For households, increased reliability and predictability of electricity supply can reduce wastage of food and other perishables, allow for the reallocation of time spent securing alternative energy sources toward other economic or leisure activities, and facilitate household access to modern appliances, as well as resources that allow for the operation of small home-based businesses. For businesses, increased supply of electricity can be cost-saving, as it reduces expenditures on more expensive sources of energy (e.g. diesel-based self-generation). Productivity may improve with reduced losses of work hours and increased utilization of electric equipment. As such, improved reliability of service can help rebuild public trust in the power sector.

8. **Given the fragility of some parts of Nigeria and energy customers' frustration about the poor quality of electricity provision, social conflict should be considered a contextual risk of the Program if the PSRP fails to deliver the intended outcomes.** The reluctance of DISCOs to ensure that all customers are metered, and to read meters when they are installed, is believed by customers to be driven by DISCOs' need to maximize revenue. Estimated billing, and lack of timely or effective redress when customers complain, is a major source of dissatisfaction amongst customers. It has probably also contributed to the continuing under-payment of monthly bills.

9. **Aligned with the applicable Core Principles 1, 5, and 6, which pertain to Social Impact Assessment and Management, Vulnerable Groups, and Social Conflict, respectively, building trust is critical to addressing the transparency and accountability issues outlined above.** Building trust between customers and DISCOs will also contribute to the reduction of collection and commercial losses (losses due to theft). It has been determined that the governance systems of the Government and the DISCOs

are the mechanisms that could best affect change. The main principles of governance measured in the ESSA applied by the Electricity Governance Initiative include: transparency and access to information; participation; accountability and redress mechanisms; and capacity.

10. **Discussions with DISCOs, MDAs, and NGOs determined that there are areas for improvement along all four principles of governance, particularly in communication between the sector agencies and key stakeholders.** Transparency surrounding bill payment can be increased (particularly in the case of estimated billing), and opportunities for customer participation through feedback should be further developed. Accountability measures must also be strengthened, as redress for over-estimated bills is difficult, tariff policy is not well-understood, and the procedure for filing complaints is unclear to customers. Improving the capacity of NERC and DISCOs to organize transparent and inclusive consultations is also necessary. NERC, DISCOs, GENCOs and other power sector stakeholders should increase information dissemination to enhance public awareness about power sector reform, the tariff policy, and the need for consumers to pay for electricity in order to guarantee electricity supply reliability. This will reduce the tension and conflicts that accompany increases in electricity price, and thus facilitate the cooperation of consumers. In addition to information dissemination, there should also be community engagement and public consultation to enable consumers to contribute to the reform process. Already, some DISCOs conduct radio phone-in programs through which they respond to feedback and deal with consumer complaints. This should be intensified and complemented with scheduled town hall meetings with consumers in order to facilitate their cooperation. NERC and DISCOs should also build upon their existing initiatives to strengthen grievance redress mechanisms to provide avenues for complaints and their prompt resolution.

Gender

11. **Improved availability and reliability of electricity can be expected to increase educational opportunities for women and girls, as well as their health and security.** By enabling lighting in the home and allowing educational facilities to use electrical equipment, electricity expands opportunities for women and girls to further their education. The quality of healthcare, for maternal services, for example, would also be improved. When electricity replaces traditional fuels, household air pollution and the risk of accidents causing burns or poisoning is reduced, women save time securing alternative fuels, and could improve their productivity by working during hours of darkness or through access to electrical appliances. Additionally, reliable lighting increases women’s sense of security. Improved availability and reliability of electricity can also contribute to women’s political empowerment and access to economic opportunities, by enabling opportunities to access modern information and communications technologies. Women’s involvement in organisations of electricity consumers could also contribute to their political empowerment.

12. **Recognizing the importance of enhancing gender equality in energy delivery to Nigeria’s growth and poverty reduction strategies, the Government has already undertaken various actions.** The National Gender Policy by the Federal Ministry of Women Affairs and Social Development focuses on female empowerment and a commitment to gender mainstreaming. In addition, a Gender Focal Point has been established in the FMoP, which ensures compliance with various measures (e.g. the National Gender Policy). Other initiatives, such as the FMFBNP’s Girls and Women’s Initiative of Nigeria (G-WIN), have partnered with the Rural Women Energy Security (RUWES) Initiative, in recognition of the fact that providing households, social institutions, and productive enterprises with new energy access and improved energy services has the potential to promote gender equality, create employment and business opportunities for women, and improve development outcomes. The RUWES Initiative aims to incorporate gender concerns into energy policies and ensure gender-sensitive capacity building programs in the energy sector.

13. **The nation-wide survey conducted as part of this Program, reveals several gender gaps related to women and men's awareness and understanding of the power sector reforms occurring in Nigeria.** For example:

- **Fairness**: Only 14 percent of female respondents thought that the power sector was managed fairly and efficiently in order to benefit Nigerian citizens, versus 20 percent of male respondents.
- **Awareness**: 13 percent of female respondents were aware that there is a reform program within the power sector, compared with 16 percent of male respondents.
- **Access to Information**: Only 23 percent of female respondents indicated they knew the objective of the PSRP, versus 32 percent of male respondents.

Furthermore, given women's gendered roles in Nigeria in terms of household tasks, they are often the most directly impacted by energy poverty and changes in the power sector, e.g. outages, tariffs and service provision. This situation can be compounded by income inequalities, lower access to information, fewer decision making and lower literacy levels among women. For example, women spend 80 minutes/day (versus 64 minutes/day for men) collecting fuels or water. In addition, 76 percent of young male and 61 percent of adult males are literate versus 58 percent young female and 41 percent adult females. More male heads of households attain secondary education (30 percent) than female heads of households (24 percent). There are also significant gaps in women's representation in the Nigeria's energy sector, with a USAID report in 2016[56] estimating employment of women in two major energy utilities sitting at around 19 percent. Across utilities workforce in Eastern Europe, the Middle East and Africa women make up an estimated 13 percent of employees.[57]

14. Given the gender gaps identified, the Program will undertake key actions to ensure that women's agency and voice is increased with regards to power sector reforms.

- **Engaging Communities on Power Sector Reform Issues Through Women's Groups:** To ensure that both women and men have access to information about the power sector reforms and are provided the opportunity to provide feedback on the PSRP, key women's groups in Nigeria will be engaged to enable them to educate and provide information to the public. This will form part of the overall national communications strategy for the PRSP activities. The purpose of these actions is to engage community members on key issues related to energy service delivery and engage citizens on the power sector reform objectives and goals. Focus will be placed on leveraging women's groups (e.g. such as RUWES Initiative) for peer-to-peer learning to enhance information flows and develop networks to provide tailored information to households and businesses and facilitate the dialogue between energy customers and power sector agencies. Attention will be paid to ensuring this information is provided in a way that it is accessible to both women and men, e.g. in female-only gatherings or orally versus through newspapers only, social media etc. Feedback will also be captured on consumer experiences (by sex) regarding service delivery, information provision, and complaints handling through DISCOs' customer relations function.
- **Follow-Up Survey and Respondent Feedback:** To ensure progression towards ensuring both women and men's voice and agency is enhanced during the sector reforms related to e.g. changes in tariffs, bill payment methods, the scope of policy changes etc., a follow-up survey will be conducted at the end of the Program. PDO Indicator 3B will track the share of women reporting

[56] https://unfccc.int/files/gender_and_climate_change/application/pdf/engendering_utilities.pdf
[57] https://www.usaid.gov/sites/default/files/documents/1865/Engendering-Utilities.pdf

they understand the objective of the PSRP from a baseline of 23 percent to a target of at least 40 percent.

- **Capacity Building:** The Program will help strengthen the mandate of the gender focal point in the FMoP by developing a work plan and clear lines of responsibility for the gender desk/focal point. In addition, support will be provided to ensure the focal point has the capacity to engage with gender actions under the PSRP as outlined above.

Consultations

15. **The World Bank social and environment team carried out formal virtual consultations on the ESSA on May 7, 2020 with a large group of stakeholders, including representatives of the Government, sector companies, and civil society groups.** The draft ESSA was shared with the key stakeholders involved with environmental and social management issues in Nigeria. The final ESSA, reflecting the comments presented at the consultations, was publicly disclosed on the World Bank external website on May 18, 2020 and in-country by the EA Department and at the PSRP website (mypower.ng) on May 17, 2020. The key actions and measures identified in the ESSA are included as part of the PAP to ensure improved environmental and social due diligence in the Program.

C. Poverty and Social Impact Assessment

16. **The proposed PSRO is expected to have positive effects on the economy and social welfare in the long-term.** Ensuring that all sector operators receive their revenue requirement, together with enforced payment discipline, will enhance their financial viability, allowing them to invest in measures to improve the reliability of electricity supply. Improved reliability of supply will reduce losses to firms, increase productivity, and eventually lower costs for the public.[58] Due to frequent blackouts, producers have to rely on backup generators, which are more expensive than grid electricity, even with the tariff increase to reach cost recovery expected by 2022.[59] Improved reliability will allow producers to use more grid electricity. As a result, there can be some savings in production and service costs. Similarly, the improvement in grid electricity will allow households to rely less on generators, resulting in direct cost savings.

17. **However, it may have some negative effects in the short-term, which require mitigation.** The financial viability of the sector requires that tariffs are gradually adjusted to achieve cost recovery. Tariff increases are expected to reduce grid-connected and metered households' purchasing power but yield important savings that can be redirected toward mitigation measures that are better targeted toward low-income households and activities that enhance inclusive growth. Eventually, cost-reflective tariffs can reduce wasteful consumption, relieve pressure on the Government budget and the environment, and limit distortion of the economy. Overall, the short-term impacts presented in the analysis below should be contextualized, as long-term effects are expected to be positive and outweigh the losses in the short run. In the long term, the economy-wide effects of the reforms are expected to contribute to the increase, inclusiveness and sustainability of growth.

18. **The poverty and social impact analysis (PSIA) focuses on identifying potential short-term negative impacts of the tariff increase currently envisioned in 2020 on household welfare.**[60] The PSRP Financing Plan has dimensioned the annual tariff shortfall ceilings for 2020-2027, with regular updates to

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[58] According to the Nigeria Enterprise Survey of 2014, 76.8 percent of Nigerian firms experienced power outages, resulting in an average loss of 11.2 percent of their annual sales.

[59] The cost of private generation is 62–94 Naira/kWh (Nigeria Power Sector Baseline Report), compared with the estimated cost reflective tariff for 2022 of 59 Naira/kWh.

[60] The more detailed analysis, with description of the methodology, is available upon request.

reflect the changing sector conditions. Tariffs will need to be adjusted to maintain tariff shortfalls within the ceilings set out in the approved Financing Plan and with the measures for protecting the poor envisaged in the same Plan. To keep to the tariff shortfall ceiling set in the approved 2020 PSRP Financing Plan, average end-consumer tariffs are expected to increase in 2020. The tariff increase will vary by customer classes and service areas.

19. The PSIA simulates the impact of an average increase consistent with 2020 PSRP Financing Plan (in nominal terms), assuming that this increase applies uniformly to residential tariffs for R2 customers[61] using the latest household survey. It focuses on the direct impacts, which results from change in electricity consumption. Indirect impacts, which relate to the impact of higher electricity tariffs on the prices of other items which use electricity as inputs, could not be simulated due to the lack of an input-output table for Nigeria. However, the indirect impacts are likely to be limited in Nigeria due to high reliance on diesel generators as a back-up to unreliable grid-electricity supply.

20. **Financing for tariff shortfalls, or underpricing of electricity, benefit only half of the population, and mainly the rich since electricity access and spending are still limited in Nigeria.** Nationwide, 53 percent of the population (56 percent of households) reported connecting to the grid, of which 72 percent of households reported spending on electricity in the last month. Among those who purchased electricity, the amount of spending is equivalent to 67 kWh a month on average. Access and spending are particularly low among the poor: while around 80 percent of the richest 40 percent of the population, ranked by total household expenditure per capita, had grid electricity, only 37 percent of the poorest 40 percent did. Among them, 69 percent paid for less than 50 kWh a month and less than 1 percent paid for more than 100 kWh. The distribution of tariff shortfalls therefore is regressive, with only eight percent benefiting the bottom 40 percent of the population.[62] Across regions, access and spending are higher in urban than in rural areas, and higher in the South than in the North.

21. **Direct impacts of tariff increase are limited to connected households and, among them, only metered households, which account for a quarter of total households.** Although not reported in the household survey, only 47 percent of connected households are metered (NERC estimate) and will face an increase in their electricity bills. The electricity bills of connected and unmetered households will actually decrease (see below). Among the metered households, the estimated impact is limited, with the direct loss estimated at around 1.3 percent of household expenditure and ranging from 1.2 percent among the middle deciles to 1.5 percent among the poorest and richest deciles (Figure 6-1).[63] While welfare loss is similar, poorer households spent less than richer households on electricity in absolute terms, hence their absolute increase in electricity bills is much smaller (₦730/month on average for the bottom 40 percent of households compared with around ₦1215/month for the top 60 percent). The household survey does not identify metered households, but metered households are generally known to be higher income households. Assuming that the share of metered and unmetered households among the poor households is the same as for the overall connected households, only 17 percent of poor households are estimated to be connected to the grid and metered. As a result, the estimate of the impact of the tariff increase on poor metered households should be treated as an upper bound estimate. Access and spending, as a share of household expenditure, are higher among female-headed households and their direct impact is therefore slightly higher than for male-headed households.[64]

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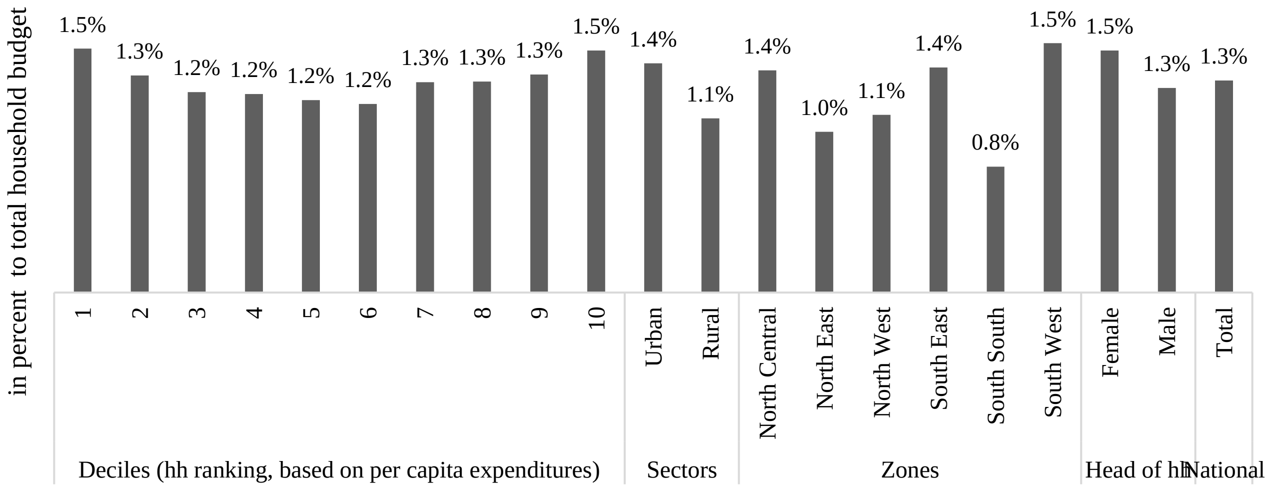
[61] Residential customers are segmented into 4 groups (R1-R4). R2 form the majority of residential customers. Other customer classes are industrial and commercial.

[62] Subsidies are calculated as the difference between cost-reflective tariff and applied tariff in 2019.

[63] With the assumption that consumption is inelastic and therefore does not decrease when price increases (maximum impact).

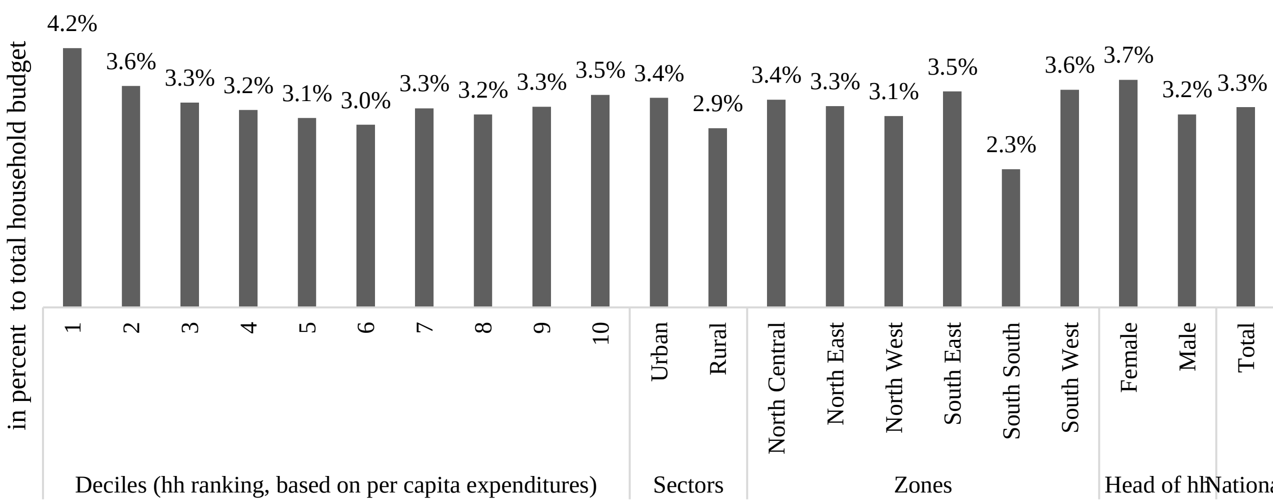
[64] More than two thirds (79.4 percent) of households in Nigeria are male-headed, but they are, on average, slightly poorer than female-headed households.

Figure 6-1: Direct effect as percent of household expenditure



22. **Electricity remains to be a small share of household expenditures, but much of the impact depends on household payment behavior.** With the direct effect outlined above for metered households, electricity spending would increase to around 3.3 percent of total household expenditures on average and range from 3 percent among the middle decile to 4.2 percent among the poorest decile (Figure 6-2). It is important to note that this impact is simulated on the reported spending of households since actual consumption is not measured in the household survey. According to NERC's records, payment (or spending) is consistently lower than billing, which is also lower than consumption due to non-technical losses (unaccounted consumption).

Figure 6-2: Share of electricity spending in total household expenditures after 2020 tariff increase



23. **The Government and NERC envisage two immediate measures to protect poor households, one for metered and one for unmetered customers.** For metered households, tariff adjustments in 2020 will not apply to the first (R1) residential class (those consuming less than 50 kWh/month) and remain at 4 ₦/kWh. Due to lack of metering, this benefits few households since, according to NERC administrative data, only 2.7 percent of metered residential customers fall into the R1 class. In the household survey, a

similar percentage of households reported paying less than ₦200/month (equivalent to 50 kWh/month at ₦4/kWh). These households, likely concentrated among the bottom 40 percent, will see no increase in their electricity bills. The rest of households have to pay the R2 tariff which is 7-8 times higher even though many paid for less than 50 kWh/month (according to the household survey). The rollout of metering that NERC is planning as part of the PIPs is critical for allowing larger share of poorer households benefit from the affordable R1 tariff. In addition, R2 class is very broad and an effort to review the classification of R2 customers could allow better protection of poorer households through tariff design. NERC is planning to review the tariff structure as part of the MYTO extraordinary review to be completed by December 31, 2020. For unmetered households, NERC has issued an order establishing a cap on the volume of electricity that DISCOs can bill the unmetered households. Though on average the bill will be capped at 100 kWh, this will vary by service area[65]. Since the average bill for unmetered customers is around 189 kWh/month, NERC estimates that the capping will, on average, reduce the volume of energy billed by half while also making the bills more predictable and less variable.

24. **The capping of the bills for unmetered households will, in the short term, reduce these households' electricity bills and benefit mainly the poor.** Around 53 percent of residential customers are unmetered, many of whom are likely poorer households. Prior to the capping, the electricity bills of unmetered households were estimated by DISCOs by roughly dividing the amount of unaccounted electricity among unmetered households, which meant that the bills did not reflect actual consumption and were often much higher than those for metered households. While the average bill for metered R1 and R2 households was around 65 kWh/month, it was around 189 kWh/month for unmetered households. As a result, the collection rate was around 80 percent among metered households (equivalent to 58 kWh/month), but only 37 percent among unmetered households (equivalent to 70 kWh/month). If the ongoing and planned effort (as part of the PIPs) to improve collection materializes, the impact on household welfare could have been unless it was subdued by the parallel effort to increase metering. While the metering gets rolled out as part of DISCOs' PIPs, the capping of the bill is estimated to reduce the electricity bills of unmetered households by ₦800/month. As mentioned above, the majority of connected poor households are unmetered, so this benefit would apply to at least 53 percent of the bottom 40 percent that are connected, or 20 percent of all bottom 40 households. Only up to 13 percent of bottom 40 households (those who are metered) will see an increase in their electricity bills, while the rest will experience no impact because they are either not connected or under the unchanged R1 tariff (Table 5).

25. **In addition to the tariff-related mitigation measures, there could be other compensation measures using a small share of the fiscal savings.** The tariff adjustment in 2020 is expected to reduce the tariff shortfall from ₦606 billion (no tariff adjustment scenario) to ₦320 billion, saving ₦286 billion. If targeted properly, a fraction of this amount could be used to mitigate the adverse direct welfare effects of tariff increase for poor households, without accounting for the savings by switching from self-generation to grid electricity estimated above. The Government's new cash transfer program could be used for this purpose. Another and possibly better use of funds would be to expand primary health and education services to the poor and develop basic physical infrastructure. Nigeria's socioeconomic indicators are low due to the lack of adequate spending in areas that benefit the poor.

[65] Caps are being defined based on average metered consumption in each service area of DISCOs. As a result, service areas with more limited metered consumption, which generally include poorer households, will have lower caps than the areas with larger metered consumption.

Annex 7: Systematic Operations Risk Rating

Systematic Operations Risk-Rating Tool (SORT)	
Risk Category	**Rating (H, S, M, L)**
1. Political and Governance	H
2. Macroeconomic	H
3. Sector Strategies and Policies	H
4. Technical Design of Project or Program	M
5. Institutional Capacity for Implementation and Sustainability	H
6. Fiduciary	S
7. Environment and Social	M
8. Stakeholders	H
9. Operational risk linked to distribution constraints	H
OVERALL	**H**

1. **The risk to achieving the PDO and the associated results is rated as High due to high rating of** Political and Governance, Macroeconomic, Institutional Capacity for Implementation and Sustainability, Stakeholders, and Operational risk associated with distribution constraints, and substantial rating for Fiduciary risks

2. **Political and Governance Risk is rated High.** The Government is committed to the PSRP and there is overall strong ownership of the PSRP among different MDAs. The PSRP's successful implementation depends on the concerted and well-coordinated efforts of the MDAs, which is challenging in Nigerian context, as there are significant overlaps of institutional roles and responsibilities (including oversight and regulatory authorities) with resulting conflicts among the MDAs, as well as inefficiencies. In addition, Government's priorities may shift over time and/or there may be changes in the Government, which all may impact PSRP implementation. To mitigate these risks, the proposed operation places a strong emphasis on strengthening governance arrangements in the sector, including measures to establish high level oversight from the Office of the President, streamline and delineate roles and responsibilities of various MDAs and establish robust coordination mechanisms. Also, the proposed operation (prior DLIs) as well as the programmatic design of the overall World Bank engagement incentivize front-loading of the Program implementation, which the Government is already doing. This risk will be also mitigated by strengthening stakeholder engagement and participation (e.g. citizens, businesses, financiers, etc.) in the PSRP implementation, and focusing on measures that will enhance sector transparency and accountability (e.g. communication, strengthening performance reporting and monitoring framework, etc.). However, this risk cannot be fully mitigated, and the residual risk is high.

3. **Macroeconomic risk is rated High, as a result of the significant uncertainty over key macro-fiscal parameters and the heightened macro risks related to COVID-19.** In 2020**,** COVID-19, decline in oil prices and the projected economic downturn for Nigeria will likely further aggravate the precarious financial situation of the power sector (as described in Box 1) making it challenging to implement the PSRP Financing Plan undermining progress towards the PDO of strengthening financial and fiscal sustainability. Even without the challenges of COVID-19, the macroeconomic risks are high. The revenue requirements

of power sector companies, and thus the tariff shortfall, are sensitive to changes in macroeconomic parameters, in particular the FX rate, where further movements are likely given: 1) several FX windows still operate in Nigeria; and 2) Nigeria's external sector is still reliant on oil so oil shocks will put pressure on the FX. FX depreciation is reflected in the MYTO minor reviews and will increase the revenue requirements of the sector and the cost-reflective tariff going forward[66]. Without tariff adjustments, the new tariff shortfalls of the sector will increase, creating a gap in the PRSP Financing Plan. In addition, nearly 40 percent of the source of funds for the Financing Plan is expected to come from direct FGN budget appropriations. While the 2020 FGN amended budget is expected to reflect emerging fiscal realities, further revenue shortfalls are possible from deeper recession and business discontinuity if there is a more severe spread of COVID-19 in Nigeria. Such revenue shortfalls would make it challenging for the FGN to fully execute the 2020 FGN budget contribution to the Financing Plan even with the high degree of political commitment to the power sector. A slow recovery would also reduce the FGN's ability to execute the direct budgetary contributions to the PRSP Financing Plan for 2021 and beyond. Mitigation measures for these risks include (i) drawdown of the FGN budgetary contributions in the beginning of each quarter as an advance to mitigate the budget execution risk; (ii) conversion of the PSRO financing proceeds at NAFEX to provide a natural hedge against NAFEX rate movements; (iii) regular updating of the PSRP Financing Plan so that FGN can respond to increased tariff shortfalls as a result of changes in the macro-fiscal parameters (e.g. through more aggressive tariff adjustment, postponing the settlement of historical tariff shortfall arrears, raising additional financing from other sources[67] for the PSRP Financing Plan). However, the residual risk after all mitigation measures remains high.

4. **Sector Strategies and Policies risk is rated High.** Overall, power sector strategies, policies and regulations are adequate and, in many cases, consistent with international good practices. However, sector performance has been unsatisfactory, largely due to inconsistent enforcement of the existing strategies, policies and regulations. These risks will be mitigated by ensuring that the sector companies receive their revenue requirement through tariff adjustments and the Financing Plan and gradual and increasing enforcement of sector policies, regulations and contracts on that basis. However, given the political sensitivity associated with tariff revisions and the fiscal challenges that the Government faces, which are further aggravated by COVID-19 and the server fiscal and economic impacts it is expected to have on Nigeria, the residual risk associated with power sector strategies and policies remains substantial.

5. **Institutional Capacity for Implementation and Sustainability risk is rated High**. There is overall strong commitment to the PSRP and good understanding of comprehensive measures required for improving the performance of the power sector by the top officials in the FGN. However, the success of the PSRP and the proposed PSRO depends upon the implementation of complex governance, policy, institutional, regulatory and financial measures by multiple MDAs, which have capacity gaps. This risk will be mitigated through the provision of sizable TA for implementation support and capacity-building through the TA component of the proposed PSRO and other operations of the World Bank in the power sector, as well as through the support provided by other development partners (in particular DFID). The

[66] Currently the MYTO is not underpinned by one single exchange rate as it reflects the different contractual arrangements in the sector, including the prevailing PPAs of GENCOs, with most but not all PPAs referenced to the CBN official rate. The DISCOs' allowances on operating and capital expenditure are also currently converted using the CBN official rate, although this is not stipulated as part of their Performance Agreements. The Program supports movement to the use of NAFEX to convert DISCOs' allowances on operating and capital expenditures from January 2021 onwards. GENCOs costs will remain based on the FX rate in prevailing PPAs/contracts. The pass through of a FX depreciation is not immediate or automatic as the MYTO review is only done semi-annually. The extent of the pass through will also depend on which exchange rate is depreciating and their weight in the MYTO.

[67] The budget process allows for mid-year adjustment. Small increases in the shortfall can be addressed through contingency budget. Larger increases that require budget revision will require approval by the National Assembly, hence will be challenging.

sustainability of the Program may be undermined if there is a change in Government, which could then lead to a change in the strategy to be pursued in the power sector. This risk will be mitigated by establishing governance structures and mechanisms that institutionalize the process of the PSRP monitoring, coordination and oversight and that engage broader stakeholders in this process (including citizens and the private sector). The residual sustainability risk, however, remains high.

6. **Fiduciary risk is rated Substantial.** The fiduciary systems assessment has identified significant risks. The main areas of fiduciary risk to the Program include: 1) unpredictability in the timing and amount of release for the FGN budgetary contributions towards the PEF; 2) diversion of funds under the PEF for payments other than those specified in the Financing Plan (e.g. payments to GENCOs from the PEF that are above and beyond new and historical tariff shortfalls); and 3) timely production of audited financial statements. To mitigate the first risk, the FGN's annual budgetary contributions' to the PEF will be prioritized and FMFBNP will be requested to release the funds on a quarterly basis, in advance, to the Program account. For the second risk the use of the funds under the Financing Plan and the Program expenditure framework will be monitored and managed through monthly reports to the PSRP Secretariat and the use of a clear payment protocols. Most importantly, Global DLI 2 incentivizes the approval and implementation of the Financing Plan which forms the basis of the PEF. Finally, the NBET has already engaged auditors for clearance of audit backlog and it is anticipated that going forward, the audits of financial years covered by the Program, with enhanced scope to cover the Program account, will be completed in a timely manner. Nevertheless, the residual risks remain substantial due to systemic concerns regarding FM, procurement, fraud, and corruption.

7. **Stakeholder risk is rated High.** Several stakeholder groups may resent the PSRP, which could impact its implementation and results. These stakeholders include: (i) electricity consumers who would be paying higher tariffs as the tariffs gradually reach cost recovery; (ii) legislative body that may refuse to approve the annual budget allocations for covering the tariff shortfall; (iii) MDA officials and staff who may have to discontinue their long-established practices of sector regulation and oversight and who may have vested interests in the sector. These risks will be mitigated by: (i) linking tariff adjustments to improved performance and accountability of the sector; (ii) ensuring stakeholder engagement in the PSRP monitoring and implementation process by involving the stakeholders in the overall governance arrangements and establishing accountability mechanisms to transparently monitor sector financial and operational performance improvements; (iii) implementing a wide communication campaign to explain the rationale for tariff adjustments, how the impacts will be mitigated for the poor and the tangible benefits that customers should expect from PSRP; (iv) identifying and strengthening the role and capacity of "champions" of reforms in each key MDA. Given the sensitive reform measures involved as part of the PSRP and the multiplicity of stakeholder interests impacted, the residual stakeholder risk remains high.

8. **Operational risk linked to distribution constraints is rated High.** The Program's objectives will not be achieved if the existing constraints in distribution infrastructure are not addressed. The Program involves several DLIs intended to ensure that adequate incentives are established for DISCOs' improved performance, together with tighter regulatory oversight and accountability as well as to establish business continuity arrangements for DISCOs in the event of their license intervention. In addition, the proposed operation for distribution recovery (currently under the preparation) will help DISCOs' with the implementation of PIPs while helping them also strengthen their governance and capacity. Despite this comprehensive set of measures, both DISCO turnaround and gas supply constraints remain complex issues and the residual risk is therefore high.

Annex 8: Program Action Plan

Action Description	DLI*	Due Date	Responsible Party	Completion Measurement**
Technical aspects				
MYTO reviews and resetting of performance parameters:				
• Completion of MYTO minor reviews to (i) adjust the FX and energy volume assumptions consistent with the FGN approved Financing Plan; and (ii) defining scope and implementation arrangements of a phased service quality -based tariff regime linking tariff rates paid by customers in each class to the level of service measured by supply hours	☒	July 1, 2020, semi-annually thereafter	NERC	MYTO for each DISCO
• Communication that the allowance parameters on capital expenditure, operational expenditure, and ATC&C losses in the Performance Agreements will end on December 31, 2021	☒	July 1, 2020	BPE	Notice
• Determination of revenue requirements of DISCOs and TCN for 2021-25 based on MYTO extraordinary review and setting new allowances for operating expenditure, capital expenditure and ATC&C losses from January 1, 2022	☒	December 31, 2020	NERC	Order for each DISCO and for TCN
Establishment and periodic updating of the PSRP Financing Plan:				
• FMFPNP issuance of updated Financing Plan on an annual basis together with underlying macro-sectoral assumptions and policy decisions	☒	Continuous (annually by the end of each year for the coming year)	FMFBNP	Memorandum and Minutes/Letter
• Hiring of an officer in the PSRP Secretariat to oversee the updating of the Financing Plan (the PEF) and monitoring of its execution by NBET	☐	Within three months after effectiveness	PSRP Secretariat	Appointment letter
• Quarterly Financing Plan monitoring and implementation	☒	Quarterly (three months	PSRP Secretariat	Quarterly Financing Plan monitoring and

Action Description	DLI*	Due Date	Responsible Party	Completion Measurement**
reports including the size of new tariff shortfalls and new non-tariff shortfalls, the uses of funds and the sources of funds		after the end of the quarter)		implementation reports
Distribution turnaround: • Approval of DISCOs' PIPs	☒	September 30, 2020	NERC	Orders approving PIPs
• Monitoring and enforcement of PIPs' implementation for DISCOs	☒	Continuous (annually for the three quarters of applicable year and last quarter of previous year)	NERC	Audit report on the monitoring and enforcement of PIPs
• Establishment of the list of qualified experts who would assume transitory management of DISCOs in the event of NERC license intervention	☒	July 1, 2020	BPE	Order with approved list
• Setting minimum remittance thresholds to establish DISCOs' payment obligation to NBET	☒	July 1, 2020 and as part of MYTO reviews till reaching cost recovery	NERC	MYTOs approving thresholds for each DISCO
• Removal of historical tariff shortfalls from DISCOs' books	☒	July 1, 2020	FMFBNP	Order approving the mechanism
• Removal of new tariff shortfalls from DISCOs' books	☒	July 1, 2020	NERC	Order approving the mechanism
Tariff adjustment trajectory and measures to protect the poor • Approval of tariff adjustments consistent and measures to protect the poor with the approved Financing Plan	☒	Continuous with the first adjustment expected on July 1, 2020	NERC	Order approving end-user tariffs
• Public consultation on tariff adjustment	☒	Continuous (prior to each tariff adjustment)	NERC	Reports on public consultation/hearing process

Action Description	DLI*	Due Date	Responsible Party	Completion Measurement**
Stakeholder and citizen engagement and communication:				
• Design and implementation of a public communication campaign as the market transitions to financial self-sustainability	☐	Starting September 1, 2020	NERC	Campaign report
• Development of a draft common script about the PSRP to provide consistent messaging about technical issues, and agree on the script with the key MDAs (FMoP, NERC, BPE, NBET, TCN and the Office of the President)	☐	December 31, 2020	PSRP Secretariat	Draft common script
• Establishment of stakeholder feedback mechanism	☐	Starting March 1, 2021	PSRP Secretariat	Stakeholder feedback mechanism
• Implementation of public communication campaign to raise awareness about the PSRP	☐	Starting March 1, 2021	PSRP Secretariat/NERC	Campaign report
• Conducting of a survey to measure public awareness	☐	December 31, 2022	PSRP Secretariat/NERC	Survey report
• Periodic reporting (through a dedicated website) of PSRP implementation progress	☐	Starting December 31, 2021	PSRP Secretariat	Indicators of Critical PSRP implementation progress
Governance and implementation arrangements of PSRP:				
• Assessment of NERC's regulatory capacity, from organizational structure and HR perspective and design of a capacity building program	☐	June 30, 2021	NERC	Report of an independent regulatory consultant and records of training
• Establishment of PSRP Finance and Policy Oversight Committee	☐	Within three months after effectiveness	Presidency	Order
• Establishment of PSRP Finance Technical Committee	☐	Within three months after effectiveness	FMFBNP	Order
• Establishment of PSRP Secretariat with Program management expertise	☐	Within three months after effectiveness	FMFBNP	Order
	☐		PSRP Secretariat	Manual

Action Description	DLI*	Due Date	Responsible Party	Completion Measurement**
• Preparation of Operations Manual		Before effectiveness		
Fiduciary aspects				
***Procurement*:** • Support to strengthening of the capacity of NBET for competitive procurement of generation	☐	Continuous	NBET	Terms of reference for support
Financial Management: • Prioritization of FGN budget appropriation releases related to the Program funding; the funds to be released into the Program Account in quarterly tranches in advance	☐	Within three months after effectiveness	FMFBNP	Directive
• Approval and adoption of the payment protocols	☐	By effectiveness	FMFBNP	Order of the Minister
• Approval for implementation of the updates made to Finance Operating Procedures Manual of NBET be presented	☐	By effectiveness	The highest authority at the management level of NBET followed by NBET Board approval as soon as it is established	Order
• Amendment of the accounting software at NBET to enable segregated recording of amounts for the PEF expenditure lines, including tariff shortfalls and non-tariff shortfalls	☐	By effectiveness	NBET	Order
• Establishment and operationalization of a risk-based, ex-post internal audit function at NBET. To this end, training to be provided to the internal audit unit and a consultant with requisite experience and skills be embedded for a few months	☐	Initiated by December 30, 2020 and continuous	NBET/PSRP Secretariat	Training of staff and report on initial assessment
• Clearance of backlog of external audit and thereafter submission of audited financial statements with enhanced ToRs of external auditors, which will include an opinion on the eligibility for PforR	☐	By September 30, 2020 for the backlog and within six months of year end thereafter	NBET/PSRP Secretariat	Audit Reports and Contract award to auditors

Action Description	DLI*	Due Date	Responsible Party	Completion Measurement**
financing of the recorded PEF expenditures				
Environmental and Social aspects				
Strengthening environmental regulation and enforcement: • Preparation of guidelines and manual for mainstreaming stakeholder engagement process and integrating environmental, health and safety issues into the implementation of the Program	☐	June 30, 2021	NERC, FMoP	Completed guidelines in booklet form disseminated to stakeholders, training provided, and guidelines operationalized
• Annual evaluation, monitoring and reporting of progress on environmental and social issues, especially regarding the compliance of the Program activities with the extant environmental standards and regulations	☐	Starting January 1, 2021	PSRP Secretariat	Completed report with recommendations about environmental and social issues and associated follow-up measures
• Evaluate and report on the Environmental and Social Risk Management Actions of the Program	☐	Within twelve months of effectiveness	PSRP Secretariat	Progress reports
Gender: • Enhancing of women's agency as providers of information and customers related to energy sector reform through a focus on advocacy and employment	☐	Starting January 1, 2021	PSRP Secretariat	Terms of Reference for Customer Information Campaign driven by Women's Groups
• Strengthening of the mandate of the gender focal point in the MoP by developing a work plan and clear lines of responsibility for the gender desk/focal point	☐	December 31, 2021	PSRP Secretariat, FMoP	Work plan with budget
• Disaggregating NERC's current data on electricity consuming households by income level and gender, commencing by assessing data gaps and developing terms of reference for a pilot study	☐	December 31, 2021	NERC	Terms of Reference for data gap assessment and pilot study

Annex 9: Implementation Support Plan

1. **The implementation support plan is designed based on identified risks of the Program, as well as the technical, fiduciary, environmental and social gaps that are identified based on World Bank assessments**. The frequency and extent of implementation support will be risk-based and flexible to address implementation challenges as they arise. The implementation support will be carried out through implementation support missions, as well as through regular interactions with the PSRP Implementation Monitoring Team (IMT) and NERC. In addition, specific technical experts (both World Bank staff and external consultants) may be engaged at various points during the implementation to provide on-demand support.

2. **The scope of implementation support will be comprehensive**. Specific areas of support include: (i) review of implementation progress and achievement of Program results and DLIs; (ii) support for resolving issues with Program implementation; (iii) enhancement of institutional capacity; (iv) monitoring of the adequacy of systems performance and compliance with legal agreements; and (v) support to the FGN in monitoring changes in risks.

3. **Implementation support will be particularly rigorous during the MYTO extraordinary review/Reset, given its criticality to the Program.** To that end, the World Bank will conduct quarterly reviews of the Program implementation progress, with focus on the progress of Reset and the update and execution of the Financing Plan, so as to address any bottlenecks in a timely manner. Following the Reset, and assuming the Program implementation is on track, Program reviews will be conducted at least twice a year.

4. **In addition, rigorous implementation support will be provided for the updating and implementation of the Financing Plan, the associated tariff adjustments and implementation of mitigation measures.** End-user tariffs have not been adjusted since 2015 and it is hence essential that the adjustment planned by the FGN and supported by the Program be implemented in a socially sustainable manner and be adequately consulted and communicated. To that end, in addition to TA support, the World Bank will provide extensive implementation support in designing mitigation measures to protect the poor and in public communication and outreach.

5. **As part of the Program task team, a team of integrated fiduciary staff with skills in procurement, FM and anti-corruption will monitor the implementation of the Program's integrated fiduciary aspects, and the status of implementation of the PAP.** This will be carried out not only half-yearly during implementation support missions, but also between missions, at least for the first year of Program implementation. The team will provide hands-on support to the NBET team managing the PEF payments; to the PSRP Secretariat on the PSRO withdrawals and oversight; and to the ACTU supporting the mitigation of fraud and corruption. In carrying out its implementation support, the World Bank team will also review the Program's financial reports and underlying records.

6. **Disbursement of Program expenditure in a timely and transparent manner is critical for the success of the Program**. To that end, the World Bank team will conduct monthly monitoring of the E-Collection account funds flows to verify that invoices to GENCOs are being settled in a timely manner and consistent with the agreed funds flow arrangements.

7. **As part of the implementation support missions, the World Bank will also monitor the implementation of the PAP**, including the progress made in addressing shortcomings identified as part of the ESSA.

8. **Parallel programs from development partners will also be valuable in ensuring the success of the PSRP.** Development partners include AfDB, AFD, DFID, Deutsche Gesellschaft fur Internationale

Zusammenarbeit (GIZ, Germany), the EU, JICA, the United Nations Industrial Development Organization (UNIDO); and Power Africa, a division of the United States Agency for International Development (USAID). Their support is primarily focused in the areas of baseline power generation, transmission, and distribution; improved DISCO performance; and increased electricity access (a component of the PSRP which is not supported by the PSRO).

9. Tables 9-1 and 9-2 summarize the proposed implementation support.

Table 9-1: Implementation Support Plan

Time	*Focus*	*Skills Needed*	*Resource Estimate*
Before MYTO extraordinary review	• Implementation of extraordinary MYTO review • Strengthening of the PSRP Secretariat • Stakeholder engagement and public communication • Roll out of the funds flow arrangements • Strengthening of feedback/grievance redress mechanisms	Technical skills in regulation, communication, FM, poverty analysis and social development	• Quarterly implementation support mission • Technical expert support/visits on demand basis • Monthly monitoring of disbursements • Quarterly monitoring of disclosure of key operational and financial data
After MYTO extraordinary review	• Consistent implementation of MYTO minor reviews • Implementation of PIPs • Monitoring, update and execution of the Financing Plan • Enforcement of DISCOs' payment discipline • Stakeholder engagement and communication	Technical skills in regulation, communication, finance and fiscal analysis, FM and social development	• Semi-annual implementation support mission • Technical expert support/visits on demand basis • Monthly monitoring of disbursements • Quarterly monitoring of disclosure of key operational and financial data
Midterm Review	The Midterm Review will evaluate Program progress and identify necessary midcourse adjustments.	Technical skills in regulation, communication, finance and fiscal analysis, FM and social development	• One implementation support visit, including technical, fiduciary, social, environment, M&E, and operational specialists

Table 9-2: Task Team Skills Mix Required for Implementation Support

Skills Needed	*Number of Staff Weeks*	*Number of Trips*	*Comments*
Project management (task team leaders)	60	10-12	HQ and field based
Regulatory issues	30	8-10	HQ and field based
Finance and fiscal analysis	30	8-10	HQ and field based
FM specialist	15	-	Field based
Procurement specialist	5	-	Field based
Communications	15	6-8	HQ based

Skills Needed	***Number of Staff Weeks***	***Number of Trips***	***Comments***
Poverty analysis	4	2-4	HQ based and field based
Environmental issues	4	-	Field based
Social development issues	10	4-6	HQ and field based
Gender issues	2	-	HQ based
Administrative support	20	-	HQ and field based

Annex 10: Fiduciary and Safeguards Arrangements for Investment Project Financing Component

1. **TA of US$20 million is provided as part of this operation for implementation support and capacity-building to the key agencies with important roles in the implementation of the critical PSRP actions supported under this Program.** This component, including procurement and FM activities, will be implemented by the PSRP Secretariat. As described in Annex 1, the PSRP Secretariat is part of the monitoring and oversight arrangements for the Program and to be established within the BOF, FMFBNP, reporting to the DG Budget. Specifically, the PSRP Secretariat will carry out the following functions through the execution of TA:

a. Conduct day-to-day monitoring and coordination of the Program implementation;
b. Facilitate the work of the Steering and Technical Committees in monitoring and oversight;
c. Support the Technical Committee in the periodic update of the Financing Plan to be consistent with the effective MYTO with at least an annual formal update for submission to the FGN;
d. Support DG Budget to submit the withdrawal application for PforR funds and requests for budget releases for the Financing Plan;
e. Monitor the execution of the approved Financing Plan by NBET against the agreed fund flow/payment protocols;
f. Engage an Independent Verification Agent to conduct a verification of the achievement of DLIs and manage the verification process;
g. Supporting key agencies – NERC, NBET, DMO, BPE and FMoP in the achievement of critical Program actions through capacity-building and other required activities; and
h. Maintaining records for procurement activities and expenditures incurred and ensuring timely preparation and submission of required financial reports.

2. Expenditures to be incurred under the TA will comprise consultant services, goods, training, workshops, non-consultant services and incremental operating costs related to the performance of the following activities:

a. Capacity building and implementation support to:
    i. NERC for implementing key PSRP regulatory actions such as conducting the MYTO extraordinary review and semi-annual minor reviews, monitoring the implementations of the PIPs by DISCOs, carrying out public communications to raise awareness about the sector reforms;
    ii. BOF, DMO and the multi-agency financing team for updating the Financing Plan and assessing fiscal and debt sustainability implications and contingent liabilities;
    iii. System Operator for carrying out economic dispatch;
    iv. BPE for its role in managing Performance Agreements and implementing business continuity arrangements; and
    v. NBET for strengthening its capacity for implementing competitive procurements, and its internal audit function to move towards a risk-based approach; and
    vi. FMoP to strengthen its policy making activities, including support to the gender focal point.
b. Verification of the achievement of Program DLIs;
c. Supporting the work of the high-level Steering Committee and Technical Committee;
d. External audit of the TA;
e. Follow-up survey to measure progress in public awareness about sector reforms; and

f. Conduct of the PSRP Secretariat functions including monitoring and coordination.

3. To prevent delays in the implementation of the Program, the establishment of the PSRP Secretariat and its functions, the TA component of Nigeria Electrification Project (NEP, P161885) has allocated US$3.7 million in support of activities for the PSRP. This has already been used to fund consultancies for NERC in activities related to the tariff review process that has been triggered by the PSRP. The support from NEP will continue until the Program is effective and starts disbursing its own TA component. Advance procurement and expenses will be carried out by the implementation agency which is Rural Electrification Agency (REA).

4. **Staffing.** The BOF has recently established a PIU for the FGIP Project. The staff in this PIU designated for FM and procurement will also support the PSRP Secretariat. At the time of this assessment, implementation of procurement activities under FGIP is yet to commence at the BOF and the staff has no other prior experience implementing procurement under any World Bank funded project. In this regard, a procurement consultant will be hired, funded by the TA component to support BOF in implementing the procurement under the TA Component. In addition, a Program Manager, Program Assistant and Finance Specialist will be engaged specifically for the PSRP Secretariat to bring in additional resources and skills, especially to oversee the updating and monitoring of the Financing Plan. Staffing needs will be reassessed once implementation starts and augmented as required.

Financial Management Arrangements

3. **Planning and budgeting**. The Program Manager, with inputs from the PSRP secretariat team and the various agencies to be supported under the TA, will prepare the annual workplan and budget for this component. After approval of the DG-Budget, these are to be submitted to the World Bank at least two months before the beginning of each fiscal year. For the first year of implementation, the workplan and budget should be prepared before Effectiveness.

4. **Funds flow.** The PSRP Secretariat will establish and operate both a US dollar denominated segregated DA alongside a Naira account. The World Bank will disburse the funds for the TA component into the US dollar-denominated DA at the CBN. On need basis, funds will be transferred to Naira account from which Naira payments will be made. After disbursement of the initial advance, replenishment of the US$ DA will be on the basis of Statement of Expenditures, to be submitted every quarter to the World Bank. The ceiling of the DA will consider forecast for three months.

5. **Accounting and financial reporting.** The PSRP Secretariat has the responsibility for the accounting and financial reporting of the TA component. Expenditures to be incurred only against approved activities in line with relevant policies. Records to be kept up to date with all transactions fully supported by necessary documents and approvals. A computerized accounting system may be deployed, if required, for efficiency, completeness, accuracy and better internal controls. Accounts will be maintained using accrual IPSAS.

6. IFRs will be prepared and submitted to the World Bank within 45 days of the end of each calendar quarter. The annual financial statements will be prepared in accordance with IPSAS.

7. **Internal controls.** The generic Financial Procedures Manual (FPM) prepared by the Office of the Accountant-General of the Federation will be adapted for the TA component and applied after approval from the World Bank. This provides for a comprehensive internal control framework. The internal auditor based in the FGIP-PIU will also cover the TA component of this project. The internal audit report will be submitted quarterly within 45 days after the end of each calendar quarter. There will be an enhanced accountability framework as additional control to mitigate the risk of misuse of funds for soft expenditures like travel, workshops and trainings etc.

8. **External audit.** An independent audit firm will be engaged with ToR acceptable to IDA for the audit of the TA component. The annual audited financial statements of the TA component together with a management letter shall be submitted to the World Bank within 6 months of the end of the fiscal year.

9. **FM Implementation Support Plan:** FM Supervision will be consistent with a risk-based approach. The supervision intensity is based initially on the FM risk rating, and subsequently on the updated FM risk rating during implementation. The FM risk for this project is rated **Substantial** but it is hoped that this will reduce as the Project is implemented.

Procurement Arrangements

12. **Procurement activities by the PSRP Secretariat will be carried out in partnership with the relevant agency being supported.** The objective, scope and technical content for each of the procurement activities being conducted for the benefit of other agencies will be prepared by the sector agency. Each agency will lead in the preparation of the ToRs relating to its activities, take the lead in technical evaluation and lead in contract management of such activities.

13. Procurement under the TA component of the Program will be carried out in accordance with the following World Bank procedures: (a) the World Bank Procurement Regulations for IPF Borrowers (July 2016, revised in November 2017 and August 2018), and (b) "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January, 2011 and July 2016, and other provisions stipulated in the Financing Agreements. In accordance with paragraph 5.9 of the "World Bank Procurement Regulations for IPF Borrowers", the World Bank's Systematic Tracking and Exchanges in Procurement (STEP) system will be used to prepare, clear and update Procurement Plans and conduct all procurement transactions for the Program.

14. **Procurement of works and substantive procurement of goods is not envisaged under the Program.** There may, however, be some procurement of office equipment and computers. Procurement of goods will be carried out using the World Bank's Standard Procurement Documents (SPD) for all procurement, subject to open competition (if any). Readily available off-the-shelf goods that cannot be grouped or standard specification commodities for individual contracts of less than US$100,000 equivalent may be procured under Request for Quotation (RFQ) procedures as detailed in paragraph 6.7 of the "Procurement Regulations for IPF Borrowers – Procurement in Investment Projects Financing", July 2016 revised in November 2017 and August 2018 and the "Guidance on Shopping Memorandum" issued by IDA on June 9, 2000. Procurement of vehicles estimated to cost up to US$500,000 equivalent can also be undertaken under the same RFQ procedures, provided they are procured directly from manufacturers or reputable first-line vehicle dealers. The appropriate selection method for each procurement of goods contract is set out in the Procurement Plan.

15. **Consultancy services will be provided under the operation in several areas.** Areas include: (i) extraordinary review of MYTO and periodic MYTO minor reviews; (ii) monitoring of the implementation of PIPs; (iii) implementation of communications strategy; (iv) the development and regular update of the comprehensive sector website; (v) support for the periodic monitoring and updating of the Financing Plan; (vi) program audits and third-party independent verifications. Consultancy firms and individuals will be selected from shortlists compiled after the PSRP Secretariat has solicited a request for expressions of interest, using the World Bank's Standard Request for Proposals where required by the World Bank's Procurement Regulations. National selection through advertisement in the national media/press may be used when the nature, scope, and/or value of the Consulting Services is unlikely to attract foreign competition and there are adequate qualified national Consultants to carry out the assignments, in

accordance with the provisions of paragraph 7.25 of the Procurement Regulations. The appropriate selection method for each consulting contract is set out in the Procurement Plan.

16. **Project Procurement Strategy for Development (PPSD) Summary:** The two major categories of procurement under this project are consultancies and procurement of information systems. There are several market players for the consulting services both nationally and internationally. The packages will be attractive to the market players except the ones with low values, which however will be attractive to local market players. There are also several players for the information system both locally and internationally. Some of the local players are partners to the International players. There is enough competition in the market to achieve value for money. The major risk for the project is the risk associated with the capacity of the PIU which will be mitigated by the employment of Procurement Consultant to assist the team. In addition, there is the risk of the coordination of the procurement implementation by the PSRP Secretariat with the other sector agencies. To mitigate this risk, each agency participating in the program will nominate a focal person who will participate at the regular program coordination meeting to be anchored by the PSRP Secretariat.

Summary of Safeguards Issues

17. **Environmental and social impact under the TA component is negligible, typical category C type of impacts.** No significant adverse impacts are expected to result from the activities that will be financed under the TA component. There may, however, be some procurement of office equipment and limited number of computers. The potential for e-waste generation will be negligible and the management would follow the national protocol for e-waste handling. The focus of the IPF component is to ensure continued capacity building and support to key sector agencies that currently receive support through the technical assistance components of other ongoing operations. It is not inconceivable that Risk of Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) could arise from the various international and national high-level expert consultancy contracts envisaged under the TA. The recipient shall, as part of the contract documents, at the minimum, request each consultant to prepare a Code of Conduct as regard SEA/SH that would be signed by the its staff as part of their contract and prior to the commencement of the job. It is important all consultant staff are trained on the content of the Code of Conduct prior to signing.