



ORDER/NERC/2025/043

BEFORE THE NIGERIAN ELECTRICITY REGULATORY COMMISSION  
IN THE MATTER OF THE PERFORMANCE IMPROVEMENT PLAN FOR  
THE TRANSMISSION COMPANY OF NIGERIA PLC AND  
THE NIGERIAN INDEPENDENT SYSTEM OPERATOR

## 1.0 TITLE

This regulatory instrument may be cited as the Order on Performance Improvement Plan ("PIP") for the Transmission Company of Nigeria Plc ("TCN") and the Nigerian Independent System Operator ("NISO") 2025.

## 2.0 COMMENCEMENT

This Order shall take effect from 15<sup>th</sup> May 2025 and shall remain effective until 14<sup>th</sup> May 2027.

## 3.0 CONTEXT

3.1 The Nigerian Electricity Regulatory Commission ("The Commission") issued the Guidelines on the Preparation of the Performance Improvement Plan ("PIP") for the Transmission Company of Nigeria ("TCN") in March 2022. This was followed by the Commission's Order NERC/2023/002 in May 2023 on the Mandatory Filing of Annual Expenditure Plans and Outcomes of the Procurements Process by TCN and any capital expenditure ("CapEx") exceeding ₦5 billion or variations exceeding 15% of an existing contract sum. These regulatory instruments mandated TCN to develop an output-based three-year PIP (2024–2026) focusing on service improvement targets, capital expenditure, and human capital development. The plan was also required to outline projected costs, risk factors, and mitigation measures.

3.2 Following TCN's formal application for its PIP, the Commission, in compliance with the Electricity Act ("EA") 2023, approved the TCN PIP Order comprising the service improvement targets, the CapEx programme and operating costs for the 2024–2026 period. The approved PIP detailed the focus areas where investments are required and outlined the annual CapEx and operating expenses ("OpEx") within TCN's tariff. The Commission also approved additional funding sources such as budgetary provisions, donor financing and other Public-Private Partnership ("PPP") models. The PIP Order

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requires TCN to file for annual updates to the PIP to reflect evolving investment needs in subsequent tariff reviews.

#### 4.0 PIP 2024 FULL YEAR REVIEW:

4.1 In line with section 5.0 of the TCN PIP Order, the Commission initiated the review of TCN's implementation of the PIP Order to determine compliance and make necessary updates to align the PIP with evolving industry needs, revise investment priorities and reflect changes in financing provisions. The review observed the following:

- a. Limited execution of the approved PIP projects, evidenced by only N1.7Bn disbursed in respect of 8 projects between January 2024 and January 2025.
- b. Low accretion of funds to the TCN-PIP dedicated escrow account. As of 31st December 2024, only 45% of the approved funding for 2024 accrued to the PIP dedicated account due to market penalties as a result of deviations from targeted Transmission Loss Factor ("TLF") and DisCo-TCN Service Level Agreements ("SLA").
- c. Limited optimisation to ensure prioritised execution of low-hanging impactful projects given the limited funding.
- d. Prolonged delays in securing the 'No Objection' certificate from the Bureau of Public Procurement.
- e. Need for a special purpose fund to support timely intervention in critical transmission and system operation projects/initiatives directly or indirectly through PPP arrangements.
- f. Need for further prioritisation of projects and minimising the number of approved PIP projects to manageable levels on the following basis:
  - i. Supporting power evacuation from GenCos and/or urgent delivery to DisCos' profitable load centres;
  - ii. Enhancing grid reliability, protection and safety; and
  - iii. Improving grid visibility.

#### 5.0 PIP RESET

5.1 Pursuant to the review, this reset is essential to ensuring that the PIP remains aligned with evolving industry requirements, stakeholder expectations, and to reflect the structural changes occasioned by the establishment of the NISO. The updated PIP has integrated feedback from the 2024 implementation towards optimising the investment in transmission infrastructure to enhance system reliability and financing efficiencies. Additionally, this reset has reflected the changes in the updated tariff provisions and



donor funding available in supporting the TCN and NISO to deliver on their key performance indicators ("KPIs") for 2025 – 2027.

5.2 Further, this PIP Order has provided specific recommendations on the implementation framework, including the adoption of competitive procurement practices to deliver value for money to the users of the transmission network. Also, this Order establishes the "Transmission Infrastructure Fund" ("TIF") to support the funding of critical transmission infrastructure projects and novel NESI initiatives that are necessary to facilitate improved delivery of transmission services in Nigeria.

## 6.0 PROJECT CATEGORIES

6.1 The CAPEX programme in the TCN's PIP is classified into 4 major categories for execution based on the funding sources.

**A. DisCo Prioritised Transmission Projects:**

Following the first-year reviews on the implementation of the TCN-PIP projects, Schedule – 1 of this Order provides the list of DisCo prioritised projects for implementation for the period 2025 – 2027. These projects are targeted at improving energy throughput, expanding the national grid and improving reliability. Qualifying projects under this category shall be funded from all three (3) funding sources of tariffs, Power Sector Recovery Operation-Additional Financing ("PSRO-AF"), and the Transmission Infrastructure Fund ("TIF").

**B. TSP Priority Projects:**

Following the first-year reviews on the implementation of the TCN-PIP projects, Schedule 2 of this Order provides a summary of the approved TSP Priority projects at a total estimated cost of N82.7Bn for implementation by the TCN for the period of 2025 - 2027. Qualifying projects under this category shall be funded from all three (3) funding sources of tariffs, Power Sector Recovery Operation-Additional Financing ("PSRO-AF"), and the Transmission Infrastructure Fund ("TIF")

**C. Nigerian Independent System Operator ("NISO") Priority Projects:**

This category of PIP constitutes absolutely essential projects whose timely and successful implementation is critical to ensuring improved delivery of system operation services across the national grid. Qualifying projects under this category shall be funded from all three (3) funding sources of tariffs, Power Sector Recovery Operation-Additional Financing ("PSRO-AF"), and the Transmission Infrastructure Fund ("TIF"). Schedule – 3 of this Order provides a summary of the NISO Priority Projects for execution during the

period 2025 – 2027. The total cost of the NISO priority projects is estimated to be NGN29.72 Bn over the next two years (2025-2027). Details of the projects are provided in Annexure 2 of this Order.

- 6.2 Accordingly, following the review, the Commission has approved this Order on PIP for the TCN and NISO effective from 15<sup>th</sup> May 2025. A summary of the updated approved projects by focus areas is provided in Table 1 below.

**Table 1: Summary of TCN Revised Projects for Implementation**

	Description	2024 Approved PIP		2025 PIP RESET	
		No of Projects	Cost (N'Bn)	No of Projects	Cost (N'Bn)
1.	DisCo Prioritised Transmission Projects	41	141.6	26	99.66
2.	TSP Prioritised Projects	51	128.6	14	82.66
3.	NISO Prioritised Projects	50	24.5	10	29.72
	Sub Total	142	294.71	50	212.04
4.	Central Bank of Nigeria – SLA Projects	52	-	52	-
5.	World Bank – WB	50	-	50	-
6.	Japan International Cooperation Agency – JICA	14	-	14	-
7.	African Development Bank – AfDB	8	-	8	-
8.	Agence Française de Développement – AFD	14	-	14	-
9.	Siemens: FGN PowerCorp	15	-	11	-
	Sub total	153	-	149	-
	Grand Total	295	-	199	-

## 7.0 FUNDING SOURCES

- 7.1 The Commission has recognised 3 funding sources for the implementation of the PIP. The sources of funds include the internally generated revenue from the market (tariff revenue), Transmission Infrastructure Fund (“TIF”), and the funding from other sources, including the FGN appropriation, Presidential Power Initiative, the Central Bank of Nigeria (completion of SLA projects), World Bank, JICA, AfDB and AFD.
- a. **Tariff:** As part of NISO and TCN’s revenue requirement, a part of the revenues from tariff of NISO and TCN, as detailed in 8.2(b) of this Order shall be reserved in a dedicated account each for the NISO and TCN to fund the implementation of approved PIP projects.

- b. **Donor Funds:** The TCN and NISO shall, subject to the necessary sovereign, statutory and regulatory approvals, utilise funds from international and national donor agencies in the execution of infrastructure projects. Approved projects for funding under these provisions are detailed in Schedules 4-9 of this Order.
- c. **The Transmission Infrastructure Fund:** The Commission has approved the establishment of a "Transmission Infrastructure Fund" to support the funding of critical Transmission infrastructure in the Nigerian Electricity Supply Industry ("NESI"). The TIF shall be centrally managed and used to securitise vendor financing and other PPP arrangements to finance infrastructure gaps in the transmission network. Accordingly, effective from 15<sup>th</sup> May 2025, a charge of ₦2.17/kWh shall apply on delivered energy to grid offtakers (DisCos, Eligible Customers, Export Customers, Independent Electricity Distribution Networks, Traders and GenCos) towards the build-up of the TIF. The following shall apply in the management and administration of the TIF:
- i. The Commission shall appoint a fund manager who shall be entrusted to administer the TIF dedicated account for the collection of contributions to the fund in line with approved guidelines.
  - ii. The Market Operator ("MO") shall issue monthly invoices to all grid offtakers (DisCos, ECs, Export Customers, IEDNs, traders, GenCos) as part of MO's monthly settlement obligation to collect and remit monthly contributions to the TIF dedicated account.
  - iii. The Commission shall determine and amend the eligibility criteria for the qualifying projects to be funded from the TIF in line with evolving industry requirements.
  - iv. The TCN and NISO shall periodically submit for the Commission's consideration the list of projects to benefit from the TIF.
  - v. All disbursements from the TIF shall be subject to a 'No Objection' certification by the Commission.
  - vi. The Commission shall review the effectiveness of the fund periodically and make necessary amendments to operational procedures to align with industry dynamics.

## 8.0 IMPLEMENTATION FRAMEWORK

- 8.1 The TCN and NISO shall prioritise the delivery of these projects above all other PIP-approved projects, and the TCN shall set aside resources from the PIP-dedicated account to guarantee the timely completion of these critical priority projects. The Commission may withhold the grant of 'No Objection' for the award of contracts and milestone disbursements to other PIP projects where TCN/NISO fails to demonstrate full compliance with these provisions.
- 8.2 The Multi-Year Tariff Order 2024 for the Transmission Company of Nigeria ("TCN MYTO 2024") provides for the ringfencing of TCN's revenue for the implementation of the PIP. Furthermore, the TCN and NISO shall each:
- a) Maintain a PIP Implementation Dedicated Account to fund the implementation of approved PIPs;
  - b) Remit 50.36% and 55.04% from the TCN and NISO's monthly market/tariff revenues respectively into the PIP Implementation Dedicated Account;
  - c) Utilise the funds accrued to the PIP Implementation Dedicated Account strictly for the implementation of the approved PIPs;
  - d) Provide the Commission with monthly reports of the schedule of remittance to and utilisation from the PIP Implementation Dedicated Account
- 8.3 The TCN and NISO shall in addition to the stated provisions:
- a) Seek the Commission's "No-Objection" before the award of projects and at each point of disbursement to ensure alignment with the PIP.
  - b) Submit an implementation plan within 3 weeks of the effectiveness of this Order, detailing the timeline and resources necessary to achieve the implementation of the PIP to the Commission.
  - c) Prequalify five (5) Original Equipment Manufacturers ("OEMs") each for lines and substation projects in respect of the offshore components associated with these projects. TCN shall utilise the services of these prequalified OEMs for projects that have not been awarded.
  - d) Ensure that all new projects for implementation in the PIP are awarded through a competitive bidding process.



## 9.0 FUNDING FOR SCADA GAP ADDITIONAL PROJECTS

9.1 The TCN is required by this Order to immediately set aside the sum of NGN25,025,178,164.59 from the closing balance in the PIP Dedicated Account as of 14th May 2025 and transfer the same amount to a dedicated SCADA Project Implementation Account to guarantee the completion of the ongoing SCADA projects.

## 10.0 ANNUAL UPDATE OF PIP

10.1 The TCN and the NISO are required to provide an annual update to the PIP to reflect the proposed investment programme as part of the review of its revenue requirements and tariffs on an ongoing basis. The Commission acknowledges this PIP as a dynamic roadmap of where TCN and NISO envision being in the next two years, which will continue to evolve in alignment with market developments and changes in the operating environment. The TCN and NISO may invest more than the indicated annual CAPEX figure in any given year by front-loading proposed future investment projects, subject to the Commission's approval.

## 11.0 CAPEX CLAWBACK

11.1 Annual CAPEX provisions that are unutilised or imprudently expended shall be clawed back during subsequent tariff reviews in line with the requirements of Section 7(a) of Regulations on Procedure for Electricity Tariff Reviews in the NESI.

## 12.0 COMMENCEMENT AND EFFECTIVENESS

12.1 The approved PIP and CAPEX programme shall take effect from the 15<sup>th</sup> day of May 2025.

## 13.0 SIGNATURE

Dated this 14th day of May 2025



Sanusi Garba  
Chairman



Musiliu O. Cseni  
Vice Chairman

## SCHEDULE – 1: DISCO PRIORITISED PROJECTS TRANSMISSION PROJECTS

SCHEDULE – 1: DISCO PRIORITISED PROJECTS TRANSMISSION PROJECTS						
	Project Code	Project Description	Location	Category	Funding Source	Wheeling/ Transformation Impact (MW)
1	AE16LR01	Reconductoring of 19km Katampe-Kubwa 132kV line from 90MVA wolf conductor to 236MVA ACCC Oriole" Conductor	From Katampe-Kubwa	Line Reconductoring	Tariff	128
2	AE21PQ02	Procurement and Installation of Mobile and variable Reactor at Gwagwalada S/S	Gwagwalada	Power Quality	Tariff/PSRO-AF	Voltage Supression of 30 to 35kV
3	AE17LR02	Re-conductoring of 10km Apo-Karu 132kV transmission line by TCN (to improve line capacity by 80-200MW) – with 250mm2 ACCC "Oriole" Conductor	From Apo-Karu	Line Reconductoring	Tariff	128
4	AE09OL04	Completion of 54km Akwanga – Lafia 132kV DC Line	From Akwanga-Lafia	Ongoing Line	Tariff	240
5	AE19NS01	Completion of 1x150MVA, 330/132kV substation at Obajana	Obajana	New Substation	Tariff/PSRO-AF	48
6	BE01OS01	Construction of 2 X 150MVA 330/132kV S/S and 2 X 60MVA 132/33kV substation, Akure	Akure	Ongoing Substation	Tariff/PSRC-AF	96
7	BE02OS02	Construction of 1 x 60MVA, 132/33kV Substation at Kwale	Kwale	Ongoing Substation	Tariff/PSRO-AF	48
8	BE03OS03	Construction of 1 x 150MVA, 330/132kV Substation at Okpai	Okpai	Ongoing Substation	Tariff/PSRO-AF	120
9	BE04OL01	Construction of 132kV Okpai-Kwale DC Transmission Line (14km)	From Okpai-Kwale	Ongoing Line	Tariff	240
10	EK28OL16	Construction of 135km Omotosho-Epe-Ajah 330kV DC Line	From Omotosho-Epe-Ajah	Ongoing Line	Tariff	1,200
11	EE04OS03	Construction of 2x60 MVA 132kV substation Nnewi	Nnewi	Ongoing Substation	Tariff/PSRO-AF	96
12	EE14OL06	Construction of 90km Onitsha-Oba-Nnewi-Ideato-Okigwe 132kV line (to reduce Feeder length of 189.96km)	From Onitsha-Oba-Nnewi-Ideato-Okigwe	Ongoing Line	Tariff	240
13	IB10OS02	Construction of 2 x 60MVA 132/33kV Substation at Ogbomosho 132kV	Ogbomosho	Ongoing Substation	Tariff/PSRO-AF	96
14	IB12OL02	Construction of 45km Ganmo-Ogbomosho 132kV DC Line	Ganmo-Ogbomosho	Ongoing Line	Tariff	240
15	IK08SR08	Completion of conversion of 33kV indoor breaker to outdoor breaker at Akoka TS	Akoka	Substation Reinforcement	Tariff/PSRO-AF	
16	IK10SR10	Construction of Additional Bays at Ejigbo TS	Ejigbo	Substation Reinforcement	Tariff/PSRO-AF	
17	JE05OL01	Construction of the Makeri-Pankshin 132KV DC Line(122km)	Makeri-Pankshin	Ongoing Line	Tariff	120
18	JE06TU01	Upgrade of 2X30MVA, 132/11kV transformers to 2X60MVA at Ashaka 132/33kV TS	Ashaka	Transformer Upgrade	Tariff/PSRO-AF	96

**SCHEDULE – 1: DISCO PRIORITISED PROJECTS TRANSMISSION PROJECTS**

	Project Code	Project Description	Location	Category	Funding Source	Wheeling/ Transformation Impact (MW)
19	KE20OS04	Construction of 2x60MVA S/S at Walalambe with 132kV line bay at Kumbotso	Kumbotso	Ongoing Substation	Tariff/PSRO-AF	96
20	KE16LR02	Reconductoring of 12km Kumbotso - Dakata 132kV line from Wolf conductor to ACCC conductor	Kumbotso-Dakata	Line Reconductoring	Tariff	128
21	KE17LR03	Reconductoring of 9km Kano-Dan Agudi 132kV Single Circuit transmission line from Wolf conductor to ACCC Silvassa conductor	Kano-Dan Agundi	Line Reconductoring	Tariff	128
22	KE19PG01	Refurbishment of 4Nos. 132kV sub-stations existing capacitor Banks and installation of additional ones in stations where there is none within KEDCO operational area for power quality	KEDCO operational areas	Power Quality	Tariff/PSRO-AF	Voltage Boost
23	PHE13SR06	Procurement of spare breakers, VTs, CTs, 33kv breakers, T-connectivity, transformer oil, etc at Port Harcourt Mains, Port Harcourt Town, Afaha Ube, Eket TS, Ekim TS, Calabar, Yenagoa TS	PHED	Substation Reinforcement	Tariff/PSRC-AF	
24	PHE19LR01	Reconductoring of Afam - Port Harcourt (37.8km) and Afam - Elelenwo(22.3km) 132kV DC Lines using ACCC Conductor	Afam-Port Harcourt main	Line Reconductoring	Tariff	128
25	YE04OL01	Construction of 233km Yola/Song/Little Gombi/Gulak/Mubi 132kV DC Line	Yola-Song-Little Gombi-Gulak-Mubi	Ongoing Line	Tariff	240
26	YE05OS01	Construction of 2X60MVA,132/33kV TS at Mubi	Mubi	Ongoing Substation	Tariff/PSRO-AF	96

## SCHEDULE – 2: TSP PRIORITY TRANSMISSION PROJECTS

SCHEDULE – 2: TSP PRIORITY TRANSMISSION PROJECTS						
S/N	Project Code	Project Description	Location	Category	Funding Source	Wheeling/Transformation Impact (MW)
1	TCN150TSP66	SCADA Gaps Projects: Tee-Offs (Appendix 1a)	Across the Network		TIF/Tariff/PSRO -AF	
2	TCN156TSP67	SCADA Gaps Projects: Telecoms (Appendix 1b)	Across the Network		TIF/Tariff/PSRO -AF	
3	TCN157TSP68	SCADA Gaps Projects: TSP Outdoor Gaps (Appendix 1c)	Across the Network		TIF/Tariff/PSRO -AF	
4	TCN030L01	Completion of Turn in Turn out of Benin-Ajaokuta 330kV line into Ihojbor	Benin-Ajaokuta	Ongoing Line	Tariff	1,200
5	TCN040L02	Construction of 23km Turn in Turn to Akure; Akure 330/132/33kV 2X150MVA, 2X60MVA substation on Benin North - Oshogbo as additional works to energise the Akure substation	Akure	Ongoing Line	Tariff	1,200
6	TCN060L04	Completion and Commissioning of Second Kaduna-Jos 330kV Line	Kaduna-Jos	Ongoing Line	Tariff	1,200
7	TCN103TSP29	2X330kV Line bays at Jos and Kaduna for termination of the Kaduna-Jos second line	Jos and Kaduna	Ongoing Substation	Tariff/PSRO-AF	
8	TCN151TSP57	Procurement and Installation of Reactor at Jebba TS, Ganmo TS, Ikot-Ekpene TS, Onitsha TS, Lokoja TS	Jebba, Ganmo, Ikot-Ekpene, Onitsha, Lokoja	Power Quality	Tariff/PSRO-AF	Voltage Supression of 30 to 35kV
9	TCN164PQ01	Completion of Transposition on the Ugwuaji-Jos 330kV line	Ugwuaji-Jos	Power Quality	Tariff	1,200
10	ALLO1PQ01	SVC device at Kano and Gombe for voltage stabilization in the North West and North East	Kano, Gombe	Power Quality	Tariff/PSRO-AF	Voltage boost of 15 to 20kV
11	TCN104TSP30	Provision of 12No. Emergency Restoration Towers for system use		Line Restoration	Tariff	
12	TCN104TSP31	TSP – Contingency For Counterpart Funding and RoWs for i. Alaoji-Onitsha line, ii. Millenium City and Rigasa Substations iii. Mando-Rimi Zakara line iv. WAPP North Core line v. Kainji-Birnin Kebbi- Sokoto line vi. Katsina-Daura-Gwiwa Jogana-Kura line vii. JICA Lagos-Ogun transmission projects (Appendix 2c)			Tariff	
13	TCN104TSP32	TSP – Protection Control and Metering Projects (Appendix 2d)			Tariff	
14	TCN104TSP33	TSP – Health, Safety, and Environment Projects (Appendix 2e)			Tariff	

## SCHEDULE – 3: NISO PRIORITY TRANSMISSION PROJECTS

SCHEDULE – 3: NISO PRIORITY TRANSMISSION PROJECTS				
S/N	Project Code	Project Description	Location	Funding Source
1	TCN158ISO69	SCADA Gaps Projects: SCADA and EMS (Appendix 2a)	Across the Network	TIF/Tariff/PSRO-AF
2	TCN47ISO30	Design, Supply and installation of OPGW in 4 Nos. critical transmission lines in critical links in the grid (600km)	Ajah-Lekki-Alagbon, Jos-Gombe, Benin-Ajaokuta, Egbin-Oke Aro-Ikeja West	Tariff/PSRO-AF
3	TCN44ISO27	Construction of New National Control Centre at Osogbo	Osogbo	Tariff/PSRO-AF
4	TCN45ISO28	Construction of New National Control Centre at Gwagwalada	Gwagwalada	Tariff/PSRO-AF
5	TCN159ISO70	Replacement and Upgrade of critical Servers and other Control Center Equipment to restore and optimize functionality of the existing SCADA system	Across the transmission network	TIF/Tariff/PSRO-AF
6	TCN160ISO71	Communication System Rehabilitation for existing SCADA System Phase I	Across the transmission network	TIF/Tariff/PSRO-AF
7	TCN161ISO72	Procurement and Installation of 452No. Long-Range Military Grade Radio for operational communication	Across the transmission network	TIF/Tariff/PSRO-AF
8	TCN119ISO51	Deployment of IoT Devices on 330kV transmission Lines (54 sub-stations and 204 Lines), on 33kV Feeders (1000 feeders), for 30 GenCo's (164 units)	Across the transmission network	TIF/Tariff/PSRO-AF
9	TCN67ISO50	Supply and Installation of 40Nos. 50V Battery Banks and chargers for telecoms equipment in the grid	Across the transmission network	Tariff
10		NISO – Operations Projects (Appendix 2b)	Across the transmission network	Tariff

## SCHEDULE – 4: CENTRAL BANK OF NIGERIA (SLA PROJECTS)

SCHEDULE – 4: CENTRAL BANK OF NIGERIA (SLA PROJECTS)							
S/N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
1	AE13SR04	Upgrade of 2x60MVA 132/33kV to 2x100MVA 132/33kV Transformers at Karu Transmission Station (To resolve transformer capacity limitation at Karu TS)	Karu	Substation Reinforcement	June, 2025	64	Abuja
2	AE14AT01	Transformers Spares: Power Transformers (1x150MVA, 1x100MVA)		Additional Transformer	June, 2025		Abuja
3	AE15AT02	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Abuja
4	BE07SR03	a. Replacement of the faulty 1x150MVA, 330/132kV Power Transformer at Asaba 330/132/33kV TS b. Upgrading of 2x60MVA with 2x100MVA, 132kV/33kV, Power Transformers c. Construction of additional 2X33kV Feeder Bays	Asaba	Substation Reinforcement	June, 2025		Benin
5	BE08SR04	Construction of 2 numbers of additional 33kV Line Bays at Ihovbor 132/33kV TS	Ihovbor	Substation Reinforcement	June, 2025		Benin
6	BE09SR05	a. Replacement of 3No 132kV and 9Nos 33kV Current transformers and b. Differential relay at Oghara 132kV TS to restore the standby 30MVA power transformer	Oghara	Substation Reinforcement	June, 2025	24	Benin
7	BE10SR06	Upgrading of faulty 1x30MVA, 132/33kV Transformer with 1x60MVA power transformer at Afiesere 132/33kV TS	Afiesere	Substation Reinforcement	June, 2025	16	Benin
8	BE11SR07	a. Replacement of faulty grounding transformer on 1x40MVA, 132/33kV at Okada 132/33kV TS. b. Replacement of differential relay and surge Arrester on 1x40MVA transformer.	Okada	Substation Reinforcement	June, 2025	32	Benin
9	BE19LR01	Reconductoring of 96km Oshogbo - Akure 132kV Single Circuit transmission line	Oshogbo-Akure	Line Reconductoring	June, 2025	48	Benin
10	BE20LR02	Reconductoring of undersized conductor on the 132KV line between Ughelli and Effurun (10Km)	Ughelli-Effurun	Line Reconductoring	June, 2025	48	Benin
11	BE21AT01	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Benin
12	EK15SR03	a. Upgrading of 1x40MVA & 1x45MVA with 2 x60MVA, 132/33kV Power Transformer at Akoka TS	Akoka	Substation Reinforcement	June, 2025	32	Eko

**SCHEDULE – 4: CENTRAL BANK OF NIGERIA (SLA PROJECTS)**

S/ N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
		b. Construction of additional 33kV feeder bay c. Conversion of indoor Circuit breaker to outdoor.					
13	EK16SR04	a. Replacement of faulty 60MVA 132/33kV Transformer with 100MVA, 132/33kV at Isolo b. Installation of 3nos 33kVA Feeder bays	Isolo	Substation Reinforcement	June, 2025	32	Eko
14	EK17SR05	Replacement of failed 60MVA transformer at Itire TS	Itire	Substation Reinforcement	June, 2025	48	Eko
15	EK18SR06	a. Construct 3nos 33kV bays at the transmission station. b. Rehabilitation of problematic indoor circuit breakers -(Elimson -Turkey type)- Faulty 33kV panel to be replaced for System Reliability	Ojo	Substation Reinforcement	June, 2025		Eko
16	EK19SR07	a. Upgrading of 2x45MVA with 2x100MVA, 132/33kV Transformers at Agbara. b. Construction of additional 6x33kV feeder bays	Agbara	Substation Reinforcement	June, 2025	88	Eko
17	EK20SR08	a. Installation of 1x100MVA, 132/33kV Transformers at Aja TS b. Construction of additional outdoor 3x33kV feeder bays	Ajah	Substation Reinforcement	June, 2025	80	Eko
18	EK26AT14	Transformers Spares: Power Transformers (1x150MVA, 1X100MVA)		Additional Transformer	June, 2025		Eko
19	EK27AT15	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Eko
20	EE15AT01	Power Transformers Spares (1x150MVA, 330/132/33kV + 1X100MVA, 132/33kV)		Additional Transformer			Enugu
21	EE16AT02	Power Transformers Spares (i) 2x60MVA, 132/33kV		Additional Transformer			Enugu
22	IB17SR03	a) Replacement of faulty 60MVA, 132/33kV transformer (T3) at Ijebu-Ode	Ijebu Ode	Substation Reinforcement	June, 2025	48	Ibadan
23	IB18SR04	a) Upgrading of 1x40MVA & 1x45MVA Mobitra with 2x60MVA, 132/33kV Transformer including 2x33kV feeder bays at Jericho 132/33kV TS	Jericho	Substation Reinforcement	June, 2025	32	Ibadan

**SCHEDULE – 4: CENTRAL BANK OF NIGERIA (SLA PROJECTS)**

S/N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
24	IB19SR05	Installation of 1x60MVA, 132/33kV Transformer at Ile Ife 132/33kV TS which is already on plinth including 2x33kV feeder bays for connection.	Ile Ife	Substation Reinforcement	June, 2025	48	Ibadan
25	IB20SR06	Installation of additional 1x150MVA, 330/132kV transformer at Ayede 330/132/33kV TS	Ayede	Substation Reinforcement	June, 2025	120	Ibadan
26	IB21SR07	Upgrading of 2x60MVA, 132/33kV transformers to 2X100MVA, 132/33kV transformers at Ibadan North 132/33kV TS	Ibadan North	Substation Reinforcement	June, 2025	64	Ibadan
27	IB26AT12	Transformers Spares: Power Transformers (1x150MVA, 1X100MVA)		Additional Transformer	June, 2025		Ibadan
28	IB27AT13	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Ibadan
29	IK02SR02	Additional 33kV line bay at Egbin 132/33kV Substation	Egbin	Substation Reinforcement	June, 2025		Ikeja
30	IK03SR03	a. Replacement of Differential protection relay and other materials on 300MVA, 330/132/33kV transformer at Oke Aro 330/132/33kV Substation. b. Installation of additional 1x100MVA, 132/33kV Power Transformer. c. Installation of additional 3x33kV feeder bays at Oke Aro TS	Oke Aro	Substation Reinforcement	June, 2025	80	Ikeja
31	IK04SR04	a. Upgrading of T3 45MVA transformer to 60MVA, 132/33kV to accommodate more load b. Upgrading of 1x30MVA to 1x60MVA, 132/33kV transformer at Isolo TS	Isolo	Substation Reinforcement	June, 2025	40	Ikeja
32	IK05SR05	a. Upgrading of 1x30MVA to 1x60MVA, 132/33kV transformer, b. Upgrading of 1x40MVA to 1x100MVA, 132/33kV power transformer	Iire	Substation Reinforcement	June, 2025	72	Ikeja
33	IK06SR06	a. Replacement of 1x30MVA transformer with 1x60MVA, 132/33kV Power Transformer b. construction of associated additional 2x33kV feeder Bay at Oworonsoki TS	Oworonsoki	Substation Reinforcement	June, 2025	24	Ikeja

**SCHEDULE – 4: CENTRAL BANK OF NIGERIA (SLA PROJECTS)**

S/ N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
34	IK16AT01	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Ikeja
35	IK19AT04	Transformers Spares: Power Transformers (1x150MVA) + (1x100MVA)		Additional Transformer	June, 2025		Ikeja
36	JE02AT01	Transformers Spares: Power Transformers (1x150MVA) + (1x100MVA)		Additional Transformer	June, 2025		Jos
37	JE03AT02	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Jos
38	KAE13SR04	Upgrading of 1x30 MVA to 1x60 MVA, 132/33kV Transformer at Gusau 132/33kV TS	Gusau	Substation Reinforcement	June, 2025	24	Kaduna
39	KAE14SR05	Construction and installation of 1x45MVA Mobitira 132/33kV down dropper (on existing B/Kebbi-Sokoto 132kV S/C transmission line) TS at Argungu	Argungu	Substation Reinforcement	June, 2025	36	Kaduna
40	KAE15SR06	Installation 1x60 MVA, 132/33kV Power Transformer at Sokoto 132/33kV TS	Sokoto	Substation Reinforcement	June, 2025	48	Kaduna
41	KAE16AT01	Transformers Spares: Power Transformers (1x150MVA) +(1x100MVA)		Additional Transformer	June, 2025		Kaduna
42	KAE17AT02	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Kaduna
43	KAE18LR01	Reconductoring of Zaria – Funtua - Gusau 132kV Transmission Line (190KM)	Zaria-Funtua	Line Reconductoring	June, 2025	48	Kaduna
44	KE08SR03	Installation of additional 60MVA 132/33kV transformer to enable evacuation of power from Wudil T/S to Kano and de-load Dakata and Dan-Agundi Substations and create flexibility	Wudil	Substation Reinforcement	June, 2025	48	Kano
45	KE13AT01	Transformers Spares: Power Transformers (1x150MVA) + (1x100MVA)		Additional Transformer	June, 2025		Kano
46	KE14AT02	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Kano

**SCHEDULE – 4: CENTRAL BANK OF NIGERIA (SLA PROJECTS)**

S/ N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
47	KE15LR01	Reconductoring of Kankia – Katsina 132kV Transmission line (70km)	Kankia-Katsina	Line Reconductoring	June, 2025	48	Kano
48	PHE09SR02	a. Addition of 2nd 1 x60MVA, 132/33kV transformer b. Installation of 3x33kV feeder Bays at Elemenwo	Elelenwo	Substation Reinforcement	June, 2025	48	Port Harcourt
49	PHE10SR03	a. Installation of additional 1x60MVA, 132/33kV transformer b. Replacement of faulty bushing on Transformer TR2 at Rumuosi	Rumuosi	Substation Reinforcement	June, 2025	48	Port Harcourt
50	PHE11SR04	Extension of 1 circuit (Z2) of 132kV Omoku D/C transmission line from Z2 Port-Harcourt main 132/33kV TS - Z4	Port Harcourt Main	Substation Reinforcement	June, 2025		Port Harcourt
51	PHE17AT01	Transformers Spares: Power Transformers (1x150MVA) + (1x100MVA)		Additional Transformer	June, 2025		Port Harcourt
52	PHE18AT02	Transformers Spares: Power Transformers (2x60MVA)		Additional Transformer	June, 2025		Port Harcourt

## Schedule – 5: World Bank (WB)

Schedule – 5: World Bank (WB)							
S/N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
1	AE23SR01	Upgrading of 2x60MVA with 2x100MVA 132/33kV Power Transformer Rehabilitation of civil structures of the Control Room and Digital Control System at Abuja Central Area	Central Area	Substation Reinforcement	June, 2025	64	Abuja
2	AE24SR02	Construction of complete new 132/33kV substation at Kabba a) 2X60MVA, 132/33kV transformers b) 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation.	Kabba	Substation Reinforcement	Completed	96	Abuja
3	AE25SR03	Rehabilitation of 330kV Substation, High Voltage Switchgears, Associated Equipment Rehabilitation of Control Room including Digital Control System at Kainji	Kainji	Substation Reinforcement	June, 2025		Abuja
4	AE26SR04	o Replacement of obsolete Control and Relay Panels with Digital Control System at Shiroro 330kV TS, o Replacement of High Voltage 330kV Switchgears and Associated Equipment	Shiroro	Substation Reinforcement	June, 2025		Abuja
5	BE12SR08	" Reinforcement of Benin 330/132/33kV TS with 2 X 300MVA 330/132kV Power Transformers" Reinforcement with 1 x 100MVA 132/33kV Power Transformer Replacement of High Voltage Switchgears, and Associated Equipment. Replacement of Obsolete Control and Relay Panels with Digital Control System	Benin	Substation Reinforcement	June, 2025	80	Benin
6	BE13SR09	o Replacement of defective 1x 60MVA 132/33kV at Effurun 132/33kV TS with a new 1x 100MVA 132/33kV Power Transformer o Replacement High Voltage Switchgears, and Associated Equipment o Installation of 4 No Additional Feeder Bays at Effurun, o Replacement of Obsolete Control and Relay Panels with Digital Control System at Effurun 132/33kV TS	Effurun	Substation Reinforcement	June, 2025	80	Benin
7	BE14SR10	Reinforcement of Delta 132/33kV TS with 1 x 100MVA 132/33kV Power Transformer	Delta	Substation Reinforcement	June, 2025	80	Benin
8	BE15SR11	Supply and installation of 100MVA 132/33kV power Transformer and associated Switchgears at Irrua 132/33kV TS	Irrua	Substation Reinforcement	June, 2025	80	Benin
9	BE16SR12	Reinforcement with 1 x 150MVA 330/132kV Inter-bus Transformer at Delta 330/132/33kV TS	Delta	Substation Reinforcement	June, 2025	120	Benin
10	BE17SR13	Upgrading of 2 x 30MVA at Ondo 132/33kV TS with 2x 60MVA, 132/33kV Power	Ondo	Substation Reinforcement	June, 2025	48	Benin

**Schedule – 5: World Bank (WB)**

S/ N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
		Transformers. o Replacement of High Voltage Switchgears, Control & Relay panel with Digital Control system and o Conversion of 6nos. 33kV Indoor to 8No Outdoor. Rehabilitation of control room					
11	EK21SR09	o Upgrading of 2 x 30MVA with 2 x 100MVA 132/33kV at Ijora 132/33kV TS o Rehabilitation of civil structures of the Control Room and Digital Control System	Ijora	Substation Reinforcement	June, 2025	112	Eko
12	EK22SR10	o Supply & Installation of 1 x300MVA 330/132kV and 2x100MVA 132/33kV Power Transformers at Lekki 330/132/33kV TS o High Voltage Switchgears and Associated Equipment	Lekki	Substation Reinforcement	June, 2025	240	Eko
13	EK23SR11	Supply & Installation of 1 x300MVA 330/132kV, 2 x 100MVA 132/33kV Power Transformers o Switchgears and Associated Equipment	Alagbon	Substation Reinforcement	June, 2025	240	Eko
14	EK24SR12	o Rehabilitation of building structure and sinking surrounding area o Replacement of obsolete 132kV equipment, 33KV Metal clad Switchgears, Control & Relay panel o Reinforcement with 1x 60MVA 132/33KV Power Transformer. o Refurbishment of the 2x 45MVA transformers and GIS component at Akoka	Akoka	Substation Reinforcement	June, 2025	84	Eko
15	EK25SR13	o Rehabilitation of building structure and sinking surrounding area o Replacement of obsolete 132kV equipment, 33KV Metal clad Switchgears, Control & Relay panel o Reinforcement with 1x 60MVA 132/33KV Power Transformer. o Refurbishment of the 1 x 40 & 60MVA transformers and GIS components at Iltre TS	Iltre	Substation Reinforcement	June, 2025	80	Eko
16	EE08OS07	Construction of complete new 132/33kV substation at Ninth Mile a) 2X60MVA, 132/33kV transformers b) 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation.	Ninth Mile	Ongoing Substation	Dec., 2025	96	Enugu
17	EE17SREH01	Rehabilitation of 330kV Substation, Control Room, Digital Control System Replacement of High Voltage Switchgears and Associated equipment at Alaoji	Alaoji	Substation Rehabilitation			Enugu
18	EE18SREH02	Rehabilitation of 132kV Substation, 132kV Control Room, Digital Control System Replacement of High Voltage Switchgears and Associated equipment at Aba	Aba	Substation Rehabilitation	June, 2025		Enugu
19	EE19SR03	Reinforcement with 1 x 150MVA 330/132/33kV, 2 x 60MVA Transformers with Associated Equipment	New Haven	Substation Reinforcement	June, 2025	96	Enugu

Schedule – 5: World Bank (WB)

S/ N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
		Replacement of High Voltage Switchgears Rehabilitation of Control Room with Digital Control System at New Haven					
20	EE20SR01	Reinforcement with 1No. 60MVA 132/33kV Power Transformers Replacement of High Voltage Switchgears and Associated Equipment at Abakaliki	Abakaliki	Substation Reinforcement	June, 2025	48	Enugu
21	EE21SR02	Supply & Installation of 1 x 75Mvar Reactor Reinforcement with 1 x 60MVA 132/33kV Replacement of High Voltage Switchgears and Associated Equipment at Ugwuaji	Ugwuaji	Substation Reinforcement	June, 2025	48	Enugu
22	EE22SR03	Reinforcement with 100MVA 132/33kV Power Transformers Extension of 132kV Bus with 3 No. Additional Feeder Bays at Umuhia	Umuhia	Substation Reinforcement	June, 2025	80	Enugu
23	EE23SR04	Complete installation of 1 x 60MVA, 132/33kV Transformer OJI (to stop Load shedding on Udi, Achi, Oji-Urban and Orumba 33kV Feeders)	Oji	Substation Reinforcement	June, 2025		Enugu
24	IB22SR08	Reinforcement with 2 x100MVA 132/33kV Power Transformers at Ilorin 132/33kV TS, High Voltage Switchgears, and Associated Equipment. Construction of New Control Room Replacement of control & relay panel with Digital Control System (DCS)	Ilorin	Substation Reinforcement	June, 2025	160	Ibadan
25	IB23SR09	Replacement of High Voltage Switchgears and Associated equipment at Otta 132/33kV TS	Otta	Substation Reinforcement			Ibadan
26	IB25SR11	Upgrading of 1x 90MVA 330/132kV transformer to 1x300MVA transformer Reinforcement with 1x100MVA 330/132kV Power Transformers Replacement of High Voltage Switchgears and Associated equipment Installation of a 75MX Reactor renovation of control room at Osogbo	Oshogbo	Substation Reinforcement	June, 2025	168	Ibadan
27	IK12SR12	a) Reinforcement with addition of 1 x 100MVA 132/33kV Power Transformer b) Replacement of High Voltage Switchgears and Associated Equipment at Alausa	Alausa	Substation Reinforcement	June, 2025	80	Ikeja
28	IK13SR13	a) Upgrading of 2 x 30MVA to 2 x 100MVA 132/33kV Power Transformers, b) Replacement of High Voltage Switchgears and Associated Equipment	Maryland	Substation Reinforcement	June, 2025	112	Ikeja
29	IK20SREH01	a) Replacement of obsolete Control and Relay Panels with Digital Control System. b) Rehabilitation of Control Room, High Voltage Switchgears and Associated Equipment at Egbin	Egbin	Substation Rehabilitation	June, 2025		Ikeja
30	JE07SR01	Reinforcement with 1 x 300MVA 330/132kV and 1 x 100MVA 132/33kV Transformers Replacement of High Voltage Switchgears, and associated equipment 3 No Additional Feeder Bays at Gombe	Gombe	Substation Reinforcement	June, 2025	80	Jos

Schedule – 5: World Bank (WB)

S/N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
31	JE08SR02	Reinforcement with 1 x 300MVA 330/132kV and 1 x 100MVA 132/33kV Transformers Replacement of High Voltage Switchgears, and associated equipment Rehabilitation of Civil Structures of the Control Room and Digital Control System at Jos TS	Jos	Substation Reinforcement	June, 2025	80	Jos
32	JE09SR03	Upgrade of 7.5MVA Power Transformer to 1 x 60MVA 132/33kV, High Voltage Switchgears and Associated Equipment at Otukpo	Otukpo	Substation Reinforcement	June, 2025	42	Jos
33	JE10SR04	Reinforcement with 1x150MVA 330/132/33kV and 1x 60MVA 132/33kV Power Transformers High Voltage Switchgears and Associated Equipment at Apir	Apir	Substation Reinforcement	June, 2025	48	Jos
34	JE11OS01	Construction of complete new 132/33kV substation at Biliri a) 2X60MVA, 132/33kV transformers b) 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation.	Biliri	Ongoing Substation	Dec, 2025	96	Jos
35	JE12OS02	Construction of complete new 330/132/33kV Substation at Bauchi by turning in and turning out of the existing 3 30kV SC Jos-Gombe line at Bauchi, a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 4 x 330kV line bays e) 2 x 132kV line bays f) 6 x 33kV feeder bay g) 6 x 33kV feeder bays h) 2x330kV line bay extension at Katsina 330/132/33kV substation.	Bauchi	Ongoing Substation	June, 2025	96	Jos
36	JE13OS03	a) Upgrading of 22.5MVA and 30MVA Transformers to 2X 60MVA 132/33kV Transformers b) Rehabilitation of Control Room with Digital Control System c) Replacement of High Voltage Switchgears and Associated Equipment at Bauchi	Bauchi	Ongoing Substation	June, 2025	48	Jos
37	KAE12SR03	a) Reinforcement with 2 x150MVA 330/132kV b) Installation of 1 x 60MVA 132/33kV Power Transformers with associated 3no. Outgoing 33kV Feeders c) Rehabilitation of Control Room at Birnin Kebbi	Birnin Kebbi	Substation Reinforcement	June, 2025	48	Kaduna
38	KE09SR04	Reinforcement with 1 x 300MVA 330/132kV Power Transformer, Replacement of High Voltage Switchgears and Associated Equipment Replacement of Control and Relay Panel with Digital Control System at Kumbotso	Kumbotso	Substation Reinforcement	June, 2025	240	Kano

**Schedule – 5: World Bank (WB)**

S/ N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
39	KE10SR05	Reinforcement with 1 x 100MVA 132/33kV Power Transformer, Switchgears Replacement of High Voltage Switchgears and Associated Equipment Replacement of Control and Relay Panel with Digital Control System Rehabilitation of Control Room Installation of Additional 3 No. Feeders Bay and at Dakata	Dakata	Substation Reinforcement	June, 2025	80	Kano
40	KE11SR06	Replacement of Faulty 1 x 30MVA Upgrading of 1 x 30MVA Transformers to 2 x 60MVA 132/33kV Transformers Replacement of High Voltage Switchgears and Associated Equipment High Voltage Switchgears and Associated Equipment Replacement of Control and Relay Panel with Digital Control System at Kankia	Kankia	Substation Reinforcement	June, 2025	48	Kano
41	KE12SR07	Reinforcement of 1 x 100MVA 132/33kV Transformers Replacement of High Voltage Switchgears and Associated Equipment Replacement of Control and Relay Panel with Digital Control System Rehabilitation of Control Room at Dan Agundi	Dan Agundi	Substation Reinforcement	June, 2025	80	Kano
42	PHE14SR07	Reinforcement with 1 x 100MVA 132/33kV Power Transformers, Replacement of High Voltage Switchgears and Associated Equipment Replacement of Control and Relay Panel with Digital Control System Rehabilitation of Control Room at Port Harcourt Main	Port Harcourt Main	Substation Reinforcement	June, 2025	80	Port Harcourt
43	PHE15SR08	Reinforcement with 1 x 100MVA 132/33kV Power Transformers, Replacement of High Voltage Switchgears and Associated Equipment Replacement of Control and Relay Panel with Digital Control System Rehabilitation of Control Room at Port Harcourt town	Port Harcourt Town	Substation Reinforcement	June, 2025	80	Port Harcourt
44	PHE16SR09	Reinforcement with 1 x 60 MVA 132/33kV Power Transformers, Replacement of High Voltage Switchgears and Associated Equipment Replacement of Control and Relay Panel with Digital Control System Rehabilitation of Control Room at Itu	Itu	Substation Reinforcement	June, 2025	48	Port Harcourt
45	YE06SR01	a) Reinforcement with 1 x 150MVA 330/132kV transformer b) Reinforcement 2x 100MVA 132/33kV transformers, c) Replacement of High Voltage Switchgears	Yola	Substation Reinforcement	June, 2025	160	Yola

Schedule – 5: World Bank (WB)

S/ N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
		and Associated Equipment d) 3 No Additional Feeder Bays at Yola					
46	YE07SR02	a) Reinforcement with 1 x 150MVA 330kV/132kV transformer b) Replacement of High Voltage Switchgears and Associated Equipment c) 3 No Additional Feeder Bays at Mayo Belwa	Mayo Belwa	Substation Reinforcement	June, 2025	120	Yola
47	YE08SR03	a) Reinforcement with 1 Nos. 150MVA 330/132kV transformer b) Replacement of High Voltage Switchgears and Associated Equipment c) 3 No Additional Feeder Bays at Damaturu	Damaturu	Substation Reinforcement	June, 2025	120	Yola
48	YE09SR04	Reinforcement of Biu 132/33kV with 1X60MVA 132/33kV transformer at Biu	Biu	Substation Reinforcement	June, 2025	48	Yola
49	YE10SR05	a) Reinforcement with 1 x 150 MVA 330kV/33kV transformer b) Replacement of High Voltage Switchgears and Associated Equipment c) 3 No Additional Feeder Bays at Maiduguri	Maiduguri	Substation Reinforcement	June, 2025	120	Yola
50	YE11SR06	a) Upgrading from 132kV to 330kV Substation with 1x150MVA, 330/132/33kV Power Transformers and 1 x 100MVA 132/33kV Transformer, b) High Voltage Switchgears and Associated Equipment. c) Construction of 330/132kV Control Room at Jalingo	Jalingo	Substation Reinforcement	June, 2025	80	Yola

## Schedule – 6: Japan International Cooperation Agency (JICA)

Schedule – 6: Japan International Cooperation Agency (JICA)							
S/N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
1	EK01NL01	Construction of 12.5km of new 330kV double circuit line from new Arigbajo 330/132/33kV substation to Olorunsogo 330kV switchyard inclusive of 1.5km 2x 330KV DC multi circuits line	Olorunsogo-Arigbajo	New Line		1200	Eko
2	EK02NL02	Construction of 29.6km of new 330kV double circuit line from new Arigbajo 330/132/33kV substation to Ajegunle (New Agbara) 330/132/33kV substation	Arigbajo- New Agbara	New Line		1200	Eko
3	EK03NL03	4. Construction of about 21.7km of new 132kV double circuit line from new Agbara (Ajegunle) 330/132/33kV substation to existing Agbara 132/33kV substation.	Agbara-New Agbara	New line		200	Eko
4	EK04NL04	Construction of 36.2km New Agbara-Badagry of 132kV double circuit line	New Agbara-Badagry	New Line		200	Eko
5	EK05NS01	Construction of complete new 330/132/33kV AIS substation at Ajegunle (New Agbara) a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 6 X 330kV line bays e) 4 X 132kV line bay f) 6 x 33kV line bays g) 2 x 132kV line bays extension at the existing Agbara 132/33KV	New Agbara	New Substation		96	Eko
6	EK06NS02	Construction of complete new 132/33kV AIS substation at Badagry a) 2X60 MVA, 132/33kV transformers b) 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. c) 2 x 132kV line bays d) 6 x 33kV line bays	Badagry	New Substation		96	Eko
7	IB01NS01	Construction of complete new 330/132/33kV AIS substation at Likosi (Ogijo) a) 2X150MVA 330/132/33kV transformers b) 2X100 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 10x 330kV line bays e) 6 X 132kV line bay f) 6 x 33kV line bays	Likosi (Ogijo)	New Substation		160	Ibadan

		g) Termination works with the existing 330 KV Transmission lines					
8	IB02NS02	Construction of complete new 330/132/33kV AIS substation at Ejio (Arigbajo) a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 12x 330kV line bays e) 2 X 132kV line bay f) 6 x 33kV line bays g) Construction of 2 x 330kV line bays extension at Olorunsogo 330kV switchyard h) Construction of 2 x 132kV line bays extension at New Abeokuta 132/33KV substation	Ejio (Arigbajo)	New Substation		96	Ibadan
9	IB03NS03	Construction of complete new 330/132/33kV AIS substation at Makogi (MFM) a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 4 x 330kV line bays e) 4 x 132kV line bay f) 6 x 33kV line bays	Makogi/MFM	New Substation		96	Ibadan
10	IB04NS04	Construction of complete new 132/33kV AIS substation at Abule Oba (Redeem) a) 2X60 MVA, 132/33kV transformers b) 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. c) 6 x 33kV line bays	Abule Oba (Redeem)	New Substation		96	Ibadan
11	IB05NL01	Construction of 5.1 km of 2x 330kV double circuit line (multi circuits) from Makogi 330/132/33kV substation to the existing Omotoso /Ikeja West double circuit line.	Makogi/MFM-Omotosholekeja West	New Line		200	Ibadan
12	IB06NL02	Construction of about 35.5km of new 132kV double circuit line from new Ejio 330/132/33kV substation to New Abeokuta 132/33kV substation	Ejio (Arigbajo)-New Abeokuta	New Line		200	Ibadan
13	IB07NL03	Construction of 7.78km of new 132kV double circuit line from Likosi 330/132/33kV substation to the proposed Redeem 132/33kV substation.	Likosi (Ogijo)-Redeem	New Line		200	Ibadan
14	IB08NL04	Construction of 2.41 km of new 2x 132kV double circuit (multi circuits – quad) line from the proposed Likosi 330/132/33kV substation to Ikorodu /Shagamu 132kV double circuit line.	Likosi (Ogijo)-Ikorodu Shagamu	New Line		400	Ibadan

## Schedule – 7: African Development Bank (AfDB/NTEP)

Schedule – 7: African Development Bank (AfDB/NTEP)							
S/N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
1	BE18LRE01	Reconstruction of one of Delta-Benin 330kV Transmission Line (125 km) Double Circuit to Quad Conductor 330 Double Circuit Line	Delta-Benin	Line Reconstruction	N/A (To be retendered due to cost overrun)	1500	Benin
2	EE01LRE01	Reconstruction of one of Alaoji-Ihiala-Onitsha 330kV Transmission Line (138km) Double Circuit to Quad Conductor 330 Double Circuit Line and 1X330kV line bay extension each at Onitsha and Alaoji	Alaoji-Ihiala-Onitsha	Line Reconstruction	26th, January, 2026	1500	Enugu
3	KAE03OS03	Construction of complete new 330/132/33kV Substation at Zaria by turning in and turning out of the existing 330kV SC Kaduna Kano line at Zaria, a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 6 x 330kV line bays e) 2 x 132kV line bays f) 6 x 33kV feeder bay	Zaria	Ongoing Substation	1st, August, 2025	96	Kaduna
4	KAE04OS04	Construction of complete new 330/132/33kV Substation at Millennium City, Kaduna by turning in and turning out of the existing 330kV DC Kaduna Jos line at Millennium City, a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 6 x 330kV line bay extension e) 2 x 132kV line bays f) 6 X 33kV feeder bay	Millenium City	Ongoing Substation		96	Kaduna
5	KAE05OS05	Construction of complete new 132/33kV Substation at Rigasa by turning in and turning out of the existing 132kV DC Kaduna Zaria line at Rigasa a) 2X60 MVA, 132/33kV transformers b) 6 X 33kV feeder bay	Rigasa	Ongoing Substation		96	Kaduna
6	KAE06OS06	Construction of complete new 132/33kV Substation at Jaji by turning in and turning out of the existing 132kV DC Kaduna - Zaria line at Jaji a) 2X60 MVA, 132/33kV transformers b) 6 X 33kV feeder bay	Jaji	Ongoing Substation	1st, August, 2025	96	Kaduna
7	KE03OS03	Construction of 2X150MVA and 2X60MVA Rimi Zakara 330/132/33kV TS	Rimi Zakara	Ongoing Substation	completed	240	Kano
8	KE05OL02	Construction of Mando - Kumbotso 2nd 330kV Line (204km)	Mando-Kumbotso	Ongoing Line	Jan-26	1500	Kano

## Schedule – 8: Agence Française de Development (AFD)

Schedule – 8: Agence Française de Development (AFD)							
S/N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
1	AE01OS01	Construction of complete new 330/132/33kV substation at New Apo (Pigba) a) 2X150MVA 330/132/33kV transformers b) 3X60MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 6 X 132kV line bay e) 3 X 132kV line bay extension at Old Apo 132kV Substation. f) 2x 330kV line bays extension at Lafia g) 9X33kV distribution feeders all civil works, testing and commissioning.	New Apo (Pigba)	Ongoing Substation	June, 2025	96	Abuja
2	AE02OS02	1. Construction of complete new 330/132/33kV AIS substation at West Main (Lugbe). a) 2X150MVA 330/132/33kV Transformers. b) 3X60MVA, 132/33kV 132/33kV Transformers (with 132kV outdoor GIS Switchgear). c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 2 X 330kV line bay and 4 X 132kV line bays. e) 33kV indoor metal clad switchgears. f) 9X33kV distribution feeders all civil works, testing and commissioning.	West Main (Lugbe)	Ongoing Substation	30th, June, 2025	96	Abuja
3	AE03OS03	Construction of complete new 132/33kV substation at Kuje a) 3X60MVA, 132/33kV transformers b) 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. c) 4 X 132kV line Bay d) 9X33kV distribution feeders all civil works, testing and commissioning.	Kuje	Ongoing Substation	Completed. The line to supply the station is under construction	96	Abuja
4	AE04OS04	1. Construction of complete new 132/33kV substation at Wumba/Lokogoma. a) 2X60MVA, 132/33kV transformers. b) 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. c) 2 X 132kV line Bay d) 2 X 5km underground 132kV XLPE Cable line, from New Apo to Wumba/Lokogoma. e) 6X33kV distribution feeders all civil works, testing and commissioning.	Wumba/Lokogoma	Ongoing Substation	Completed. The line to supply the station is under construction	96	Abuja
5	AE05OL01	Construction of about 172km of new 330kV double circuit line from Lafia 330kV 330/132/33kV substation to the proposed New Apo (Pigba) 330/132/33kV substation.	Lafia-New Apo	Ongoing Line		1200	Abuja
6	AE06OL01	Construction of about 11km of new 132kV double circuit line from New Apo (Pigba) 330/132/33kV substation to Old Apo 132/33kV substation	New Apo-Old Apo	Ongoing Line	30th, Sept, 2025	200	Abuja
7	AE07OL02	Construction of 42km of new 132kV double circuit line from New Apo 330/132/33kV substation to the Kuje 132/33kV substation.	New Apo-Kuje	Ongoing line	30th, Sept, 2025	200	Abuja
8	AE08OL03	Construction of 29km of new 132kV double circuit line from the proposed Kuje 132/33kV Substation to West Main (Lugbe) 330/132/33kV substation	West Main-Kuje	Ongoing line	30th, Sept, 2025	200	Abuja

**Schedule – 8: Agence Française de Development (AFD)**

S/N	Project Code	Project Description	Location	Category	Project Completion Date (MM - YY)	Expected Impact (in MW)	DisCo Impacted
9	KAE01OSO1	Construction of complete new 330/132/33kV Substation at Kalgo a) 1X150MVA 330/132/33kV transformers b) 1X100 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 6 x 330kV line bays e) 6 x 330kV bay extension at B/Kebbi f) 2 x 330kV bay extension at Kainji	Kalgo	Ongoing Substation	March, 2027	80	Kaduna
10	KAE02OSO2	Construction of complete new 330/132/33kV Substation at New Sokoto a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 4 x 330kV line bays e) 2 x 132kV line bays	Sokoto	Ongoing Substation	March, 2027	96	Kaduna
11	KAE19OL01	3. Birnin Kebbi (Kalgo)– Sokoto 330kV DC transmission line on the existing 132kV Birnin Kebbi Sokoto ROW and reconducting the existing 132 kV single circuit Birnin-Kebbi line to double its capacity	Kalgo-Sokoto	Ongoing Line	March, 2027	1200	Kaduna
12	KE01OS01	Construction of complete new 330/132/33kV Substation at Daura a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 4 x 330kV line bays e) 6 x 33kV feeder bays f) 2x330kV line bay extension at Katsina 330/132/33kV substation.	Daura	Ongoing Substation	March, 2027	96	Kano
13	KE02OS02	Construction of complete new 330/132/33kV Substation at Jogana a) 2X150MVA 330/132/33kV transformers b) 2X60 MVA, 132/33kV transformers c) 330kV, 132kV, 33kV primary and secondary switchgears, Control/protection systems and automation. d) 6 x 330kV line bays e) 6 x 33kV feeder bays f) 2x330kV line bay extension at Katsina 330/132/33kV substation.	Jogana	Ongoing Substation	March, 2027	96	Kano
14	KE04OL01	Construction of length of 330kV DC twin line between Katsina – Daura – Gwiwa – Jogana – Kura.	Katsina – Daura – Gwiwa – Jogana – Kura.	Ongoing Line	March, 2027	1200	Kano

## Schedule – 9: Siemens/Presidential Power Initiative (FGN PowerCo.)

Schedule – 9: Siemens/Presidential Power Initiative (FGN PowerCo.)							
S/N	Project Code	Project Description	Location	Category	Project Completion Date	Expected Impact (in MW)	DisCo Impacted
1	KAE19SR07	Sokoto 132/33kV Substation (Design, supply, installation, testing and commissioning of 1X60MVA 132/33kV power transformer and associated AIS switchgear)	Sokoto	Substation Reinforcement		48	Kaduna
2	IB20SR06	Ayede 330/132/33kV Substation (Installation of 1 x 150MVA, 330/132kV transformer and construction of 1 x 132kV line bay to Jericho)	Ayede	Substation Reinforcement		120	Ibadan
3	EE24SR05	Onitsha 330/132/33kV Substation (Design, supply, installation, testing and commissioning of 1x300MVA, 330/132/33kV power transformer and all associated GIS switchgear in a single breaker with two bus select isolator scheme)	Onitsha	Substation Reinforcement		260	Enugu
4	IB28SR12	New Abeokuta 330/132kV Substation (2 x 150MVA 330/132/33kV transformer, 2 x 330kV line bays, 2 x 330kV transformer bays and 4 x 132kV line bays including bus section for double bus bar 132kV)	Abeokuta	Substation Reinforcement		260	Ibadan
5	KAE20SR07	Mando 330/132/33kV Substation (Design, supply, installation, testing and commissioning of 1x300MVA, 330/132/33kV power transformer and all associated GIS switchgear in a single breaker with two bus select isolator scheme)	Mando	Substation Reinforcement		260	Kaduna
6	JE14SR05	Yandev 132/33kV Substation (Replacement of faulty 40MVA 132/33kV Mobitran with 63MVA 132/33kV Mobile Substation)	Yandev	Substation Reinforcement		55	Jos
7	EE25SR06	Onitsha 132/33kV Substation (Replacement of 15MVA 132/11kV with 100MVA 132/33kV transformer)	Onitsha	Substation Reinforcement		80	Enugu
8	IB29SR13	Ibadan-North 132/33kV Substation (Upgrading 2 x 30MVA to 2 x 100MVA 132/33kV transformer with 2No new 33kV Feeders, retrofitting 6No 33kV outgoings and construction of 2 x 132kV line bays for Turn -In Turn Out at Ibadan-North 132/33kV substation)	Ibadan	Substation Reinforcement		160	Ibadan
9	KAE20SR08	Talatan Mafara 132/33kV Substation (Design, supply, installation, testing and commissioning of 2 X 60MVA, 132/33kV AIS substation and associated switchgear, as well as 2No. 300kVA 33/0.4kV grounding transformers)	Talatan Mafara	Substation Reinforcement		100	Kaduna
10	EK29SR14	Alagbon Extension 330/132/33kV Substation (Construction of 2x330kV line bay extension)	Alagbon	Substation Reinforcement			Eko
11	IK22SR14	Akangba 330/132kV Substation (2x330kV line bay extension in 1½ breaker scheme)	Akangba	Substation Reinforcement			Ikeja

# Annexure -1



### Appendix 1a. TSP SCADA Gaps Projects: Tee-Offs

SELECTED SUBSTATIONS FOR CONVERSION TO LINE TURN-IN/TURN-OUT  
(BAY EQUIPMENT, COMMUNICATION EQUIPMENT & LINE TOWERS)

S/N	Voltage Level	Line Routes	Substation
1	132KV	Dakata - Gagarawa - Hadejia	Gagarawa Substation T-off on Dakata - Hadejia 132kV Line
2	132KV	Kano - Tamburawa - Dangora - Zaria	Tamburawa Substation Connected to the Grid via a Turn-in Turn-out on Kano - Zaria line without LMU or the LLO
3	132KV	Kano - Tamburawa - Dangora - Zaria	Dangora Substation Connected to the Grid via a Turn-in Turn-out on Kano - Zaria line without LMU on the LLO
4	132KV	Zaria - Funtua - Gusau	Funtua Substation T-off on Zaria - Gusau 132kV line
5	132kV	Benin - Oghara - Delta line 1	Oghara Substation Connected to the Grid via a Turn-in Turn-out on Benin - Delta 1 line without LMU on the LLO
6	132KV	Kashimbilla - Takum - Wukari - Yandev	Kashimbilla Substation
7	132KV	Kashimbilla - Takum - Wukari - Yandev	Takum Substation
8	132KV	Kashimbilla - Takum - Wukari - Yandev	Wukari Substation
9	132KV	Kashimbilla - Takum - Wukari - Yandev	Yandev Substation
10	132KV	Kumbotso - Wallambe - Dakata	Wallambe Substation

**Appendix 1b. SCADA Gaps Projects: Telecoms**

S/N	REGION	VOLTAGE LEVEL	STATION NAME	TYPES OF INSTALLATION	GAPS
1	Lagos	132kV	Akangba 132/33kV	FIBER INSTALLATION, ETHERNET SWITCH	1, Lay a new fiber cable between the control room of Akangba 132KV and the control room of Akangba 330kV, the cable length is about 500m.
					2, Add one pair of Ethernet switch with single mode SFP 1 node in Akangba 132KV and Akangba 330kV
2	Benin	132kV	Ihovbor 132/33kV	MPLS	Repair of the existing 24F OPGW cable between Ihovbor 132kV and Okada 132kV SS has been achieved
3	Benin	132kV	Okada	MW Radio	To establish Microwave Radio communication to Ihovbor
4	Enugu	132kV	Abakaliki 132/33kV	MW Radio	Extension of fiber from New haven, Nkalagu to Abakaliki, 92km and provision PMLS TP
5	Enugu	132kV	Ugwuaji 132/33kV	under ground fibre and a pair of PoE enabled optical switches	1. Lay a new fiber cable between the control room of Ugwuaji 330kV and the control room of Ugwuaji 132/33kV, the cable length is about 700m.
					2. Add one pair of Ethernet switch with single mode SFP module in Ugwuaji 132/33kV and Ugwuaji 330kV.
6	Kaduna	132kV	Talata Mafara 132/33kV	PLC	Facing sokoto and Talata Mafara TS Repair or upgrade the existing PLC system
7	Kaduna	132kV	Zaria 132/33kV	IP PLC	provide MPLS equipment at the SS
8	Shiroro	132kV	Kontagora	IP PLC	Repair or upgrade the existing PLC system facing Tegina T/S
9	Port Harcourt	132kV	Omoku	MW Radio Installation	To establish Microwave Radio telecommunication to PH Main
10	Port Harcourt	132kV	Afam V	MW Radio Installation	To establish Microwave Radio telecommunication to Afam 1
		132kV	Afam VI	MW Radio Installation	To establish Microwave Radio telecommunication to Afam VI
11	Port Harcourt	132kV	Umuhia 132/33k V	OPGW repairs, MPLS TP	Repairs of OPGW on Umuhia - Alaoji 132kv line,
12	Grid	All stations	Grid	Grid	Lack of vehicles and mobility has frustrated the effective supervision and implementation of projects in the grid. There is need to ensure mobility for grid coordination.
13	Grid	All stations	Grid	Grid	Lack of capacity building has impacted on the performance of telecoms personnel.
14	Grid	Selected Stations under World Bank Project	Grid	Microwave Radio Towers	Due to the delay in procuring towers for the world Bank SCADA/EMS Telecommunication project microwave radio systems, it has become necessary to ensure that the towers are procured on schedule

**Appendix 1c. SCADA Gaps Projects: TSP Outdoor Gaps**

S/N	Description of Equipment	Unit	Reviewed Qty
1	330kV Current Transformers	Nos.	25
2	330kV Capacitive Voltage Transformers	Nos.	14
3	132kV Current Transformers	Nos.	34
4	132kV Capacitive Voltage Transformers	Nos.	49
5	330kV Circuit Breaker	Nos.	22
6	132kV Circuit Breaker	Nos.	46
7	330KV Isolators	Nos.	-
8	132kV Isolators	Nos.	-
9	Estimated Control Cables Required		
9a	19c x 2.5mm <sup>2</sup>	Mtrs	36150
9b	12c x 2.5mm <sup>2</sup>	Mtrs	88350
9c	10c x 2.5mm <sup>2</sup>	Mtrs	9000
9d	4c x 4mm <sup>2</sup>	Mtrs	9000
10			
10a	RTCC Panel/Tapcon	Nos.	181
10b	OLTC Motor Drive	Nos.	28
11	Procurement of Bay Controller Relays and Ethernet Switches for Transmission Substation Nation wide .	Lot	-
12	Procurement of Three phase O/C & E/F Relays/BCU relay for use in Transmission Substation Nation wide.	Nos.	40
13	33kV Circuit Breaker	Nos.	48
14	33kV Isolators	Nos.	-

**Appendix 1d. TSP – Contingency For Counterpart Funding and RoWs**

Project Code	Project Description	Funding Source
TCN95LC0	Reconstruction of 138km Alaoji-Onitsha 330kV line to 330kV DC Quad line	Tariff
TCN96LC02	Construction of 2x150MVA, 330/132/33kV and 2x60MVA, 132/33kV Complete Substation at Millennium City and 2x60MVA, 132/33kV Substation at Rigasa	Tariff
TCN97LC03	Mando-Rimi Zakara 330kV DC Quad line on ACCC(204km)	Tariff
TCN98LC04	WAPP North Core line	Tariff
TCN100LC06	Kainji-Birnin Kebbi- Sokoto 330kV line	Tariff
TCN101LC07	Katsina-Daura-Gwiwa Jogana-Kura 330kV line	Tariff
TCN105LC08	JICA Lagos-Ogun Transmission Projects	Tariff



# Annexure -2



### Appendix 2a. SCADA Gaps Projects: SCADA and EMS

S/N	PROJECT DESCRIPTION
1	Upgrading of Existing SAS (Other than NR) and Integration into new SCADA System
2	EMS Software
3	Consultancy for supervision, testing and commissioning of the remainder of the TR 6C Contract after June WB credit closure. What will happen to the supervision of the remaining SCADA enable projects under NETAP rehabilitation and digitalization projects?
4	Spares for SCADA Equipment
5	Logistics
6	Air Conditioners
7	Training

### Appendix 2b. NISO – Operations Projects

Project Code	Project Description	Funding Source
TCN24ISO07	Acquisition and provision of Software suites - Server Operating systems, Client Operating System, Microsoft Office Productivity Tools	Tariff/PSRO-AF
TCN33ISO16	Design and Implementation of Trading Point Telemetry System (TPTS)	Tariff/PSRO-AF
TCN35ISO18	Annual License Maintenance and upgrade of existing System Planning software and tools (PSS(E), DIGSilent Power Factory, NEPLAN, ArcGIS Pro) and subscriptions for Cloud services.	Tariff/PSRO-AF
TCN40ISO23	Local/overseas Capacity building for Planning Engineers on ArcGIS visualization and analysis of spatial data related to power system infrastructure and renewable energy resources.	Tariff/PSRO-AF
TCN42ISO25	Consultancy supports for long term expansion planning and reinforcing the transmission infrastructure to accommodate increased renewable energy capacity integration.	Tariff/PSRO-AF
TCN43ISO26	Consultancy services for Transmission Loss Determination and Reduction studies. This is to scientifically analyze the sources of the losses and conduct feasibility analysis for optimized actions and investment required for the loss reduction.	Tariff/PSRO-AF
TCN142ISO58	Construction of Regional Office Benin Region	Tariff/PSRO-AF
TCN146ISO62	Construction of Regional Office Lagos Region	Tariff/PSRO-AF
TCN147ISO63	Construction of Regional Office Shiroro Region	Tariff/PSRO-AF
TCN149ISO65	ICT Hardware (working tools) Acquisition and maintenance of servers, Desktops, Laptops, Switches, Routers, Printers, Copiers, Scanners etc	Tariff/PSRO-AF
TCN162ISO73	Consultancy Services for Grid Islanding Studies	Tariff/PSRO-AF
TCN162ISO74	Automation of Billing System	Tariff/PSRO-AF
TCN162ISO75	Construction of Regional Control Room at Afam	Tariff/PSRO-AF
TCN67ISO50	Supply and Installation of 40Nos. 50V Battery Banks and chargers for telecoms equipment in the grid	Tariff/PSRO-AF



**Appendix 2c. TSP – Protection Control and Metering Projects**

Project Code	Project Description	Funding Source
TCN106TSP31	Procurement of 30Nos customized interface computer for OMICRON, Relay and Substation Automation System	Tariff/PSRO-AF
TCN107TSP32	Procurement of distance Protection Relay Panels for the replacement of Failing critical 330kV and 132kV circuit in the Grid	Tariff/PSRO-AF
TCN108TSP33	Supply of 40Nos Primary and 40Nos Secondary test equipment	Tariff/PSRO-AF
TCN109TSP34	Supply of 20Nos Numerical distance protection relays for 330kV transmission line	Tariff/PSRO-AF
TCN110TSP35	Supply of 40Nos Numerical distance protection relays for the replacement of Failing critical 330kV and 132kV circuit in the Grid	Tariff/PSRO-AF
TCN111TSP36	Procurement of Contractor for the transportation, erection and installation of 330kV PVT, and erection and installation of 330kV Reactor bay at Ikot Ekpene	Tariff/PSRO-AF
TCN112TSP37	Procurement of Control Cables of different sizes and switchgear material for installation of Power Voltage Transformers at Ikot Ekpene	Tariff/PSRO-AF
TCN113TSP38	Procurement of Control Cables for replacement and installation of Akure-Osogbo 132kV line, transformer T3A, 33kV Bus section Instrument Transformers at Akure and Ado Ekiti Substations.	Tariff/PSRO-AF
TCN114TSP39	Procurement of Control Cables for use at Alagbon, Ikot Ekpene and Akangba Sustations.	Tariff/PSRO-AF
TCN115TSP40	Procurement of Control Cables for Installation and maintenance use.	Tariff/PSRO-AF
TCN116TSP41	The procurement of 75 Nos 33kV 300/400/600/800/1/1/1/1A Current Transformer for 33kV Outgoing feeder bay circuits.	Tariff/PSRO-AF
TCN117TSP42	Emergency Procurement of 40 Nos Distance Protection relay for replacement on defective Main-1 & Main-2 330kV Transmission Lines Circuits in the grid.	Tariff/PSRO-AF

**Appendix 2d. TSP – Health, Safety, and Environment Projects**

Project Code	Project Description	Funding Source
TCN127TSP46	Construction of fire hydrants in 330kV Transmission substations across TCN grid network (15 Substations)	Tariff/PSRO-AF
TCN128TSP49	Installation of modern fire-fighting equipment (3 gallons) Enforcer 3 and fire bull fluorine-free foam (15 units in 5 Substations)	Tariff/PSRO-AF