HYDERABAD ELECTRIC SUPPLY COMPANY

OFFICE OF THE CHIEF EXECUTIVE OFFICER HESCO HYDERABAD

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No.CEO/HESCO/DG(MIRAD)/M(P&F)/DM(TP)/ 1407-09 **Dated:** 22 **.11.2024**

Mr. Masroor Khan,
Director NEPRA,
NEPRA Tower, Attaturk Avenue (East), G-5/1,
Islamabad.

Subject: **Submission of Distribution Company Integrated Investment Plan (DIIP) for Tariff Control Period from FY 2025-26 to FY 2029-30.**

Reference:
1. *NEPRA's letter No.17460-61 dated 15.11.2024.*
2. *HESCO's letter No.1111-12 dated 11.10.2024.*
3. *NEPRA's letter No.13994-14000 dated 06.09.2024.*
4. *NEPRA's letter No.8292-98 dated 05.06.2024.*

Sequel to above and in compliance to para 23 (A)(1) of NEPRA Guidelines for Determination of Consumer End Tariff (Methodology & Process), 2015, kindly find attached herewith HESCO's Distribution Integrated Investment Plan (DIIP) for the next Multi-Year Tariff (MYT) control period i.e. FY 2025-26 to FY 2029-30, for information and further necessary action please.

Best Regards,

DA/as above

Chief Executive Officer,
HESCO, Hyderabad.

C.C to:

1. Chief Financial Officer HESCO, Hyderabad along-with HESCO DIIP.
2. PSO to CEO HESCO, Hyderabad.
- Master File.

HESCO's DISTRIBUTION COMPANIES INTEGRATED INVESTMENT PLAN (DIIP)

FY 2025-26 to FY 2029-30

Prepared By:
MIRAD HESCO

HYDERABAD ELECTRIC SUPPLY COMPANY

Contents

1. Section-I Executive Summary

1.1. Introduction

Hyderabad Electric Supply Company (HESCO), a licensed Power Distribution & Supply company, requires adequate revenue to fulfill its regulatory obligations and deliver on its vision and mission. Our primary objectives include providing reliable, quality, and uninterrupted power supply, coupled with exceptional customer care, and maintaining efficient distribution networks.

To achieve financial sustainability, HESCO relies on three key funding sources: internal efficiency improvements, revenue generation through tariffs, and borrowings.

HESCO intends to be financial viability, control Circular Debt, and support future investments, we have developed a comprehensive Distribution Integrated Investment Plan (DIIP) for FY 2025-26 to FY 2029-30. This plan aligns with regulatory directives and enable us to achieve strategic objectives, sustainable business goals, and ensure adequate power supply.

By implementing the DIIP, HESCO aims to strengthen its STG and distribution network, reduce energy losses, and improve customer satisfaction, ultimately contributing to the economic growth and development of our region.

HESCO has worked-out an investment of **Rs.110,316.34 Million** for the period of FY 2025-26 to FY 2029-30, as outlined in this Distribution Integrated Investment Plan (DIIP). This investment will fund various development projects, including STG (Secondary Transmission & Grids), ELR (Energy Loss Reduction) & DOP (Distribution of Power), AMI / AMR, APMS, Transformer Workshop, Safety Equipment, and Customer Care, ensuring the reliability and expansion of HESCO's power distribution network.

Through the implementation of this Distribution Integrated Investment Plan (DIIP), HESCO forecasts the following benefits (anticipated):

Energy Saved through Loss Reduction – GWh

Description	2025-26	2026-27	2027-28	2028-29	2029-30	Total
STG	4.38	14.016	29.784	151.55	14.454	214.18
DOP	2.38	2.32	2.32	2.78	2.72	12.51
ELR	29.89	33.91	38.75	43.65	48.98	195.18
APMS	23.13	23.13	0.00	0.00	0.00	46.26
AMI	7.61	7.61	3.05	0.00	0.00	18.27
TOTAL	**67.39**	**80.98**	**73.90**	**197.97**	**66.15**	**486.40**

HESCO's Investment Plan Summary:

(Amounts in Million PKR)

Sr. No.	Description	2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	**STG Investments**						
1.1	Own Resources	10,902.71	9,665.44	9,619.03	10,484.16	6,114.89	**46,786.23**
1.2	World Bank	5,491.78	3,897.74	1,183.62	-	-	**10,573.13**
	Sub-Total	16,394.49	13,563.17	10,802.65	10,484.16	6,114.89	**57,359.36**
2	**Distribution Investments**						
2.1	Distribution of Power (DOP)	293.20	322.50	354.70	390.20	429.20	**1,789.80**
2.2	Energy Loss Reduction (ELR)	1,802.70	1,983.00	2,181.30	2,399.40	2,639.40	**11,005.80**
2.3	DOP Civil	712.28	532.57	573.70	290.36	277.10	**2,386.01**
2.4	Deposit Works	7,397.48	7,113.51	1,611.89	1,716.66	1,828.24	**19,667.78**
	Sub-Total	10,205.66	9,951.58	4,721.59	4,796.62	5,173.94	**34,849.39**
3	**Consultancy and Software Purchase**						
3.1	GIS Mapping	200.00	200.00	-	-	-	**400.00**
3.2	Evaluation of T&D losses	35.00	25.00	-	-	-	**60.00**
3.3	Other Consultancy services	50.00	50.00	50.00	50.00	50.00	**250.00**
3.4	Software, Tools & Its Trainings	95.00	-	-	-	-	**95.00**
	Sub-Total	380.00	275.00	50.00	50.00	50.00	**805.00**
4	**Other**						
4.1	Model Sub-Division	500.00	750.00	500.00	500.00	500.00	**2,750.00**
4.2	Earthing and Grounding	2,100.00	2,100.00	-	-	-	**4,200.00**
4.3	APMS / Transformer Protection	900.00	900.00	-	-	-	**1,800.00**
4.4	TRW - Workshop	610.00	-	-	-	-	**610.00**
4.5	Fire & Safety Equipment / T&P items	50.00	10.00	10.00	10.00	10.00	**90.00**
4.6	Bucket Mounted Vehicles	270.00	270.00	270.00	270.00	270.00	**1,350.00**
4.7	Village Electrification	240.00	260.00	280.00	300.00	300.00	**1,380.00**
4.8	11kV Sectionalizer	25.00	25.00	25.00	-	-	**75.00**
4.9	AMI / AMR & AMI Cell Equipment	836.20	785.00	6.90	-	16.90	**1,645.00**
4.10	IT Equipment & ERP/ Data	379.00	160.00	83.00	70.00	68.00	**760.00**
4.11	Handheld Units (HHUs)	-	7.87	-	44.19	-	**52.05**
4.12	Vehicles	602.50	400.00	455.50	150.00	180.00	**1,788.00**
4.13	Furniture & Office Equipment	132.26	140.86	150.02	159.77	170.15	**753.06**
4.14	CCTV - Camera	49.48	-	-	-	-	**49.48**
	Sub-Total	6,694.44	5,808.73	1,780.42	1,503.95	1,515.05	**17,302.59**
	Grand Total	**33,674.59**	**29,598.48**	**17,354.65**	**16,834.73**	**12,853.89**	**110,316.34**

1.2. Vision, Mission and Core Values

VISION

To ensure un-interrupted quality power supply to the customers of the company, signifying a productive and constructive role of HESCO in socio economic activities and revival of national economy by way of sustainable industrial and agriculture growth.

MISSION

To distribute electricity for the progress and prosperity of the people in HESCO area. To excel customer expectations with reliable and stable services by ensuring high order in maintenance of all its technical facilities. To provide safe and secure working environment for its employees. To develop growth opportunities for employees, and stakeholders. To ensure customer satisfaction with high standards of customer's services in friendly environment. To be ethical in compliance of all applicable laws and corporate practices in letter and spirit.

CORE VALUES

- **Ethics:**

  We are committed to maintaining high professional standards of conduct and personal integrity in our daily activities.

- **Leadership:**

  Our seniors take responsibility for their people. They provide the direction, the means and tools for their success. They remain devoted to developing, stimulating, encouraging and empowering individuals.

- **Teamwork:**

  Sound strategy and execution require diverse talents to work in union where people work together towards common objectives. We emphasize ability to listen, observe and understand each other.

- **Culture of excellence:**

  Our organizational culture reflects an environment where leadership, innovation and achievements are encouraged and rewarded at all levels. We foster trustworthiness through open dialogue with our employees, sharing of information, knowledge, experience and mutual respect.

- **Courtesy:**

  We are courteous with our customers, stakeholders, and towards each other and encourage open communication.

- **Responsibility:**

  We are responsible as individuals and as teams for our work and our actions. We welcome scrutiny, and we hold ourselves accountable.

- **Integrity:**

  We have integrity as individuals and as teams our decisions are characterized by honesty and fairness.

- **Safety:**

  Working safely and protecting the public, our employees, animals and the assets we manage is non-negotiable.

- **Customer Service:**

  Providing quality service at a competitive price while being responsive to our owners' needs creates added value and improves customer satisfaction.

- **Innovation:**

  Supporting the development of technologies to promote the efficient use of electricity, protect the environment, and create a diversified energy supply portfolio mitigates risk and creates opportunities.

1.3. Purpose and Goals of the Investment Plan

The Investment Plan entails HESCO's vision, mission, core values, stakeholders' needs, general indicators, sales and consumer forecasts, power supply issues in line with Regulatory Framework as enunciated by NEPRA through approval of CTBCM. The Plan also takes account of limitations, human resources and organizational development, financial projections, regulatory requirements including quality of service, subsidies and legal restrictions affecting timely collection of delinquent payments, performance indices with initiatives and risk assessment and will serve as a central reference document for integrated cross-functional planning, and periodic performance reviews, that will help HESCO make informed decisions based on priorities. The investment Plan of HESCO for the period 2025-26 to 2029-30, in addition to the broader CTBCM framework, is guided by the National Electricity Policy 2021, National Electricity Plan 2023, SOE Act, 2023 Indicative Generation Capacity Expansion Plan (IGCEP) approved by NEPRA, NEPRA Power Procurement Regulations, HESCO's Transmission Expansion Plan as integrated with Transmission System Expansion Plan of NTDC and the Demand Forecast of HESCO submitted to NEPRA.

Accordingly, the Plan in hand is aligned to the strategic positioning of HESCO, as delineated earlier herein above, to establish medium term outlook based on its Electric Power Supplier and Electric Power Distribution Businesses separately. The main goal of the Investment Plan, set out by HESCO, is to ensure and assure itself and consumers towards the adequacy and sufficiency of power supply during the plan horizon and to establish seamless outreach of its power distribution network for all Users through a robust achievable Investment Plan. This plan is a living reference document which will be used by the CEO and management of HESCO to focus their activities and energies for the next five years in making HESCO an operationally reliable, technically resilient and financially viable company by improving the regulation and governance of the entity, introducing new technologies including upgrade of existing technology and machinery and improving human resources in line with best utility and business practices worldwide. This plan will also be utilized by the Policy, Strategy and Market Reforms Committee of the Board for regular monitoring, to ensure that company achieves its stated objectives.
This Investment Plan covers a five-year period from FY 2025-26 to FY 2029-30, encompassing the following areas:

- Demonstrating HESCO's Power Supply and Power Distribution capabilities and eligibility.
- Identifying projections of power demand, power resources and population served expected in the time.
- Illustrating the strategic objectives, aligned with optimally achievable scenario as pledged with the Government of Pakistan – the Shareholder, designed for coordinated preparedness to accomplish the strategic goals in the five-year timeframe of the Investment Plan.
- Projecting the financial impact on HESCO's bottom-line of implementing the project plans.

2. Section-II The Company's Baseline

2.1. General Information

2.1.1. History:

In 1950s, the Govt. of Pakistan (GoP) had decided to set up an independent and autonomous Authority to deal with all available water resources and power system network including power generation, transmission and distribution. The department was formed and named as Water and Power Development Authority (WAPDA). In 1980s, the power distribution network of WAPDA was sub-divided into eight Area Electricity Boards (AEB), Hyderabad was one of the AEBs among said Area Electricity Boards dealing with power distribution system.

In 1998, WAPDA was divided into two main sectors: WAPDA and PEPCO. WAPDA was restricted to managing water resources and hydro power generation, while PEPCO (Pakistan Electric Power Company) was formed to oversee thermal power generation (GENCOs), transmission (NTDC), and distribution (DISCOs). PEPCO, initially a temporary in-charge company for Pakistan Power Sector reforms, has been renamed as Power Planning and Monitoring Company (PPMC) Pvt. Limited, focusing on macro monitoring and planning, leaving micro-management to individual companies' managements and boards.

Hyderabad Electric Supply Company Limited (HESCO) is an ex-WAPDA distribution company (DISCO), incorporated on April 23, 1998, as a public limited company under the Companies Ordinance 1984, following structural reforms by the Government of Pakistan (GoP). HESCO's management and administration are entrusted to its Board of Directors (BoD), nominated by the Ministry of Energy (Power Division), GoP, Islamabad, and approved by the Federal Cabinet. HESCO began official operations under a Chief Executive Officer (CEO) and standard formations.

2.1.2. Strategic Positioning

As the Pakistan Power Sector (PPS) undergoes another set of continued reforms, HESCO is all set to add value to the evolving wholesale competitive electricity market in line with Competitive Trading Bilateral Contracts Market (CTBCM) regime.

Towards this end, moving ahead of the single territorial electric power service provider within service territory; HESCO, as envisaged per CTBCM, has initiated transformation as multirole service provider as "Electric Power Supplier" and "Power Distributer". As per regulation, HESCO shall, however, continue to be "Supplier of Last Resort" to ensure continued, uninterrupted, reliable and adequate power supply to any and all the customers at all times, within the Service Territory.

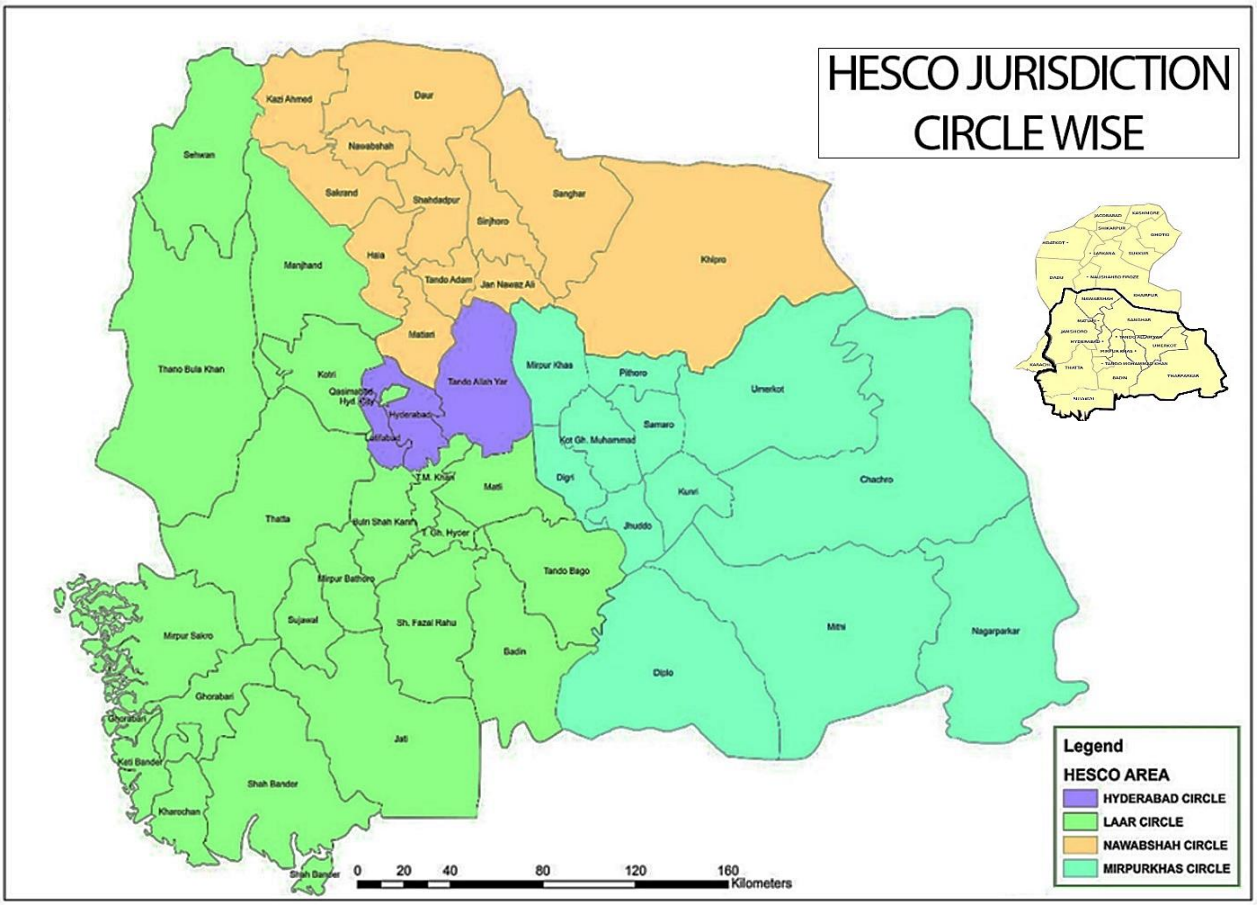
As Electric Power Distributor, i.e., the Distribution Network Operator (DNO), HESCO pledges to provide interconnection facility and open access to its system for all intending Users (Market Participants) including, but not limited to, the eligible Generation Companies, Bulk Power Consumers, Traders, Competitive Electric Power Suppliers, Distributed Generation etc. at reasonable and affordable prices, without any favor or, otherwise, discrimination or restrictions. Taking natural monopoly wire-business role, the DNO, we are well aware that the position requires us to ensure embedding principles of impartiality, non-discrimination and arm's length transaction even while dealing with Power Supplier arms of our own company.

As Electric Power Supplier, HESCO is all set to take the startling task of facing competition at wholesale market level and, thus gearing up to ensure retention of base load Bulk Power Consumers (BPC). We also clearly understand our commercial priorities shall not undermine the rights of embedded regulated customers.

Licence	Licence Granted	Validity	Licence No.
Distribution of Electric Power	9th May, 2023	8th May, 2043	DL/05/2023
Supplier of Last Resort (SoLR)	27th April, 2023	26th April, 2043	SOLR/O5/2023

2.1.3. Geographic Coverage

HESCO's service area comprises of 13 civil districts (Hyderabad, Thatta, Sujawal, Jamshoro, Matiari, Nawab Shah, Sanghar, Umarkot, Mirpur Khas, Tharparkar, Badin, Tando Muhammad Khan, and Tando Allah Yar) of Sindh Province, spanning a total service area of 77,160 sq.km and 1.24 million consumers.

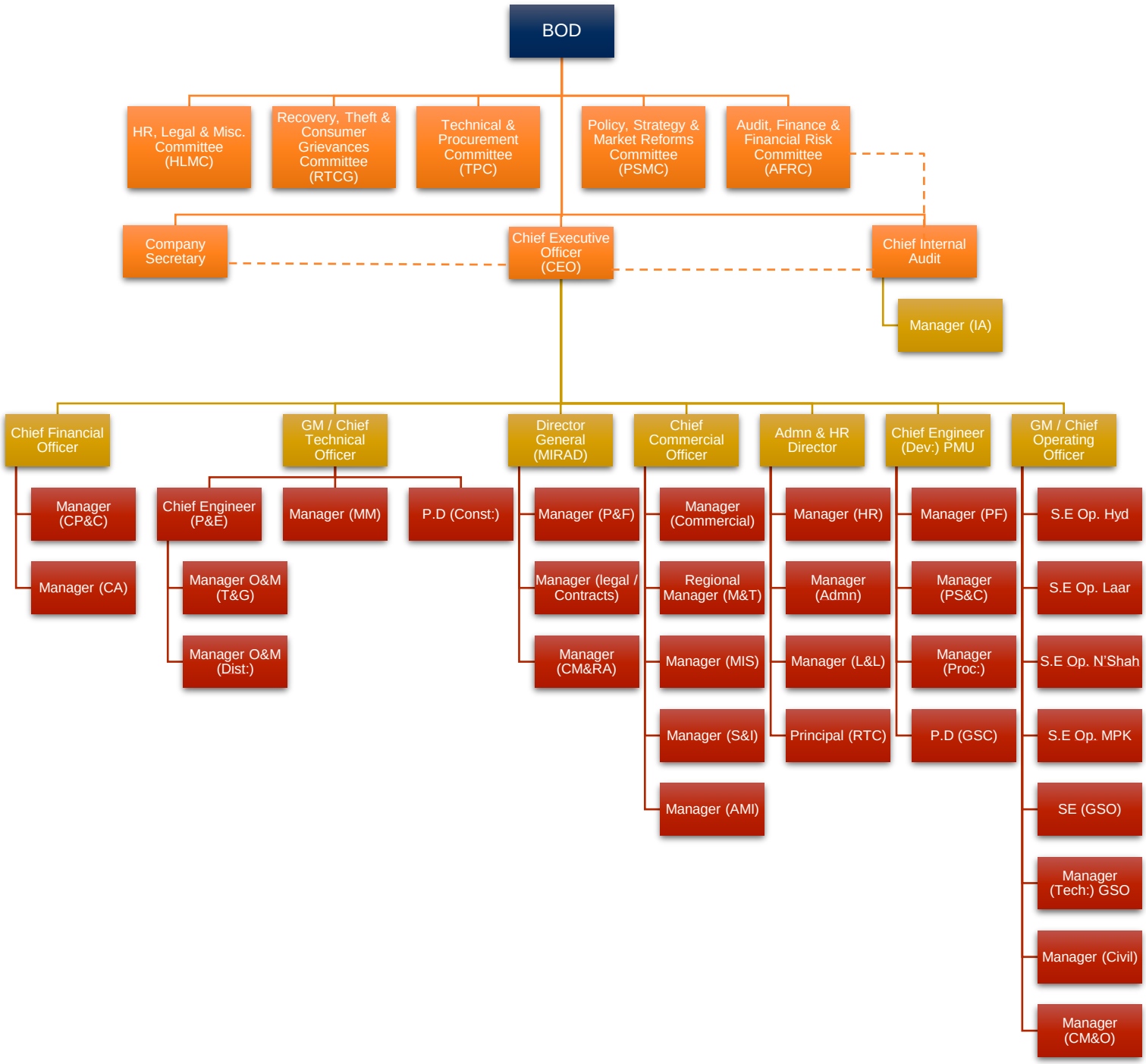


2.1.4. Human Resources and Corporate Governance:

The management hierarchy of HESCO: The Board of Directors, consisting often members, is responsible for overall policy making, decision making and guiding the authority. The day-to-day affairs of the company are run by its nine Executive Directors who are responsible for their respective functions, under the overall control of the Chief Executive Officer.

2.1.5. Company's Structure

The Organizational structure of the Company including Corporate Governance is as under:



2.1.6. Statistical & Financial Information

The historical statistical information relating to purchases and sales of electricity, SAIFI & SAIDI and T&D losses is presented below:

Overall, Company Line Losses					
Period	Units (Millions)			% Losses	% Inc/Dec
	Units Received as Per CPPA	Units Billed	Lost		
Jul-23 to Jun-24	5,098.9	3,709.4	1,389.5	27.25	-0.21
Jul-22 to Jun-23	4,884.0	3,565.3	1,318.7	27.00	-0.40
Jul-21 to Jun-22	5,560	4,035	1,525.2	27.40	-0.60
Jul-20 to Jun-21	5,574	4,014	1,560.2	28.00	-0.90

%age Inc / Dec with respect to same period last year

Description	2020-21	2021-22	2022-23	2023-24
	Percentage			
Transmission Losses	2.6	1.8	2.02	1.81
Distribution Losses	26.1	26.1	25.50	25.82
T&D Losses	28.0	27.4	27.00	27.25
AT&C losses	45.3	45.5	44.6	43.5

Description			2020-21	2021-22	2022-23	2023-24
Distribution	SAIFI (Faults)	11kV	13.19	11.89	11.71	11.52
		400V	137.11	134.09	133.06	131.42
	SAIDI (hours)	11kV	145.22	133.92	129.98	125.14
		400V	7852.68	7560.52	7514.34	7463.79
Transmission	SAIFI (Faults)	132kV	2.22	4.60	4.90	6.20
	SAIDI (hours)	132kV	240.44	1035.90	1138.10	762.30

2.1.7. Relationship between staff and consumers:

There is total 6,844 employees working in HESCO as on FY 2023-24. The relationship between staff and consumers is as follows:

Description	2023-24
Consumers	1,243,566
Staff	6,844
Consumers to staff Ratio	181:1

2.1.8. Existing Project Design and Implementation System

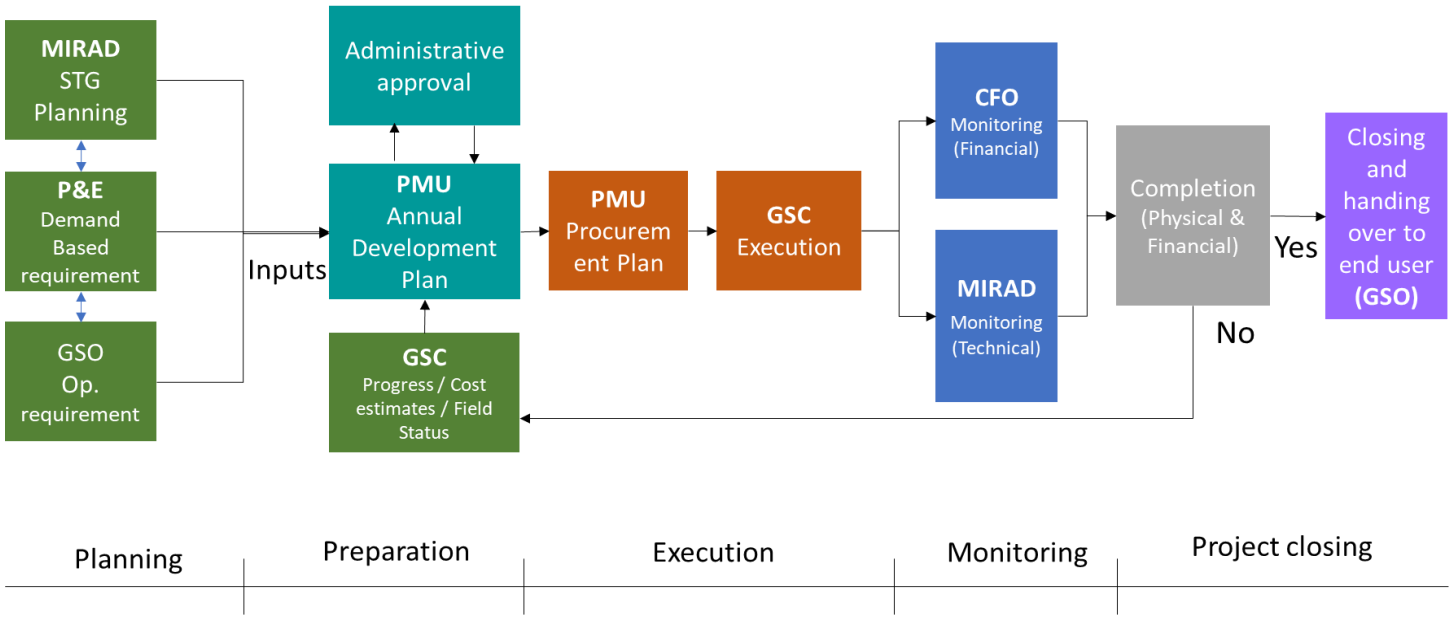
The project design and implementation system of HESCO is based on the resource allocation (the anticipated amount of material required and obtained for the execution of the project), and resource leveling (the required number of resources to be provided at a proper time).

HESCO has the required capability, personnel and expertise to implement and execute a project. It has well established, functioning departments that are capable of handling projects of similar nature and magnitude. Some of these departments are as under:

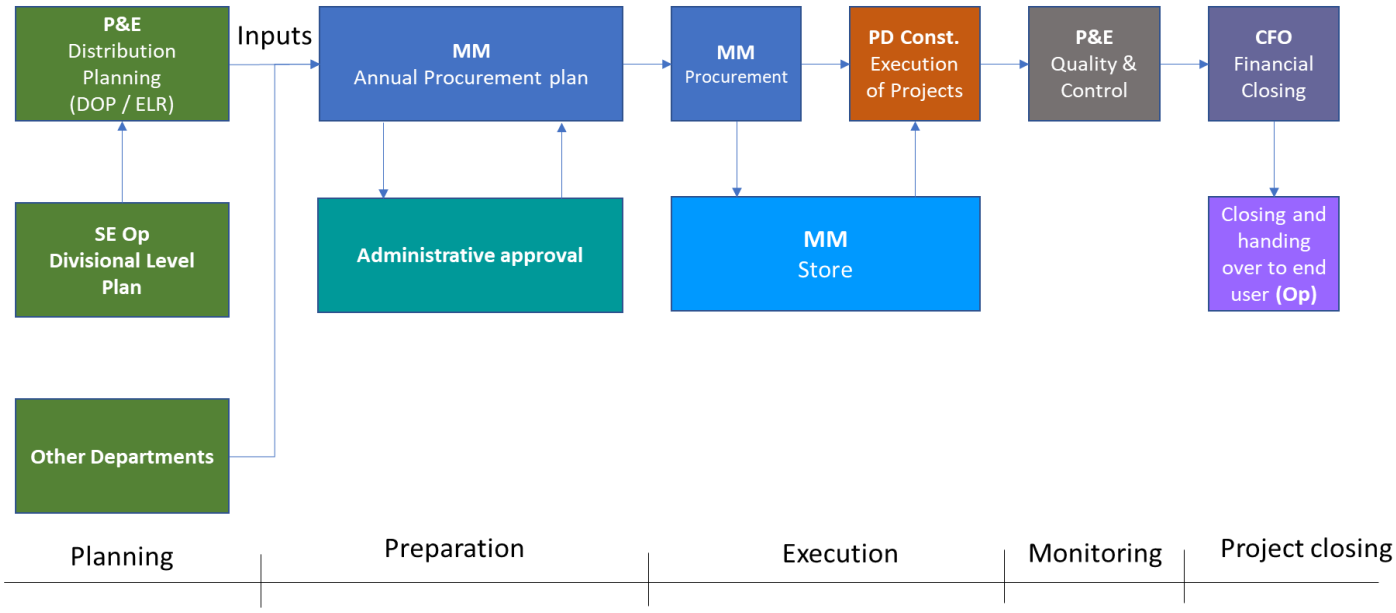
- MIRAD
- Planning & Engineering
- Project Management Unit
- Material Management
- Finance Department

Project implementation is summarized in the form of a Process chart as below:

STG Project Implementation Process Annually



Distribution Project Implementation Process Annually



2.1.9. Existing Operation System

The existing operation of the Company is comprising upon the following structure:

The company is currently serving a consumer base of 1.24 million. The commercial side of these operations include the sale of electricity to domestic, commercial, industrial and various other categories of consumers.

Formation	Circles	Divisions	Subdivisions
Operation	4	17	72
Construction	1	4	12
GSO	1	4	19
GSC	1	4	9
M&T	1	3	15
TOTAL	**8**	**32**	**127**

Circles are headed by Superintending Engineers (SEs), Divisions are managed by Executive Engineers (XENs) and Subdivisions are run by Sub Divisional Officers (SDOs). Each division has a Customer Services Officer (CSO).

Operation Circles of HESCO

The company operates the distribution and supply system through 72 operation Sub Divisions providing services i.e., new connection, meter reading, billing, collections, customer service and support. Further, Sub Divisions are also responsible to curtail power theft in the area.

Sr. No.	Circles	Divisions	Subdivisions
1	Hyderabad	5	18
2	Laar	5	20
3	Nawabshah	4	21
4	Mirpur Khas	3	13
TOTAL	**-**	**17**	**72**

2.1.10. Approved Investment (allowed)

(Million Rs.)							
Sr. No.	**Description**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**Total**
1	Allowed Investment in current MYT	2,227	11,932	20,686	21,195	20,304	76,344
2	Approved Investment / Budget	3,721	12,114	25,259	36,404	25,517	99,294
3	Expenditure incurred	1,987	2,520	4,122	Un-Audited (in progress)		-
Source of financing (As per Allowed Investment)							
4	Own source	933	10,573	14,429	17,762	17,339	61,036
5	World bank	-	-	4,830	1,935	1,392	8,157
6	Federal PSDP	623	654	687	721	757	3,442
7	Deposit Works	671	705	740	777	816	3,709
Total		**2,227**	**11,932**	**20,686**	**21,195**	**20,304**	**76,344**
Source of financing (As per Approved Budget)							
8	Own source	3,721	10,755	13,992	28,251	20,753	73,751
9	World bank	0	0	4,161	6,123	3,191	13,475
10	Federal PSDP	0	654	2,248	250	757	3,909
11	Deposit Works	0	705	4,858	1,780	816	8,159
Total		**3,721**	**12,114**	**25,259**	**36,404**	**25,517**	**99,294**

2.1.11. Investments made in Last Five Years

The details of investment in last five years for network infrastructure and Civil are as under:

Description	**2020-21 (Final)**	**2021-22 (Final)**	**2022-23 (Final)**	**2023-24 (Provisional)**
DOP (Civil)	38	60	87	24
DOP (P&E)	69	136	289	640
ELR (P&E)	141	114	326	809
STG (PMU)	310	658	1,692	909
Total	**558**	**968**	**2,394**	**2,382**

2.1.12. Source of Financing of financing and works executed

At present projects are being executed through the following financial arrangements:

- HESCO's Own resources
- World bank
- Consumer Deposits

2.1.13. The Overall Financial Performance (Profit / Loss)

(Rs. in Mln)

THE OVERALL FINANCIAL PERFORMANCE (PROFIT / LOSS)								
PROFIT AND LOSS ACCOUNT								
Sr. No.	**Description**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
1	Sale	35,023	39,604	44,631	49,202	54,449	74,708	82,627
2	Subsidy	8,248	15,860	34,140	35,806	30,927	30,818	34,105
3	Revenue	**43,271**	**55,464**	**78,771**	**85,008**	**85,376**	**105,526**	**116,732**
4	Cost of Electricity	**(51,265)**	**(63,825)**	**(71,099)**	**(82,418)**	**(74,791)**	**(114,502)**	**(128,215)**
5	Gross Profit	**(7,994)**	**(8,361)**	**7,672**	**2,590**	**10,585**	**(8,976)**	**(11,483)**
6	Amortization of Deferred Credit	**744**	**780**	**844**	**714**	**725**	**773**	**815**
7	Profit Before Operating Expense	**(7,250)**	**(7,580)**	**8,516**	**3,304**	**11,310**	**(8,203)**	**(10,668)**
8	Operating Cost	**(8,559)**	**(9,983)**	**(10,727)**	**(11,991)**	**(10,970)**	**(13,287)**	**(18,299)**
9	Depreciation	**(1,386)**	**(1,470)**	**(1,103)**	**(1,230)**	**(1,244)**	**(1,256)**	**(1,322)**
10	Provision for Doubtful Debt	**(7,051)**	**(11,635)**	**(2,429)**	**(7,081)**	**(73,311)**	**(30,047)**	**(25,223)**
11	Other Income	**(16,995)**	**(23,088)**	**(14,260)**	**(20,302)**	**(85,525)**	**(44,590)**	**(44,844)**
12	Total Expenses	**1,771**	**2,027**	**2,347**	**2,809**	**2,407**	**2,006**	**3,195**
13	Operating Loss	**(22,474)**	**(28,642)**	**(3,397)**	**(14,189)**	**(71,808)**	**(50,787)**	**(52,317)**
14	Financial Charges	**(734)**	**(2,002)**	**(2,781)**	**(4,060)**	**(3,262)**	**(2,678)**	**(3,585)**
15	EBT	**(23,208)**	**(30,644)**	**(6,178)**	**(18,249)**	**(75,070)**	**(53,465)**	**(55,902)**
16	Taxation	**(369)**	**(511)**	**(575)**	**(773)**	**(837)**	**(944)**	**(1,042)**
17	Profit/ (Loss) After Taxation	**(23,577)**	**(31,155)**	**(6,752)**	**(19,022)**	**(75,907)**	**(54,409)**	**(56,944)**

2.1.14. Ratio analysis

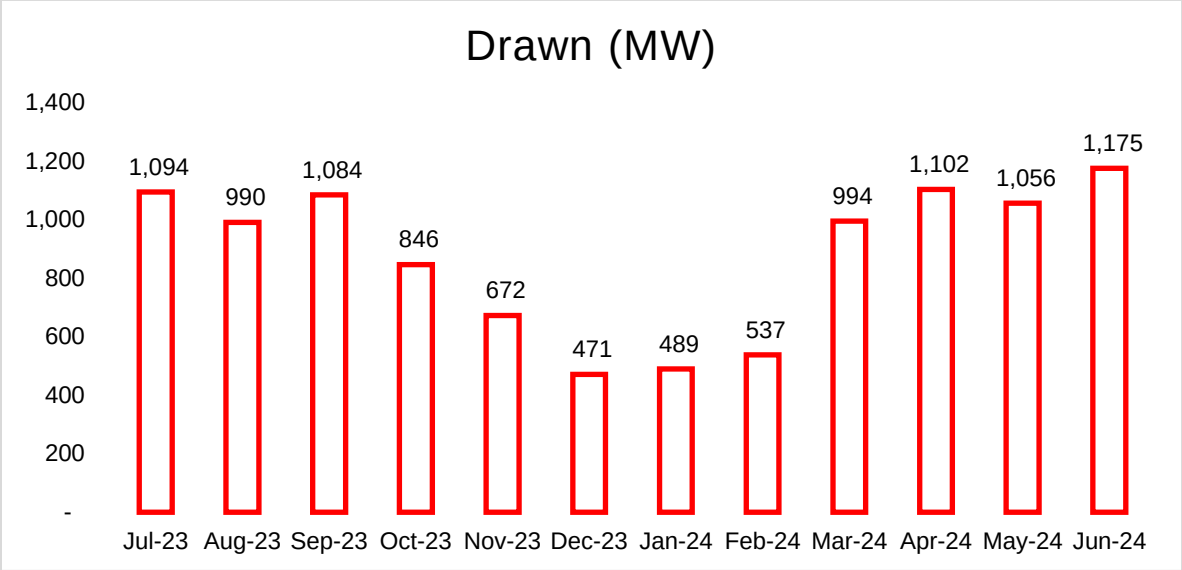
Ratio Analysis	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Gross Profit Ratio - %	-18.47%	-15.07%	9.74%	3.05%	12.40%	-8.51%	-9.84%
Net Profit Ratio-%	-54.49%	-56.17%	-8.57%	-22.38%	-88.91%	-51.56%	-48.78%
Operating Expense Ratio-%	39.28%	41.63%	18.10%	23.88%	100.17%	42.25%	38.42%
Interest Coverage Ratio	(30.61)	(14.31)	(1.22)	(3.49)	(22.01)	(18.96)	(14.59)

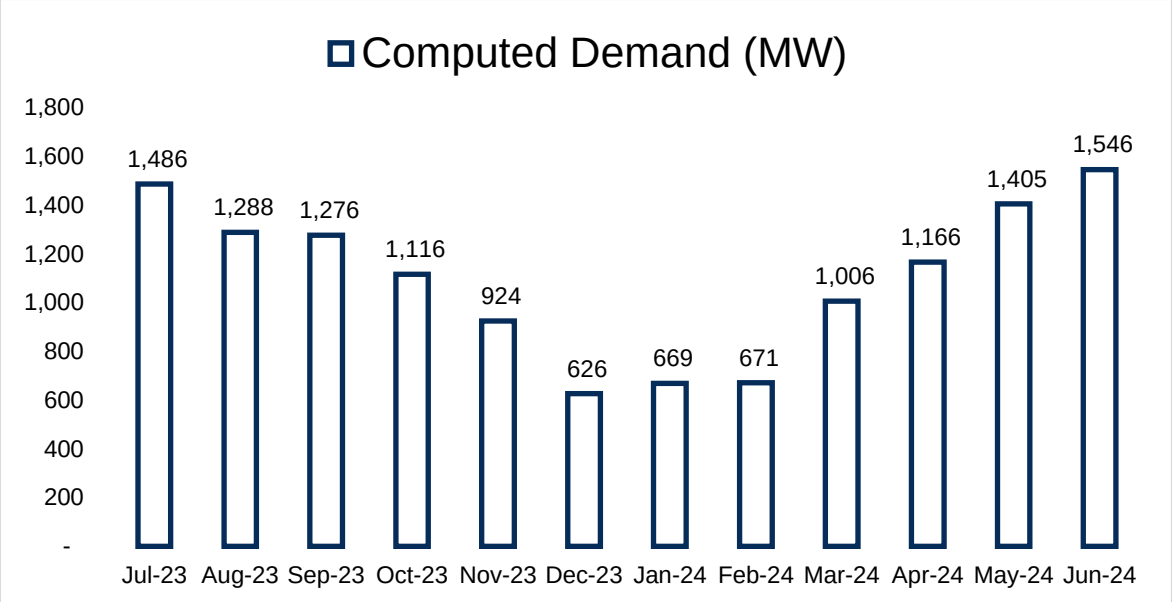
2.1.15. Repair and maintenance Expenses for last 5 years

FY	2018-19	2019-20	2020-21	2021-22	2022-23
Amount (Million PKR.)	449.389	598.639	350.306	532.472	Un-Audited

2.2. Power Demand and Supply

During FY 2023-24 the maximum recorded load of 1,178 MW was recorded during month of June-2024, whereas the maximum computed load was 1,546 MW during June 2024.





2.3. Secondary Transmission and Distribution Network Profile

Secondary Transmission & Grid Network:	
Total Grid Stations	78 Nos.
132 kV Grid Stations	63 Nos.
66 kV Grid Stations	15 Nos.
No. of Power Transformers	135 Nos.
Installed Capacity of Power Transformers	3,188.8 MVA
Length of 132 kV (STG) Line	2,851 km
Length of 66 kV (STG) Line	687.1 km
Distribution Network:	
No. of 11 kV Feeders	626 Nos.
No. of Distribution Transformers	49,785 Nos.
Total Installed Capacity of Distribution Transformers	3,300.9 MVA
Length of 11 kV (HT) Line	28,834.38 km
Length of 0.415 kV (LT) Line	15,089.09 km

As on June 2024

2.4. Financial Management

Finance is a strategic function that ensures efficient financial management and control in order to mitigate the business risk and maximize value for the Customer, shareholders and the Company. The department's goals, which are aligned with the Company's strategy, broadly cover the following areas:

- Deliver the finance and commercial strategy
- Be guardians of enterprise value creation
- Balance risk and opportunity
- Demonstrate stewardship of spend by lowering absolute costs

Management regularly conducts reviews to ensure that all financial decisions align with the overall business strategy and goals. Key management decisions are presented to the Board for their approval to ensure transparency in governance.

In addition, compliance with applicable laws and regulations is ensured. HESCO has a fully resourced finance and procurement functions, bifurcated in different subdepartments which collectively ensure smooth running of Finance and Procurement functions.

2.4.1. Budgeting Process

S No.	Process
1	This process covers the activities regarding preparation and allocation of Operating and Maintenance Budget
2	Budget Performa for the preparation of Estimated Budget is forwarded by the Budget Section of Finance Directorate to the D&D Offices
3	Estimated Budget is prepared by all the D&D Offices and submitted to the Budget Section for consolidation and scrutiny.
4	The Estimated Consolidated Budget is reviewed by the FD, CEO and the Finance Committee and recommended to the BOD for approval
5	After Approval from BOD, Operating and Maintenance Budget is allocated and a Letter for Distribution of Allocated Budget is issued to all the D&D Offices.
6	The approved budget is forwarded to NEPRA and any changes suggested by NEPRA are incorporated in the Revised Budget which is approved by the BOD.
7	After approval of the Revised Budget, a Letter for Distribution of Revised Budget is issued to all D&D Offices by CP & C Section of Finance Directorate
8	Variance Analysis Report is prepared on monthly basis which is reviewed by FD and presented to the BOD.
9	The Budget Section maintains and updates a D&D Office wise Budget Record

2.5. HR Management

Human Resources is a strategic function that supports HESCO by aligning the People Strategy with Business Objectives to drive the growth of both our people and the organization.

HR plays a key role in capability building within the organization, offering multiple platforms such as formal training programs, peer learning opportunities, and on-the-job experiences.

Additionally, Human Resources supports the development of a high-performance organization aligned with HESCO's values and ambitions. Risk management is also a critical activity for HR, ensuring that people practices are legally and socially compliant and that any grievances are addressed in a timely manner.

Scope & Role:

- Manpower / Establishment
- Recruitment and Selection
- Appointment, Deployment, Re-deployment / Transfers
- Compensation and Benefits Administration
- Career Planning and Promotions
- Performance Management
- Incentives Administration
- Training and skill Development
- Supervision over Employees' Health, Welfare, Safety and Security
- Transportation
- Electronic Communication
- Custodial Services for Company records
- Correspondences and other Communication Services
- Office / Facilities Management
- Legal Matters
- Discipline / Enquiries
- PERs
- Labor Union / Labor Related Matters
- Sports
- Property Management

2.5.1. Manpower

To execute, control, maintain the network and provide better services round-the-clock to our valued customer, as on Oct 2024, HESCO consists of 6,844 Nos. skilled and energetic professionals.

Description	Officers		Officials		Grand Total
	Tech	Non-Tech	Tech	Non-Tech	
Sanctioned	255	148	5,812	4,815	**11,030**
Working	219	78	3,611	2,936	**6,844**
Vacant	36	70	2,201	1,879	**4,186**
Vacant %	**14.12%**	**47.30%**	**37.87%**	**39.02%**	**37.95%**

2.5.2. Percentage of Officers Trained during the Training

During the FY: 2023-24, 16 No. officers (BPS-17 to 19) completed training courses from the WAPDA Staff College Islamabad & WAPDA Engineering Academy Faisalabad, as per detail given below:

Sr. No.	Name of Course / Training	No. of Officers
1	Senior Management Course (SMC) at WAPDA staff College, Islamabad	3
2	Refresher (T-900) at WAPDA Engineering Academy, Faisalabad	3
3	Middle Management Course (MMC) at WAPDA staff College, Islamabad	5
4	Refresher (T-800) at WAPDA Engineering Academy, Faisalabad	2
5	Junior Management Course (JMC) at WAPDA staff College, Islamabad	2
6	Sector Specific Course (SSC) at WAPDA Engineering Academy, Faisalabad	1
	Total	**16**

Regional Training College HESCO:

- For the first time, the Regional Training College (RTC), HESCO, has taken over the responsibility of conducting courses/training sessions for promotion and time-scale upgradation under the "Upper Technical Subordinate Staff Course (Pre-Promotion)" program. Previously, this training was conducted at the WAPDA Engineering Academy in Faisalabad. Now, RTC is conducting it to upgrade staff from LS-I/SSO-I to Junior Engineer (Distribution/T&G), Batch 1.

- Additionally, RTC has signed an MoU with Mehran UET, Jamshoro, to utilize its laboratories and benefit from lectures on advanced topics delivered by university professors at RTC, Jamshoro.

- The Regional Training College, HESCO, has regularly conducted courses / training sessions for officials.

HR STRENGTH - OCCUPANCY RATIO FY 2020-21 TO FY 2024-25

Sr. No.	Description	2020-21	2021-22	2022-23	2023-24	2024-25	Total
1	Officers' strength - Occupancy Ratio %	63	58	62	76	75	67
2	Staff strength - Occupancy Ratio %	69	66	65	63	62	65
3	Resolution of Disciplinary Cases	2414	1704	2487	1912	2000	10517
4	Percentage of officers trained during the year	13	10	17	10	2	10
5	Percentage of staff trained during the year	31	37	25	21	-	29
7	Status of Current in-house training centers	4	4	4	4	4	4
8	How many managements related trainings are given to officers from external organization per year and other baseline conditions	32	23	42	29	5	131

2.6. IT-MIS

An independent IT directorate is operational at HESCO to look after the complete Management Information System (MIS) related to Company's operation. The Basic functions of Computer Centers are to manage complete billing process, providing up-dated defaulter list, management of HESCO website, updating of HESCO MIS operations including losses and recovery, employees pay rolls management, computer network management at Company level, Hardware, Software development, maintenance and services etc.

2.7. Commercial Management

HESCO's previous billing system was marked by manual, cumbersome processes, weak controls, a lack of commercial focus, limited transparency, and unreliable information. To address these issues, a Commercial Management System, serving as the backbone of customer care and commercial operations, was introduced in operation circles of HESCO.

Traditional meter reading process was manual and inefficient, involving multiple steps that were prone to transcription errors and data manipulation due to inadequate verification time and poor internal controls. To address these challenges, HESCO introduced the AMR initiative, the meter reading process and enhancing the role of the MIS directorate. This included digitizing registers, eliminating redundancies, and improving monitoring methods. Mobile Meter Reading (MMRs) were subsequently deployed across various circles to streamline operations and ensure accuracy.

2.7.1. Summary of Units Purchased and Billed:

Summary of historic units purchased (along-with Net Metering), units' sale, number of consumers, recovery against the billed amount during the periods FY 2020-21 to FY 2023-24 are provided as below:

Year	Units Purchased from CPPA	Units Billed	No. of Consumers	Amount Billed Monthly W/subsidy	Amount Recovered	Receivables Without subsidy	Average Rate Per Unit	% Of collection against billing
	MkWh	MkWh	in Million	Rs. Mln	Rs. Mln	Rs. Mln	Rs.	
2020-21	5,574	4,014	1.173	71,456	54,302	13,177	17.801	76.00%
2021-22	5,560	4,035	1.196	86,133	64,650	134,666	21.349	75.06%
2022-23	4,884.0	3,565.3	1.224	109,711.9	83,252	166,010	31.088	75.9%
2023-24	5,098.9	3,709.4	1.244	153,384.2	119,046	202,789	42.008	77.6%

2.7.2. Number of billing related complaints and adjustments made in a year

A total of 4,129 complaints regarding excess billing were received, out of which 4,069 were resolved during FY 2023-24.

2.7.3. The process and technology utilized for meter reading, billing and customer services

The process for meter reading, billing, and customer service involves both manual and automated systems:

1. **Meter Reading**:
    - **Mobile Meter Reading**: Manual readings are taken by meter readers using mobile devices.
    - **AMR (Automated Meter Reading)**: Smart meters automatically send usage data to the server for Sindh Government connections, enabling real-time readings.

2. **Billing**: Data from either manual or AMR readings is used for accurate billing, with AMR speeding up and improving accuracy.
3. **Customer Service & Complaints**:
    - **CCMS**: Centralized system to manage complaints.
    - **FCC**: Field complaint centers for in-person assistance.
    - **118**: Customer support hotline.
    - **PMDU**: Government escalation body for unresolved issues.
    - **Local Centers**: Sub-Divisional, Divisional, and Circle levels for further complaint redressal.

This combination ensures efficient meter reading, accurate billing, and multiple channels for resolving customer issues.

2.7.4. Number of Defective Meters

Description		Year			
		2020-21	2021-22	2022-23	2023-24
Number of Defective Meters.		36,670	13,248	12,276	631
Number of Defective Meters Added		58,862	20,954	44,690	56,339
Number of Defective Meters Replaced	**CP-90**	22,628	17,596	13,032	13,858
	Others	31,763	26,780	32,630	54,126
	Total	54,391	44,376	45,662	67,984

2.7.5. Number of pending new connections

Description	Year				
	Unit	2021-22	2022-23	2023-24	2024-25 (Upto 10-2024)
Pending new connections (Ripe)	Nos.	1297	937	894	1,048
Load of pending new connections (Ripe)	kW	39,288	40,212	38,477	42,187
Pending new connections (Unripe)	Nos.	1,151	669	669	580
Load of pending new connections (Un-Ripe)	kW	4,169	1,430	2,301	2,716
Total Number of pending new connections.	**Nos.**	**2,448**	**1,606**	**1,563**	**1,628**
Total Load of pending new connections	**kW**	**43,457**	**41,643**	**40,779**	**44,903**

2.7.6. Amount pending against Dead Defaulters

Dead Defaulters up-to Oct 2024	
Customer (Nos.)	31,864
Amount (Million PKR)	240.845

2.7.7. AMI / AMR progress

Already Installed Against S-Phase, 3-Phase and LT-TOU Connections (As of Oct 2024)

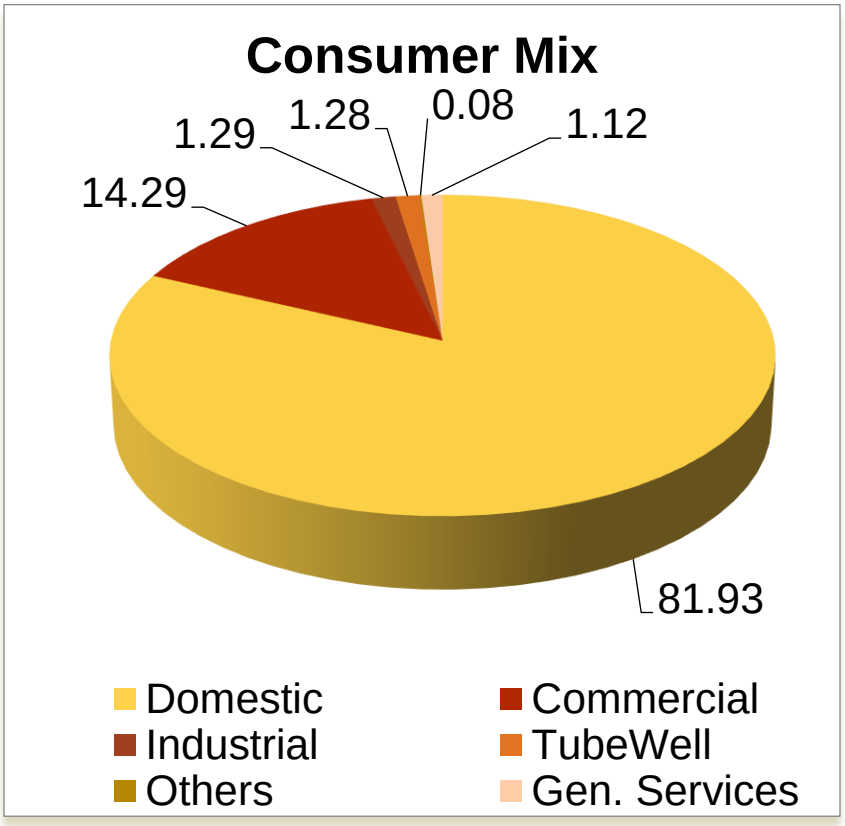
(Nos.)

Automatic Meter Reading (AMR)/ Advance Metering Infrastructure (AMI)					
Domestic	Commercial	Industrial	Tube-well	Others	Total
121	14	15	2,233	8,649	11,032

2.7.8. Consumer Mix

Number of Consumer as of June 2024 is as under,

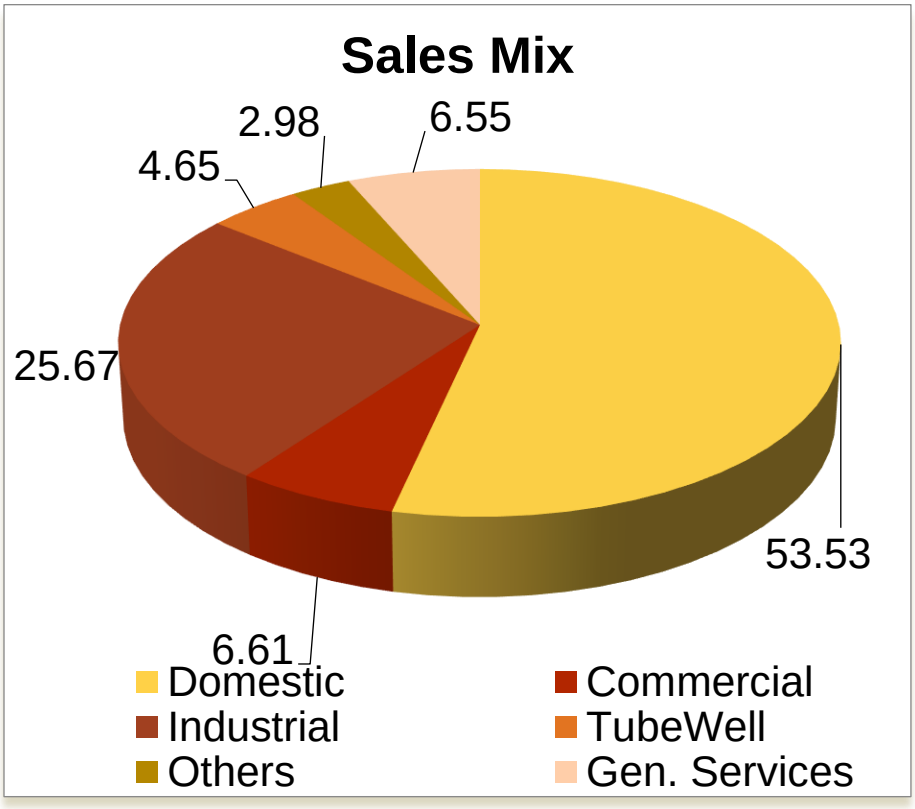
Description	No. of Customers
Domestic	1,018,884 (81.93%)
Commercial	177,694 (14.29%)
Industrial	B-4 09 No. B-3 257 No. B-2 3,893 No. B-1 11,870 No
	Total 15,922 (1.29%)
Tube well	15,922 (1.28%)
Others	1,054 (0.08%)
General Services	13,983 (1.12%)
TOTAL	**1,243,566**



2.7.9. Sales Mix

Number of Consumer as of June 2024 is as under,

Description	CONSUMPTION (MkWh)
Domestic	1,985.75 (53.53%)
Commercial	245.24 (6.61%)
Industrial	B-4 137.69 B-3 400.16 B-2 356.10 B-1 58.12
	Total 952.07 (25.67%)
Tube well	172.64 (4.65%)
Others	110.66 (2.98%)
General Services	243.01 (6.55%)
TOTAL	**3,709.36**



2.7.10. Net Metering

Net-Metering enables customers to transfer their low cost / access electricity generated through Renewable Energy Sources (Solar or wind) during daytime to Grid, It prevents HESCO's distribution system from overloading as it provides locally generated energy to nearby consumers, subsequently removing stress from secondary transmission system of HESCO. Power generation through net-metering can be easily financed / implemented by home owners through own resources or bank loans. It enables conservation of hydel power during daytime to provide higher dispatch of hydel power at night and is offering potential to rapidly grow HESCO distributed power through 'net-metering' resulting in saving on power transmission cost and losses.

Net Metering Cell in HESCO is fully functional and facilitating the application process & to submit its progress to PPMC and NEPRA time to time.

Financial Year	NM Consumers (Less or Equal to 25 kW)	Capacity	NM Consumers Above 25 kW	Capacity	Total NM Consumers	Total Capacity
	Nos.	MW	Nos.	MW	Nos.	MW
2018-19	1	0.01	-	-	1	0.01
2019-20	-	-	-	-	-	-
2020-21	6	0.12	4	0.63	10	0.75
2021-22	42	0.34	13	1.57	55	1.92
2022-23	94	1.16	16	2.82	110	3.98
2023-24	257	3.36	28	5.28	285	8.63
2024-25 (up-to Oct'24)	258	2.75	5	0.90	263	3.65
Total	**658**	**7.74**	**66.00**	**11.19**	**724.00**	**18.93**

2.8. Internal Control

Investment & Expenditure (Admin & Financial Approval)

The company prepares annual development budgets / procurement plan which is approved by the Board and then is subsequently used as a monitoring tool for incurrence of various operational & capital expenditures during the year.

In addition to this, HESCO also follows the book of Financial Power approved by the BOD wherein limits have been assigned at the individual level for expenditure approvals.

Internal Audit:

HESCO's Internal Audit Department (IAD) is an independent function and the Chief Internal Auditor reports directly to the AFRC (Audit Finance and Financial Risk Committee). The IAD is governed by Chief Internal Audit (CIA) charter / Audit Manual duly approved by the Committee, which describes the purpose, authority, responsibility and reporting relationship of IAD.

All assurance activities are performed in accordance with Audit Manual along-with an annual risk-based internal audit plan approved by the AFRC, whereas consulting activities are based on the services requested by the management, with agreed objectives, scope and reporting.

The Committee monitors the effectiveness of the IA function through discussions with Chief Internal Auditor along with the review of matters arising from the IA reports. The Committee on the basis of IA reports reviews the adequacy of internal controls and discusses corrective actions in the light of Management responses. This review allows the Company to improve controls and compliance in areas where weaknesses are identified.

The Committee also reviews and ensures that IA function is adequately staffed with professionals who possess the requisite internal audit training and experience to perform their duties.

2.9. Legal and Contractual Framework:

HESCO was incorporated under the Companies Ordinance 1984 (now Companies Act 2017). Accordingly, all the Legal and Contractual Frameworks applicable over the Companies registered and operating in Pakistan under the Companies Act, 2017 are binding over HESCO. The Companies Act 2017 encompasses all the rules and regulations for businesses registered with Security Exchange Commission of Pakistan (SECP). The Ordinance provides legal protection to the businesses, with the SECP keeping a close check on financial and corporate entities to ensure the stakeholders' interest.

The important legal and regulatory documents, principal contracts, and laws under which HESCO operates are:

1. The Companies Ordinance 1984 (Companies Act 2017)
2. HESCO Memorandum of Association
3. HESCO Articles of Association
4. NEPRA's Act, Rules and Regulations
5. Distribution License (DL/05/2023)
6. Electric Power Supply License (SOLR/05/2023)
7. Income Tax Ordinance 2001
8. SOE Act 2023
9. Power procurement resolution by NEPRA
10. Sales tax Act 1990
11. Sindh Environmental Protection Act (SEPA) 2014

2.10. Presentation and Analysis of the main issues being faced by the Company.

Financial Issues:

The Company has the following financial issues:

- Tax Issues with FBR
- Subsidies.
- CDP issue of non-coincident factor

Investment Needs:

- STG head
- ELR head
- DOP head
- Other system development program

Other Issues:

- **Shortage of Staff:** HESCO is facing shortage of 106-Nos. officers. Furthermore, 4,186 No. posts of officials are also vacant due to which it is very problematic to manage the operational & maintenance work of the company. Overall, HESCO is facing shortage of 4,186-Nos of employees, working strength is 6,844 out of 11,030.

2.11. Power Supply Business- Security of Supply

HESCO's security of Supply position up-to FY-2026-27 is summarized below;

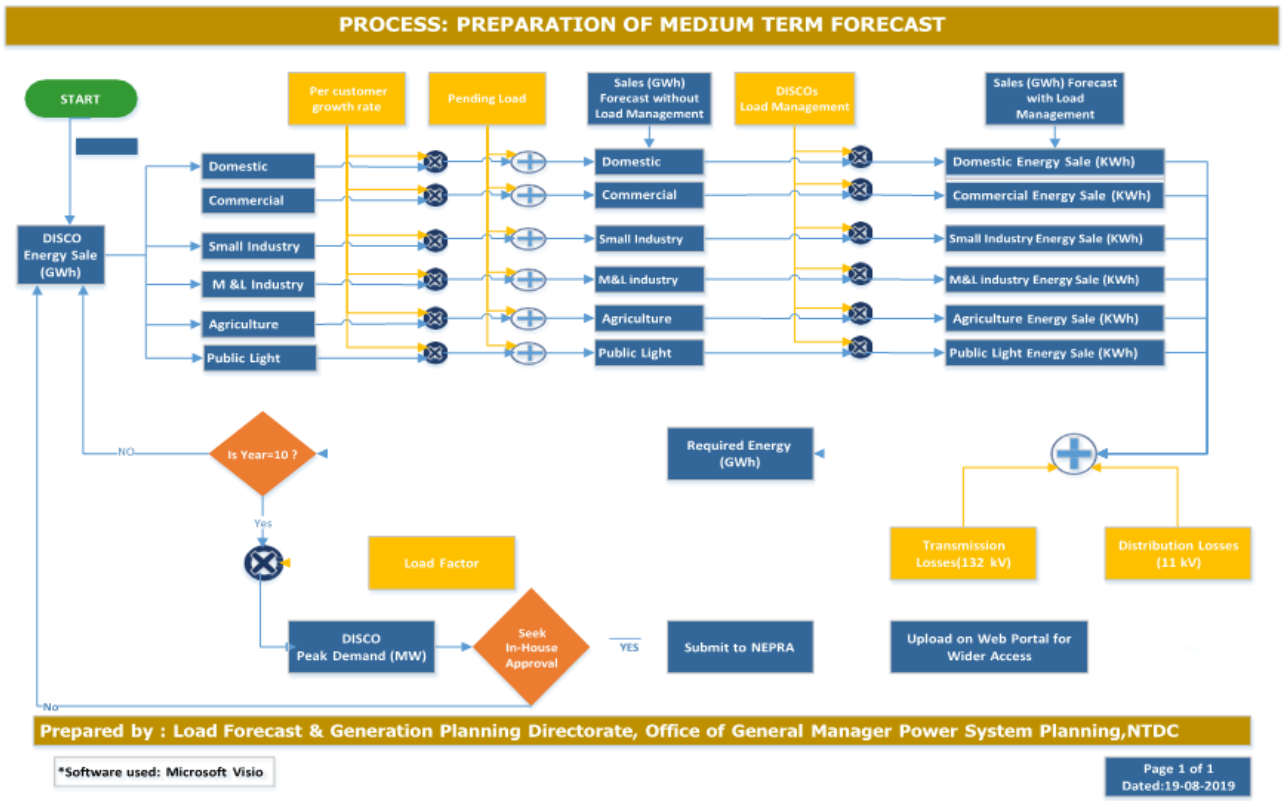
Sr. No.	Description	Year	Current	Year-1	Year-2	Year-3	Year-4
		FY:	2022-23	2023-24	2024-25	2025-26	2026-27
1	HESCO Share Firm Capacity	MW	1,539	1,459	1,600	1,638	1,741
Power Acquisition Programme							
2	Future Procurement	MW	26	19	50	55	31
3	Total HESCO Capacity (1+2)	MW	1,565	1,478	1,650	1,693	1,772
4	Capacity Obligation	MW	1,333	1,382	1,431	1,482	1,534
5	Compliance with Capacity Obligation (3 / 1)	% age	117	107	115	114	116
6	Minimum Compliance Required	% age	98	98	98	98	98

3. Section-III Forecast for Next Five Years

3.1. Introduction

Demand Forecast based on Power Market Survey and is prepared by HESCO MIRAD team with assistance of NTDC. The PMS report (Base Year FY-2022-23) consists of year wise detailed forecast of HESCO's energy sale and power demand for the whole company and each sub-station within the company's distribution network. In addition, forecast for Civil Administrative areas such as Divisions and Districts served by the company's distribution network.

Load forecasting is an important element of the power planning process involving prediction of energy and demand in the future. The forecast serves as the basis for demand and supply-side planning. Load forecasts are typically prepared by utilities for different time frames and the level of details required depends upon different planning applications and operations for which the forecast will be used.



3.2. Consumers in HESCO

3.2.1. Historical Numbers of Consumers in past years

Year	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Domestic	907,482	933,484	958,445	978,685	1,001,862	1,019,000
Commercial	163,791	166,213	169,007	171,843	175,246	177,694
Small Industry	11,749	11,364	11,502	11,630	11,768	11,837
M&L Industry	3,472	3,462	3,665	3,830	4,067	4,159
Agriculture	14,434	15,522	15,660	15,729	15,904	15,922
Bulk Supply	342	344	345	346	351	351
Public Light	540	572	572	573	587	587
Others	13,850	13,719	13,794	13,858	13,962	14,016
Total	1,115,660	1,144,680	1,172,990	1,196,494	1,223,747	1,243,566

3.2.2. Projected Number of Consumers

After Analyzing the previous trends and keeping the potential growth in urbanization in major cities of HESCO i.e., Hyderabad, Mirpurkhas, Nawabshah & Thatta, as many of new housing societies are emerging rapidly majorly in said cities and in other cities as well. In view of that below table has been formulated to project the approximate number of consumers for next years

Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Domestic	1,036,313	1,054,040	1,072,070	1,090,408	1,109,060	1,128,031
Commercial	180,176	182,693	185,245	187,833	190,457	193,118
Industrial	16,194	16,361	16,530	16,701	16,874	17,049
Tube Well	15,940	15,958	15,976	15,994	16,012	16,030
A3 Tariff	14,035	14,087	14,139	14,191	14,243	14,295
Others	1,056	1,058	1,060	1,062	1,064	1,066
Total	1,263,714	1,284,197	1,305,020	1,326,189	1,347,710	1,369,589

3.3. Energy and Demand Forecasts

Demand Forecast has been developed under two (2) scenarios, viz:

- Low Forecast (Recorded);
- Base Forecast (Computed)

Where the Base Forecast represents, the total expected sale, had the load shedding is not implemented, i.e., the computed loads; whereas the Low Forecast represents only loads served, i.e., the recorded loads.
Accordingly, the position for the plan horizon 2024-25 till 2029-30, under both the above-mentioned scenarios, each provided separately, has emerged as under:

3.3.1. Low Forecast:

Low Forecast accounts for the actual electricity demand that was served, reflecting the recorded loads after factoring in the imposed load shedding. This represents the lower level of electricity supplied due to the shortfall in generation or other system constraints, highlighting the gap between potential demand and the actual electricity delivered to consumers.

Year	Energy Sale		Distribution Losses		Energy Received at 11 kV	Peak Demand at 11 kV	Transmission Losses		Energy Sent out at 132 kV	Load Factor	Peak Demand at 132 kV
	(GWh)	G.R	(GWh)	(%)	GWh	MW	(GWh)	(%)	(GWh)	(%)	(MW)
2024-25	3,802	2.3	1,247	24.7	5,048	1,232	113	2.20	5,162	46.8	1,260
2025-26	3,909	2.8	1,251	24.3	5,160	1,250	115	2.19	5,275	47.1	1,278
2026-27	3,989	2.1	1,246	23.8	5,235	1,268	117	2.18	5,352	47.1	1,296
2027-28	4,053	1.6	1,233	23.3	5,286	1,280	117	2.17	5,403	47.1	1,309
2028-29	4,159	2.6	1,233	22.9	5,392	1,301	119	2.16	5,511	47.3	1,330
2029-30	4,221	1.5	1,218	22.4	5,438	1,312	119	2.15	5,558	47.3	1,341

3.3.1.1. Category Wise Sale- GWh (Low Forecast)

Year	Domestic	Commercial	Public Light	Small Industries	M&L Industries	Tube Well	Bulk	Total
	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)
2024-25	2,338	253	30	4	924	161	92.0	3,802
2025-26	2,401	261	31	5	961	159	92.0	3,909
2026-27	2,463	271	31	5	973	156	92.0	3,989
2027-28	2,507	282	31	5	985	152	92.0	4,053
2028-29	2,589	289	31	5	1,006	147	92.0	4,159
2029-30	2,635	296	32	5	1,018	142	92.0	4,221

3.3.2. Base Forecast

Base Forecast refers to the total expected electricity sales, which represent the overall demand in HESCO's service area had no load shedding been implemented. This forecast is based on the computed loads, assuming that all demand is fully met without interruptions or restrictions. Essentially, it captures the full potential consumption of electricity without the impact of load shedding.

Year	Computed Sale	Distribution Losses	Energy Received at 11 kV	Peak Demand at 11 kV	Transmission Losses	Energy Sent out at 132 kV	Computed Peak Demand at 132 kV
	(GWh)	(GWh)	GWh	MW	(GWh)	(GWh)	(MW)
2024-25	4,044	1,326	5,370	1,289	120.7	5,490	1,318
2025-26	4,245	1,359	5,605	1,335	125.4	5,730	1,365
2026-27	4,421	1,381	5,802	1,381	129.2	5,931	1,412
2027-28	4,674	1,422	6,097	1,452	135.2	6,232	1,484
2028-29	4,970	1,474	6,444	1,529	142.2	6,586	1,563
2029-30	5,317	1,534	6,850	1,625	150.5	7,001	1,661

3.3.2.1.Sale Base forecast

Year	Domestic	Commercial	Public Light	Small Industries	M&L Industries	Tube Well	Bulk	Total
	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)
2024-25	2,486	269	32	5	982	171	97	4,044
2025-26	2,608	283	33	5	1,044	172	100	4,245
2026-27	2,729	300	34	5	1,078	172	102	4,421
2027-28	2,891	325	36	5	1,136	175	106	4,674
2028-29	3,094	345	38	6	1,202	176	110	4,970
2029-30	3,320	373	40	6	1,282	179	116	5,317

3.3.3. Monthly Peak Demand Forecast

Year	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
2024-25	1,170	1,030	987	915	801	567	636	726	880	1,131	1,305	1,318
2025-26	1,212	1,067	1,022	947	830	587	659	752	912	1,171	1,351	1,365
2026-27	1,254	1,104	1,058	980	859	607	682	778	943	1,212	1,398	1,412
2027-28	1,318	1,161	1,112	1,030	902	638	717	818	991	1,273	1,469	1,484
2028-29	1,388	1,222	1,171	1,085	950	672	755	861	1,044	1,341	1,547	1,563
2029-30	1,475	1,299	1,244	1,153	1,010	714	802	915	1,110	1,425	1,644	1,661

4. Section-IV Power Acquisition Programme

4.1. Introduction

The Hyderabad Electric Supply Company (HESCO) is Licensee for Supply of Electric Power, as per NEPRA (Electric Power Procurement) Regulations, 2022, HESCO, apart from being "electric power supply licensee" and by having right to provide distribution service in the service territory, is also to act as "Supplier of Last Resort **(SoLR)**".

As per Regulation 4 of the said Regulations, an Electric Power Supplier shall be responsible for;

- for ensuring security of supply for its consumers by planning power procurement in adequate quantity.
- procures adequate electric power to meet its capacity obligations with prudent spatial load forecasts while using the best available information, to avoid under or over contracting.
- adopts efficient and effective power procurement strategy and risk mitigation mechanisms keeping in view the approved IGCEP, TSEP, Network Expansion Plan(s) and Power Acquisition Programme.
- maintains creditworthiness, financial health, and sufficient payment capacity, and complies with its electric power procurement and use of system charges payment obligations.

The Regulation 6 of the said Regulations requires the supply of last resort shall prepare a rolling five-year **Power Acquisition Programme (PAP)** on an annual basis which shall include:

- Its requirements in terms of energy and peak demands.
- existing contracted energy and capacity.
- Its capacity obligations as determined by the market operator in accordance with the Market Commercial Code.
- Proposed new and firm power procurement during the next three years and indicative procurement for the subsequent two years.

4.2. Assessment of Supply

Besides requirements of the Act, the Licensing Regulations, and the Procurement Regulations, Power Acquisition Programme (PAP) is based on Medium Term Load Forecasts (MTLFs) of each SOLR as already submitted with the Authority, the Indicative Generation Capacity Expansion Plan (IGCEP-2022) as approved by the Authority and the Report on Compliance with Capacity Obligations 2022-23, prepared by the CPPA-G (as designate Market Operator) under the provisions of the approved Market Commercial Code (MCC).

The above-mentioned Capacity Obligation Report 2022-23 provides systematic calculation of Capacity Obligation of each SOLR determined in accordance with the Market Commercial Code and valuation of existing and future contracted firm capacities of supply for assessment of compliance with the said Capacity Obligation.

4.3. Inputs for PAP

The following data inputs has been used to determine the Capacity Obligations:

- Estimated Peak Demand.
- Capacity Obligations with Transmission Losses of NTDC & Reserve Margin.
- Existing Firm Capacities.
- Contracted Firm Capacities.
- Retirement Firm Capacities.
- Future Procurement.

4.4. Estimated Peak Demand

Year	Energy Sale		Distribution Losses		Energy Received at 11 kV	Peak Demand at 11 kV	Transmission Losses	Energy sent out at 132kV	Energy Sent out at 132 kV	Load Factor	Peak Demand at 132 kV
	(GWh)	G.R	(GWh)	(%)	GWh	MW	(GWh)	(%)	(GWh)	(%)	(MW)
2022-23	4,217	4.5	1,455	25.6	5,671	1,148	157	2.69	5,828	56.4	**1,180**
2023-24	4,398	4.3	1,481	25.2	5,880	1,190	161	2.67	6,041	56.4	**1,223**
2024-25	4,596	4.5	1,514	24.8	6,110	1,233	166	2.65	6,277	56.6	**1,267**
2025-26	4,803	4.5	1,545	24.3	6,348	1,277	172	2.63	6,520	56.7	**1,312**
2026-27	5,008	4.3	1,573	23.9	6,581	1,322	177	2.61	6,758	56.8	**1,358**

4.5. Capacity Obligation

Sr. No.	Description	Year	Current	Year-1	Year-2	Year-3	Year-4
		FY	2022-23	2023-24	2024-25	2025-26	2026-27
1	Estimated Peak Demand	MW	1,180	1,223	1,267	1,312	1,358
2	Transmission Losses	%age	2.639	2.639	2.639	2.639	2.639
3	Adjusted Peak Demand	MW	1,212	1,256	1,301	1,348	1,395
4	Reserve Margin	%age	10.0	10.0	10.0	10.0	10.0
5	Capacity Obligation	MW	1,333	1,382	1,431	1,482	1,534

4.6. Existing firm Capacities

Fuel	2022-23	2023-24	2024-25	2025-26	2026-27
	(MW)				
Imported Coal	3,422	3,422	3,422	3,422	3,422
Local Coal	1,134	1,134	1,134	1,134	1,134
RLNG	6,264	6,264	6,264	6,264	6,264
Gas	2,532	2,532	2,532	2,532	2,532
Nuclear	3,223	3,223	3,223	3,223	3,223
Bagasse	244	244	244	244	244
Solar	144	144	144	144	144
Hydro	9,419	9,419	9,419	9,419	9,419
SPP	126	126	126	126	126
Wind	752	752	752	752	752
RFO	3,781	3,781	3,781	3,781	3,781
TOTAL	**31,040**	**31,040**	**31,040**	**31,040**	**31,040**
Less: K-Electric Share	**1,200**	**1,200**	**1,200**	**1,200**	**1,200**
Grand Total	**29,840**	**29,840**	**29,840**	**29,840**	**29,840**

4.7. Contracted firm Capacities

Fuel	2022-23	2023-24	2024-25	2025-26	2026-27
	(MW)				
Imported Coal	607	607	607	607	607
Local Coal	1,822	1,822	1,822	2,098	2,098
RLNG	1,162	1,162	1,162	1,162	1,162
Gas	-	-	-	-	-
Nuclear	-	-	-	-	-
Bagasse	-	-	15	15	15
Solar	33	40	40	40	40
Hydro	119	387	2,317	2,852	5.027
Cross Border	-	-	1,000	1,000	1,000
Wind	-	15	15	15	15
RFO	-	-	-	-	-
TOTAL	**3,743**	**4,033**	**6,978**	**7,789**	**9,964**
Less: K-Electric Share	**0**	**850**	**850**	**850**	**850**
Grand Total	**3,743**	**3,183**	**6,128**	**6,939**	**9,114**

4.8. Retirement Firm Capacities

Fuel	2022-23	2023-24	2024-25	2025-26	2026-27
	(MW)				
Imported Coal	-	-	-	-	-
Local Coal	-	-	-	-	-
RLNG	1,459	1,459	1,459	1,459	1,459
Gas	-	379	379	379	379
Nuclear	-	-	-	-	-
Bagasse	-	-	-	-	-
Solar	-	-	-	-	-
Hydro	-	-	-	-	-
SPP	-	-	10	23	42
Wind	-	-	-	-	-
RFO	-	718	718	718	718
TOTAL	**1,459**	**2,556**	**2,566**	**2,579**	**2,598**

4.9. HESCO Share in Firm Capacity

Sr. No.	Description	Year:	Current	Year-1	Year-2	Year-3	Year-4
		FY:	2022-23	2023-24	2024-25	2025-26	2026-27
1	Existing Firm Capacities	MW	29,840	29,840	29,840	29,840	29,840
2	Contracted Firm Capacities	MW	3,743	3,183	6,128	6,939	9,114
3	Retirement Firm Capacities	MW	-1,459	-2,556	-2,566	-2,579	-2,598
4	Total Firm Capacity (1+2+3)	MW	32,124	30,466	33,402	34,200	36,356
5	HESCO Share (as per Code)	% age	4.79	4.79	4.79	4.79	4.79
6	HESCO Share Firm Capacity	MW	1,539	1,459	1,600	1,638	1,741

4.10. Security of Supply Position HESCO

Security of Supply for regulated consumers is assessed on the basis of HESCO's Capacity Obligation and HESCO's share in firm capacity. This, however, does not include any future procurement as per IGCEP-2022 or individual procurement initiatives by HESCO at their own or under directions from the Government of Pakistan.

Sr. No.	Description	Year:	Current	Year-1	Year-2	Year-3	Year-4
		FY:	2022-23	2023-24	2024-25	2025-26	2026-27
1	Capacity Obligation	MW	1,333	1,382	1,431	1,482	1,534
2	HESCO Share Firm Capacity	MW	1,539	1,459	1,600	1,638	1,741
3	Compliance with Capacity Obligation	%	115	106	112	111	113

4.11. Power Procurement FY 2022-23 to 2026-27

Fuel	2022-23	2023-24	2024-25	2025-26	2026-27
	(MW)				
Imported Coal	-	-	-	-	-
Local Coal	-	-	-	-	-
RLNG	500	500	500	500	
Gas	-	-	-	-	-
Nuclear	-	-	-	-	-
Bagasse	-	-	-	-	-
Solar	81	217	298	379	460
Hydro	-	98.5	169.5	178.5	178.5
SPP	-	9.5	9.5	9.5	9.5
Wind	-	15	15	15	15
RFO	-	-	-	-	-
TOTAL	581	840	992	1,082	663

4.12. HESCO Share in PAP FY-2022-23 to 2026-27

Description	Year:	Current	Year-1	Year-2	Year-3	Year-4
	FY	2022-23	2023-24	2024-25	2025-26	2026-27
HESCO Share in Future Procurement	MW	26	19	50	55	31

4.13. HESCO's Compliance with Capacity Obligation Including Future Procurement

Sr. No.	Description	Year	Current	Year-1	Year-2	Year-3	Year-4
		FY:	2022-23	2023-24	2024-25	2025-26	2026-27
1	HESCO Share Firm Capacity	MW	1,539	1,459	1,600	1,638	1,741
Power Acquisition Programme							
2	Future Procurement	MW	26	19	50	55	31
3	Total HESCO Capacity (1+2)	MW	1,565	1,478	1,650	1,693	1,772
4	Capacity Obligation	MW	1,333	1,382	1,431	1,482	1,534
5	Compliance with Capacity Obligation (3 / 1)	% age	117	107	115	114	116
6	Minimum Compliance Required	% age	98	98	98	98	98

5. Section-V Next Five Years Goals and Objectives

5.1. Goals and Objectives

Goals and Targets of HESCO								
Challenge	**UoM**	**Benchmark**	**Current Status 2024-25**	**Year Wise Status**				
				2025-26	**2026-27**	**2027-28**	**2028-29**	**2029-30**
Losses	%age of kWh	-	26.0	23.5	17.5	17	17	16.8
Continuity and Reliability of Supply								
a. Continuity of Supply	SAIFI	13	130	128.7	127.4	126.1	124.8	123.5
	SAIDI	14	7015.31	6489.16	5937.59	5403.2	4889.9	4425.35
b. Reliability of Supply	Power Factor	0.95	0.90	0.95	0.95	0.95	0.95	0.95
Customer Services	No. of Complaints (%age)	1.0%	0.23%	1.0%	1.0%	1.0%	1.0%	1.0%
Network Expansion (132kV)								
a. Transformation Capacity	MVA	-	3,188.8	3542.8	3348.8	3609.5	3,256.8	3,247.5
b. Length of Transmission Lines	KM	-	3478.1	3479.1	3518.1	3885.34	3788.1	3642.1
Recovery	%age	100%	85.37%	94.4%	100%	101%	102%	103%
Safety	No. of Accidents	0%	9	0	0	0	0	0

* as per Grid Code

6. Section-VI Projects and Program

Objective of planning for STG and Distribution system:

Availability: Supply resources must be easily accessible, abundant, and based on appropriate technologies.

Reliability: Optimal and timely constructed network infrastructure to ensure resource adequacy and secure system operations.

As shown below in figure, a highly reliable power system would entail large investments in the power system and therefore, increase costs. On the other hand, lower investments in the power system's capacity would reduce costs but expose the system to outages. Therefore, an optimal system planning entails a power system that balances costs with reliability. Thus, HESCO has intent to planned all activities / works / projects accordingly.

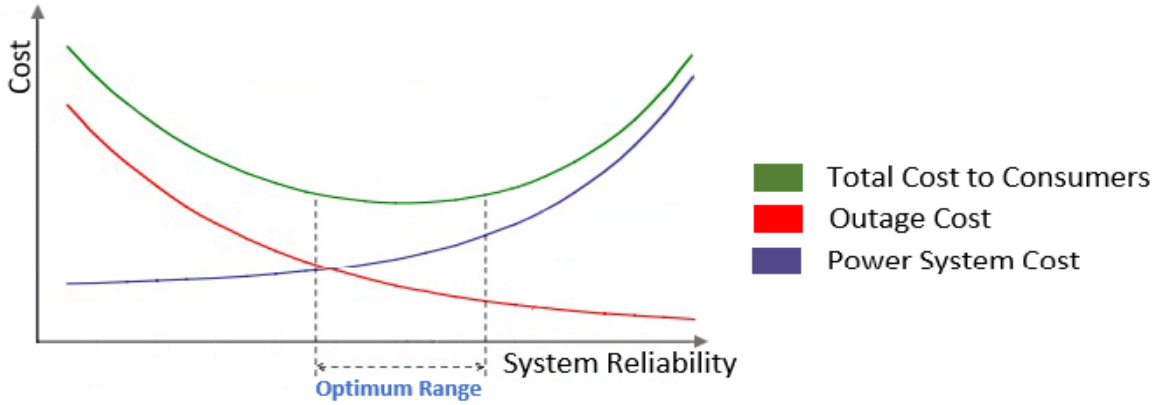


Figure: Power system reliability vs. costs

6.1. Secondary Transmission System - Scope

This section covers scope for the expansion and rehabilitation of secondary transmission network (132 kV & 66kV) of HESCO.

HESCO has prepared the case in view of scope (the Best Case / optimally achievable), implementation of this would have completely revamped the transmission network and enabled the HESCO to achieve the NEPRA's specified Performance Standards Distribution and provision of the Grid / Distribution code, especially the Grid Planning Code issued by NEPRA. This DIIP is based on the Optimally Achievable Case scope and costs.

However, HESCO understands that proposed scope will be achieved.

In view of the growing demand of electricity, HESCO's Secondary Transmission & Distribution (132 kV & below) infrastructure requires investments in Secondary Transmission & Grid Stations (STG).

Secondary Transmission & Grids Program HESCO is launched to:

- Provide relief to the overloaded grid stations and transmission lines
- Accommodate future load growth
- Evacuate power from future 220kV and 500kV NTDC grid stations

The STG project covers all 13 districts under the jurisdiction of HESCO, i.e. Hyderabad, Thatta, Sujawal, Jamshoro, Matiari, Nawab Shah, Sanghar, Umarkot, Mirpur Khas, Tharparkar, Badin, Tando Muhammad Khan, and Tando Allah Yar.

6.1.1. Grid Stations

Sr. No	Description	Total No.	Total Capacity (MVA)	2025-26 (No)	2026-27 (No)	2027-28 (No)	2028-29 (No)	2029-30 (No)
1	**New**							
a	132 KV	8	546	0	2	5	0	1
2	**Conversion**							
a	66 to 132 KV	9	161	0	0	3	4	2
3	**Augmentation**							
a	132 KV	10	150	10	-	-	-	-
b	66 KV	1	8	1	-	-	-	-
4	**Extension (Transformer)**							
a	132 KV	10	196	10	-	-	-	-
5	**Rehabilitation of Grid**							
a	132 KV	3	0	3	-	-	-	-

6.1.2. Transmission Lines

Sr. No.	Description	Total Length	2025-26	2026-27	2027-28	2028-29	2029-30
			(km)	(km)	(km)	(km)	(km)
1	**New Transmission Lines**						
a	132 kV D/C	181.5	1	29	80.5	29	42
b	132 kV SDT	475.24	0	0	192.24	161	122
c	2nd Stringing	265.5	0	11	134.5	120	0
2	**Up-gradation / Remodeling of Transmission Lines**						
a	132 kV SDT	507.71	15	0	201.71	74	217
3	**Reconductoring of Transmission Lines (HTLS)**						
a	132 kV D/C	51	51	-	-	-	-

6.1.3. Capacitors

Sr. No.	Description	Total (Nos.)	2025-26	2026-27	2027-28	2028-29	2029-30
			(Nos.)	(Nos.)	(Nos.)	(Nos.)	(Nos.)
1	Capacitor Banks / Cells for 30 Nos. Grid Station at 11kV Voltage level	30	10	10	10	-	-

STG Projects were identified by performing system studies in collaboration with NTDC under TSEP project by considering the following:

- Verification & Finalization of PMS Report.
- Validation of HESCO Existing Network.
- Load flow studies of the system to confirm existing and expected future system constraints.
- Identification of sub-projects to eliminate constraints.
- Further load flow studies to assess sub project technical viability, and overall compatibility with NTDC system upgrades.
- Sub Projects are also proposed for system reliability and stability.
- Sub Projects are proposed for rehabilitation to ensure the physical stability of Grid Stations and Transmission Lines in the HESCO Network.

6.2. Plan for Expansion and Rehabilitation Distribution System – Scope

HESCO has prepared the Expansion and Rehabilitation plan for Distribution network to improve the reliability and sustainability, the implementation of plan would completely revamp the distribution network and enabled the HESCO to achieve the NEPRA's specified Performance Standards Distribution and provision of the Distribution / Grid Code, especially the Distribution Planning Code issued by NEPRA.

This section covers the expansion and rehabilitation of distribution network (11kV and below) of the distribution company.

6.2.1. Energy Loss Reduction (ELR) Works:

Description		Total Nos.	2025-26	2026-27	2027-28	2028-29	2029-30
ELR Works (Nos.)	HT	97	16	18	19	21	23
	LT	6636	1087	1196	1315	1447	1591
	Total	6733	1103	1214	1334	1468	1614

6.2.2. Distribution of Power (DOP) Works:

Description		Total Nos.	2025-26	2026-27	2027-28	2028-29	2029-30
DOP Works (Nos.)	HT	201	33	36	40	44	48
	LT	244	40	44	48	53	59
	Total	445	73	80	88	97	107

Methodology

The distribution Voltage is 11 kV on HT and 0.4 kV on LT system. Estimation of. material requirement is made on the basis of WAPDA SDI. All aspects are considered while deciding the design and requirement of material e.g., requirement of new line for urban as well as for Rural area. For reconductoring of urban area's line as well as rural area are considered keeping in view the size of conductor as well. Different type of assemblies is selected which is used

commonly and estimation for a specific assembly is made separately. In these works, one point works have also been proposed.

Some of the information related to Distribution System of HESCO considered during DIIP is as under;

1	Type of Distribution System (Overhead Lines/Underground Cables)	Overhead lines	
2	Type of HT Conductors	Osprey, Panther, DOG, Rabbit and Gopher	
3	Type of HT Cables	1,000 MCM, 500 MCM, 250MCM, 4.0 AWG, 2.0 AWG 3-Core, 2.0 AWG 1-Core, 4.0 AWG 3-Core 120mm2, 240mm2	
4	Type of LT Conductor	WASP, ANT and GNAT	
5	Type of LT Cables	PVC 37/0.083 4-Core, PVC 37/0.083 1-Core, PVC 19/0.083 4-Core, PVC 19/0.083 1-Core, PVC 19/0.052 4-Core, PVC 7/0.052 4-Core, PVC 7/0.052 2-Core, LT ABC	
6	Length of HT Line	28,577.03 km	
7	Length of LT Line	15,059.91 km	
8	No. of Feeders	596 (Public + Dedicated)	
9	Number of Grid Stations	132 kV grids of HESCO	63
		66 kV grids of HESCO	15
		Consumers Grid Stations maintained & Operated by HESCO (132 kV)	1
		Consumer G/S maintained by HESCO & Operated by Consumer (132 kV)	1
		Consumer Grid Stations maintained & Operated by Consumers	8
		(8 x 132 kV)	
		Total	88
10	Number of Power Trafos	133	
11	Power Transformers Installed Capacity (MVA)	3,093.8	
12	Number of Distribution Transformers	44,941	
13	Distribution Transformers Capacity (MVA)	2,782.4	
14	Voltage level (kV)	Transmission Network	132 & 66
		Distribution Network	11, 0.4 & 0.23
15	Frequency	50 Hz	
16	Regulation	Voltage	5%
		Frequency	1%

6.3. Village Electrification Works:

(Nos.)

Sr. No.	Description	Total No.	2025-26	2026-27	2027-28	2028-29	2029-30
1	Village Electrification	500	100	100	100	100	100

6.4. Deposit Works:

If any applicant opts for installation of dedicated system instead of obtaining connection from a Common Distribution System, the same shall be provided on cost deposit basis.

Currently major Deposit works in HESCO are beside others:

- K-IV Pumping Station Project 132kV Grid Station (Customer Grid)
- M/s Service Long March 132kV (GIS) Grid Station (Customer Grid)
- Other DOP / ELR Deposit works

6.5. Other Functional Improvement Plans

6.5.1. Commercial Improvement Plan

This plan covers the commercial improvement activities including but not limited to metering including AMRs as well as creation of model sub-divisions.

Sr. No.	Description	Units	Total No.	2025-26	2026-27	2027-28	2028-29	2029-30
1	AMI / AMR (MIS)	Nos.	30,000	15,000	15,000	-	-	-
2	AMI / AMR (PMU)	Nos.	30,000	10,000	10,000	10,000		
3	Asset Performance Management System (APMS)	Nos.	5,000	2,500	2,500	-	-	-
4	Handheld Units (HHUs)	Nos.	600	-	100	-	500	-

The Integrated Commercial Improvement Plan (ICIP) broadly aims to demonstrate commercial loss reduction, improvement in revenues and improvement in customer services through process automation, transparency, accountability, and improved productivity in order to create a foundation for sustainable commercial operations.

6.5.2. Operation Improvement Plan

Distribution Integrated Investment Plan (DIIP) FY 2025-26 to FY 2029-30 for Operation related works,

Sr. No.	Project / Work name	Scope (details)	Unit	2025-26	2026-27	2027-28	2028-29	2029-30
1	DOP Civil	New Office, New Residential Buildings and Repair & Maintenance Works	Nos.	30	22	24	12	12
2	Model Sub-Division	State of the art Sub-Division	Nos.	2	3	2	2	2
3	CCTV - Camera	For 175 HESCO locations	Nos.	175	-	-	-	-
4	Furniture & Office Equipment	For 175 HESCO locations	Nos.	35	35	35	35	35
5	GIS Mapping	STG/HT/LT	%	50	50	-	-	-
6	Evaluation of T&D losses	Technical Losses of HESCO	%	60	40	-	-	-
7	Other Consultancy services	Feasibility and other studies	%	20	20	20	20	20
8	Software, Tools & Its Trainings	Technical Software tool (i.e., PSS®E & others)	%	100	-	-	-	-
9	IT Equipment & ERP/ Data	ERP (Cloud based), computers, Printers, Networking & other accessories	%	50	21	11	9	9
10	Earthing and Grounding	For HT and LT network	Nos.	140,000	140,000	-	-	-

Sr. No.	Project / Work name	Scope (details)	Unit	2025-26	2026-27	2027-28	2028-29	2029-30
11	Vehicles	Mini Trucks, Cranes, Trucks, Pick ups	Nos.	40	50	35	30	30
12	Bucket Mounted Vehicles	Safety Vehicle for operation circles	Nos.	15	15	15	15	15
13	TRW - Workshop	Functionalization Of Nawabshah, Hyderabad & Mirpur Khas TRW	%	100	-	-	-	-
14	Fire & Safety Equipment / T&P items	fire extinguisher with bucket and T&P Items	Nos.	400	100	100	100	100
15	11kV Sectionalizer	Set of 11kV Sectionalizer for HT Network	%	33	33	33	-	-

6.5.3. Financial Management Improvement Plan

HESCO started work to improve the internal audit function and audit and accounting manuals. Under this plan HESCO envisages to conduct specialized studies like Assets tagging and valuation.

6.5.4. Human Resources Improvement Plan

S #	HR Improvement plan Items	Define Scope				
		2025-26	2026-27	2027-28	2028-29	2029-30
A	Revamping of Training Centers	Recording of Safety Related videos	03 No. Laptops	Construction of new Building for Auditorium	Power Lab (For LS-I Practical Training instead of WEAF & GSO/GSC trainees practical instead of on Job Training)	Renovation of Hostels
		Developing of Official RTC Website	Video Facility for 03 Nos.	Synergy /GIS Mapping Tools/GPS Devices/power Analyzer Digitalize Printer		New Furniture for Academic & Hostel Blocks
		Meter Testing LAB	Class room	Course manuals revised and printing of new training manuals.		Renovation of academic Building
		Construction of New Building for all Practical LAB's in RTC HESCO.	MMR Software	Yard Stick Revision		Construction of New Class Rooms as 2nd Floor

S #	HR Improvement plan Items	Define Scope				
		2025-26	2026-27	2027-28	2028-29	2029-30
		Renovation of all CTC's (white wash, Furniture, Water Dispenser, Air Conditioners for Class Rooms)	New Vehicle			
B	Training of Employees through external training institution	Frequent nomination of HESCO officer for professional courses / workshops organized by the different institutions like NIMS, PIMS, NUST, LUMS & FAST etc. to run the business commensuration on modern lines	Revamping with online training program by adding rich media in prospective of Corona virus	To design training scheduled for HESCO employees through motivational speakers from private sector institution	Affiliation with modern private / government sector institution to enhance IT related capability of Officers / Officials	Revaluation of old training substance of each level and to design fresh modules of Technical / Non-Technical trainings after due deliberation of Senior Management
C	Provision of Safety T&P and promoting safety culture	Procurement of the quality PPE's and T&P's items, Fire Extinguishers, fire-fighting equipment and Bucket Mounted Insulated Vehicles for the prevention of the accidents.	Management shall provide adequate training to employees at RTC and CTC's at HESCO in phases so that they become well acquainted to perform the assigned work safely.	Safety Directorate will be established in the HESCO under the command of HSE Chief, Director HSE, Deputy Directors HSE, Assistant Directors HSE and Inspectors HSE for the close monitoring of Safety issues at the level of Operation Circles in HESCO in order to control the violation of safety standards to avoid fatal and non-fatal accidents and promote safety culture to achieve the target of zero accident.	The Pana-flex Posters and Hand Books for adopting safety preventive measures to deliver among employees for their awareness to avoid the accidents.	Outsourcing of checking/ observations on line staff during working on HT/LT lines. monitoring their activities of the technical staff Like K- Electric will be adopted
		Safety Seminars at Division Level, T&P parades at sub division level held for the awareness of safety preventive measures to the employees working on HT / LT lines and Transformers in order to avoid the accidents.	Provision of earthing on Transformers, HT / LT structures in order to avoid the leakage of current for prevention of the happening any untoward incident.			

S #	HR Improvement plan Items	Define Scope				
		2025-26	2026-27	2027-28	2028-29	2029-30
D	Human Resource Information System Implementation	Human Resources Management Information System, a software solution that integrates various HR functions, such as recruitment, employee onboarding, performance management, training and development, payroll management, and employee records, into a single platform.				
E	Conducting the yard stick study	Review current organizational structure.	Review the Sanctioned Strength & Creation	Implementing the ERP System	Revised job description of all employees	Capacity building to enhance its capacity to perform effectively.
F	IT infrastructure to support new initiatives	---	---	----	----	----
G	Improving the working environment	Desired delivery without creating a sense of pressure on the staff	Clarity on performanc e, empowering workers to celebrate successes and learn from mistake.	Employees feel safe to take risks and be themselves in front of their superior.	Arrangeme nt of skill enhanceme nt training session to improve productivity.	Equipping with the best resources and the updated technological equipment.

This plan covers the HR improvement activities, revamping / addition of training facilities, training of employees through external facilities, conducting some studies, improving the working environment etc.

6.5.5. New Positions to be Created in HESCO FY 2025-26 to FY 2029-30

S #	Department / Section	Officers	Officials
1	Technical Services Directorate	12	7
2	Social Safeguard (E&SS)	3	0
3	Operation Division	7	207
4	Operation Sub-Division	7	543
	Total	**29**	**757**

6.5.6. Staffing Plan of HESCO from FY 2025-26 to FY 2029-30

Sr No.	Description	Unit	Year					
			Total	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
Manpower Requirements								
A- Staffing Required to Cater for Existing Shortage								
1	Chief Executive Officer	No.	1	1	0	0	0	0
2	DG (MIRAD)	No.	1	1	0	0	0	0
3	Chief Financial Officer	No.	1	1	0	0	0	0
4	Manager (MIRAD)	No.	3	3	0	0	0	0
5	Deputy Manager (MIRAD)	No.	2	2	0	0	0	0
6	Deputy Manager	No.	3	3	0	0	0	0
7	SDO / Junior Engineer	No.	14	14	0	0	0	0
8	Assistant Manager (MIRAD)	No.	1	1	0	0	0	0
9	Assistant Manager	No.	22	0	12	10	0	0
10	Revenue Officer	No.	6	6	0	0	0	0
11	APS	No.	5	3	0	1	1	0
12	Store System Supervisor	No.	1	1	0	0	0	0
13	Accounts Assistant	No.	34	31	1	1	1	0
14	Audit Assistant	No.	18	18	0	0	0	0
15	Commercial Assistant	No.	95	50	18	12	9	6
16	Data Coder	No.	4	4	0	0	0	0
17	Data Entry Operator	No.	15	15	0	0	0	0
18	Establishment Assistant	No.	20	7	4	3	3	3
19	LS-I	No.	6	0	0	1	2	3
20	Security Inspector	No.	1	1	0	0	0	0
21	Senior Store Keeper	No.	5	1	1	1	1	1
22	SSO-I	No.	11	6	1	1	1	2
23	Stock Verifier	No.	0	0	0	0	0	0
24	Test Inspector	No.	9	3	1	1	2	2
25	Junior Store Keeper	No.	10	6	1	1	1	1
26	Laboratory Assistant	No.	4	3	0	1	0	0
27	LS-II	No.	113	72	10	12	10	9
28	MS-I	No.	9	5	1	1	1	1
29	SSO-II	No.	75	36	12	10	9	8
30	Steno-II	No.	28	19	3	3	2	1
31	Sub Engineer	No.	8	6	0	0	1	1
32	Test Assistant	No.	5	4	1	0	0	0
33	Transport Supervisor	No.	1	1	0	0	0	0
34	Assistant Draughtsman	No.	11	6	2	1	1	1
35	UDC	No.	61	37	7	6	5	6
36	LDC (Establishment)	No.	116	71	14	11	11	9
37	Work Supervisor	No.	0	0	0	0	0	0

Sr No.	Description	Unit	Year					
			Total	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
38	Crane Operator	No.	1	1	0	0	0	0
39	Gate Clerk	No.	1	1	0	0	0	0
40	LDC (Accounts)	No.	9	6	1	1	1	0
41	LDC (Audit)	No.	0	0	0	0	0	0
42	LDC (Commercial)	No.	58	40	7	5	3	3
43	Meter Reader	No.	116	76	11	11	10	8
44	Pesh Imam	No.	1	1	0	0	0	0
45	SSA	No.	59	48	4	3	2	2
46	Store / Stock Clerk	No.	1	1	0	0	0	0
47	Surveyor	No.	1	1	0	0	0	0
48	Tracer	No.	16	16	0	0	0	0
49	Security Sergeant	No.	12	6	2	1	2	1
50	Vehicle Driver	No.	140	88	18	13	11	10
51	ASSA	No.	74	74	0	0	0	0
52	Bill Distributor	No.	52	51	0	1	0	0
53	Carpenter	No.	3	3	0	0	0	0
54	Electric Helper	No.	51	36	6	4	3	2
55	Electric Welder	No.	1	1	0	0	0	0
56	Helper	No.	32	22	4	3	2	1
57	Machine Attendant	No.	10	6	1	1	1	1
58	Telephone Operator	No.	1	1	0	0	0	0
59	Security Guard	No.	153	86	14	23	12	18
60	ALM	No.	631	500	45	38	26	22
61	Plumber	No.	3	2	1	0	0	0
62	Pump Operator	No.	1	1	0	0	0	0
63	Store Helper	No.	16	14	1	0	0	1
64	Tube Well Operator	No.	4	3	1	0	0	0
65	Cook	No.	4	4	0	0	0	0
66	Gestetner Operator	No.	0	0	0	0	0	0
67	Moazzin	No.	3	2	1	0	0	0
68	Bearer	No.	2	0	1	0	0	1
69	Daftari	No.	0	0	0	0	0	0
70	Lorry Cleaner	No.	13	11	0	1	0	1
71	Bhishti	No.	2	0	1	0	0	1
72	Chowkidar	No.	65	51	5	3	3	3
73	Mali	No.	52	45	2	2	1	2
74	Store Coolly	No.	4	3	0	0	1	0
75	Naib Qasid	No.	143	124	4	6	3	6
76	Sanitary Worker	No.	48	35	6	2	3	2
Total (A)		**No.**	**2502**	**1798**	**225**	**195**	**145**	**139**
B- Staffing Required for Future Expansion								

Sr No.	Description	Unit	Year					
			Total	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
1	Chief (IT) Officer	No.	1	1	0	0	0	0
2	Chief HR & CPO	No.	1	1	0	0	0	0
3	Chief (SCM) Officer	No.	1	1	0	0	0	0
4	Chief Legal Officer	No.	1	1	0	0	0	0
5	Chief Tech & Eng.Advisor	No.	1	1	0	0	0	0
6	Chief Comm Advisor	No.	1	1	0	0	0	0
7	Manager (Env & Soc Saf)	No.	1	1	0	0	0	0
8	Deputy Manager	No.	2	2	0	0	0	0
9	Assistant Manager	No.	2	2	0	0	0	0
10	AM (Gender Spec)	No.	1	1	0	0	0	0
11	AM (Occ Health & Safety)	No.	1	1	0	0	0	0
12	Junior Engineer	No.	7	0	2	2	2	1
13	Revenue Officer	No.	3	0	1	0	1	1
14	Accounts Assistant	No.	7	0	2	1	2	2
15	Commercial Assistant	No.	39	0	13	0	13	13
16	LS-II	No.	7	0	2	2	2	1
17	Steno-II	No.	7	0	2	1	2	2
18	UDC	No.	12	0	3	3	3	3
19	LDC (Establishment)	No.	24	0	6	6	6	6
20	Meter Reader	No.	35	0	10	10	10	5
21	Tracer	No.	8	0	2	2	2	2
22	ALM	No.	126	0	36	36	36	18
23	Bill Distributor	No.	35	0	10	10	10	5
24	Chowkidar	No.	14	0	4	3	4	3
25	Naib Qasid	No.	31	0	9	6	9	7
26	Sanitary Worker	No.	14	0	4	3	4	3
Total (B)		**No.**	**382**	**13**	**106**	**85**	**106**	**72**
Total (A+B)		**No.**	**2884**	**1811**	**331**	**280**	**251**	**211**

6.5.7. Annual Employee Recognition Event

It is the duty of an organization to appreciate its employees because as a matter of fact, an organization is in existence only because of its employees. Therefore, HESCO will organize an annual function to celebrate its successes and achievement in the last year as well as to recognize the employees that have given HESCO the reasons for celebration through their dedication and hard work. This will not only motivate the employees but will consequently result in creating harmony and mutual understanding among them.

6.5.8. Communications Improvement Plan

This covers the communications improvement activities including but not limited to improving the internal communication amongst employees and external communication with customers to improve image of the company etc.

(I) Internal Communication:

Mail Servers:

Before HESCO could take the initiative to improve communication with its external stakeholder such as consumers and the community as a whole, it must ensure that it has achieved the optimum level required in the internal communication among staff. To achieve this objective, HESCO should acquire the basic infrastructure that would help the staff to have affective communication among them. The modes of communication that are needed to be strengthened by HESCO as an organization are electronic communication via email and, telephonic communication over the cell phones.

In order to provide instant access to the information required for the spontaneous decision making and problem solving, HESCO employees in the officer cadre need to have in their possession, at least an email address to communicate within the boundaries of HESCO and a cell phone enabling them to relay their communication outside the premises of their offices. Therefore, a mail server is suggested to be deployed within the organization. Scanners will also be installed to ease the email functionality. This will be done right after the communication protocols have been set, user trainings have been imparted and procedures have been finalized; all of which would happen in the first year of Business Plan implementation. In addition, cell phones will also be provided to the officers serving the dual purpose of not only making phone calls but also checking their emails.

These interventions will ensure that HESCO establish an effective internal communication setup required to run the organization and its operations, in a more efficient manner.

(II) Public Communication & Outreach Activities:

HESCO's Public Relations (PR) Departments comprise one PR officer along-with supporting staff who dedicate a good portion of their time to issuing rebuttals to inaccurate media reports. The concept of image building and consumer awareness needs improvement. Therefore, this plan which actually comprises of a complete portfolio in the realm of Public Communication and Outreach, helping put forward an improved brand image of HESCO, better customer services and better-informed customers through a series of outreach campaigns.

1. Mass Media Campaigns

The Public Relations and Customer Services Departments of HESCO will design localized campaigns to target consumers on both energy conservation and the timely payments of bills. These campaigns will help HESCO in its image promotion as a well-run and progressive power distribution company.
In the long run, these campaigns will result in an improved image of HESCO as a dynamic and customer-friendly entity through external communications that will help to smoothly implement consumer awareness campaigns and will empower the PR Department to deliver assertive communications and outreach on behalf of HESCO.

2. Public Outreach & Awareness Programs

Consumer outreach activities will help build a relationship between HESCO and its consumers. Campaigns targeted at schools and universities, and industries, traders and farmers will be planned in close coordination with the relevant departments of HESCO.

A variety of interventions at schools and colleges will be held including energy conservation seminars, lectures on HESCO's role as a DISCO, debating, essay writing and painting competitions. These will help in the image promotion of HESCO among school- / college-going students. A range of consumer awareness material will be disseminated to improve the knowledge of students on energy conservation and efficiency at both homes and schools.

Industries are important consumers of HESCO therefore targeting industrialists, through seminars at the Chamber of Commerce, will spread energy conservation awareness and the effectiveness of energy audits. Speakers from HESCO will be arranged to speak with industrialists on selected topics e.g., energy conservation, better relationships between HESCO and industries and the need for strengthening cooperation to the mutual benefit of both.

Similarly, meetings will be organized with Press Club, to gain its support to spread the message to the masses to adopt energy conservation measures and place HESCO's conservation material in prominent locations.

3. Design and printing of Customer Awareness Material

As part of the overall branding campaign, HESCO's Customer Services Centers will be branded through the strategic placement of standees, banners and other awareness material. Brochures, leaflets and handbooks will be developed for employee safety measures and workplace ethics that will help guide Customer Service Center employees. The proposed action plan includes designing content that educates consumers about HESCO's role as a DISCO and the different energy conservation measures, they can adopt.

4. Student Energy Conservation Programs

Another important intervention is the energy efficiency and anti-theft campaigns consisting of mass media and Informational and Educational Communication (IEC) materials for dissemination to the public as well as internal communications. These are grassroots-level promotions that target awareness at community level or through schoolchildren and college/university students with action-oriented messages, where benefits of proposed actions are quantitative and clear to the audience.

5. Linemen Training, Tools and Equipment

HESCO has provided quality tools, vehicles and equipment, and also conducted different trainings of line staff on the latest tools and equipment that are used worldwide to make line work effective and prevent lineman from fatal and severe non-fatal accidents. A hundred purpose-built vehicles have been provided making the line staff able to carry all necessary tools and equipment that are mandatory to perform their job safely.

HESCO's senior and middle managers are also trained so that they can realize the importance of lineman safety in quality work production and elimination of these accidents. The point of consensus has developed in the HESCO due to safety trainings at all levels of management and line staff is "all these accidents are avoidable and can be eliminated". To reach such point, unwavering commitment is required at every level of DISCO to show zero tolerance attitudes on any accident in future. The management can't justify its position by initiating disciplinary actions against SDOs and Supervisors only, but the management has to have allocated good number of resources in lineman safety.

In this business plan HESCO has incorporated such needs in lineman safety with extensive homework and calculations. In this plan, all the needs of Safety Organization restructuring, Trainings and Safety Professional Development Programs for management and line staff, provision of Bucket Mounted Trucks for transport for supply complaints handling, communication, Linemen equipment and PPEs have been catered with to make HESCO lineman safe, effective and efficient (that includes miscellaneous gang-tools, individual tools, personal protective equipment are planned to be procured). This plan also includes provision for customized trainings for HESCO's LM.

This plan under safety when executed well save HESCO from huge losses due to poor quality of work and rampant accidents of experienced lineman caused in the shape of heavy financial losses and human loss and it will also improve response to complaint time resulted in improved customer services.

Besides purchases of T&P, PPE, vehicle HESCO is also going to construct Transformer Reclamation workshop as well Protection of Distribution Transformers and 11kV Sectionalizer to ensure best measures for safety.

7. Section-VII Costs and Financing Plan

7.1. Costing Detail of Secondary Transmission System - Scope

7.1.1. Grid Stations

(Amount Million Rs.)

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	**New Grids**						
a	132 kV	8,430.71	2,963.44	3,339.05	1,328.22	400.00	400.00
2	**Conversion**						
a	66 to 132 kV	10,402.68	1,570.99	3,511.21	2,686.30	1,916.56	717.63
3	**Augmentation**						
a	132 kV	2,594.32	2,594.32	-	-	-	-
B	66kV	83.96	83.96	-	-	-	-
4	**Rehabilitation of G/S**						
a	132 kV	22.962	22.962	-	-	-	-
5	**Extension (Transformer)**						
a	132 kV	1,659.41	1,659.41	-	-	-	-
Total Grid Stations		**23,194.05**	**8,895.08**	**6,850.27**	**4,014.52**	**2,316.56**	**1,117.63**

7.1.2. Transmission Lines

(Amount Million Rs.)

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	New T/Line	10,070.84	2,322.23	2,065.73	2,343.35	2,435.46	904.07
2	2nd Stringing	3,445.72	155.98	743.30	1,539.74	1,006.70	-
3	Re-conductoring	1,268.82	1,268.82	-	-	-	-
4	Upgradation / Remodeling	13,436.43	1,428.79	2,311.73	1,757.27	4,285.45	3,653.20
Total Transmission Lines		**28,221.80**	**5,175.81**	**5,120.76**	**5,640.36**	**7,727.60**	**4,557.27**

7.1.3. Capacitor at Grids

(Amount Million Rs.)

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	11kV fixed capacitors at grids	450.00	150.00	150.00	150.00	-	-
Total Capacitors		**450.00**	**150.00**	**150.00**	**150.00**	**-**	**-**

7.1.4. Other STG related works

(Amount Million Rs.)

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	GSO Maintenance Material	2000.000	400.000	400.000	400.000	400.000	400.000
2	GSO T&P	100.000	20.000	20.000	20.000	20.000	20.000
3	Fire Fighting Equipment	100.000	20.000	20.000	20.000	20.000	20.000
4	Technical Assistance	162.577	108.385	54.192	0.000	0.000	0.000
5	Project Implementation and Management Support Consultant	566.103	242.615	242.615	80.872	0.000	0.000
6	Financing Cost & Project Overhead	1142.210	456.884	456.884	228.442	0.000	0.000
7	Improved O&M	677.267	677.267	0.000	0.000	0.000	0.000
	Total	**4748.15**	**1925.15**	**1193.69**	**749.31**	**440**	**440**

7.2. Costing Details for Distribution System - Scope

7.2.1. Energy Loss Reduction (ELR) Works:

(Amount Million Rs.)

Description		Total Nos.	2025-26	2026-27	2027-28	2028-29	2029-30
ELR Works	HT	1149.7	188.3	207.2	227.9	250.7	275.7
	LT	9856.2	1614.4	1775.9	1953.4	2148.8	2363.7
	Total	**11005.9**	**1802.7**	**1983.0**	**2181.3**	**2399.4**	**2639.4**

7.2.2. Distribution of Power (DOP) Works:

(Amount Million Rs.)

Description		Total Nos.	2025-26	2026-27	2027-28	2028-29	2029-30
DOP Works	HT	1293.4	211.9	233.0	256.4	282.0	310.2
	LT	496.5	81.3	89.5	98.4	108.2	119.1
	Total	**1789.9**	**293.2**	**322.5**	**354.7**	**390.2**	**429.2**

7.2.3. Village Electrification Works:

(Amount Million Rs.)

Sr. No.	Description	Total No.	2025-26	2026-27	2027-28	2028-29	2029-30
1	Village Electrification	1,380	240	260	280	300	300

7.2.4. Deposit Works:

(Amount Million Rs.)

Sr. No.	Description	Total No.	2025-26	2026-27	2027-28	2028-29	2029-30
1	Deposit Works	19,667.783	7,397.481	7,113.510	1,611.888	1,716.661	1,828.244

7.2.5. Other Functional Improvement Plans

7.2.5.1. Commercial Improvement Plan

(Amount Million Rs.)

Sr. No.	Description	Total No.	2025-26	2026-27	2027-28	2028-29	2029-30
1	AMI / AMR & AMI Cell Equipment	1,645.00	836.20	785.00	6.90	-	16.90
2	30,000 AMR meters (WB)	745.355	248.452	248.452	248.452	-	-
3	Asset Performance Management System (APMS)	1,800.00	900.00	900.00	-	-	-
4	Handheld Units (HHUs)	52.05	-	7.87	-	44.19	-
	Total	**4,242.41**	**1,984.65**	**1,941.32**	**255.35**	**44.19**	**16.9**

7.2.5.2. Other Improvement Plan

(Amount Million Rs.)

Sr. No.	Project / Work name	Total	2025-26	2026-27	2027-28	2028-29	2029-30
1	DOP Civil	2,386.01	712.28	532.57	573.70	290.36	277.10
2	Model Sub-Division	2,750.00	500.00	750.00	500.00	500.00	500.00
3	CCTV - Camera	49.48	49.48	-	-	-	-
4	Furniture & Office Equipment	753.06	132.26	140.86	150.02	159.77	170.15
5	GIS Mapping	400.00	200.00	200.00	-	-	-
6	Evaluation of T&D losses	60.00	35.00	25.00	-	-	-
7	Other Consultancy services	250.00	50.00	50.00	50.00	50.00	50.00
8	Software, Tools & Its Trainings	95.00	95.00	-	-	-	-

Sr. No.	Project / Work name	Total	2025-26	2026-27	2027-28	2028-29	2029-30
9	IT Equipment & ERP/ Data	760.00	379.00	160.00	83.00	70.00	68.00
10	Earthing and Grounding	4,200.00	2,100.00	2,100.00	-	-	-
11	Vehicles	1,788.00	602.50	400.00	455.50	150.00	180.00
12	Bucket Mounted Vehicles	1,350.00	270.00	270.00	270.00	270.00	270.00
13	TRW - Workshop	610.00	610.00	-	-	-	-
14	Fire & Safety Equipment / T&P items	90.00	50.00	10.00	10.00	10.00	10.00
15	11kV Sectionalizer	75.00	25.00	25.00	25.00	-	-
	Total	**15,616.54**	**5,810.52**	**4,663.43**	**2,117.22**	**1,500.13**	**1,525.25**

7.3. Financing plan

(Amount Million Rs.)

Description	Total	2025-26	2026-27	2027-28	2028-29	2029-30
Own Resources	20,545.33	18,327.23	14,279.15	14,818.07	10,725.64	78,695.42
World Bank Loan*	5,491.78	3,897.74	1,183.62	0.00	0.00	10,573.13
Consumer Contribution (Deposit)	7,397.48	7,113.51	1,611.89	1,716.66	1,828.24	19,667.78
Govt. of Sindh / Federal for Village Electrification	240.00	260.00	280.00	300.00	300.00	1,380.00
Grand Total	**33,674.59**	**29,598.48**	**17,354.65**	**16,834.73**	**12,853.89**	**110,316.34**

*Exchange rate applied at 277.91 PKR per USD as of Dated 22-Nov-2024 for World Bank Funded Projects.

7.4. HESCO's Investment Plan

(Amounts in Million PKR)

Sr. No.	Description	2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	**STG Investments**						
1.1	Own Resources	10,902.71	9,665.44	9,619.03	10,484.16	6,114.89	**46,786.23**
1.2	World Bank	5,491.78	3,897.74	1,183.62	-	-	**10,573.13**
	Sub-Total	16,394.49	13,563.17	10,802.65	10,484.16	6,114.89	**57,359.36**
2	**Distribution Investments**						
2.1	Distribution of Power (DOP)	293.20	322.50	354.70	390.20	429.20	**1,789.80**
2.2	Energy Loss Reduction (ELR)	1,802.70	1,983.00	2,181.30	2,399.40	2,639.40	**11,005.80**
2.3	DOP Civil	712.28	532.57	573.70	290.36	277.10	**2,386.01**
2.4	Deposit Works	7,397.48	7,113.51	1,611.89	1,716.66	1,828.24	**19,667.78**
	Sub-Total	10,205.66	9,951.58	4,721.59	4,796.62	5,173.94	**34,849.39**
3	**Consultancy and Software Purchase**						
3.1	GIS Mapping	200.00	200.00	-	-	-	**400.00**
3.2	Evaluation of T&D losses	35.00	25.00	-	-	-	**60.00**
3.3	Other Consultancy services	50.00	50.00	50.00	50.00	50.00	**250.00**
3.4	Software, Tools & Its Trainings	95.00	-	-	-	-	**95.00**
	Sub-Total	380.00	275.00	50.00	50.00	50.00	**805.00**
4	**Other**						
4.1	Model Sub-Division	500.00	750.00	500.00	500.00	500.00	**2,750.00**
4.2	Earthing and Grounding	2,100.00	2,100.00	-	-	-	**4,200.00**
4.3	APMS / Transformer Protection	900.00	900.00	-	-	-	**1,800.00**
4.4	TRW - Workshop	610.00	-	-	-	-	**610.00**
4.5	Fire & Safety Equipment / T&P items	50.00	10.00	10.00	10.00	10.00	**90.00**
4.6	Bucket Mounted Vehicles	270.00	270.00	270.00	270.00	270.00	**1,350.00**
4.7	Village Electrification	240.00	260.00	280.00	300.00	300.00	**1,380.00**
4.8	11kV Sectionalizer	25.00	25.00	25.00	-	-	**75.00**
4.9	AMI / AMR & AMI Cell Equipment	836.20	785.00	6.90	-	16.90	**1,645.00**
4.10	IT Equipment & ERP/ Data	379.00	160.00	83.00	70.00	68.00	**760.00**
4.11	Handheld Units (HHUs)	-	7.87	-	44.19	-	**52.05**
4.12	Vehicles	602.50	400.00	455.50	150.00	180.00	**1,788.00**
4.13	Furniture & Office Equipment	132.26	140.86	150.02	159.77	170.15	**753.06**
4.14	CCTV - Camera	49.48	-	-	-	-	**49.48**
	Sub-Total	6,694.44	5,808.73	1,780.42	1,503.95	1,515.05	**17,302.59**
	Grand Total	**33,674.59**	**29,598.48**	**17,354.65**	**16,834.73**	**12,853.89**	**110,316.34**

8. Section-VIII Summary of Benefits

8.1. Tangible Benefits

8.1.1. Consumer Growth:

Nos. in Million

Year	2025-26	2026-27	2027-28	2028-29	2029-30
Domestic	1.054	1.072	1.090	1.109	1.128
Commercial	0.183	0.185	0.188	0.190	0.193
Industrial	0.016	0.017	0.017	0.017	0.017
Tube Well	0.016	0.016	0.016	0.016	0.016
General Services	0.014	0.014	0.014	0.014	0.014
Others	0.001	0.001	0.001	0.001	0.001
Total	**1.284**	**1.305**	**1.326**	**1.348**	**1.370**

8.1.2. Sale Growth:

Year	Units Purchased	Units Sold	Units Lost	Total T&D
	(GWh)	(GWh)	(GWh)	(%)
2025-26	5,229.60	4,001.30	1,228.30	23.5
2026-27	5,299.50	4,369.50	930.00	17.5
2027-28	5,370.40	4,454.80	915.60	17.0
2028-29	5,442.20	4,517.10	925.10	17.0
2029-30	5,515.10	4,591.30	923.80	16.8

8.1.3. Energy Saved through Loss Reduction:

GWh

Year	2025-26	2026-27	2027-28	2028-29	2029-30	Total
DOP	2.38	2.32	2.32	2.78	2.72	**12.51**
ELR	29.89	33.91	38.75	43.65	48.98	**195.18**
APMS	23.13	23.13	0.00	0.00	0.00	**46.26**
AMI	7.61	7.61	3.05	0.00	0.00	**18.27**
TOTAL	**63.01**	**66.97**	**44.12**	**46.42**	**51.70**	**272.21**

HESCO assets will be increased by the implementation of STG Project as follows:

Year		2025-26	2026-27	2027-28	2028-29	2029-30
Grid Stations		0	2	5	0	1
Augmentation		11	0	0	0	0
Extension		10	0	0	0	0
Conversion		0	0	3	4	2
MVA Capacity	Addition	354	160	420.7	68	58.7
	Total	3,543	3,703	4,124	4,192	4,250
Length of 132kV Transmission Line	Addition	1	40	407.24	310	164
	Total	2,852	2,892	3,299	3,609	3,773

8.2. Non-Tangible Benefits

- Improvement of quality of electric supply to end consumers.
- Removal of system constraints.
- Stability & Reliability of system will be enhanced.
- Reduction in loading of transmission lines & power transformers.
- Reduction / Savings as well as capping the losses.
- To avoid unnecessary O&M cost on transmission and distribution network.
- Increase in the available system capacity to meet future load growth at/around proposed projects.
- Preventing of electrical equipment's, from damaging / burning due to overloading of system.
- Removal of hazards and ensuring safety of personal, public and property.

8.2.1. Proposed Investment Year wise STG Projects:

Proposed Investments in next five years are:

FY	Investment (Million Rs.)
2025-26	16,394
2026-27	13,563
2027-28	10,803
2028-29	10,484
2029-30	6,115
TOTAL	**57,359**

8.2.2. STG Energy Savings (GWh):

Description	2025-26	2026-27	2027-28	2028-29	2029-30	Total
STG Energy Savings (GWh) (Anticipated)	4.38	14.02	29.78	151.55	14.45	214.184

9. Section-VII Financial Projections of HESCO

9.1. Balance Sheet

The balance sheet and profit and loss account of HESCO for tariff control period.

HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED
BALANCE SHEET STATEMENT
FIVE YEARS (PROJECTED)

	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
	June 30, 2028 Rupees	June 30, 2027 Rupees	June 30, 2026 Rupees	June 30, 2025 Rupees	June 30, 2024 Rupees
ASSETS					
Non-current assets					
Property and equipment	48,068,106,721	46,668,064,778	45,308,800,755	43,989,126,947	39,791,159,608
Capital work-in-progress	17,833,035,932	17,313,627,119	16,809,346,717	16,240,914,703	16,160,114,132
	65,901,142,653	**63,981,691,896**	**62,118,147,472**	**60,230,041,649**	**55,951,273,740**
Long term loans	-	-	-	-	-
Current assets					
Stores and spares	10,161,261,784	10,156,183,692	10,151,108,138	10,146,035,120	10,140,964,638
Trade debts	24,057,153,131	24,045,130,566	24,033,114,009	24,021,103,457	24,009,098,908
Loans and advances	95,048,943	95,001,442	94,953,965	94,906,512	94,859,082
Due from associated undertakings	110,080,570,795	90,050,545,522	72,020,535,254	59,990,539,984.13	58,691,716,531
Other receivables	25,151,540,951	25,138,971,465	25,126,408,261	25,113,851,335.46	24,382,379,937
Advance income tax - net	1,465,836,399	1,465,103,847	1,464,371,662	1,463,639,841.65	1,421,009,555
Accrued markup	124,518,430	124,456,202	124,394,005	124,331,839	124,269,704
Cash and bank balances	17,274,106,918	17,265,474,181	17,256,845,758	17,248,221,648	17,239,601,847
	188,410,037,351	**168,340,866,917**	**150,271,731,052**	**138,202,629,737**	**136,103,900,201**
Total assets	**254,311,180,004**	**232,322,558,814**	**212,389,878,524**	**198,432,671,386**	**192,055,173,941**
EQUITY AND LIABILITIES					
Share capital and reserve					
Share capital	10,000	10,000	10,000	10,000	10,000
Accumulated loss	(483,493,023,017)	(479,839,692,172)	(473,273,413,680)	(459,949,578,131)	(447,042,504,953)
	(483,493,013,017)	**(479,839,682,172)**	**(473,273,403,680)**	**(459,949,568,131)**	**(447,042,494,953)**
Deposit for issuance of shares	151,344,729,175	148,377,185,466	145,467,828,888	142,615,518,518	142,615,518,518
Deferred credit	24,408,967,945	23,930,360,730	23,461,137,971	23,001,115,657	22,966,665,659
Non-current liabilities					
Long term financing	3,187,929,468	3,183,154,736	3,178,387,155	3,173,626,715	3,168,873,405
Customers' security deposits	3,691,595,851	3,515,805,573	3,348,386,260	3,188,939,295	3,096,057,568
Receipt against deposit work and connections	6,332,236,147	6,030,701,092	5,743,524,850	5,470,023,666	5,209,546,349
Employees' retirement benefits	111,983,640,347	97,377,078,563	84,675,720,489	73,631,061,295	58,904,849,036
	125,195,401,813	**110,106,739,964**	**96,946,018,754**	**85,463,650,972**	**70,379,326,358**
Current liabilities					
Trade and other payables	7,899,201,269	7,669,127,445	7,445,754,801	7,241,830,263	7,230,983,788
Due to associated undertakings	411,151,072,655	404,300,674,446	394,591,016,144	382,335,185,868	378,206,783,919
Accrued markup	11,611,742,167	11,594,350,641	11,576,985,163	11,559,645,694	11,542,332,196
Current and overdue portion of long term financing	6,193,077,998	6,183,802,294	6,174,540,484	6,165,292,545	6,156,058,457
	436,855,094,088	**429,747,954,826**	**419,788,296,591**	**407,301,954,370**	**403,136,158,360**
Total equity and liabilities	**254,311,180,004**	**232,322,558,814**	**212,389,878,524**	**198,432,671,386**	**192,055,173,941**

9.2. Profit and Loss Account

HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED
PROFIT AND LOSS ACCOUNT
FIVE YEARS (PROJECTED)

	PROJECTED June 30, 2028 Rupees	PROJECTED June 30, 2027 Rupees	PROJECTED June 30, 2026 Rupees	PROJECTED June 30, 2025 Rupees	PROJECTED June 30, 2024 Rupees
Electricity sales	177,259,102,082	165,943,505,314	151,186,637,738	143,987,274,036	137,130,737,177
Tariff subsidy	53,891,578,700	51,325,313,047	48,881,250,521	46,553,571,925	44,336,735,167
	231,150,680,782	**217,268,818,362**	**200,067,888,259**	**190,540,845,961**	**181,467,472,344**
Cost of electricity	(212,247,684,011)	(202,140,651,439)	(192,514,906,132)	(183,347,529,650)	(166,679,572,409)
Gross profit/(loss)	**18,902,996,772**	**15,128,166,923**	**7,552,982,127**	**7,193,316,312**	**14,787,899,935**
Amortization of deferred credit	654,124,329	622,975,551	593,310,049	565,057,189	548,599,213
	19,557,121,101	**15,751,142,474**	**8,146,292,176**	**7,758,373,501**	**15,336,499,148**
Operating expenses excluding depreciation	(15,861,197,575)	(15,399,220,946)	(14,950,699,948)	(14,515,242,668)	(13,824,040,636)
Depreciation	(2,620,996,544)	(2,544,656,839)	(2,470,540,620)	(2,398,583,126)	(2,328,721,482)
Provision for doubtful debts	(4,047,069,504)	(3,929,193,693)	(3,814,751,158)	(3,703,641,901)	(3,595,768,836)
Provision for doubtful subsidies	-	-	-	-	-
Provision for slow moving stock	-	-	-	-	-
Other income	4,003,389,858	3,886,786,270	3,773,578,903	3,663,668,838	3,556,960,037
	(18,525,873,764)	**(17,986,285,208)**	**(17,462,412,823)**	**(16,953,798,858)**	**(16,191,570,917)**
Operating profit / (loss)	**1,031,247,336**	**(2,235,142,734)**	**(9,316,120,647)**	**(9,195,425,357)**	**(855,071,769)**
Finance cost	(3,512,274,082)	(3,192,976,439)	(2,902,705,853)	(2,638,823,503)	(2,398,930,457)
Profit / (loss) before taxation	**(2,481,026,746)**	**(5,428,119,172)**	**(12,218,826,501)**	**(11,834,248,860)**	**(3,254,002,226)**
Tax expense	(1,172,304,099)	(1,138,159,320)	(1,105,009,048)	(1,072,824,319)	(1,051,788,548)
Profit / (loss) after taxation	**(3,653,330,845)**	**(6,566,278,492)**	**(13,323,835,549)**	**(12,907,073,178)**	**(4,305,790,774)**
Profit / (loss) per share -Basic and diluted	**(3,653,331)**	**(6,566,278)**	**(13,323,836)**	**(12,907,073)**	**(4,305,791)**

9.3. Statement of Cash Flows

HYDERABAD ELECTRIC SUPPLY COMPANY LIMITED
STATEMENT OF CASH FLOWS
FIVE YEARS (PROJECTED)

	PROJECTED June 30, 2028 Rupees	PROJECTED June 30, 2027 Rupees	PROJECTED June 30, 2026 Rupees	PROJECTED June 30, 2025 Rupees	PROJECTED June 30, 2024 Rupees
Cash flows from operating activities	(23,798)	(28,566)	(33,524)	(38,963)	(40,327)
Cash flows from investing activities	(2,556)	(3,066)	(3,396)	(4,369)	(2,132)
Cash flows from financing activities	26,363	31,640	36,929	43,340	45,194
Net increase/decrease	9	8	9	8	2,735
Cash and cash equivalents at the beginning of th	**17,265**	**17,257**	**17,248**	17,240	14,505
Cash and cash equivalents at the end of the yea	**17,274**	**17,265**	**17,257**	**17,248**	**17,240**

10. Section-X
Implementation, Monitoring Plan and Reporting

HESCO's Market Implementation & Regulatory Affairs Department is continuously establishing a comprehensive and rigorous process for collecting and analyzing data pertaining to ongoing projects. This enables the Company to assess the effectiveness of its investment plan in achieving expected targets. The attainment of Goals & Objectives outlined in Section V is of paramount importance, and this plan is specifically designed to enhance network reliability and quality of supply, thereby building upon our existing trajectory.

The timely execution of this plan is contingent upon the approval of a sustainable tariff by the Authority for Distribution business. HESCO will undertake continuous monitoring of progress against the submitted investment plan and its impact on KPIs.

To facilitate this, the Company will implement a regular reporting framework, comprising quarterly and annual reports, to track physical and financial progress of planned investments. In accordance with current MYT (FY 2020-21 to FY 2024-25) Summary of Direction (Clause.85).

11. Section-XI
Environmental and Social Assessment and Mitigation Plans

ENVIRONMENTAL AND SOCIAL ASSESSMENT AND MITIGATION PLANS

There are environmental and social impacts of implementing the projects. A detailed environmental and social assessment is required to be carried out as per Sindh Environmental Protection Act-2014 and its Regulations 2021 to successfully complete the projects.
Following are some of the Environmental, Social Impacts and Mitigation Measures, whereas details of impacts and mitigation measures can be ascertained after environmental and social assessment (s).

Environmental impacts	Mitigating measures
Noise	1. Project proponent to ensure compliance of National Environmental Quality Standards (NEQS) i.e., less than 85 Db (A) Noise for 08 hours of working
	2. Provision of silencer or muffler for construction work equipment which generates excessive noise.
	3. Adopt acoustic methods/ mitigation plan.
	4. Transformers should not be overloaded and power factor should be maintained.
	5. Hammer type percussive piling to be conducted in day light hours.
	6. Use of well-maintained trucks/ machinery with proper alignment/ lubrication to be ensured.
Waste Water/ Drainage	1. Proper installation of temporary drainage and erosion control before works (like septic tank and soak pits).S No direct waste water to be discharged into water bodies and ensure compliance of National Environmental Quality Standards (NEQS)
	2. Cover the construction material/ chemicals to reduce material loss/ spillage into water bodies.
	3. Storage of lubricants, fuels and chemicals in self-contained dedicated enclosures to avoid spillage/ leakage into water bodies.
Air Pollution	1. Spraying of bare areas with water/ sprinkling.
	2. Stockpiled soil and sand shall be slightly wetted before loading, particularly in windy conditions.
	3. Well maintained trucks/ machinery with proper alignment/ lubrication.
	4. Vehicle transporting soil, sand and construction material shall be covered.
	5. Transport through densely populated areas should be avoided.
	6. At completion, all debris and waste shall be removed and not burned. Landscaping, trees plantation and road verges to be re-installed upon completion.
Waste Disposal	1. Develop waste management plan to identify sufficient locations for storage and reuse of transformers and recycling of breaker oils and disposal of transformer oil

	residually contaminated soils, scrap metal; "Cradle to Grave" phenomenon may be adopted.
	2. Designate disposal sites in the contract and disposal rates accordingly.
	3. Regular monitoring of transformer seal and transformer oil, gravel base should be provided in Switchyard and transformer may be repaired in situ in or sent to workshop.
	4. Proper operation and maintenance of transformer (O&M).
Safety Control Measures	1. Provide induction safety training/ capacity building of all staff (GSC/GSO) including contractor labor on health and safety matters, adequate warning signs, PTW (Permit to Work System) for HT Lines 11kV and above especially use of personal protective equipment (PPEs) like hard hat, hard toe shoes, protective rubber/ ladder gloves, safety belt and safety ladder and ear plug/muff to be ensured.
	2. There is always potential for spread of vector borne and communicable diseases like AIDS, Hepatitis, Tuberculosis, Small Pox and Influenza from labor camps to local community shall be avoided, hence medical screening/ vaccination to be ensured by the contractor prior to project commencement.
	3. Prevent any illegal encroachments/ entries of irrelevant personnel especially children, beggar etc.
	4. Transportation Routes used in the vicinity of given project sites like schools/ hospitals/college to be avoided.
	5. Local community grievances on construction nuisance/ agriculture land damages, access to agriculture land, hospitals/schools close to ROW, air/ noise pollution and high-speed transportation activities must be considered and responded promptly.
Fire Hazard	1. Continuous operation of transformers over long period of time to be avoided in-order to avoid melting of seals. Proper operation & maintenance of transformer (O&M) to avoid oil spillage/ leakage. Transformer should not be overloaded and power factor should be maintained.
	2. Short circuiting of system.
	3. Each sub-project site is provided with firefighting equipment including CO2, foam type and sand containers as well as land line/ power line carrier telephone to call the nearby fire brigade/ Rescue 1122.
Public Complaints	1. Public complaints regarding delays in civil works, ROW issues, late compensation on account of Kharaba of seasonal crops and tree cutting etc. Grievance Redressal committee should be constituted to solve these issues on projects sites.

12. Glossary

Acronym

AMI	Advance Metering Infrastructure
AMR	Automatic Meter Reading
AIDS	Acquire Immune Deficiency Syndrome
APMS	Asset Performance Management System
BoD	Board of Director
BTS	Base Transceiver Station
CAPM	Capital Asset Pricing Model
CDP	Common Delivery Point
COSS	Cost of Service Study
CPPA (G)	Central Power Purchasing Agency Guarantee Limited
CTBCM	Competitive Trading Bilateral Contract Market
CWIP	Closing Work in Progress
DIIP	Distribution Companies Integrated Investment Plan
DISCO	Distribution Company
DM	Distribution Margin
DOP	Distribution of Power
ELR	Energy Loss Reduction
ERP	Enterprise resource planning
FCA	Fuel Charges Adjustment
FY	Financial Year
GIS	Geographical Information System
GIS	Gas Insulated Switchgear (written with Grid Station)
GoP	Government of Pakistan
GoS	Government of Sindh
GSC	Grid System Construction
GSO	Grid System Operation
GWh	Giga Watt Hours
HHU	Hand Held Unit
HT/LT	High Tension/Low Tension
HSD	High Speed Diesel
IGTDP	Integrated Generation Transmission and Distribution Plan
HESCO	Hyderabad Electric Supply Company Limited
KIBOR	Karachi Inter Bank Offer Rates
KSE	Karachi Stock Exchange
kV	kilo Volt
kW	kilo Watt
kWh	kilo Watt hour
LPC	Late Payment Charges
LM	Line Man

MDI	Maximum Demand Indicator
MoWP	Ministry of Water and Power
M&T	Metering & Testing
MVA	Mega Volt Amp
MIRAD	Market Implementation and Regulatory Affairs Department
MW	Mega Watt
MWh	Mega Watt hour
NEPRA	National Electric Power Regulatory Authority
NOC	Network Operation Centre
NTDC	National Transmission & Dispatch Company
O&M	Operation and Maintenance
OGRA	Oil and Gas Regulatory Authority
PEPCO	Pakistan Electric Power Company
PDEIP	Power Distribution Enhancement Investment Program
P.Tr	Power Transformer
PAP	Power Acquisition Programme
PPA	Power Purchase Agreement
PPAA	Power Procurement Agency Agreement
PPE	Personal Protective Equipment
PPP	Power Purchase Price
PMS	Power Market Survey
PMU	Project Management Unit
R&M	Repair and Maintenance
RE	Rural Electrification
RLNG	Re-gasified Liquefied Natural Gas
RoE	Return on Equity
RORB	Return on Rate Base
SBP	State Bank of Pakistan
STG	Secondary Transmission Grid
SYT	Single Year Tariff
T&D	Transmission and Distribution
TOU	Time of Use
T&P	Tools & Plants
TOR	Term of Reference
TPM	Transfer Price Mechanism
TRW	Transformer Reclamation Workshop
UOSC	Use of System Charges
WACC	Weighted average cost of capital
WAPDA	Water and Power Development Authority
WB	World Bank
X-WDISCOs	Ex-WAPDA Distribution Companies

Appendix

STG Works Details

Abstract of STG Investment

Amount In Million PKR.

Sr. No.	Main Head	Category	Sub Category	2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	Grid	New Grid Station with allied Transmission Lines		2,963.44	3,339.05	1,328.22	400.00	400.00	8,430.71
2		Conversion of Grid Stations from 66kV to 132kV with allied Transmission Lines		1,570.99	3,511.21	2,686.30	1,916.56	717.63	10,402.68
3		Augmentation		2,678.28	-	-	-	-	2,678.28
4		Extension (Transformer)		1,659.41	-	-	-	-	1,659.41
5		Rehabilitation of Grid		22.96	-	-	-	-	22.96
6	Transmission Line	New T/Line with line bays	D/C	707.52	323.53	121.40	212.45	273.15	1,638.05
7			SDT	1,614.71	1,742.20	2,221.95	2,223.01	630.92	8,432.79
8			2nd Stringing	155.98	743.30	1,539.74	1,006.70	-	3,445.72
9		Rehabilitation of Transmission Line	Re-conductoring	1,268.82	-	-	-	-	1,268.82
10			Upgradation / Remodeling	1,428.79	2,311.73	1,757.27	4,285.45	3,653.20	13,436.43
13	Capacitors	11kV fixed capacitors	11kV	150.00	150.00	150.00	-	-	450.00
14	Others	GSO Material / GSO Maintenance Material		400.00	400.00	400.00	400.00	400.00	2,000.00
15		GSO T&P		20.00	20.00	20.00	20.00	20.00	100.00
16		Fire Fighting Equipement		20.00	20.00	20.00	20.00	20.00	100.00
17		GSC T&P		-	-	-	-	-	
18		Technical Assistance		108.38	54.19	-	-	-	162.58
19		Project Implementation and Management Support Consultant		242.62	242.62	80.87	-	-	566.10
20		Financing Cost & Project Overhead		456.88	456.88	228.44	-	-	1,142.21
21		Improved O&M		677.27	-	-	-	-	677.27
22		30,000 AMR meters - Hyderabad & Laar Circle		248.45	248.45	248.45	-	-	745.35
Grand Total				**16,394.49**	**13,563.17**	**10,802.65**	**10,484.16**	**6,114.89**	**57,359.36**

New Grid Station with allied Transmission Lines

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Works	Scope of Work	MVA	Length (KM)	Type	Conductor	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
1	132kV Rashidabad G/S*	New Grid - 2x40 MVA, T/Bay along with D/C T/Line - 01 KM on Greely	80	1	D/C	Greelay	World Bank**	605.84	757.30	-	-	-	1,363.15	2026-27
2	132kV River Band G/S*	New Grid - 2x40 MVA, T/Bay along with D/C T/Line - 05 KM on Cairo	80	5	D/C	Cairo	World Bank**	790.38	986.58	-	-	-	1,776.96	2026-27
3	132 kV Mirpurkhas-II G/S*	New Grid - 2x40 MVA, T/Bay along with T/Line - 15 KM	80	15	D/C	Lynx	Own Resources	190.98	254.64	190.98	-	-	636.60	2027-28
4	132kV BhitShah G/S*	New Grid - 1x40 MVA, T/Bay along with T/Line - 5KM	40	5	D/C	Rail	Own Resources	233.03	155.35	129.46	-	-	517.84	2027-28
5	132kV Kotri Site-II G/S *	New Grid - 2x40 MVA, T/Bay along with T/Line - 3.5 KM	80	3.5	D/C	Greelay	Own Resources	216.21	216.21	108.10	-	-	540.52	2027-28
6	132kV Nindo G/S	New Grid - 1x20/26 MVA along with SDT T/Line - 28 KM on Cairo	26	28	SDT	Cairo	Own Resource	-	-	-	400.00	400.00	800.00	2029-30
7	132kV Nooriabad-II G/S*	New Grid - 2x40 MVA, T/Bay along with D/C T/Line - 05 KM on Greely	80	5	D/C	Greelay	Own Resources	227.56	227.56	113.78	-	-	568.89	2027-28
8	Qasimabad-II	New GIS Grid with allied T/L 1-KM D/C Rail (in /Out arrangement), 2x40MVA	80	1	D/C	Rail	Own Resources	699.45	741.41	785.90	-	-	2,226.76	2027-28
Total			**546**	1		-	-	**2963.44**	**3339.05**	**1328.22**	**400.00**	**400.00**	8430.71	**-**

*Partially work completed in Current MYT (FY 2020-21 to FY 2024-25)

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**Exchange rate applied at 277.91 PKR per USD as of Dated 22-Nov-2024 for World Bank Funded Projects.

Conversion of Grid Stations from 66kV to 132kV with allied Transmission Lines

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Works	Scope of Work	P.Tr MVA	Existing at 66kV	Net MVA addted	Length (KM)	T/L Type	Conductor	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
1	Conversion from 66kV to 132kV Khipro G/S*	1 x 20/26 MVA, along with D/C T/Line - 56 KM on Lynx	26	19.3	6.7	56	D/C	Lynx	World Bank**	938.78	1,251.71	625.85	-	-	2,816.34	2027-28
2	Conversion from 66kV to 132kV Mithi G/S*	1x40 MVA, T/Bay along with 132KV Noukot – Mithi T/Line - 46KM	40	13	27	46	SDT	Lynx	Own Resources	281.27	281.27	140.64	-	-	703.18	2027-28
3	Conversion from 66kV to 132kV Mithi G/S*	1x40 MVA, T/Bay along with 132KV Mithi - Islamkot T/Line - 45KM	40	13	27	45	SDT	Lynx	Own Resources	350.93	350.93	175.47	-	-	877.33	2027-28
4	Conversion from 66kV to 132kV Pithoro G/S	1 x 20/26 MVA, along with S/C T/Line - 30 KM on Lynx	26	13	13	30	SDT	Lynx	Own Resources	-	401.84	287.03	459.25	-	1,148.12	2028-29
5	Conversion from 66kV to 132kV Tando Bago G/S	1 x 20/26 MVA, along with S/C Feeding T/Line - 25KM from Badin G/S on Cairo.	26	13	13	25	SDT	Cairo	Own Resources	-	405.65	304.24	304.24	-	1,014.12	2028-29
6	Conversion from 66kV to 132kV Pangrio G/S	1 x 20/26 MVA, along with S/C T/Line - 30 KM from Tando Bago on Cario	26	5	21	30	SDT	Cairo	Own Resources	-	448.48	336.36	336.36	-	1,121.20	2028-29
7	Conversion from 66kV to 132kV Kaloi G/S	1 x 20/26 MVA, along with S/C T/Line - 22 KM from Pangrio on Cario	26	5	21	22	SDT	Cairo	Own Resources	-	371.33	278.50	278.50	-	928.32	2028-29
8	Conversion from 66kV to 132kV Kadhan G/S	1 x 20/26 MVA, along with S/C T/Line - 32 KM on Cario	26	13	13	32	SDT	Cairo	Own Resources	-	-	364.30	364.30	485.73	1,214.32	2029-30
9	Conversion from 66kV to 132kV Nabisar G/S	1 x 20/26 MVA, along with D/C T/Line - 09 KM on Lynx	26	6.3	19.7	9	D/C	Lynx	Own Resources	-	-	173.92	173.92	231.90	579.74	2029-30
Total			**262**	**100.6**	**161.4**	**295**	**-**	**-**	**-**	**1,570.99**	**3,511.21**	**2,686.30**	**1,916.56**	**717.63**	**10,402.68**	**-**

*Partially work completed in Current MYT (FY 2020-21 to FY 2024-25)

**Exchange rate applied at 277.91 PKR per USD as of Dated 22-Nov-2024 for World Bank Funded Projects.

Augmentation (Power Transformers)

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Grid Station	Scope of Work	New P.Tr MVA	Existing P. Tr MVA	Net MVA addted	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
1	132kV Sakrand G/S	T-2 40MVA in place Of 20/26MVA P/Transformer	40	26	14	Own Resources	241.24	-	-	-	-	241.24	2025-26
2	132kV Sanghar G/S	T-2 40MVA in place Of 20/26MVA P/Transformer	40	26	14	Own Resources	241.24	-	-	-	-	241.24	2025-26
3	132kV Qazi Ahmed G/S	T-2 40MVA in place Of 20/26MVA P/Transformer	40	26	14	Own Resources	241.24	-	-	-	-	241.24	2025-26
4	132kV Kalu Kohar G/S	T-1 40MVA P/Transformer in place of 20/26 P/Transformer (Proposed)	40	26	14	Own Resources	260.00	-	-	-	-	260.00	2025-26
5	132kV Hala G/S*	T-2 40MVA in place Of 10/13MVA P/Transformer	40	13	27	World Bank**	347.67	-	-	-	-	347.67	2025-26
6	132kV Phulleli G/S	Augmentation of 20/26MVA T-1, Power Transformer with 31.5/40MVA.	40	26	14	Own Resources	260.00	-	-	-	-	260.00	2025-26
7	132kV Gulshan-e-Shahbaz G/S	Augmentation of 10/13MVA T-2, Power Transformer with 20/26MVA.	26	13	13	Own Resources	247.65	-	-	-	-	247.65	2025-26
8	132kV Shahpurchakar G/S	Augmentation of 10/13MVA T-1, Power Transformer with 20/26MVA.	26	13	13	Own Resources	247.65	-	-	-	-	247.65	2025-26
9	132kV Shahdadpur G/S	Augmentation of 20/26MVA T-2, Power Transformer with 31.5/40MVA.	40	26	14	Own Resources	260.00	-	-	-	-	260.00	2025-26
10	66kV Head Jamrao G/S	Augmentation of 05 MVA Power Transformer T-1 with 10/13MVA.	13	5	8	Own Resources	83.96	-	-	-	-	83.96	2025-26
11	132kV Kandiari G/S	Augmentation of 10/13MVA Power Transformer with 20/26MVA.	26	13	13	Own Resources	247.65	-	-	-	-	247.65	2025-26
Total			**371**	**213**	**158**	**-**	**2,678.28**	**-**	**-**	**-**	**-**	**2,678.28**	**-**

*Partially work completed in Current MYT (FY 2020-21 to FY 2024-25)

**Exchange rate applied at 277.91 PKR per USD as of Dated 22-Nov-2024 for World Bank Funded Projects.

Extension (Power Transformer)

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Grid Station	Scope of Work	MVA	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
1	132kV Tando Adam G/S*	Extension of 31.5/40 MVA P.T/Bay	40	World Bank**	412.70	-	-	-	-	412.70	2025-26
2	132kV Bhan Saeedabad G/S	Extension of 10/13MVA P/Transformer	13	Own Resources	83.96	-	-	-	-	83.96	2025-26
3	132kV New Matli G/S*	Extension of 10/13MVA P/Transformer	13	Own Resources	83.96	-	-	-	-	83.96	2025-26
4	132kV Sanghar G/S	Extension of 20/26MVA Power Transformer	26	Own Resources	247.65	-	-	-	-	247.65	2025-26
5	132kV Nawabshah-I G/S	Addition of 3rd 20/26MVA Power Transformer is required.	26	Own Resources	247.65	-	-	-	-	247.65	2025-26
6	132kV Doulatpur G/S	Addition of 3rd 20/26MVA Power Transformer is required.	26	Own Resources	247.65	-	-	-	-	247.65	2025-26
7	132kV Noukot G/S	Addition of 2nd 10/13MVA Power Transformer is required.	13	Own Resources	83.96	-	-	-	-	83.96	2025-26
8	132kV Digri G/S	Addition of 2nd 10/13MVA Power Transformer is required.	13	Own Resources	83.96	-	-	-	-	83.96	2025-26
9	132kV K.M.Bhurgari G/S	Addition of 10/13MVA , Power Transformer.	13	Own Resources	83.96					83.96	2025-26
10	132kV Sultanabad G/S	Addition of 10/13MVA, Power Transformer.	13	Own Resources	83.96					83.96	2025-26
Total			**196**	**-**	**1,659.41**	**-**	**-**	**-**	**-**	**1,659.41**	**-**

*Partially work completed in Current MYT (FY 2020-21 to FY 2024-25)

**Exchange rate applied at 277.91 PKR per USD as of Dated 22-Nov-2024 for World Bank Funded Projects.

Rehabilitation of Grid

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Grid Station	Scope of Work	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
1	132kV Nooriabad G/S	Conversion of existing 132kV Single conductor Bus Bar in to Twin bundle conductor Bus Bar.	Own Resources	7.654	-	-	-	-	7.65	2025-26
2	132kV Jhampir G/S	Conversion of existing 132kV Single conductor Bus Bar in to Twin bundle conductor Bus Bar.	Own Resources	7.654	-	-	-	-	7.65	2025-26
3	132kV Tando Allahyar G/S	Conversion of existing 132kV Single conductor Bus Bar in to Twin bundle conductor Bus Bar.	Own Resources	7.654	-	-	-	-	7.65	2025-26
Total			**-**	**22.962**	**-**	**-**	**-**	**-**	**22.962**	**-**

Capacitors

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Works	Scope of Work	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
1	Capacitors New Installation / replacement	Capacitor Banks / Cells for 30 Nos. Grid Station at 11kV Voltage level	Own Resources	150.000	150.000	150.000			450.00	2027-28
Total				**150.000**	**150.000**	**150.000**			**450.00**	

New Transmission Line with line bays

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Works	Scope of Work	Length (KM)	Conductor	Type (SDT, D/C, 2nd Stringing)	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
1	In & Out Arrangement at Saeedabad G/S 2 No. L/Bays at Substation *	In & Out Arrangement -11 KM - 41 Nos. Locations.	11	Lynx	2nd Stringing	Self funding	155.982	155.982	-	-	-	311.96	**2026-27**
2	Sakrand – Nawabshah Society 02 No. L/Bays *	New Transmission Line -20 KM along with 02 No. Line Bays 1 No. at Sakrand & 1 No. at Nawabshah	20	Rail	SDT	Self funding	162.684	325.369	325.369	-	-	813.42	**2027-28**
3	132 kV Sujawal Golarchi T/L with Line Bays *	New Transmission Line - 51.24 KM- 192 Locations	51.24	Cairo	SDT	Self funding	202.438	253.048	50.610	-	-	506.10	**2027-28**
4	06 Nos. 132kV T/Line from proposed 220 kV New Mirpurkhas Grid Station (of NTDC) to HESCO's Network *	i. 132kV T/Line for Loop In & Out M.P.Khas – Kandiari (D/C) -14KM- Lynx Conudctor ii.132kV T/Line for Loop In & Out M.P.Khas – Sanghar (D/C) -15KM- Lynx Conudctor iii. 132kV T/Line from M.P.Khas New – M.P.Khas (SDT) - 10KM - Rail Conductor iv. 132kV T/Line form M.P.Khas – Kandairi (SDT) - 44KM - Rail Conductor	14 15 10 44	Lynx Lynx Rail Rail	D/C D/C SDT SDT	Self funding	906.384	906.384	1,359.575	1,359.575	-	4,531.92	**2028-29**
5	2nd Circuit Mirpurkhas – Samaro S/S	2nd CKT Stringing - 70KM - Lynx Conductor	70	Lynx	2nd Stringing	Self funding	-	148.920	148.920	-	-	297.84	**2027-28**
6	2nd Circuit Noukot – Mithi – Islamkot	2nd CKT Stringing - 90KM - Cairo Conductor	90	Cairo	2nd Stringing	Self funding	-	-	665.000	665.000	-	1,330.00	**2028-29**
7	2nd Circuit Samaro – Umerkor T/Line	2nd CKT Stringing - 36KM - Cairo Conductor	36	Cairo	2nd Stringing	Self funding	-	438.400	109.600	-	-	548.00	**2027-28**
8	2nd Circuit Nawabshah1 – Dour T/Line	2nd CKT Stringing - 30KM - Lynx Conductor	30	Lynx	2nd Stringing	Self funding	-	-	341.695	341.695	-	683.39	**2028-29**
9	Jam Nawaz Ali – T.Adam S/S 2xLine Bays	32 KM Line on Lynx Conductor with 2xLine Bays	32	Lynx	SDT	Self funding	-	-	-	462.680	115.67	578.35	**2029-30**
10	132kV SDT Qazi Ahmed – Dour T/L on Rail Conductor	132kV, 30KM SDT Qazi Ahmed – Dour T/L on Rail Conductor, 01 No. line Bay at 132kV Grid Station Daur and 01 No. line Bay at 132kV Grid Station Qazi Ahmed.	30	Rail	SDT	Self funding	-	-	229.000	400.750	515.25	1,145.00	**2029-30**
11	132kV D/C In/Out Arrangement from Matli - Tando Ghulam Ali T/Line at Shaikh Bhirkhio	132kV, 33KM SDT Matli - Shaikh Bhirkio-Tando Ghulam Ali T/Line on Cairo Conductor and 02 No. line Bay at 132kV Matli and Tando Ghulam Ali Grid Station at Shaikh Bhirkio Grid Station	33	Cairo	D/C	Self funding	-	-	121.400	212.450	273.15	607.00	**2029-30**

Sr. No.	Name of Works	Scope of Work	Length (KM)	Conductor	Type (SDT, D/C, 2nd Stringing)	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
12	In/Out Arrangement from 132kV Tando Muhammad Khan –Talhar T/Line –at 132kV New Matli G/S	In/Out feed D/C T/line, 01 KM (Approax.) on Cario conductor, from 132kV T.M.Khan –Talhar, 02 No. line Bays for 132kV Tando Muhammad Khan and Talhar G/S at Matli Grid Station	1	Cairo	D/C	Self funding	115.180	-	-	-	-	115.18	**2025-26**
13	132kV T/Line In & Out arrangement of existing 132kV Nooriabad Master Green Circuit at 132kV Grid Station kalu Kohar *	In & Out arrangement -11 KM- Greely Conductor.	11	Greelay	D/C	Self funding	292.614	195.076	-	-	-	487.69	**2026-27**
14	132kV T/Line In & Out arrangement of existing 132kV Hala Road Hala Circuit at 132kV Grid Station Tando Adam *	In & Out arrangement -12KM- Rail Conductor	12	Rail	D/C	Self funding	299.729	128.455	-	-	-	428.18	**2026-27**
15	132 kV Feed Line for Kaloi Grid Station from 132 kV Naukot G/S	30 Km Single Circuit T/Line on Cairo conductor	30	Cairo	SDT	Self funding	343.200	257.400	257.400	-	-	858.00	**2027-28**
16	132kV Chamber T-Off Removal	In / Out Arrangement at 132kV Chamber	28.5	Lynx	2nd Stringing	Self funding	-	-	274.523			274.52	**2027-28**
Total			**568.74**	**-**	**-**	**-**	**2,478.211**	**2,809.033**	**3,883.092**	**3,442.150**	**904.070**	**13,516.556**	**-**

*Partially work completed in Current MYT (FY 2020-21 to FY 2024-25)

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Rehabilitation of Transmission Line

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Works	Scope of Work	Length (KM)	Type	Conductor	Type (Re-conductoring, Upgradation/ Remodeling)	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
1	132kV T.M Khan - B.S Karim Transmission Line	New Transmission Line -42 KM - 154 Nos. Locations.	42	SDT	Cairo	Upgradation / Remodeling	Own Resources	209.576	314.364	174.646	-	-	698.59	2027-28
2	132kV SDT B.S Karim - Sujawal Transmission Line	New Transmission Line -38 KM - 141 Nos. Locations.	38	SDT	Cairo	Upgradation / Remodeling	Own Resources	224.054	336.081	186.712	-	-	746.85	2027-28
3	132kV SDT Thatta - Pir Patho Transmission Line	New Transmission Line -29 KM - 119 Nos. Locations.	29	SDT	Cairo	Upgradation / Remodeling	Own Resources	353.034	529.551	294.195	-	-	1,176.78	2027-28
4	132kV SDT Pir Patho - Mirpur Sakro Transmission Line	New Transmission Line -22 KM - 87 Nos. Locations.	22	SDT	Cairo	Upgradation / Remodeling	Own Resources	277.225	415.838	231.021	-	-	924.08	2027-28
5	132kV SDT NTPS - T.M Khan	New Transmission Line -32.71 KM - 115 Nos. Locations.	33	SDT	Cairo	Upgradation / Remodeling	Own Resources	111.897	111.897	55.948	-	-	279.74	2027-28
6	Remodeling of Jamhsoro New – Larkhra – Khanote - Shalmani - Sehwan - Bhan Saeedabad - Dadu	Construction of New 132kV SDT Circuit 217 KM on Rail Conductor	217	SDT	Rail	Upgradation / Remodeling	Own Resources	-	-	-	3,653.195	3,653.195	7,306.39	2029-30
7	132KV Sanghar-Shahpurchakar-Nawabshah-II-Nawabshah-I G/S	132KV, 74KM (Approax.) SDT Sanghar – S.P.Chakar-N.Shah – II – N.Shah – I T/line on Rail Conductor and 01 Line Bay at 132KV Sanghar,02 Line Bay at 132KV S.P. chakar 02 Line Bay at 132KV Nawabshah-II,01 Line Bay at 132KV Nawabshah-I G/S	74	SDT	Rail	Upgradation / Remodeling	Own Resources	-	281.000	491.750	632.250	-	1,405.00	2028-29

Sr. No.	Name of Works	Scope of Work	Length (KM)	Type	Conductor	Type (Re-conductoring, Upgradation/ Remodeling)	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment	Year of Completion (tentative)
8	Re-conductoring with HTLS (High Temperature Low Sag) Double Circuit (28Km) (Jamshoro-Qasimabad-Hala Road) (Jamshoro-Rajputana-Hala Road)	Reconductoring of Transmission Line -D/C -28 KM on HTLS Casablanca(ACCC)	28	D/C	HTLS	Re-conductoring	World Bank	662.815	-	-	-	-	662.82	2025-26
9	132kV D/C T.M.Khan Road – Latifabad – GTPS Kotri & T.M.Khan Road – Kohsar – Kotri Site – GTPS Kotri T/Line	Installation of D/C HTLS conductor for enhancement of ampere capacity.	23	D/C	HTLS	Re-conductoring	Own Resources	606.000	-	-	-	-	606.00	2025-26
10	132kV Thatta – Thatta Cement Factory T/Line.	Complete Rehabilitation of line-15km Cairo	15	SDT	Cairo	Upgradation / Remodeling	Own Resources	253.000	-	-	-	-	253.00	2025-26
11	132kV Sujawal – Ladiun T/Line	Complete Rehabilitation of line	38	SDT	Cairo	Upgradation / Remodeling	Own Resources	-	323.000	323.000	-	-	646.00	2027-28
Total			**558.7**		**-**	**-**	**-**	**2,697.601**	**2,311.730**	**1,757.273**	**4,285.445**	**3,653.195**	14,705.24	-

*Partially work completed in Current MYT (FY 2020-21 to FY 2024-25)

**Exchange rate applied at 277.91 PKR per USD as of Dated 22-Nov-2024 for World Bank Funded Projects.

Others

Tentative / Estimated Cost in Million PKR.

Sr. No.	Name of Works	Scope of Work	Funding Source	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	Total New investment
1	Improved O & M *	Supply of goods & equipment including Power Transformers, Circuit Breakers, CT/PT, LAs, 11 kV switch gears, 132 KV T/L material , Testing Sets, Crane, Crane mounted Loaders, Lifters, vehicles with built in iron man hoists, Non Ceramic Composite Insulators.	World Bank**	677.267	-	-	-	-	677.27
2	Technical Assistance *	Trainings	World Bank**	108.385	54.192	-	-	-	162.58
3	Project Implementation And Management Support Consultant *	Hiring Of Project Implementation And Management Support Consultant	World Bank**	242.615	242.615	80.872	-	-	566.10
4	Financing Cost + Project Overhead *	Interest During Construction And Commitment Charges + HESCO Support	World Bank**	456.884	456.884	228.442	-	-	1,142.21
5	GSO Maintenance Material	GSO Maintenance Material / Aug / Ext / O&M	Own Resources	400.000	400.000	400.000	400.000	400.000	2,000.00
6	GSO T&P	GSO T&P	Own Resources	20.000	20.000	20.000	20.000	20.000	100.00
7	Fire Fighting Equipment For Existing System	Fire Fighting Equipment For Existing System	Own Resources	20.000	20.000	20.000	20.000	20.000	100.00
8	Complete facility for AMI System *	30,000 AMR meters - Hyderabad & Laar Circle	World Bank **	248.452	248.452	248.452	-	-	745.35
Total			-	2,173.60	1,442.14	997.77	440.00	440.00	5,493.51

*Partially work completed in Current MYT (FY 2020-21 to FY 2024-25)

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