



ORDER/NERC/279/2021

**BEFORE THE NIGERIAN ELECTRICITY REGULATORY COMMISSION  
IN THE MATTER OF THE EXTRAORDINARY REVIEW OF MULTI-YEAR TARIFF ORDER FOR  
YOLA ELECTRICITY DISTRIBUTION PLC**

**1.1. Title**

This regulatory instrument may be cited as NERC Order on Performance Improvement Plan (PIP) and Extraordinary Tariff Review Application for Yola Electricity Distribution Plc ("YEDC").

**1.2. Commencement**

The approved PIP and CAPEX programme of YEDC shall take effect from 1st January 2022 and shall remain effective until 31st December 2026 unless amended by the Commission.

**1.3. Context**

YEDC applied to the Commission for a review of the provisions for Capital Expenditure (CAPEX) in its tariffs to support the implementation of its Performance Improvement Plan ("PIP") over the next 5 years. Under the Power Sector Recovery Program (PSRP), it is envisaged that the Commission would implement a robust tariff review process aimed at improving the performance of the Nigerian Electricity Supply Industry ("NESI"). This process involved a review of the capital expenditure allowances in the MYTO model to align with the Performance Improvement Plans (PIPs) of the Distribution Companies (DisCos). The approved PIP and Extraordinary Tariff Application shall form the basis for YEDC to prioritise the implementation of the proposed CAPEX initiatives. The approved PIPs shall also form the basis for defining KPIs for YEDC for the next 5 years by the Commission with emphasis on improvement in energy throughput and improved service delivery to the customers.

As part of the Stakeholder Consultation Process for Extra Ordinary Tariff Review, the Commission held public hearings to consider the applications filed by YEDC in Yola and monitored the stakeholders' engagements by YEDC at different locations within its franchise. Based on the feedback received during the consultations and subsequent deliberations with various stakeholders, the Commission approved the Serviced-Based Tariff

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(SBT) effective from the 1st of September 2020 to ensure that rates paid by customers align with the quality of service as measured by the daily average availability of power supply over a 60-day reference period. Further updates to YEDC's initial PIP submission have been considered as part of this review to align the PIPs with customer expectations of service commitment by YEDC.

#### 1.4. Summary and Overview of YEDC's Network/Current State

YEDC is one of the successor distribution companies ("DisCos") created following the unbundling and privatization of the state-owned Power Utility, the Power Holding Company of Nigeria Plc. The Company is responsible for distributing electricity to around 396,650 customers covering Adamawa, Borno, Taraba, and Yobe States of Nigeria. The company in 2019 had an estimated energy demand of 351 GWh per year, with a constrained demand power of 40 MW. These restrictions are due to energy shortfall and generation constraints. The total ATC&C losses are 61.9 % in 2019.

YEDC is operating under political force majeure condition, caused by insecurity that has severely limited YEDC's ability to improve services and reduce ATC&C losses in the affected Business Units. Some areas of the network have been damaged and will require significant CAPEX to restore services to the desired state. Since taking over the investments have been mostly focused on the rehabilitation and maintenance of the existing network. The planned investments in the expansion of the network had to be minimized due to the energy and revenue shortfall experienced by the company. As a result, YEDC's plan focuses on the following objectives:

- Facilitating access to the network for new customers,
- Improving the quality of service (energy availability and sales increase),
- Reducing ATC&C losses,
- Service level clustering and projections
- Service level tariffs
- Decreasing operating costs,
- Improving customer care, and
- Implementing a strong Corporate Social Responsibility program.

#### 1.5. Stakeholder Consultation

YEDC had followed a process for stakeholder consultation as directed by the Commission. Several focused group discussions to harness stakeholder's views on the service delivery, future expectations, and preferences were conducted with various customer groups such as the Premium Customers, Manufacturers Association of Nigeria (MAN), and Non-Maximum Demand customers. These engagements were required to:





- instill accountability between YEDC and its customers on the services and justification for associated costs and resulting tariffs;
  - assist in minimising disputes by engendering understanding and trust between YEDC and its customers;
  - provide an opportunity for YEDC to engage with customers on the service improvement initiatives proposed in the PIP.
- Key discussion areas for the stakeholder sessions were:
  - Quality and reliability of supply
  - Quality of the metering billing, and payment process
  - Consumers perception of the processes
  - Consumers relationship management
  - Quality of fault complaint and repairs process

#### 1.6 Outputs proposed with interentions:

YEDC proposes to undertake numerous interventions to improve service delivery to the customers. Over the next five years, the proposed interventions will allow YEDC to achieve but not limited to the following:

- Increasing the total energy supplied across its network from the 2019 levels of 1,161,359 MWh/ year to 1,226,710 MWh/ year by December 2020;
- Reduce the average frequency of interruptions to an average of 4 per day by December 2022;
- Reduce the average duration of interruptions to an average of 6 hours per day by December 2022;
- Reduce the average response time to calls from 1.55mins to 1.29minutes by December 2022;
- Reduce the average response time to resolving complaints from 8 days to 5 days by December 2022; and
- Increase the service voltage level to 33kV by December 2022.

**Table – 2: Planned Service Improvements**

Item	Unit	Current	Service Improvement	Year-5 Target	Variance
Customers	#	396,650	250,000	646,650	63%
Current ATC&C Loss	%	66	29	37.4	44%
Energy Delivered	GWh	351	1,161	1,512.1	331%
Average Duration of Supply	(Hrs/Day)	16	6	22	36%
Average Frequency of Interruptions	#/day	7.00	-3000	4.00	-43%
Average Duration of Interruptions	Hrs/day	8.0	-2.0	6.0	-25%

### 1.7. Investment Strategies:

Key strategies proposed by YEDC to attain the targeted service levels over the next 5 years include the following:

1. Implementation of investments and other initiatives in distribution network rehabilitation and upgrade aimed at resolving existing constraints limiting availability and quality of energy supply.
2. Identification of eventual constraints to meeting electricity demand arising from issues affecting high and medium voltage network infrastructure.
3. TCN-DisCo interface projects are required in resolving existing constraints and meeting electricity demand.
4. Installation of metering systems to capture all electrical parameters involved in commercial transactions with NBET and TCN and amounts of energy injected into the network operated by the DisCo.
5. Incorporation of an Incidents Recording and Management System (IRMS) to identify the location and analyze the extent of an interruption in electricity supply and to enable fast resolution and service restoration.
6. Regularization of consumers not registered as customers.
7. Installation of appropriate meters for all the ministries, departments, and agencies at federal, state, and local levels.
8. Incorporation of a Commercial Management System (CMS) to manage all commercial processes: revenue cycle, attending to customers, etc.
9. Incorporation of an Enterprise Resource Planning (ERP) information system to support corporate planning and management of shared services (accounting, finance, human resources, procurement, logistics & information technology).
10. Implementation of a Revenue Protection Project (RPP) supported by Advanced Metering Infrastructure (AMI) to systematically record and monitor consumption of large and medium customers.
11. Incorporation of a Supervisory Control and Data Acquisition System (SCADA) to operate and control HV & MV infrastructure.



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Table – 4: Proposed Investment (Technical)

Item	Unit	Current	Additions/ Construction	Year-5 Target	Variance	PIP Rehabilitation	% of Rehabilitation
Network Length 33 kV	Km	6,717	123	6,839	2%	165	2%
Network Length 11 kV	Km	1,475	17	1,492	1.1%	211	14%
Network Length 0.4 kV	Km	869	11	881	1.3%		
MVA distributions transformers	MVA	995	228	1,223	23%		
# distributions transformers	#	3,929	140	4,069	4%		
MVA Substations transformers	MVA	565	65	630	12%		
# Substations transformers	#	112	9	121	8%		

Table – 5: Yola Disco Proposed Investment Programme (Financial)

Investment Plan	2021	2022	2023	2024	2025	Total
	N000,000	N000,000	N000,000	N000,000	N000,000	N000,000
Construction of 33kV Feeder	10,341	10,341	10,341	10,341	10,341	51,707
Rehabilitation of 33kV Feeder	24	24	24	24	24	119
Construction of 11kV Feeder	8	8	8	8	8	40
Rehabilitation of 11kV Feeder	24	24	24	24	24	119
Construction of 0.415kV Feeder	-	-	-	-	-	-
Distribution Plan Capex	40	40	40	40	40	199
Substation Plan Capex	262	262	262	262	262	1,312
ATC&C Loss Reduction Plan (total)	8	8	8	8	8	40
Customer Service Improvement Plan	8	8	8	8	8	40
IT Investments (SCADA+GIS+ERP+HSE)	32	32	32	32	32	159
Network Metering Capex	2,575	2,575	2,575	2,575	2,575	12,877
Others	819	819	819	819	819	4,094
<b>Total CAPEX</b>	<b>14,149</b>	<b>14,149</b>	<b>14,149</b>	<b>14,149</b>	<b>14,149</b>	<b>70,744</b>

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## 2.0 Commission's Review

2.1. The Commission's Guideline for PIP Application established criteria for YEDC to prepare an output-based plan that sets out the service improvement output targets over the planning horizon of 5 years. This plan includes the programs and activities that will lead to the realisation of those outputs, the human and material resources required, the projected costs and analysis of the risk factors, and the proposed mitigation measures. YEDC's PIP and Extraordinary tariff review application was exposed to a Public Hearing and consultation presided over by a panel of three commissioners in line with the Business Rules and the "Regulations on Procedure for Electricity Tariff Reviews in the Nigerian Electricity Supply Industry" in February 2020. The Hearing provided an avenue for customers, interested parties, and expert intervenors to critically examine YEDC's proposal and the associated expected improvement in service levels. YEDC was further directed to conduct stakeholders' (customers') engagements at various locations within its franchise area which were attended to and monitored by the staff of the Commission.

2.2. Following the outcome of the public consultation, the Commission via Order NERC/198/2020 required YEDC to update its PIP and Extraordinary Tariff Review Application by disaggregating its respective service areas and/or customers per quality of service in order to align rates payable by customers with the quality of supply ("service-based tariffs"). A further review of YEDC's updated submission was considered using the following criteria:

- i. completeness and consistency of the description of each component of the PIP;
- ii. compliance of each component with the Guidelines for preparation of PIPs issued by the Commission;
- iii. analysis of expected results/outcomes from the implementation of each component including the mitigants provided for addressing identified challenges that may hinder the achievement of target;
- iv. thorough price benchmarking and other relevant approaches to the estimation of resources (physical amounts and related OpEx and CapEx) for each component;
- v. determining if the cost and timeline for delivering the output is efficient;
- vi. assessing the efficiency of the proposed financing arrangement;
- vii. analysing the level of technology/modernization leap proposed going forward;
- viii. determining and analysing the overall level of efficiency improvement proposed.

## 3.0 Results of the Review

The Commission, having considered YEDC's PIP and Extraordinary Tariff Review Application in line with the provision of EPSRA and relevant regulations, approved the PIP and CAPEX programme over 5 years as provided in Table – 4 and Table – 5 below.

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Summary of approved projects for Year-1 and Year-2 are also provided in Table – 6, while a detailed list of approved projects for Year-1 and Year-2 are provided in Appendices 1 and 2 respectively.

Table – 4: YEDC's Approved 5-year CAPEX Programme

Year	2021	2022	2023	2024	2025	Total
	Period - 1	Period - 2	Period - 3	Period - 4	Period - 5	Period 1 - 5
	₦000,000	₦000,000	₦000,000	₦000,000	₦000,000	₦000,000
Annual Approved CAPEX	5,452.4	5,452.4	5,452.4	5,452.4	5,452.4	27,262.0

Table – 5: YEDC's Approved 5-year PIP and CAPEX Programme

5-Year Approved PIP	
	₦000,000
Total CAPEX	27,262.0
Distribution Network Capex	17,409.2
Construction of 33kV Feeder	2,251.0
Rehabilitation of 33kV Feeder	2,130.5
Construction of 11kV Feeder	570.2
Rehabilitation of 11kV Feeder	2,130.5
Construction of 0.400kV Feeder	855.1
Distributions transformers (plan)	2,536.4
MVA Substations transformers (plan)	6,935.5
ATC&C Loss Reduction Plan (total)	210.2
Customer Service Improvement Plan	1,265.6
IT Investments (SCADA+GIS+ERP+HSE)	2,160.3
SCADA Initiatives	210.2
GIS Improvement	210.2
ERP System Infrastructure	1319.6
HSE Initiatives	210.2
AMI Network Metering	210.2
Customer Metering Capex	-
Network Metering Capex	4,355.1
Others	1,861.7

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Table – 6: YEDC's Approved PIP and CAPEX Programme for 2021 and 2022

Approved PIP	2021	2022
	<i>N000,000</i>	<i>N000,000</i>
<b>Total CAPEX</b>	<b><u>5,452.4</u></b>	<b><u>5,452.4</u></b>
<b>Distribution Network Capex</b>	<b>2,235.7</b>	<b>2,998.2</b>
Construction of 33kV Feeder	336.6	338.7
Rehabilitation of 33kV Feeder	210.8	215.3
Construction of 11kV Feeder	84.4	86.6
Rehabilitation of 11kV Feeder	210.8	215.3
Construction of 0.400kV Feeder	84.4	86.6
Distributions transformers (plan)	252.5	254.7
MVA Substations transformers (plan)	1,056.1	1,800.9
ATC&C Loss Reduction Plan (total)	42.0	42.0
Customer Service Improvement Plan	506.3	506.3
IT Investments (SCADA+GIS+ERP+HSE)	1,081.8	410.1
SCADA Initiatives	42.0	42.0
GIS Improvement	42.0	42.0
ERP System Infrastructure	804.2	251.5
HSE Initiatives	51.5	32.5
AMI Network Metering	142.0	42.0
Customer Metering Capex	-	-
Network Metering Capex	1,349.1	1,352.5
Others	237.5	143.4

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#### 4.0 Annual Update of PIPs

YEDC shall be required to provide an annual update to the PIP to reflect the proposed investment programme as part of the Minor Review of Tariffs on a continuous basis. The Commission recognizes this PIP as a dynamic roadmap of where YEDC envisions to be in the next five (5) years and will continue to evolve in alignment with market development and changes to the operating environment. YEDC may invest more than the indicated annual CAPEX figure in any particular year on account of front-loading proposed future investments or due to the unanticipated critical investment needs subject to the approval of the Commission.

#### 5.0 Front-loading of CAPEX

YEDC is at liberty to front-load its CAPEX programmes to attain accelerated service improvements. Front-loading of CAPEX programme in any year shall not exceed annual CAPEX for the following year in line with the framework for continuous update of the PIPs.

#### 6.0 CAPEX Clawback

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

#### 7.0 Commencement and Effectiveness

The approved PIP and CAPEX programme of YEDC shall take effect on the 1st day of January 2022 and shall remain effective until the 31<sup>st</sup> day of December 2026.

#### 8.0 Signature

Dated this 29<sup>th</sup> day of April 2021



Sanusi Garba

Chairman



Dafe C. Akpeneye

Commissioner

# Appendices



Appendix 1 - Details of Planned 2021 Investments for Yola Electricity Distribution Company

<i>Distribution Network: lines</i>				
<i>Project Type: Construction of 33kV Feeder</i>				
#	Project Description	Location	Route Length (km)	Project Completion Date (MM - YY)
1	Construction of 33KV Network from Yola TCN to Yola Town through Numan Road-Malkwai Bypass	JIMETA	24.51	Sep-21

<i>Distribution Network: lines</i>					
<i>Project Type: Rehabilitation of 33kV Feeder</i>					
#	Project Description	Type of Rehabilitation	Location	Route Length (km)	Project Completion Date (MM - YY)
1	From Jalingo TCN on Town Feeder to Road block	Reconductoring, Replacement of Poles and Poles accessories	Jalingo, Taraba State	7.02	Sep-21
2	From Jalingo TCN on Mutum-Biyu Feeder to Roadblock	Reconductoring, Replacement of Poles and Poles accessories	Jalingo, Taraba State	7.02	Oct-21
3	From Yola TCN to Hayin-Gada Bridge	Reconductoring, Replacement of Poles and Poles accessories	Jalingo, Taraba State	9.5	Nov-21
4	From Mayo-Belwa Junction at Ngurore towards Mayo Belwa along Numan 33kV line	Reconductoring, Replacement of Poles and Poles accessories	Jalingo, Taraba State	9.5	Dec-21

*Distribution Network: lines*  
*Project Type: Construction of 11kV Feeder*

#	Project Description	Location	Route Length (km)	Project Completion Date (MM . YY)	Expected Impact in MW
1	Numan Road 11kV Feeder to Kotare LAYOUT	Jimeta-Yola	2.7775	Sep-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
2	From Existing FGGC Feeder to Airforce Comprehensive School Close	Jimeta-Yola	0.6	Oct-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

*Distribution Network: lines*  
*Project Type: Rehabilitation of 11kV Feeder*

#	Project Description	Type of Rehabilitation	Location	Route Length (km)	Project Completion Date (MM . YY)	Expected Impact in MW
1	Federal Low Cost 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Yola Town	5	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.



2	ABTI 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Yola Town	3	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
3	FMC 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Yola Town	2	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
4	Wuro Hausa 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Yola Town	5	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
5	Numan I 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Numan	3	Jun-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
6	Numan II 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Numan	2	Jul-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
7	Pompomari 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Maidugu ri	5	Aug-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
8	Bulumkutu 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Maidugu ri	5	Sep-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

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9	Nassarowo 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta, Yola	4	Oct-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
10	Shinco 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta, Yola	3.14	Nov-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
11	Bajabure 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta, Yola	5	Dec-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

*Distribution Network: lines*

*Project Type: Construction and Rehabilitation of 0.400kV Feeder*

#	Project Description	Type of Project	Route Length (km)	Project Completion Date (MM - YY)	Expected Impact in MW)
1	All LT Units in Federal Low Cost, 500kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	2	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
2	All LT Units in ABTI 300kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	2	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.



3	All LT Units in FMC 500kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	2	Apr-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
4	All LT Units in Wuro Hausa 500kVA, 11/0.400KV S/S	Reconductoring, Replacement of Pole Accessories	2	May-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
5	All LT Units in Numan 500kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	2	Jun-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
6	All LT Units in Numan II 300kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	2	Jul-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
7	All LT Units in Pompamari 500kVA, 11/0.400KV S/S	Reconductoring, Replacement of Pole Accessories	2	Aug-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
8	All LT Units in Bulumkutu 500kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	2	Sep-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

9	All LT Units in Nasrrowo 300kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	2	Oct-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
10	All LT Units in Bajabure 500kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	2	Dec-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

*Distribution Network: stations*

*Project Type: New Construction, Reinforcement and Standardisation of Distribution Substation*

#	Name of Substation	Transformation Voltage (kV)	Rating kVA	Type of work (New Construction or Replacement)	Location	Quantity	Project Completion Date (MM - YY)	Expected Impact in MW
1	Kofare New Layout S/S	11/0.415	500	New Construction	Jimeta-Yola	1	Apr-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT for Period 2
2	Airforce Comprehensive Sch. Close S/S	11/0.415	500	New Construction	Jimeta-Yola	1	Apr-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level

3	Agric Quarters Area S/S	11/0.415	500	New Construction	Jimeta-Yala 1	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2
4	Target Junction S/S	11/0.415	500	New Construction	Jimeta-Yala 1	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2
5	Anguwan Hona S/S, Sangere FUTY	33/0.415	500	New Construction	Jimeta-Yala 1	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2



6	Sangere Bode 1	11/0.415	500	New Construction	Jimeta-Yola	1	Apr-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2
7	Proposed Basirat S/S	11/0.415	500	New Construction	Jimeta-Yola	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2
8	LCCN Bookshop	11/0.415		New Construction	Jimeta-Yola	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2
9	Bulumkutu Behind Yandoya	11/0.415	500	New Construction	Bulumkutu, Marduguri	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2





10	Maromil 2	11/0.415	500	New Construction	Bulumkutu, Maiduguri	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2
11	Teachers Village bypass	11/0.415	500	New Construction	Bulumkutu, Maiduguri	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2
12	Polo High Court Barr. Chul T-off	11/0.415	500	New Construction	Yerwa, Maiduguri	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2
13	Bale kanuri, Gombole	11/0.415	500	New Construction	Yerwa, Maiduguri	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT for Period 2






14	Gallimari Bukamari I	11/0.415	500	New Construction	Yerwa, Maiduguri	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
15	Texaco II	11/0.415	500	New Construction	Kanem, Maiduguri	1	May-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
16	Nateco II Relief	11/0.415	500	New Construction	Kanem, Maiduguri	1	Jun-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
17	Ramat Motors II	11/0.415	500	New Construction	Kanem, Maiduguri	1	Jun-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.







18	GRA Numan S/S	11/0.415	500	New Construction	GRA, Numan	1	Jun-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
19	Proposed New Era	11/0.415	500	New Construction	New Era, Jalingo	1	Jun-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
20	Proposed Royal Castle	11/0.415	500	New Construction	Magami, Jalingo	1	Jul-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
21	Proposed Gadan Bobboji	11/0.415	500	New Construction	Tudun Wada, Jalingo	1	Jul-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

22	Proposed Jauro Gana	33/0.415	500	New Construction	Babayau, Jalingo	1	Jul-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
23	Proposed Rumde II	33/0.415	500	New Construction	Rumde, Jalingo	1	Aug-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
24	Yolde Pate 5	11/0.415	500	New Construction	Yolde Pate, Yola	1	Aug-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
25	Sanda IV	11/0.415	500	New Construction	Federal Low Cost, Yola	1	Sep-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

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26	Fodama II	33/0.415	500	New Construction	Fadama, Takum, Taraba State	1	Oct-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
27	NTA Barracks	11/0.415	500	New Construction	Takum Opp Barracks, Taraba State	1	Nov-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
28	Takum General Hospital II	11/0.415	500	New Construction	Takum Town, Taraba State	1	Dec-21	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

*Network: Injection Substations (33/11kV)*

*Project Type: Construction, Reinforcement and Standardisation of Injection Sub-station*

#	Name of Substation	Location	N° of units	Type (Manned/unmanned)	Type of work	Rating - MVA	Project Completion Date (MM - YY)	Expected Impact (MW)



1	Material requirements for the construction and installation of 15MVA, 33/11kV transformer at Bulumkutu Injection Sub-station.	Bulumkutu, Maiduguri	1	Manned	Additional Power Transformer	15	Jun-21	Additional 10MW power will be delivered to customers in the area (Migration from Band C to Band A - Minimum of 20hrs supply per day.
2	Material requirements for the construction and installation of 7.5MVA, 33/11kV 777 Housing Estate Injection Substation at Ngomari, Maiduguri	Ngomari, Maiduguri	1	Manned	Additional Power Transformer	15	Jul-21	Additional 5.0MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime and migration of customers from Band C to Band A. Also, it will de-load 2 x 15MVA Bulumkutu Injection Substation after completion.
3	Proposed 1 x 7.5MVA, 33/11KV Injection Substation at Sangere Bode, Jimeta-Yala, Adamawa State	Sangere Bode, Jimeta-Yala	1	Manned	New Construction	7.5	Aug-21	An additional 7MW of uninterrupted power will be evacuated to customers in YEDC franchise areas with the introduction of these transformers to provide relief sub-stations to overloaded sub-stations, helps in the reduction of our technical losses, improvement in our voltage profile to meet up with the Service

									Level Commitments in the SRT for period 2.
4	Proposed 1 x 2.5MVA, 33/11KV Injection Substation at Nyako Quarters, Jimeta-Yola, Adamawa State	Nyako Quarter s, Jimeta-Yola	1	Unmanned	New Construction	2.5	Sep-21	Additional 2.0MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.	
5	Proposed 1 x 2.5MVA, 33/11KV Injection Substation at Bika Ussa, Taraba State	Bika, Ussa	1	Unmanned	Replacement of failed transformer	2.5	Oct-21	Additional 2.0MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.	

6	Proposed 1 x 1.0MVA, 33/11KV Injection Substation at New Era, Jalingo, Taraba State.	New Era, Jalingo	1	Unmanned	New Construction	1	Nov-21	Additional 0.8MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.
7	Proposed 1 x 1.0MVA, 33/11KV Injection Substation at Bonny Quarters, Jimeta-Yala, Adamawa State.	Bonny Qtrs, Jimeta-Yala	2	Unmanned	New Construction	1	Dec-21	Additional 0.8MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.

**Network: Standardisation of Existing Injection Substations (33/11KV)**

<b>Project Type: Replacement of Switch Gears, Control Panel and Protection Equipment</b>						
#	Name of Substation	Description	Quantity	Project Completion Date (MM - YY)	Expected Impact	
	Across all YEDC Manned Injection Substations	33kV Relays	85	Jun-21	Reduces downtime in the Network and ensures compliance with the Service Level Agreement (SLA) and for timely replacement of failed control equipment.	
		11kV Relays	84			
	At Various Business Units and the Headquarters	10kV Insulation Testers	16			
		Geo Earth Resistance Testers	17			
		Electrical Toolboxes	16			
		Mechanical Toolboxes	16			
		Operating Rod	17			
		Complete Tripping unit	4			







	Line Taps	1004
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*ATC&C Loss Reduction Plan*

#	Name	Description	Quantity	Project Completion Date (MM - YY)	Expected Impact
1	Purchase of All Aluminium Conductor (AAC) 100mm <sup>2</sup> (Mtrs)	For re-conductoring of Undersized LV Line segments	52542 mtrs	Sep-21	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

*Customer Service Improvement Plan*

#	Project Description	Description	Quantity	Project Completion Date (MM - YY)	Expected Impact
1	Customer Enumeration Service Part 1	One-off Customer Enumeration Service per customer including: All necessary logistical and operational arrangements including mobile devices, hardware, ArcGIS, software and licensing costs, data entry personnel and enumerators GIS based Mapping of Customers, Assets, DGPS/ GPS Survey and Development of web-enabled Customer Enumeration and Asset Management System	250,000	Dec-21	For database integrity, improved customer service experience, informed planning and decision making and for enhanced marketing and other operational activities.



	Recurring Costs	
	Lump-sum fees for O&M for 1 year of Web-Enabled Customer Enumeration and Asset Management System	250,000

IT Investments (SCADA)						
#	Name	Description	Location	GPS Coordinates	Project Completion Date (MM - YY)	Expected Impact
1	Purchase of Data Loggers, Current Transformers and Voltage Transformers	For remote real-time sensing and reading of Network Parameters	YEDC Headquarters, Jimeta-Yala, Adamawa State.	9.259673N, 12.456818E	Jul-21	To monitor and determine Energy delivered to customers; in line with Service Reflective Tariff. This is also in compliance with NERC directive on daily hourly Energy Status. Real-time monitoring of networks.

IT Investments (GIS)					
#	Name	Description	Location	Project Completion Date (MM - YY)	Expected Impact
1	Purchase of NEPLAN Software with its associated Modules and Training of Personnel	For Technical Loss determination, Load Flow analysis, Network Simulation, modelling and design.	YEDC Headquarters, Jimeta-Yala, Adamawa State.	Aug-21	Ease of determining Technical Losses, Network Load flow analysis, Nodal and fault current analysis etc. I will also ensure Network simulation for proper planning.

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IT Investments (ERP)					
#	Project Description	Description	Quantity	Project Completion Date (MM - YY)	Expected Impact
#	Customer Relationship Management and Billing System (To be installed YEDC Headquarters, Jimeta-Yola, Adamawa State.) (GPS Coordinates : 9.259873N; 12.456818E)	One-off			Customer Relationship Management System (CRM) for improved customer service experience, Management Information System (MIS) for management decision making and to achieve overall market transparency.
#		Software Licensing and Implementation Costs inc Cloud Hosting Infrastructure, Payment Systems, 3rd Party Integrations etc	1	Sep-21	
		Hardware Component			
		High Spec Servers for Admin Center, Main and Backup	2		
		Laserjet Printer	1		
		High Spec Desktop for Customer Recording/Encoding/Adjustments at Billing Centers	20		
		High Volume Enterprise Multi Function Printers at Billing Centers	4		
		Power Backup System; TOKVA Inverter inc Batteries	5		
		Server Rack inc all accessories; Keyboard Video Monitor, KVM Switch etc	5		
		Networking and LAN Implementation at each billing center provision	5		
		Re-occurring costs			
		Annual Maintenance Fee and STS Fee to accommodate 500,000 customers	12		
	20Mbps Dedicated Broadband Internet	12			

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IT Investments (HSE)					
#	Project Description	Description	Quantity	Project Completion Date (MM - YY)	Expected Impact
1	Supply of Personal Protective Equipment (PPEs) to Yola Disco - Safety Belts, Hand Gloves, Safety Helmet and Grounding Kits.	Safety Belt Hand Gloves Safety Helmet Grounding Kits	350 350 350 80	Sep-21	Occupational health and safety best practices for safe working conditions.

IT Investments (AMI)					
#	Name	Description	Location	Project Completion Date (MM - YY)	Expected Impact
1	Software and Cloud Storage Upgrade of existing MV-90 Server Infrastructure	To interface with Data Loggers at the Injection Substations for remote observation and analysis of Network parameters	YEDC Headquarters, Jimeta-Yola, Adamawa State.	Sep-21	To monitor and determine Energy delivered to customers; in line with Service Reflective Tariff. This is also in compliance with NERC directive on daily hourly Energy Status. Real-time monitoring of networks.

Network Metering (Smart Meters)					
#	Project Description	Description	Quantity	Project Completion Date (MM - YY)	Expected Impact
1	11kV Outgoing Feeder Metering at Manned Injection Substations	New	100	Sep-21	To monitor and determine Energy delivered to

2	500kVA, 33/0.415kV DT meters	New	200	customers in line with Service Based Tariff (SBT). This is also in compliance with NERC directive on daily hourly Energy Supply Status report. It also helps to determine un-accounted for energy.
3	500kVA, 11/0.415kV DT meters	New	300	
4	300/kVA, 33/0.415kV DT meters	New	140	
5	300/315kVA, 11/0.415kV DT meters	New	250	
6	Supply and Installation of 265Nos Post-Paid MD Meters	MD Postpaid Meter (100/5A Rating) MD Postpaid Meter (200/5A Rating) MD Postpaid Meter (300/5A Rating) MD Postpaid Meter (500/5A Rating)	140 60 15 50	Oct-21 To monitor and determine Energy delivered to customers in line with Service Based Tariff (SBT). This is also in compliance with NERC directive on daily hourly Energy Supply Status report. It also helps to determine un-accounted for energy.
7	Supply and Installation of 307Nos Pre-Paid MD Meters	MD Pre-Paid Meter (100/5A Rating) MD Pre-Paid Meter (200/5A Rating) MD Pre-Paid Meter (300/5A Rating) MD Pre-Paid Meter (500/5A Rating) MD Pre-Paid Meter (800/5A Rating)	140 40 22 100 5	

Other Service Improvement Plan



#	Project Name	Description	Quantity (Qty)	Project Completion Date (MM - YY)	Expected Impact in MW)
1	Procurement of Twenty (20) Nibs Operational Vehicles for YEDC franchise areas (Fairly-Used Pick-Up Van)	TOYOTA HILUX 4x4 DOUBLE CABIN 2017 MODEL	20	May-21	Improvement in service delivery to our customers by timely response to fault clearance to achieve obligations to the bond system.
2	Supply of HT and LT ladders to Yola Disco	HT Ladder	100	Sep-21	Occupational health and safety best practices for safe working conditions.
3		LT Ladder	130		






*Appendix 2 - Details of Planned 2022 Investments for Yola Electricity Distribution Company*

<i>Distribution Network: lines</i>						
<i>Project Type: Construction of 33kV Feeder</i>						
S/N	Project Description	Location	Overhead/ underground	Route Length (km)	Project Completion Date (MM - YY)	Expected Impact in MW
1	From Mayo-Belwa Transmission Station to Jada (Separation of Jada from Mayo-Belwa Line).	Mayo-Belwa, Adamawa State	Overhead	2.5	Apr-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT
2	From TADP Injection Substation to Jalingo Airport	Jalingo, Taraba State	Overhead	7.6	Jul-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT
3	From Yola TCN to MAUTECH	Jimeta, Adamawa State	Overhead	14.4	Sep-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT

<i>Distribution Network: lines</i>			
<i>Project Type: Rehabilitation of 33kV Feeder</i>			
Overhead/ underground	Location	Route Length (km)	Expected Impact in MW

Overhead	Jalingo, Taraba State	13.24	Aug-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
Overhead	Jalingo, Taraba State	19.8	Sep-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

<i>Distribution Network: lines</i>					
<i>Project Type: Construction of 11kV Feeder</i>					
S/N	Project Description	Location	Route Length (km)	Project Completion Date (MM - YY)	Expected Impact in MW)
1	Construction of 11kV Line behind Modern Stadium	Jimeta-Yala	0.7	Mar-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.






2	Construction of 11kV Line to Proposed Shagamu II Relief Substation	Jimeta-Yola	0.5	Apr-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
3	Conversion of Sangere FUTY 33kV Network to 11kV Network	Jimeta-Yola	1.3	May-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
4	Construction of 11kV Line to Proposed Palkari Relief Substation	Jimeta-Yola	0.52	Jun-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
5	Construction of 11kV Line to proposed Kolare Agric Layout Relief Substation	Jimeta-Yola	0.36	Jul-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

*Distribution Network: lines*

*Project Type: Rehabilitation of 11kV Feeder*



#	Project Description	Type of Rehabilitation	Location	Route Length (km)	Project Completion Date (MM - YY)	Expected Impact in MW
1	Yola Road 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta-Yola	3.2	Feb-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
2	FGGC 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta-Yola	5.6	Feb-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
3	Ajiya 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta-Yola	0.75	Apr-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
4	Karewa 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta-Yola	1.3	Apr-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

5	ATCI 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jalingo, Taraba State	2.4	Jun-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
6	Town 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jalingo, Taraba State	2.3	Jun-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
7	Magami 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jalingo, Taraba State	9.3	Aug-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
8	Old Kwata 11kV Feeder (Entire Network)	Reconductoring, Replacement of Pole Accessories	Potiskum, Yobe State	9.1	Aug-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
9	Bajabure 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta, Yola	4.1	Oct-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

10	Jambutu 11kV Feeder	Reconductoring, Replacement of Pole Accessories	Jimeta, Yola	4.1	Oct-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
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*Distribution Network: lines*

*Project Type: Construction and Rehabilitation of 0.400kV Feeder*

#	Project Description	Type of Project	Location	Route Length (km)	Project Completion Date (MM - YY)	Expected Impact in MW
1	All LT Units in Yola Road II, 500kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	Yola Town	2	Feb-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
2	All LT Units in FGGC I 300kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	Yola Town	2	Feb-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
3	All LT Units in Ajiya II 500kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	Yola Town	2	Apr-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

4	All LT Units in Karewa III 500kVA, 11/0.400KV S/S	Reconductoring, Replacement of Pole Accessories	Yola Town	2	Apr-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
5	All LT Units in ATC I 500kVA, 11/0.400KV S/S	Reconductoring, Replacement of Pole Accessories	Numan	2	Jun-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
6	All LT Units in Numan II 300kVA, 11/0.400KV S/S	Reconductoring, Replacement of Pole Accessories	Numan	2	Jun-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
7	All LT Units in Magami I 500kVA, 11/0.400KV S/S	Reconductoring, Replacement of Pole Accessories	Maiduguri	2	Aug-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
8	All LT Units in Old Kwata II 500kVA, 11/0.400KV S/S	Reconductoring, Replacement of Pole Accessories	Maiduguri	2	Aug-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
9	All LT Units in Bajabure I 300kVA, 11/0.400KV S/S	Reconductoring, Replacement of Pole Accessories	Jimeta, Yola	2	Oct-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.



10	All LT Units in Jambutu III 500kVA, 11/0.400kV S/S	Reconductoring, Replacement of Pole Accessories	Jimeta, Yola	2	Oct-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
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*Distribution Network: stations*

*Project Type: New Construction, Reinforcement and Standardisation of Distribution Sub-station*

S/N	Name of Substation	Transformer on Voltage (kV)	Rating kVA	Type of work (New Construction or Replacement)	Location	Quantity	Project Completion Date (MM - YY)	Expected Impact in MW
1	Sangere I	11/0.415	500	New Construction	Jimeta-Yola	1	Apr-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
2	Sangere II	11/0.415	500	New Construction	Jimeta-Yola	1	Apr-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

3	Sangere III	11/0.415	500	New Construction	Jimeta-Yola	1	Apr-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
4	Sangere IV	11/0.415	500	New Construction	Jimeta-Yola	1	Apr-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
5	Proposed Modern Stadium	11/0.415	500	New Construction	Jimeta-Yola	1	May-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
6	Shagamu II Relief	11/0.415	500	New Construction	Jimeta-Yola	1	May-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

7	Paikari Relief	11/0.415	500	New Construction	Jimeta-Yola	1	May-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
8	Kofare Agric layout Relief	11/0.415	500	New Construction	Jimeta-Yola	1	May-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
9	Shagamu III Relief	11/0.415	500	New Construction	Jimeta-Yola	1	Jun-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

10	Palkari II Relief	11/0.415	500	New Construction	Jimeta-Yola	1	Jun-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
11	Brother Musa Relief	11/0.415	500	New Construction	Jimeta-Yola	1	Jun-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
12	Wuro Jabbe I Relief	11/0.415	500	New Construction	Jimeta-Yola	1	Jun-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
13	Wuro Jabbe II Relief	11/0.415	500	New Construction	Jimeta-Yola	1	Jul-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level



14	Wuro Jabbe III Relief	11/0.415	500	New Construction	Jimeta-Yola	1	Jul-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
15	Wuro Jabbe IV Relief	11/0.415	500	New Construction	Jimeta-Yola	1	Jul-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
16	Malah	11/0.415	500	New Construction	Jimeta-Yola	1	Jul-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

17	Engr. Luka	11/0.415	500	New Construction	Jimeta-Yola	1	Aug-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
18	Engr. Boman	11/0.415	500	New Construction	Jimeta-Yola	1	Aug-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
19	Green Village	11/0.415	500	New Construction	Numan	1	Aug-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
20	Dawaya	11/0.415	500	New Construction	Numan	1	Aug-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.

21	Behind Police College	11/0.415	500	New Construction	Bulumkutu, Maiduguri	1	Sep-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
22	Bale Kanuri, Gombole	11/0.415	500	New Construction	Yerwa, Maiduguri	1	Sep-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
23	Emir's Palace	11/0.415	500	New Construction	Jalingo, Taraba State	1	Sep-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.

24	Mayo-Gwai V	11/0.415	500	New Construction	Jalingo, Taraba State	1	Oct-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
25	Behind Rest House	11/0.415	500	New Construction	Numan	1	Oct-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
26	Digil	33/0.415	500	New Construction	Mubi	1	Oct-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
27	Fori Bypass Bama Road	11/0.415	500	New Construction	Yerwa, Maiduguri	1	Nov-22	Reduction in technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.





2	Proposed 1 x 7.5MVA, 33/11KV Injection Substation at Sangere FUTY, Adamawa State	Sangere FUTY, Jimeta-Yola, Adamawa State	1	Manned	Additional Power Transformer	7.5	May-22	An additional 7MW of uninterrupted power will be evacuated to customers in YEDC franchise areas with the introduction of these transformers to provide relief sub-stations to overloaded sub-stations, helps in the reduction of our technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
3	Proposed 1 x 7.5MVA, 33/11KV Injection Substation at Army Barracks Road, Adamawa State	Army Barracks Road, Jimeta-Yola	1	Manned	New Construction	7.5	Jul-22	An additional 6MW of uninterrupted power will be evacuated to customers in YEDC franchise areas with the introduction of these

	4	Proposed 1 x 7.5MVA, 33/11KV Injection Substation at Ganye, Adamawa State	Ganye, Adamawa State	1	Manned	Additional Power Transformer	7.5	Sep-22	transformers to provide relief sub-stations to overloaded sub-stations, helps in the reduction of our technical losses, improvement in our voltage profile to meet up with the Service Level Commitments in the SRT.
									An additional 6MW of uninterrupted power will be evacuated to customers in YEDC franchise areas with the introduction of these transformers to provide relief sub-stations to overloaded sub-stations, helps in the reduction of our technical losses, improvement in our voltage

5	Proposed 1 x 2.5MVA, 33/11KV Injection Substation at Guyuk, Adamawa State	Guyuk, Adamawa State	1	Unmanned	New Construction	2.5	Jun-22	Additional 2.0MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.
6	Proposed 1 x 2.5MVA, 33/11KV Injection Substation at Garkida, Adamawa State	Garkida, Adamawa State	1	Unmanned	New Construction	2.5	Jul-22	Additional 2.0MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.

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7	Proposed 1 x 1.0MVA, 33/11KV Injection Substation at Kwambia, Adamawa State.	Kwambia, Adamawa State.	1	Unmanned	New Construction	1	Aug-22	Additional 0.8 MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.
8	Proposed 1 x 1.0MVA, 33/11KV Injection Substation at Kala'a, Adamawa State.	Kala'a, Hong LGA, Adamawa State	1	Unmanned	New Construction	1	Sep-22	Additional 0.8 MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.
9	Proposed 1 x 1.0MVA, 33/11KV Injection Substation at Dumne, Adamawa State.	Dumne, Song	1	Unmanned	New Construction	1	Oct-22	Additional 0.8 MW power will be delivered to customers in the area which will in turn improve the Voltage profile in line with Service Level Commitment in the SBT regime.

*Network: Standardisation of Existing Injection Substations (33/11kV)*

*Project Type: Replacement of Switch Gears, Control Panel and Protection Equipment*

#	Name of Substation	Description	Location	Quantity	Project Completion Date (MM - YY)	Expected Impact
	2 x 15MVA, 33/11kV Jambutu Injection Substation	11kV 9-Man Panel Vacuum Switchgear	Jambutu Injection Substation, Jimeta-Yola, Adamawa State (9.272578N, 12.3921758E)	1	Jun-22	Reduces downtime in the Network and ensures compliance with the Service Level Agreement (SLA) and for timely replacement of failed control equipment.
	1 x 7.5MVA, 33/11kV FUTY Injection Substation	11kV 4-Man Panel Vacuum Switchgear	FUTY Injection Substation, Jimeta-Yola, Adamawa State. (9.3412544N, 12.5048071E)	1		
	Across all YEDC Manned Injection Substations	33kV Relays	Various Business Units	85	Sep-22	Reduces downtime in the Network and ensures compliance with the Service Level Agreement (SLA) and for timely replacement of failed control equipment.
	At Various Business Units and the Headquarters	11kV Relays		84		
		10kV Insulation Testers		16		
		Geo Earth Resistance Testers		16		
		Electrical Toolboxes		16		
		Mechanical Toolboxes		16		
		Operating Rod		16		
		Complete Tripping unit	4			
		Line Taps	1004			

*ATC&C Loss Reduction Plan*

#	Name	Description	Quantity	Project Completion Date (MM - YY)	Expected Impact

1	Procurement of All Aluminium Conductor (AAC) 100mm <sup>2</sup> (Mtrs)	For re-conductoring of Undersized LV Line segments	52,542	Apr-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
	Total				

Customer Service Improvement Plan					
#	Project Name	Location	Description	Quantity	Expected Impact
1	Customer Enumeration Service Part 2	YEDC Headquarters, Jimeta-Yola, Adamawa State.) (GPS Coordinates : 9.259873N; 12.456818E)	One-off Customer Enumeration Service per customer including: All necessary logistical and operational arrangements including mobile devices, hardware, ArcGIS, software and licensing costs, data entry personnel and enumerators. GIS based Mapping of Customers, Assets, DGPS/ GPS Survey and Development of web-enabled Customer Enumeration and Asset Management System	250,000	For database integrity, improved customer service experience, informed planning and decision making and for enhanced marketing and other operational activities.
			Recurring Costs		
			Lumpsum fees for O&M for 1 year of Web-Enabled Customer Enumeration and Asset Management System	250000	

IT Investments (SCADA)

#	Name	Description	Location	Project Completion Date (MM - YY)	Expected Impact
1	Purchase of Data Loggers, Current Transformers and Voltage Transformers	For remote real-time sensing and reading of Network Parameters.	YEDC Headquarters, Jimeta-Yola, Adamawa State.	Oct-22	To monitor and determine Energy delivered to customers; in line with Service Reflective Tariff. This is also in compliance with NERC directive on daily hourly Energy Status. Real-time monitoring of networks.

IT Investments (GIS)

#	Name	Description	Location	Project Completion Date (MM - YY)	Expected Impact
1	Purchase of ERP software for Technical Staff evaluation and management	For Technical Staff management at Headquarters and Technical staff at various Business Units.	YEDC Headquarters, Jimeta-Yola, Adamawa State.	Nov-22	Ease of determining Technical Losses, Network load flow analysis, Nodal and fault current analysis etc. It will also ensure Network simulation for proper planning.

IT Investments (ERP)

#	Name	Description	Location	Project Completion Date (MM - YY)	Expected Impact
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#	Project Name	Description	Location	Quantity	Project Completion Date (MM - YY)	Expected Impact
1	N/A					
2	Customer Contact Center	One-off Hardware, Networking and Communication Contact Center Solution Setup	YEDC Headquarters, Jimeta-Yola, Adamawa State.	1	May 22	For improved customer service experience, Management Information System (MIS), and to achieve overall sector transparency by adhering the tenets of the Disco's Service Level Agreement (SLA).
		Contact Center Customisation and Integrations		1		
		Recurring Costs				
		Annual Maintenance Fee and STS Fee to accommodate 500,000 customers	YEDC Headquarters, Jimeta-Yola, Adamawa State.	1		

IT Investments (HSE)						
#	Project Description	Description	Quantity	Project Completion Date (MM - YY)	Expected Impact	
1	Supply of Personal Protective Equipment (PPEs) to Yola Disco - Safety Belts, Hand Gloves, Safety Helmet and Grounding Kits.	Safety Belt	250	Sep-22	Occupational health and safety best practices for safe working conditions.	
		Hand Gloves	250			
		Safety Helmet	250			
		Grounding Kits	40			

IT Investments (AMI)						



1	Procurement of distribution material for Construction of LV from various Distribution Substations across YEDC Business Units	Secondary Poles	520	Oct-22	Reduction in technical losses, improvement in our voltage profile to met up with the Service Level Commitments in the SRT.
		Conductor 70mm <sup>2</sup>	95,423		
		D-Iron	2,082		
		Bolts and nut	2,064		
		Shackle insulator	2,082		
	Supply of HT and LT ladders to Yola Disco	HT ladder	100	Sep-21	Occupational health and safety best practices for safe working conditions.
		LT ladder	130		