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DISTRIBUTION INTEGRATED INVESTMENT PLAN 2025-2030

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Section -I
Executive Summary

i. Introduction

Peshawar Electric Supply Company (PESCO), incorporated as a Public Limited Company on 23rd April 1998, is responsible for the delivery of electricity to over 3.52 million consumers of Peshawar, Charsadda, Nowshera, Kohat, Hangu, Karak, Bannu, Lakki Marwat, D.I.Khan, Tank, Mardan, Swabi, Swat, Malakand, Buner, Shangla, Dir (Upper), Dir (Lower), Chitral Upper, Chitral Lower, Kohistan Upper, Kohistan Lower and Kolai Palas districts of Khyber Pukhtunkhwa (KPK), Pakistan as set out in PESCO's Distribution License no. 07/DL/2002, granted by NEPRA under the NEPRA Act on April 04, 2002, as a result of the restructuring of WAPDA's Power Wing, PESCO assumed its official operations and is since then being headed by a Chief Executive Officer (CEO). PESCO pays a power purchase price (in Rs/kWh) for the electricity it procures from the Central Power Purchasing Agency (CPPA) or from other sources on behalf of the CPPA which would include the generation and transmission charges regulated by NEPRA. The major objectives of the company include ensuring uninterrupted and stable power supply to all its customers along with state-of-the-art customer care as well as establishing and operating reliable electricity distribution networks.

Currently, PESCO has 10629 active employees, employed in twelve directorates and is responsible for distributing electricity to approximately 3.52 million consumers. The consumer mix comprises approximately 88.7 % domestic consumers (3.13 million) including residential consumers in both urban and rural areas, 9.8% commercial consumers (0.34 million) including business consumers such as markets, plazas, and offices in both urban and rural areas, 0.71% industrial consumers (0.025 million) consisting of large and small industrial loads,0.02% bulk consumers (730) consisting primarily of large societal consumers like housing societies, 0.64% agricultural consumers (0.022 million) including tube wells in rural areas.

ii. Purpose and Goal of Investment Plan

The Integrated Investment Plan[1]entails PESCO's vision, mission, core values, stakeholders' needs, general indicators, sales and consumer forecasts, power supply issues with 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 that will help PESCO make informed decisions based on priorities.

The goal of the Investment Plan/Business Plan is to create a document which will be used by the CEO and senior managers of PESCO to focus its activities and energies for the next five years in making PESCO a 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 practices worldwide. This plan will also be utilized by the Strategic Planning Committee to the Board for regular monitoring, to ensure that company achieves its stated objectives.

[1] The term Investment Plan or Business Plan will be used interchangeably throughout this document, as NEPRA names the Business Plan as the Investment Plan

This Investment Plan covers a five-year period from 2025-26 to 2029-30, encompassing the following areas:

- Defining the activities and resources available to PESCO through the incorporation agreements and laws relating to it
- Identifying projections of power demand, power resources and population served expected in the time period from 2025-26 to 2029-30.
- Illustrating the strategic objectives for 2025-26 to 2029-30, aligned with optimally achievable scenario as defined by the regulator, which designated coordinators prepared to accomplish the strategic goals in the five-year timeframe of the Investment Plan
- The best and optimally achievable scenarios to demonstrate what is required and what can be achieved keeping in view the resources constraints and realities on ground.
- Projecting the financial impact on PESCO's bottom-line of implementing the project plans

iii. Major Planning Situation

The following challenges faced by PESCO require integrated cross functional planning:

- Technical challenges and technological advances that require PESCO to upgrade the network, including metering to receive and measure continuous and reliable flow of power
- Operational challenges to maintain continuous flow of reliable power to the customers and meet their expectations in demand dominated, load-shedding driven regime
- Institutional challenges faced while developing the capacity of PESCO
- Smooth power evacuation, especially related to variable renewable being integrated in the network
- Compliance with applicable laws and regulations
- Social responsibility to conserve energy and social up-lift

iv. Company's Investment Plan

The five-year Investment Plan (2025-26 to 2029-30) is intended to be used by PESCO managers and the Strategic Planning Committee of the Board of Directors as a reference guide to the upgradation and operations of PESCO, taking into consideration the activities projected to occur in the next five years. Although the Investment Plan is based on a five-year window, it will be a living document and will be updated to reflect changes in requirements.

As per regulatory requirement specified in DIIP formats, two scenarios have been worked out, Best Case Scenario (if implemented, the company will achieve NEPRA standards in five years, comes with a higher cost) and Optimally Achievable Scenario (based on what company can fund, procure and implement realistically, comes with less cost, but compromise on the performance). The Multi Year Tariff (MYT) of PESCO will be based on the Achievable Scenario, and the Best Case is prepared to demonstrate the overall needs of the PESCO to meet the benchmarks specified by NEPRA in five years.

Abstract of the business plan based on the two scenarios is presented hereunder:

Under this five-year plan PESCO will expand and rehabilitate its Transmission and Distribution (T&D) systems. Moreover, plans have been prepared to improve the financial, commercial, human resource and communications functions, including IT that supports the main T&D business. From new grid stations to AMRs for commercial improvements, initiatives have been planned to improve the overall performance of the company in an integrated manner. For details on scope please refer to Section-V of this plan.

Costs Summary:

- Total Cost Best Case: Rs. 282780 million (Including deposit and other cost) in local Currency and USD: 66.82 million in foreign currency.
- Total Cost Optimally Achievable Case: Rs. 121583 million (Including deposit and other cost) in local Currency and USD: 66.82 million in foreign currency.

Benefits Summary:

- Best Case: Savings of 2649 MKWh of energy through loss reduction and smooth dispersal of power from new generation.
- Optimally Achievable Case: Savings of 1000 MKWh of energy through loss reduction and smooth dispersal of power from new generation.

Loss Reduction and Collections Targets:

PESCO will reduce the losses from 41.5% in 2023-24 to 35.5 % by 2029-30. PESCO has attained the collection efficiency of 89 % that will be improved up to 93.9% during the control period.

Section -II
The Company's– Baseline

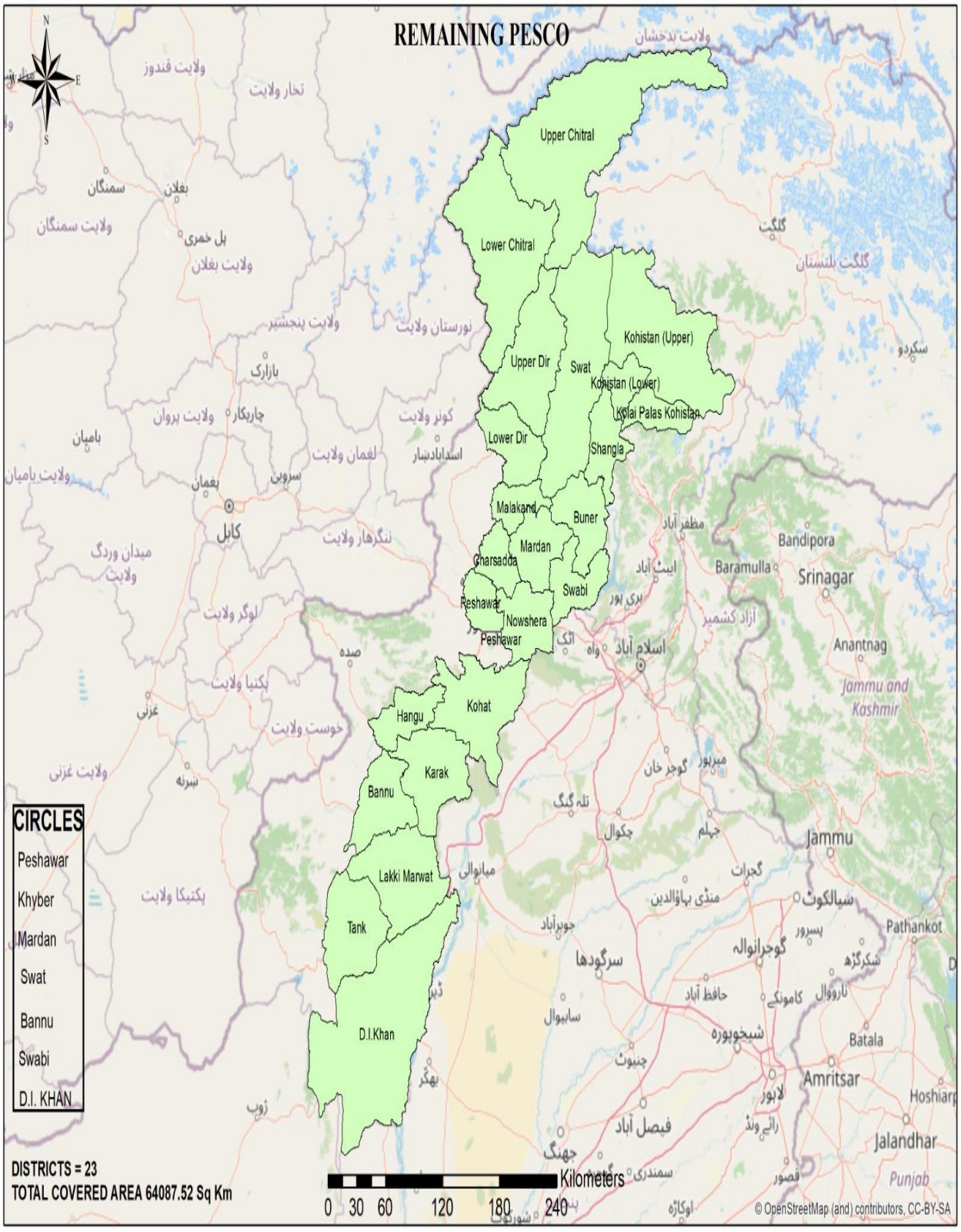
i. General Information

- **History**

Peshawar Electric Supply Company, PESCO, is a Public Limited Utility Company, responsible for the distribution of electric power to the population of KPK. PESCO was incorporated in Pakistan under the Companies Ordinance 1984, on 23rd April 1998, in line with Government policy of unbundling and corporatizing Pakistan's power sector, as a result of restructuring of WAPDA's Power Wing after the enforcement of NEPRA Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997). PESCO's Distribution License No. DL/07/2023 was issued by NEPRA on May 09th, 2023 for the distribution of electric power.

- **Geographic Coverage**

The network facilities of Peshawar Area Electricity Board (PAEB) of WAPDA were transferred to PESCO after its incorporation. PESCO's service area comprises of all the civil districts of KPK, spanning a total service area of 64088 sq.km and 3.52 million consumers.


REMAINING PESCO
Upper Chitral
Lower Chitral
Kohistan (Upper)
Upper Dir
Swat
Kohistan (Lower)
Kolai Palas Kohistan
Lower Dir
Shangla
Malakand
Buner
Mardan
Gharsadda
Swabi
Peshawar
Nowshera
Peshawar
Kohat
Hangu
Karak
Bannu
Lakki Marwat
Tank
D.I.Khan
CIRCLES
Peshawar
Khyber
Mardan
Swat
Bannu
Swabi
D.I. KHAN
DISTRICTS = 23
TOTAL COVERED AREA 64087.52 Sq Km
Kilometers
0 30 60 120 180 240
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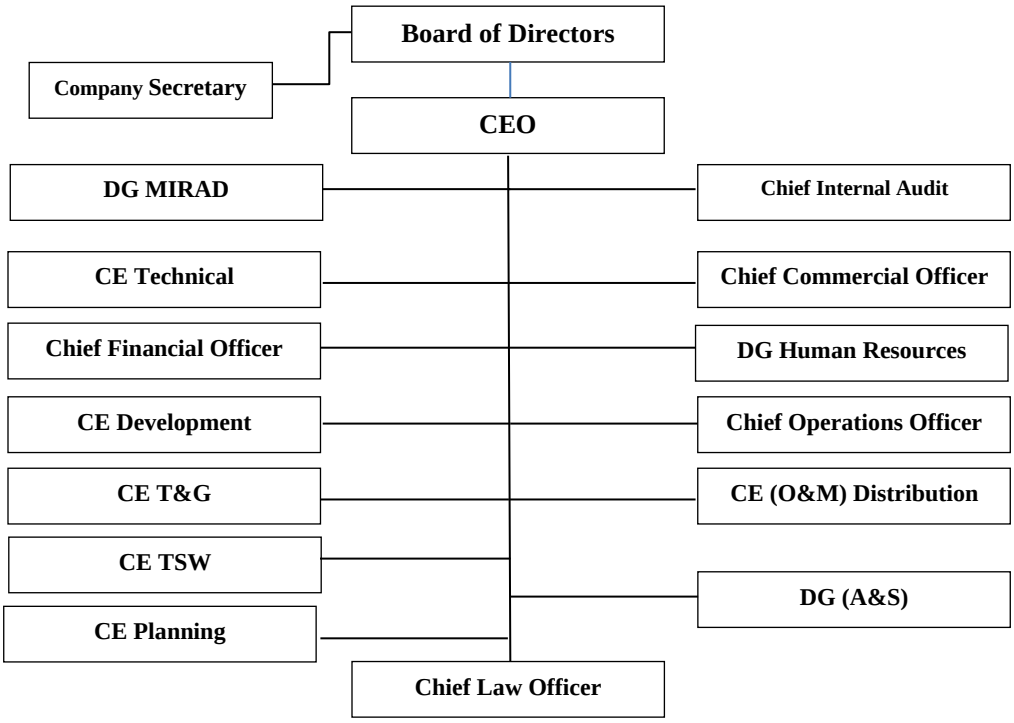
- **Company's Structure, Human Resources and Corporate Governance**

The following organogram explains the management hierarchy of PESCO.
Its Board of Directors is responsible for overall policy making, decision making and guiding the authority. The day-to-day affairs of the company are run by its eight Executive Directors who are responsible for their respective functions, under the overall control of the Chief Executive Officer.



- **Statistical & Financial Information**, including Purchases and Sales of Electricity, losses, and revenue billing and collection depicting the company's financial health is tabulated below:

Description	Units	2019-20	2020-21	2021-22	2022-23	2023-24
Units Received	MkWh	14792	15541	16562	15255	14133.5
Units Sold	MkWh	9043	9608	10355	9549	8803
T & D Losses.	%	38.9	38.2	37.47	37.4	37.71
Revenue Billed	M.Rs.	160484	176074	232629	311975	383863
Revenue Collected	M.Rs.	140798	181274	214420	287306	352826
O & M Cost	**M.Rs.**	**20917**	**25006**	**26406**	**30666**	**38168**
Repair & Maintenance	M.Rs.	788	1177	1039	1018	1350
Salaries/Pensions	M.Rs.	18837	22162	23617	27687	34326
Travelling Expenses	M.Rs.	234	236	283	324	326
Vehicle Expenses	M.Rs.	167	183	203	272	296
Other Expenses	M.Rs.	891	1248	1264	1365	1870

- **General level of Investments:** PESCO has made the following investments excluding consumer contribution in different projects:

(Rs. Min)

Description	2019-20	2020-21	2021-22	2022-23	2023-24
Development of Power	673	1413	1586	1513	1403
Energy Loss Reduction	1033	1570	2412	2738	2172
STG	1219	4008	3200	4095	1601
Total	**2925**	**6991**	**7198**	**8346**	**5176**

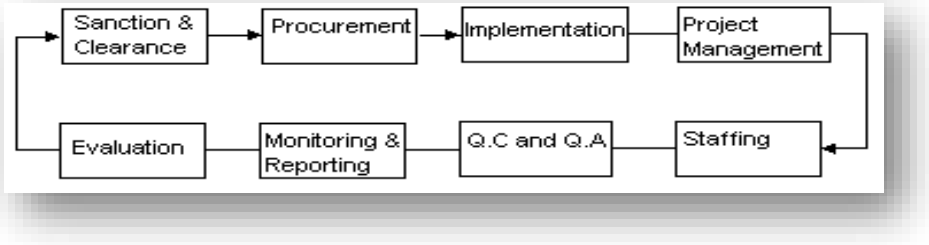
- **Existing Project Design and Implementation System of DISCO**

The project design and implementation system of PESCO is based on the resource allocation (the anticipated amount of material required and obtained for the execution of the project), resource leveling (the required amount of resources to be provided at a proper time e.g, at the start of a phase, more work force and less material may be required as compared to the growth or maturity stage) and resource scheduling/loading (the amount of resources required during the specified phase of the project.

PESCO 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:

- Engineering
- Material Management
- Finance
- Commercial

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



Further, to align its planning department with the current and future needs of the business, PESCO is restructuring its overall planning function.

- **Existing Operation System of DISCO**

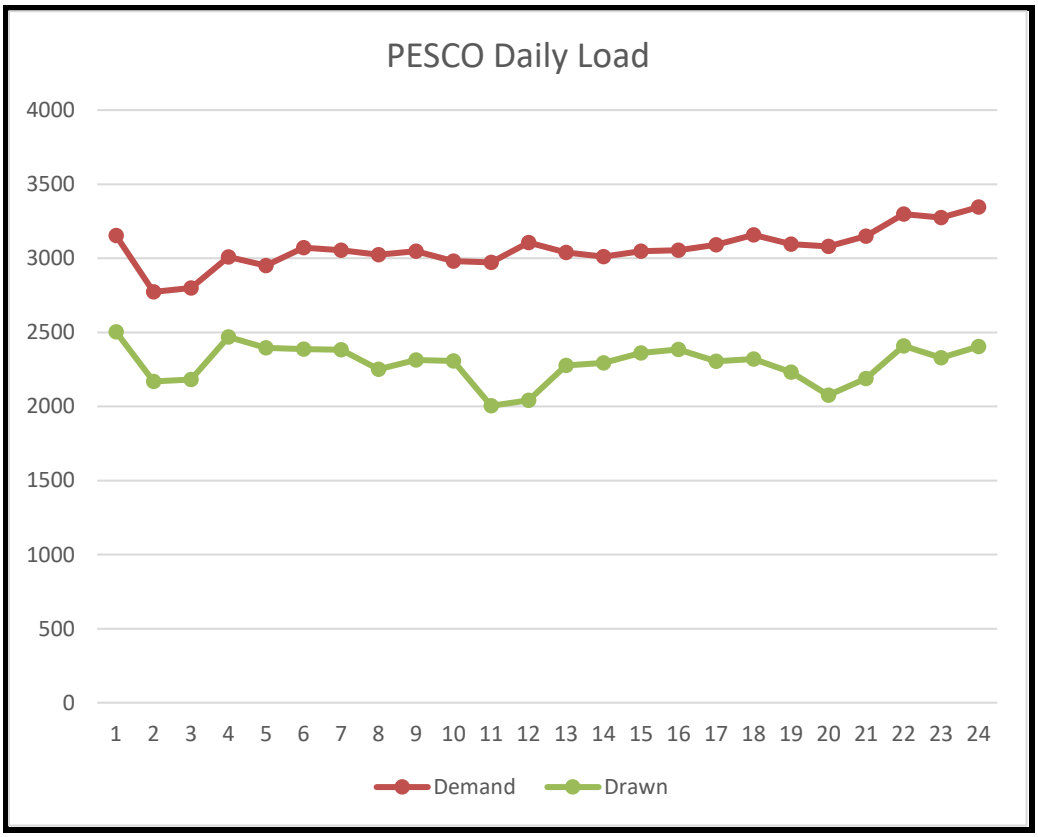
The existing administrative layout of PESCO operation system is given below:

Description	Circles	Divisions	Subdivisions	R.O Office
Distribution	7	32	167	32

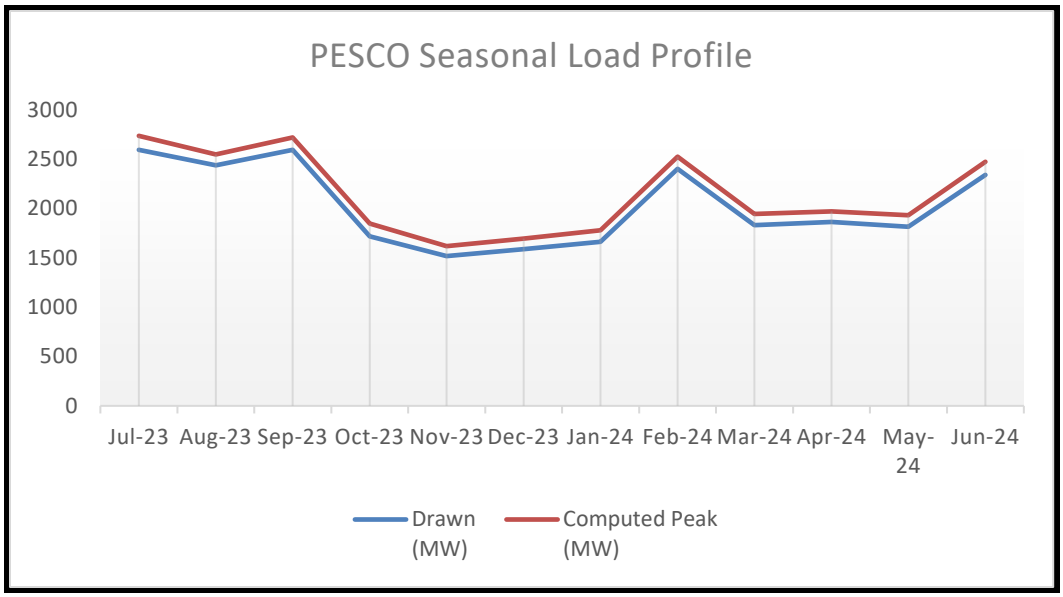
Each Distribution division has one revenue /customer service office. The distribution circles, divisions, customer services offices and subdivisions deal with all types of customers of the company. The Grid System Operation (GSO) circle, divisions and subdivisions take care of and maintain the power supply through 132kV and 66kV systems comprising of the transmission lines and grid stations while the Grid System Construction (GSC) executes 66kV and 132kV grid station and transmission lines works. The Metering and Testing (M&T) section takes care of the installation, maintenance and testing of energy meters of all types. The Construction Section undertakes the implementation and execution of investment programs of 11kV and LT (0.4 kV), System Augmentation Program (ELR and DOP), deposit works and village electrification.

ii. Power Demand and Supply

- **Daily Load Demand**
  Below is the graphical representation of load fed below and computed demand, the difference is the load-shedding:



- **Seasonal Load Profile**
  Below is the graphical representation of load fed below and computed demand, the difference is the load-shedding:



iii. Secondary Transmission and Distribution Network Condition:

PESCO has 83 grid stations of 132 kv, 08 grid stations of 66 kv and 1 grid station of 33 kv, thus making a total of 92 grid stations. PESCO serves 3.52 million customers through 1095 number of distribution feeders with a total length of 31581.9 km of HT Lines and 32243.2 km of LT Lines. The total number of distribution transformers in PESCO is 71442.

iv. Financial Management:

The accounting systems and the corresponding back-office operations of PESCO are legacy based which are not only unable to meet the growing needs of the company but also incapable of providing timely information required for senior management to make effective decisions or properly monitor and control utility operations. The ERP is being implemented; however, all the current processes are run manually. PESCO's cost/revenue centers are dispersed geographically, adding to the delay in reporting. The number and type of financial transactions are complex and diverse, and the data required to manage these transactions quite voluminous.

The system of inventory / material management requires significant manual effort and does not provide real time valuation and status of the inventory. The inventory of PESCO, despite real time updating, is updated periodically for its valuation, thus, weakening the overall internal control system which in turn does not provide timely information for the project costing or project management. The inventory at the warehouse is maintained manually on Microsoft Excel without any use of inventory coding.

Lack of automation in the financial system and its manual integration with billing system results in working capital difficulties for PESCO and delay follow up with banks for cash-in-transit by respective customer service offices.

The PESCO requirement for Operating and Maintenance expenses for the Financial Year 2023-24 was Rs. 39907 million. The brief head-wise detail is provided in the table below:

S. No.	Expense Head	O&M Expense Requirement (Rs. Million)
1	Salaries and Benefits	34326
2	Repair and Maintenance	1350
3	Traveling Expenses	326
4	Vehicle Expenses	296
5	Other Expenses	1870
	Total	**38168**

v. HR Management

PESCO Existing Strength

Number of Employees of PESCO (BPS-1 to BPS-20)		
Officers/Officials	**BPS**	**Number of Employees**
Officers	**20**	**10**
	19	**27**
	18	**116**
	17	**222**
Total (BPS 17 to BPS 20)		**375**
Officials	**16**	**254**
	15	**1008**
	14	**569**
	13	**161**
	11	**1393**
	10	**2**
	9	**2582**
	8	**59**
	7	**3273**
	6	**425**
	5	**24**
	4	**3**
	3	**33**
	2	**13**
	1	**455**
Total (BPS 1 to BPS 16)		**10254**
Grand Total		**10629**

PESCO regularly conducts training and capacity building of its employees largely through self-owned training facilities (CTCs and RTCs) and WAPDA Staff College. The trainings that are mandated by WAPDA for the Officers are conducted at the Staff College while the local training centers organize around fifteen to twenty regular training programs each year for PESCO employees. An average of 3201 numbers of staff trained under various functional and skill-based training programs each year. In the year 2022-23, a total of 3129 employees were trained at the RTC and 72 employees at the WAPDA Staff College. Meanwhile, the budgeted amount spent on these training courses was nearly Rs. 28 million.

PESCO has a total of five training facilities including one RTC and four CTCs to deliver training to the employees. Recently, PESCO has upgraded the RTC and four CTCs of PESCO.

vi. IT-MIS

IT, which is the backbone of the business has significantly improved but still required further scaling.

The table below depicts the IT infrastructure being developed by PESCO by getting assistance from PDP:

Projects	Server	Desktop	Laptop	UPS	Printer	Scanner	LAN	WAN	Other Hardware	Software
ERP/ CIS	8	413	39	415	133	32	778 nodes	46 links	-	Oracle covering Finance, HR and MM modules for ERP & Customer Care and Billing software for CIS
Mobiles for MR	-		-			-	-	-	mobiles	MMR Software
CSC	2	4	-	6	-	-	-	-	-	CMS v 2.2
P&E	1	6	-	7	2	-	8 nodes	-	-	ArcGIS & SynerGEE
AMR	7	181	-	182	176	-	6 nodes	1 link[2]	13,250 AMR meters	MDC Software
LDI[3]	4	6	-	7	1	-	16 nodes	1 link[4]	-	MDC Software
IT Lab at HQ	-	16	-	16	1	-	17 nodes	-	-	-
Intranet Portal Project	3	13	3	13	1	11	24 nodes	44 links	-	-
RTC Lab	1	25	3	2	1	-	26 nodes	-	-	-
Data Center	Racks, UPS, backup systems, fire safety, HVAC, biometric based security, video surveillance, backup generator etc.									
Total Quantity	**23**	**707**	**45**	**691**	**358**	**43**	**875**	**92**	**N/A**	**-**

[2]PDC at PESCO HO is connected with WAPDA House NOC @ 2 Mbps
[3]Servers for LDI and AMR are located at WAPDA House NOC.
[4]AMI at PESCO HO is connected with WAPDA House NOC @ 2 Mbps

vii. Commercial Management

The commercial operations of PESCO were legacy based and did not offer much in terms of transparency, data accuracy, system efficiency and services to consumers. Therefore, there was a dire need to improve commercial procedures and bring them at par with best practices adopted by utilities worldwide. With the vision to improve the overall commercial operations, PESCO implemented an optimal fusion of activities that would be in order to revolutionize the business practices adopted by PESCO which took its commercial operations many steps further.

The old billing system of PESCO was characterized by manual and cumbersome processes, inadequate controls, insufficient commercial focus, limited transparency and a lack of reliable information. Therefore, CIS, which is the critical backbone of customer care and commercial operations, was implemented at selected circles of PESCO.

As far as meter reading process is considered, the orthodox practice was recording the reading and calculating the consumption on customer records (Kalamzu card), transferring this data to the meter reading list, obtaining approval for the compiled readings by operating personnel and then entering the reading and the consumption into the computer which was a time-consuming process leaving little or no time to verify suspect readings. Therefore, data manipulation and transcription errors were common causing the entire process to be highly inefficient with poor internal controls. In response to this, PESCO implemented the IMR initiative under which the process of meter reading was re-engineered, and the role of the MIS directorate was increased to maintain registers electronically, eliminate redundancies and ensure better monitoring methods. The MMR was implemented in different Circles of PESCO.

PESCO has also implemented a large-scale high-end meter replacement program across its territory, with AMR (GSM/GPRS) meters for up to 12,500 high-end residential, agricultural, commercial, and industrial customers having a sanctioned load of more than 20 kW to ensure improved commercial performance, increased revenue (by modernizing PESCO's meter reading) and commercial management processes by reducing losses and saving energy.

The following table illustrates the trend of units purchased from CPPA and subsequent billing to the consumers by PESCO as a whole including HAZECO:

(Units in GWh)

Description	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Units Received from CPPA	14302	14792	15541	16562	15255	14133.5
Units Billed to Customers	9074	9043	9608	10355	9549	8803
Units Lost	5228	5748	5933	6207	5706	5330.5
Losses (%)	36.6	38.9	38.2	37.47	37.40	37.71

The table below gives an illustration of the billing and collection pattern of PESCO as a whole including HAZECO:

(Revenue in Million Rs)

Description	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Revenue Billed to Customers	135418	160628	176816	233591	313486	383863
Revenue Collected from Customers	120003	140798	181274	214420	287306	352826
Revenue Collection (%)	88.6	87.7	103	91.8	91.6	91.9

viii. Internal Control

- **Investment Approval**

  The company has adopted WAPDA procedures and PEPCO approved book of Financial Powers for processing all types of expenditures. The above documents prescribe financial and administrative powers of various offices for different type of expenditures.

  The investment program is categorized into three components: Development of Power, Rehabilitation / Energy Loss Reduction and Secondary Transmission Lines and Grid Stations and now been transformed into the Distribution Integrated Investment Plan (DIIP)/ Business Plan, which also covers other functional areas plans as well.

  The Planning Department under supervision of CEO and Chief Engineer and in consultation with Operation, Finance and other Directorates prepared PC-1s for DOP, ELR, STG and RE. The PC-1s were submitted to Planning Division of GOP after approval of BOD/Authority for final approval from ECNEC and subsequently they were approved. The approved PC-1s are the basis of annual investment. Now DIIP will be utilized for getting regulatory approval first and then taking the desired course of approval, based on funding sources.

- **Internal Audit**

  There are three types of audits conducted in PESCO Internal Audit, Govt. Audit and Audit by a chartered company. Each has different scope and objectives. The internal audit processes of PESCO are governed by the legacy systems which have missed the mark to adequately identify non-compliance with existing procedures such as:

  - Units consumed but consumer not billed
  - Damaged or slow meters
  - Inaccurate meter reading
  - Units billed to nonexistent consumers
  - Failure to monitor accounts with payment arrangements

Under the co-sourcing arrangement, a co-sourcing partner was hired provided assistance to PESCO to implement a risk based audit approach as defined in the new internal audit manual for a period of one year. After a year, the performance of the audit function was evaluated and it was revealed that the internal audit function has significantly improved as the desired controls were established with in the processes. The capacity and capability of the internal audit staff was also increased.

ix. Legal and Contractual Framework

The primary function of PESCO is to distribute electrical power to the residents and industries within its service area.

The important legal and regulatory documents, principal contracts, and laws under which PESCO must operate are:

- The Companies Ordinance 1984
- PESCO Memorandum of Association
- PESCO Articles of Association
- Distribution License 2023
- NEPRA Performance Standard 2022
- Income Tax Ordinance 2001

The Companies Ordinance of 1984 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. According to the Ordinance, PESCO has to follow the Memorandum of Association and Articles of Association.

According to its Memorandum of Association, in April 1998, PESCO was incorporated as a Limited Liability Company with the right to acquire properties and grid stations of WAPDA with the sole purpose of carrying on and expanding the business and supplying electricity to the areas formerly supplied by the Peshawar Area Electricity Board (AEB). Similarly, the Companies Ordnance of 1984 provides a framework of rules and regulations to PESCO, known as its Articles of Association, which cause PESCO to be classified as a Public Limited business and therefore subject to the laws which apply to such corporations.

NEPRA, under the regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (hereinafter NEPRA Act), amended by the act of parliament on 27th April 2018, wherein it has been enacted as this Act shall be called the Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act 2018, is responsible for regulating the electricity sector in Pakistan which includes determining the Revenue Requirement, tariffs and other terms and conditions for the supply of electricity by the Generation, Transmission and Distribution Companies and to recommend the same to the Federal Government for notification. For this purpose, NEPRA has laid down certain guidelines and procedures under the NEPRA Tariff Standards and Procedures Rules, 1998 and subsequent amendments made in the act. This petition is been being filed in the light of updated NEPRA Act, wherein through the act of parliament the wire

business has been separated from the Commercial services of a Distribution Company, the Act has also introduced Market Operator, Electric Power Trader, Electric Power Supplier and also has made amendments to the generation of electricity within the country. This Petition is being filed in compliance of Clause 20 wherein the licensee for electric power distribution has been defined and ACT quotes that "no person shall, except under the authority of a license issued by the Authority under this Act and subject to the conditions specified, engage in the distribution of electric power" and clause 23 (e) wherein the term Electric Power Supply Licensee has been introduced, act states that "no person shall unless license by the Authority under this Act, engage in the supply of electric power to a consumer: provided that the holder of a distribution license on the date of coming in to effect of the Regulation of Generation, Transmission and Distribution of Electric Power (Amendment Act, 2018) shall deemed to hold a license for supply of electric power under this section for a period of 5 years from the said date. In May 2023, NEPRA granted a distribution license to PESCO as per section 21 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997. According to it, PESCO can engage in distribution services and make sales of power to consumers in the Service Territory and the Concession Territory subject to and in accordance with the terms and conditions of the license.

NEPRA also prescribes separate performance standards for generation, transmission and distribution of safe, efficient and reliable electric power to all the consumers.

Additionally, the taxation system is defined by the Income Tax Ordinance of 2001. Like all DISCOs, PESCO has to comply with this Ordinance and file the following returns:

- Annual income tax return
- Monthly sales tax return
- Statement of deductions and calculations
- Monthly withholding tax
- Quarterly advance tax

The following deductions are made by PESCO and are duly submitted to the Government of Pakistan:

- Sales tax
- Withholding tax on sales tax
- Withholding tax on goods
- Withholding tax on sales

Section -III
Forecasts for Next Five Years

Through Power Market Survey (PMS), PESCO prepares the forecast ten years. The forecasts for the period of 2022-23 to 2032-33 are tabulated in this section and attached as **Annex-1**. Additionally, the generation plan is prepared centrally by NTDC that is also attached as **Annex-2.**

i. Consumer Growth by Category

DIIP 1 – Consumer Growth by Category (Nos. of Consumers)

Year	Domestic	Commercial	Industrial	T/ Well	Others	Total
2025-26	122043	12996	883	690	66	136677
2026-27	124736	13200	881	678	66	139561
2027-28	127472	13399	880	668	67	142485
2028-29	131545	13733	889	665	67	146898
2029-30	137994	14316	913	673	70	153965

ii. Energy and Demand Forecasts

DIIP2 – Energy and Demand Forecasts

Category-wise Energy Sales (GWh) – Including Load Shedding

Description	2025-26	2026-27	2027-28	2028-29	2029-30
Domestic	4531.1	4690.7	4950.6	5211.3	5710.6
Commercial	734.2	772.2	826.9	883.9	975.8
Public Lighting	9.9	10.6	10.6	11.4	12.2
Small Industries	57.8	60.0	63.1	66.1	70.7
M&L Industries	2840.9	3289.3	3727.8	4113.1	4343.4
Tube Well	48.6	50.9	54.7	58.5	63.8
Bulk	637.6	661.2	698.4	733.4	781.3
TOTAL	8860.1	9535.0	10332.2	11077.8	11957.8
Growth %	8.7	7.6	8.4	7.2	7.9

Category-wise Energy Sales (GWh) – Excluding Load Shedding

Description	2025-26	2026-27	2027-28	2028-29	2029-30
Domestic	4376.1	4442.2	4514.4	4592.7	4792.6
Commercial	709.1	731.1	753.9	779.0	818.5
Public Lighting	9.9	9.9	9.9	9.9	9.9
Small Industries	55.5	56.2	57.8	58.5	59.3
M&L Industries	2743.6	3114.5	3399.5	3625.2	3645.7
Tube Well	47.1	48.6	50.2	51.7	53.2
Bulk	615.6	626.2	636.9	646.0	655.9

TOTAL	8556.8	9028.8	9422.5	9763.0	10035.0
Growth %	6.3	5.5	4.4	3.6	2.8

Category-wise Demand (MW) – Including Load Shedding

Description	2025-26	2026-27	2027-28	2028-29	2029-30
Domestic	1002.4	1038.2	1095.9	1154.4	1266.2
Commercial	150.5	158.1	169.5	180.9	199.9
Public Lighting	2.3	2.3	2.3	2.3	2.3
Small Industries	11.4	11.4	12.2	12.9	13.7
M&L Industries	443.1	505.4	566.2	620.2	654.4
Tube Well	10.6	11.4	12.2	12.9	13.7
Bulk	74.5	77.5	82.1	85.9	91.2
TOTAL	1560.3	1664.4	1792.8	1914.4	2072.5
Growth %	7.4	6.7	7.7	6.8	8.3

Category-wise Demand (MW) –Excluding Load Shedding

Description	2025-26	2026-27	2027-28	2028-29	2029-30
Domestic	945.4	956.1	971.3	987.2	1004.7
Commercial	139.1	143.6	147.4	152.8	157.3
Public Lighting	2.3	2.3	2.3	2.3	2.3
Small Industries	10.6	10.6	10.6	11.4	11.4
M&L Industries	366.3	423.3	472.7	510.0	539.6
Tube Well	9.9	9.9	10.6	10.6	11.4
Bulk	69.9	71.4	72.2	73.7	74.5
TOTAL	1416.6	1488.1	1556.5	1615.0	1665.9
Growth %	7.5	5.0	4.6	3.8	3.2

iii. Generation Forecast and Power Acquisition Program

Whereas, the Peshawar Electric Supply Company ("PESCO") is currently the deemed Electric Power Supply Licensee in terms of Section 23E of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "Act" amended 2018) as reproduced below: 23E. Electric power supply license. – (1) No person shall, unless licensed by the Authority under this Act, engage in the supply of electric power to a consumer:

"Provided that the holder of a distribution license on the date of coming into effect of the Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018 shall be deemed to hold a license for supply of electric power under this section for a period of five years from such date."

Whereas, as per NEPRA (Electric Power Procurement) Regulations, 2022, PESCO, apart from being deemed "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".

As per Regulation 4 (1) of the said NEPRA (EPPR 2022), each Electric Power Supplier shall be responsible for protecting the security of supply at economic prices for its consumers, by planning in advance power procurement in adequate quantity.

i. Procure sufficient power to meet the demand of its consumers with prudent demand forecasts with the best of available information, to avoid unnecessary under or over procurement.
ii. Adopt adequate power procurement strategy and risk mitigation mechanism; and
iii. Maintain the financial strength and sufficient payment capacity to be considered credit worthy, and timely comply with its power procurement and use of system charges payment obligations.

The Regulation 5 of the EPPR 2022 requires the electric power supply licensee to submit to the Authority an updated business plan demonstrating that the licensee continues to comply with the requirements of prescribed eligibility criteria, the requirements in other applicable documents. The Regulation 5 prescribes the least ingredients of the business plan.
Under Regulation 5(a) & 6 of the said Regulations requires the "supplier of last resort" to provide Power Acquisition Program and new power procurement.

Strategic Directive 5 (a) and (b) of the National Electricity Plan 2023-27

This part of overall Business Plan of PESCO for the period 2022-23 to 2026-27 deals with its obligations under the above mentioned legal / regulatory requirements. For the purposes of guiding principle for security of supply, Strategic Directive 4 (a) and (b) are also reproduced as below:
During the currency of this NE-Plan, IGCEP shall be developed and approved on annual basis. Accordingly, each iteration of IGCEP shall account for the following:
a) Served demand shall be used as basis for the purpose of demand forecast.
b) Government, at any time, may decide to incorporate commercial load management quantum in demand forecast based on:

i. Position and incremental impact on circular debt.
ii. Adjustment in AT&C losses by the Regulator.
iii. XW-DISCOs' preparedness as provided in Strategic Directive 026.

(Note: The Strategic Directive 026 deals with broad contours of the Strategic Roadmap already agreed with the Government of Pakistan, Ministry of Energy (Power Division).
The detailed previous Power Acquisition Plan for the year 2022-23 is attached herewith in **(Annex-3).**
The latest PAP is not yet prepared as the IGCEP is not prepared by the NTDC. Upon the completion, the same will be shared with NEPRA authority for further necessary action.

iv. Other Changes Including Technological Advances

PESCO has introduced technology to improve its financial, commercial and overall business management, which needs to be sustained and scaled-up. Therefore, preparing and implementing DIIP is extremely important.

v. Analysis

As depicted above, the power demand of the customers is growing rapidly, and extensive generation is being added. With overloaded transmission and distribution system, if proper plan like DIIP is not approved, implemented, monitored and closed in-time, then the customers will not get relieved and the whole generation investments can go down the drain.

Section -IV
Next Five Years Goals and Objectives

i. Goals and Objectives Matrix

The goals are long term targets and objectives are medium term targets. The objectives defined by PESCO are SMART i.e., Specific, Measurable, Attainable, Realistic and Timely. The target setting has been done keeping in view what can be **achieved optimally** in the next five years. Table below (DIIP4) lists the goals and objectives for next five year for the company, are prepared by extensive discussions and coordination within PESCO and goals & objectives from initial exercise are placed at **(Annex-4)**

DIIP4 - Goals and Objectives Matrix

PESCO GOALS AND OBJECTIVES

Strategic Goals	Strategic Objectives	Cordinating Directorate(s)	Leading Directorate	Tareget Measurement	2023-24	Final Year Objective 2025-26 to 2029-30					Project Manager	Supporting Plan
						2025-26	2026-27	2027-28	2028-29	2029-30		
1.0 Improve Operational Effeciency	**1.1.a** Reduce technical and comercial losses -Improved HT/LT Ratio -Improved power factor -Improved voltage profile - Reduce average length of HT feeders -AT&C based Investments -Single Phase transformers piloting to hard areas w/o LT - ABC expansion (conversion of bare LT with HT)	P&E, PD Const, PD GSC, MM, Fin, Comm, Ops, MIS	Technical	%age	0.20%	0.2%	0.2%	0.2%	0.2%	0.2%	GM Technical, CE P&E and team	DIIP-Transmission and Distribution Plan
			Commercial	%age	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%		
			Total Losses	**%age of KWh**	**41.50%**	**38.5%**	**38.5%**	**37.5%**	**36.5%**	**35.5%**		

	Strategic Objectives	Cordinating Directorate(s)	Leading Directorate	Tareget Measurement	2023-24	Final Year Objective 2025-26 to 2029-30					Project Manager	Supporting Plan
						2025-26	2026-27	2027-28	2028-29	2029-30		
1.0 Improve Operational Effeciency	**1.1.b** Reduce Comercial Losses	CSD, MIS and Ops	CSD	%age of KWh	This is progressive decreased by % of the commercial loss. Therefore, 4% commercial loss will be reduced	0.80%	0.80%	0.80%	0.80%	0.80%	CSD and his team	DIIP- Commercial Improvement Plan(CIP)
	1.2 Improve SAIDA/SAIFI To meet specified regulatory performance standards	Ops, T&G, O&M Dist, CSD, Technical	O&M Dist	Hours/Numbers	Over Specified Limit of NEPRA	To comply with NEPRA's specified standards						
	1.3 Improve collections to 100%	CSD, Ops, MIS, O&M Dist	CSD	%age billed amount excluding subsidy	89%	91.5%	92.2%	92.8%	93.4%	93.9%		
	1.4 Eliminate fatal & non-fatal accidents	Ops, O&M Dist, MM, HR, Dev, T&G	Operations	No of acidents	in double figures per year	Substational Reduction	Eliminate	Eliminate	Eliminate	Eliminate	DD Safety	DIIP_ Lineman Safety Plan
2.0 Improve Customer Care and Service	**2.1.1** "Soft area" Reduction in billing complaints to less than 1%	Ops, CSD, O&M Dist	CSD	%age of total consumers	More than 10%	Reduction	Reduction	Reduction	<1%	<1%	CSD and his team	DIIP- Commercial Improvement Plan(CIP)
	2.1.2 "Hard area" Reduction in billing complaints to less than 5%	Ops, CSD, O&M Dist	CSD	%age of total consumers	More than 10%	Reduction	Reduction	Reduction	<25%	<10%		
	2.2 Minimize New Connections installation duration	Ops, O&M, Dist, CSD, MM	CSD	No of days	NERPA's guidelines not complied with	To comply with NEPRA's specified standards						
	2.3 Minimize Reconnection installation duration	Ops, O&M, Dist, CSD, MM	CSD	No of days	NERPA's guidelines not complied with	To comply with NEPRA's specified standards						
	2.4 Minimize the redressal time for supply complaints	Ops, MIS, CSD, O&M Dist	MIS	Hours	NERPA's guidelines not complied with	To comply with NEPRA's specified standards						

Strategic Goals	Strategic Objectives	Cordinating Directorate(s)	Leading Directorate	Tareget Measurement	2023-24	Final Year Objective 2025-26 to 2029-30					Project Manager	Supporting Plan
						2025-26	2026-27	2027-28	2028-29	2029-30		
3.0 Improve PESCO's Infrastructure	**3.1 Human-ware**											
	3.1.1 Start Training & capacity building initiatives	HR & All	HR		Legacy training	TNA, Training plans, CPD					HRD and his team	Human Resources Improvement Plan (IIRIP)
	3.1.2 Fulfill the basic requirement for needs to operate for field staff	HR, FIN, Ops, O&M Dist	HR		No comprehensive system in place	LM plan part of the overall DIIP						
	3.2 Orgaware											
	3.2.1 Org A&R review and implementation	HR & All	HR		Not fully implemented	Align org structure with business strategy					HRD and his team	Organizational Improvement Plan(OIP)
	3.2.2 Improve recruitment process	All	HR		Legacy Process	Needs Improvement						
	3.2.3 Conduct yardstick study for Human Resources	All	HR		Yardstick study is obsolete	Yardstick Study to be updated						
	3.2.4 Implement Performance based management system	PR, HR	HR		Legacy system with no implementation	1)Upgrade and implement the existing acelerated promotion policy. 2) Increments based on performance ratings of PER's						
	3.2.5 Improvement in office facilities/work environment	HR & All	HR		Limited/inadequate facilities	Needs Improvement						

Strategic Goals	Strategic Objectives	Cordinating Directorate(s)	Leading Directorate	Tareget Measurement	2023-24	Final Year Objective 2025-26 to 2029-30					Project Manager	Supporting Plan
						2025-26	2026-27	2027-28	2028-29	2029-30		
3.0 Improve PESCO's Infrastructure	**3.3 Technoware**											
	3.3.1 AMI expansion	MIS, Ops, O&M Dist, CSD, P&E	CSD	% of Customers Covered with AMR	Project by PESCO is in process.	AMR/AMI at all 11 KV feeders are installed both on incoming and outgoing. AMR/AMI at consumer level upto 05 kw load will be installed in next five years.					CSD	Commercial Improvement Plan (CIP)
	3.3.2 Expand HHU and meter correction	MIS, Ops, O&M Dist, CSD, P&E	CSD	% of Customers Covered with HHUs	Project by PESCO is in process.	"Soft area" 100% is completed. "Hard area" 90% is completed.					CSD	Commercial Improvement Plan (CIP)
	3.3.3 Replace electromechanical meters with static meters (100%)	Ops, O&M Dist, CSD, P&E	CSD	% of Customers Covered with Static Meters	Project by PESCO is in process.	100% electronic meters					CSD	Commercial Improvement Plan (CIP)
	3.3.4 P&E expansion to GIS Mapping	P&E, MIS, Ops, O&M Dist	P&E		Project by PESCO is in process.	Fully implemented in PESCO					P&E	DIIP
	3.4 Inforware											
	3.4.1 Implement ERP & its rollout	All	IT		Project by PESCO is in process.	Extension of the IT network to support ERP in all circles.					FD	Financial Management Improvement Plan (FMIP)
	3.4.2 Implement CIS & its rollout	CSD, MIS	CSD		Project by PESCO is in process.	Extension to all circles					CSD	Commercial Improvement Plan (CIP)
	3.4.3 Expand intranet portal to PESCO	All	MIS		Deployment at H/Q level	Already deployed and will be improved further in next five years.					MIS	Communication Improvement Plan (CIP)
	3.4.4 Improve communications through email	All	MIS		Paper based communication	Promote e-communication culyure					DGIT	Internal comm. Improvement Plan(ICIP)

Strategic Goals	Strategic Objectives	Cordinating Directorate(s)	Leading Directorate	Tareget Measurement	2023-24	Final Year Objective 2025-26 to 2029-30					Project Manager	Supporting Plan
						2025-26	2026-27	2027-28	2028-29	2029-30		
4.0 Comply with applicable laws and regulation	4.1 Companies Ordinance 1984	FIN, Company Secetary	FIN		–	Study and Compliance Required					All	Create a Library, map all requirements and Make it part of Business Plan
	4.2 Code of Corporate Governance for Public Sector	FIN, Company Secetary	FIN		–							
	4.3 Income Tax Ordinance	Legal, FIN, CSD, MIS	FIN		–							
	4.4 Sales Tax Act	Legal, FIN, CSD, MIS	FIN		–							
	4.5 Electricity Act & rules	Legal, CSD	CSD		_							
	4.6 Theft Ordinance CPC	Ops, Legal	CSD		_							
	4.7 Industrial Relations	HR, Legal	HR		_							
	4.8 Other labor laws	HR, Legal	HR		_							
	4.9 PPRA Rules	Dev, P&E	P&E		_							
	4.10 Distribution Licence	Ops, T&G, P&E, Dev, CSD, FIN	FIN		–							
	4.11 NEPRA Act & Rules	All	FIN		_							
	4.12 Compliance with	Dev	Dev		_							
	4.13 Power Sale Agreement with CPPA	Legal, FIN, CSD, T&G	FIN		–							
5.0 Make PESCO a socially responsible corporate entity	5.3 Campaign for energy conservation	P&E, PR	PR	No of Campaigns	Limited Campaigns	DISCO's wide					Communication Head	Stakeholders Communication Plan

In the above table the goals for PESCO are divided into five major categories (i) Improve operational efficiency (this includes technical (transmission and distribution systems operational efficiency[5]), financial, commercial, human resource, employee safety etc. (ii) Customers Services and Care, (iii) Improve DISCOs Infrastructure (with only top priority projects under the four heads defined that need highest of attention), (iv) Comply with applicable laws and regulations and (v) The initiatives that the DISCO may take to make it more socially responsible corporate entity.

[5] NEPRA Performance Standards (Distribution) Rules, 2005 and Distribution Codes were consulted while preparing these objectives

ii. Rationale for Setting Goals and Objectives and the Planning Criteria for Proposed Investments

The goals and objectives that have been narrated under DIIP-4 were prepared after extensive discussions and coordination efforts within PESCO. These are the targets that PESCO has set, and the projects / initiatives have been identified to meet these set targets. The resources requirements for the best case were far more than the capacity PESCO to fund and execute. Initiatives have been identified and prioritized under the optimally achievable scenario keeping in view, the following factors:

a. The reliable dispersal of power, especially the power that will be injected within PESCO in the next five years, including the variable renewables.
b. Funding availability as PESCO can arrange funding only up to Rs. 121583 million in local currency and 66.82 million USD in foreign currency as required under the achievable scenario and not Rs. 282780 million in local currency and 66.82 million USD in foreign currency as required under best case.
c. Capacity to procure and execute is another constraint that has limited PESCO's capability to implement the achievable scope, not the larger scope envisaged under best scenario developed.
d. Meeting the technical parameters specified in the Grid Code, Distribution code performance standards and consumer service manual.
e. Loss reduction from 41.5% in 2023-24 to 35.5% in 2029-30, the loss improvement potential saturates as the losses are further decreased and improving/maintaining collections.
f. Improving internal controls, faster information availability and quality of data through back-office automation
g. Improving the competencies of the employees and their morale, through training capacity building and incentives
h. Improving corporate brand image by improving internal and external communications
i. Safety of line-staff is a key part of DIIP, includes special focus on LM safety.
j. Return on investment is also considered while planning and prioritizing the interventions.
k. Other objectives (social uplift e.g. village electrification) are part of the plan as well

Section -V
Projects and Programs – Scope

A. Secondary Transmission System

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

PESCO has prepared two Scenarios and the related scope. **Scenario-1** (the Best Case), that if implemented would have completely revamped the transmission network and enabled the DISCOs to achieve the NEPRA's specified Performance Standards Distribution and provision of the Distribution Code, especially the Distribution Planning Code issued by NEPRA.

The company has also prepared a **Scenario-2** (the Optimally Achievable Case) based on its procurement, execution and especially the ability to raise funding. The Multi Year Tariff (MYT) is based on based on the Optimally Achievable Case scope and costs.

The proposed sub–Transmission Lines and Grid Stations works for DISCO also includes the scope for "Deposit Work" and these works are separately identified in the formats below:

- **Load Flow Studies for Best Case and Optimally Achievable Cases**

  This section covers the load flow peak-cases for five years. The assumptions and results of these studies are discussed under this section and detailed plots are referred in the Annexures. Special situation, for instance, integration with Solar Power (large induction) over a specified period in PESCO has been paid special attention in the studies.

  As per NEPRA's guidelines provided in the DIIP formats, PESCO has prepared two Scenarios and the related scope. Scenario-1 (the Best Case), that if implemented will completely revamp the transmission network and enable the DISCOs to achieve the NEPRA's specified Performance Standards Distribution and provision of the Distribution Code, especially the Distribution Planning Code issued by NEPRA.

  Further, the company has also prepared a Scenario-2 (the Optimally Achievable Case) based on its procurement / execution capacity and availability / capacity to raise funding for the investments. Detailed system studies for the future years (based on two scenarios as defined above) have been carried out to determine the justification of the proposed sub-projects in PESCO area under five-year DIIP and to assess their impact on the system transmission network.

  The other objectives of the studies are identification of any reinforcements required with the proposed sub-projects in terms of new lines, new substations transformer addition/augmentation, reactive power compensation and switchgear addition/replacement at the substations, in addition to the already planned/under execution projects in PESCO. The benefits of the proposed sub-projects to the network of PESCO have also been determined through system studies and are discussed below.

Methodology of Analysis – Load Flow Studies

The methodology of system studies/analysis for both scenarios (best and achievable scenarios) is given as under:

i. Under this DIIP, PESCO's network expansion plan including already planned/under-execution projects have been included.
ii. The proposed sub-projects to be implemented have been identified through load flow studies and identified separately.
iii. The complete system model of the National Grid has been simulated, i.e., system network of not only the PESCO but also of NTDC and the neighboring DISCOs have been simulated for the purpose of analysis.
iv. The assumptions on which the system studies are based have been mentioned with necessary details below.
v. Two types of analysis, i.e., load flow and short circuit, have been carried out and their results have been presented in the report.
vi. Load flow analysis has been carried out for the steady state normal system operating condition in order to:
    - Assess adequacy of the network to feed the proposed sub- projects.
    - Determine any additional transmission reinforcement and/or reactive compensation requirement for the scope of work of sub-projects.
    - Justification of proposed projects
    - Determine the benefits of the above proposed works at substations and transmission lines in terms of reduction in transmission losses, improvement in voltage profile, reduction in loading of transmission lines or transformers, spare capacity margin in the transmission system.
vii. Short circuit analysis has been carried out to compute 3-phase and 1-phase short circuit levels at the substations. A comparison between the computed short levels and short circuit rating of the installed switchgear equipment at the existing substations has also been made in the vicinity of the proposed sub-projects in order to assess whether any switchgear equipment is appropriate or will become under-rated after the commissioning of the proposed sub-project(s). Recommendations for under-rated switchgear have also been made where needed, which essentially is replacement, also made part of scope.
viii. Conclusions and recommendations on the basis of technical analyses have been presented at the end.

Assumptions – Load Flow Studies

The load flow studies are based on the following assumptions:

i. Latest PMS load forecast attached as **(Annex-1)**. The diversified values of the peak projected loads on substations, existing and new, have been modeled as per latest PMS load forecast. The loads have been adjusted as per the ratio between PESCO Peak including load shedding and the algebraic sum of recorded individual peaks of the substations of PESCO. This diversified peak is modeled in the load flow cases that helps in identifying scope for transmission lines.
ii. The scope of substation is derived from their individual undiversified peaks separately in excel based models. This scope identified is then modeled in the load flow cases.
iii. Generation expansion plan utilized in the load flow studies is attached at **(Annex-2)**. All the existing as well as the proposed power plants, both in public and private sectors have been assumed in operation in all the study scenarios as per their expected commissioning schedules.

iv. Latest PESCO's planned/on-going transmission expansion/re-enforcement projects, including substations (extension, augmentation, conversion, new), transmission lines have also been simulated in the studies as per their expected commissioning schedules.

Study Criteria– Load Flow Studies

The load flow studies have been carried out keeping in view the following criteria in the PESCO's network:

Best Case

- Voltage Limits: ±5% under normal operating conditions
- The loading of transmission lines and transformers has been kept within 80% of their capacities under normal operating conditions.
- N-1 contingency analysis has been carried out and additional scope to meet that criterion is also simulated.

Optimally Achievable Case

- Voltage Limits: ±5% under normal operating conditions
- The loading of transmission lines and transformers has been kept within 80% of their capacities under normal operating conditions.
- N-1 contingency analysis has not been carried out under this option as it would be requiring further reinforcement in PESCO's transmission network for which PESCO at this stage has no firm financing.

Results of Load Flow Studies

Load flow studies have been carried out with already planned/ongoing projects; and with & without proposed subprojects in 5-year plan to study their impact on the system network.

The year wise Single line diagram of the system showing voltage profile and MW/MVAR flows are attached as **(Annex-5)**.

i. **Year Wise Voltage Profile**
It is evident from the study exhibits that voltage profile will improve and become within permissible limits.

ii. **Year Wise Loading Position** -
Load flow studies have also been carried out for both Best and optimally achievable system scenario with the proposed rehabilitation in form of Conversions, 132 kV Capacitors and New transmission Lines and year wise loading position of Transmission lines are attached as **(Annex-6).**

iii. Reduction In Transmission Losses

Transmission - Loss Reduction				
Year	MW		MKWh	
	Ideal	Realistic	Ideal	Realistic
2025-26	5.92	5.76	28.52	33.30
2026-27	8.0	5.2	38.54	30.06
2027-28	9.70	6.4	46.73	37.00
2028-29	6.5	1.76	31.32	10.18
2029-30	7.4	2.08	35.65	12.03

- **Expansion and Rehabilitation (Best Case) - Scope**
  The scope of Work for Best Case is tabulated here under:

a. Grid Stations (Best Case)

DIIP 5 - Grid Stations (Best Case)

Sr. No	Description	Total No.	Total Capacity (MVA)	2025-26	2026-27	2027-28	2028-29	2029-30
1	**New**							
A	132 KV	21	1372	5	5	4	3	4
2	**Conversion**							
A	66 to 132 KV	3	130	1				2
B	33 to 132 KV							
3	**Augmentation**							
A	132 KV	22	307	13	4	3	2	
B	66 KV							
4	**Extension (Transformer)**							
A	132 KV	14	504	7	3	1	3	
B	66 KV							
5	**Rehabilitation**							
A	132 KV	2		2				
B	66 KV							
	Total	**62**	**2313**	**28**	**12**	**8**	**8**	**6**

a. Transmission Lines (Best Case)

i. New Line (Best Case)

Sr. No.	Description	Total Length (km)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C	211	120	27	34	13	17
2	132 KV SDT	46	30				16

ii. Rehabilitation/Reconductoring/Up-gradation (Best Case)

Sr. No.	Description	Total Length (km)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C	26	6			20	
2	132 KV SDT	218		9	38	70	101
3	132 kV Addl: Ckt / Reconductoring	86			28	15	43

iii. Reconductoring and Rerouting (Best Case)

DIIP 8 – Transmission Lines: Reconductoring and Rerouting (Best Case)

Sr. No.	Description	Total Length (km)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C	Nil					
2	132 KV SDT	Nil					

iv. Capacitor (Best Case)

Sr. No.	Description	Total (MVAR)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV Capacitor						
2	11 KV Capacitor	648	96	262	188	102	

- **Expansion and Rehabilitation (Optimally Achievable Case) - Scope**
  The scope of Work for Achievable Case is tabulated here under:

a. Grid Stations (Optimally Achievable Case)

DIIP 10 - Grid Stations Optimally Achievable Case

Sr. No	Description	Total No.	Total Capacity (MVA)	2025-26	2026-27	2027-28	2028-29	2029-30
1	**New**							
A	132 KV	20	1042	5	5	4	3	3
2	**Conversion**							
A	66 to 132 KV	2	78	1				1
B	33 to 132 KV							
3	**Augmentation**							
A	132 KV	16	223	13	1	2		
B	66 KV							
4	**Extension (Transformer)**							
A	132 KV	13	464	7		1	3	2
B	66 KV							
5	**Rehabilitation**							
A	132 KV	2		2				
B	66 KV							
	Total	**53**	**1807**	**28**	**6**	**7**	**6**	**6**

b. Transmission Lines (Optimally Achievable Case)

i. New Line

DIIP 11 - Transmission Lines (Optimally Achievable): New Line

Sr. No.	Description	Total Length (km)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C	210	120	25	34	15	16
2	132 KV SDT	46	30				16

ii. Rehabilitation/Reconductoring/Up-gradation

DIIP 12 - Transmission Lines (Optimally Achievable): Rehabilitation/Reconductoring/Up-gradation

Sr. No.	Description	Total Length (km)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C	26	6			20	

2	132 KV SDT	100		9	38	19	34
3	132 KV Addl: Ckt	86			28	15	43

iii. Reconductoring and Rerouting

DIIP 13 - Transmission Lines (Optimally Achievable): Reconductoring and Rerouting

Sr. No.	Description	Total Length (km)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C	Nil					
2	132 KV SDT	Nil					

iv. Capacitors

DIIP 14 - Transmission Lines (Optimally Achievable): Capacitors

Sr. No.	Description	Total (MVAR)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV Capacitor						
2	11 KV Capacitor	648	96	262	188	102	

- **Short Circuit Studies**

The computed fault levels have been compared with the short circuit rating of the installed switchgear equipment at the substations to identify any under-rated switchgear in the existing substation.

The maximum short circuit levels have been computed with the following assumptions under IEC 909 standard by setting:

- Transformers tap ratio to unity.
- Line charging to zero.
- Shunt elements to zero under in positive sequence
- Voltage at 1.1 p.u

As per above short circuit study results, following rating of switchgear is recommended while keeping margin for future network expansion:

- 40 kA for 132 kV
- 40 kA for 11 kV, especially for power transformers.

It has been found that the short circuit levels, as a result of the induction of the proposed subprojects, will not increase at the existing substations in their vicinity.

B. Plan for Expansion and Rehabilitation Distribution System – Scope

Under this section, the Expansion and Rehabilitation (two scenarios Best and Optimally Achievable) are presented, and the Status of Study Based Distribution System Planning Based on GIS Mapping and the Rollout Plans are also discussed.

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

PESCO has prepared two Scenarios and the related scope. **Scenario-1** (the Best Case), that if implemented will completely revamp the distribution network and enable the DISCOs to achieve the NEPRA's specified Performance Standards for Distribution and the provisions of the Distribution Code, especially the Distribution Planning Code issued by NEPRA.

PESCO has also prepared a **Scenario-2** (the Optimally Achievable Case) based on its procurement and execution capacity and will make the MYT rate case based on this scenario.

The proposed distribution works for PESCO also includes the scope for "Deposit Works" and "Village Electrification Works" and these works are separately identified in the formats below.

- **Expansion and Rehabilitation (Best Case)**

The table DIIP 15 captures the complete scope under Best Case for distribution system:

DIIP15 - Distribution System (Best Case)

Sr. No.	Description	Unit	Quantities					
			2025-26	2026-27	2027-28	2028-29	2029-30	Total
Scope of Work for 11 kV and Below Expansion								
A.								
1	**Expansion of HT Lines**							
	Number of proposals	Nos	35	37	38	39	39	188
	Length of new HT line	Km	210	222	228	234	234	1128
	Reconductoring	Km	200	211	217	222	222	1072
2	**Transformers**							
	a. 25 KVA	Nos	113	119	125	131	137	624
	b. 50 KVA	Nos	1136	1193	1252	1315	1381	6277
	c. 100 KVA	Nos	1166	1224	1286	1350	1417	6443
	d. 200 KVA	Nos	561	589	619	649	682	3100
	e. others KVA	Nos	0	0	0	0	0	0
	Sub Total		2976	3125	3281	3445	3617	16444
3	**11 KV Capacitors**							
	a. Fixed 450 KVAR	Nos	70	74	76	78	78	376
	b. Fixed 900 KVAR	Nos	0	0	0	0	0	0
	c. Others	Nos	0	0	0	0	0	0
	Sub Total		70	74	76	78	78	376
4	**11 KV Panel**	Nos	35	37	38	39	39	188

5	**11kV 500 MCM Cable**	km	11	11	11	12	12	56
Scope of Work for LT Expansion								
B.								
1	**New LT Lines**							
	Number of proposals	Nos	2976	3125	3281	3445	3617	16444
	Length of new LT line (Total Wasp+ANT)	Km	640	672	705	741	777	3536
	Length of new LT line (Total ABC 70 & 90 mm²)	Km	60	62	66	68	72	328
1 A	**LT Reconductoring**							
	Wasp+ANT+ABC 70 & 90 mm²	Km	259	272	285	300	315	1431
2	**LT Capacitors**							
	a. Different KVARs	Nos	0	0	0	0	0	0
3	**Other Equipment's and Material**							
	a. Single Phase Meters	Nos	194572	204301	214516	225242	236504	1075134
	b. Three Phase AMR Meters	Nos	27796	29186	30645	32177	33786	153591
	c. MDI	Nos	853	895	940	987	1036	4712
	Sub Total	Nos	223221	234382	246101	258406	271326	1233437
Scope of Cost Deposit Work								
C.	**Village Electrification**							
1	**New HT Lines**							
	Length of new HT line	Km	269	283	297	312	327	1488
2	**New LT Lines**							
	Length of new LT line	Km	718	754	791	831	872	3966
3	**Transformers**							
	a. 25 KVA	Nos	115	121	128	135	142	641
	b. 50 KVA	Nos	815	856	899	944	992	4506
	c. 100 KVA	Nos	252	265	279	293	308	1397
	d. 200 KVA	Nos	39	41	44	47	50	221
	e. others KVA	Nos						
	Sub Total		1221	1283	1350	1419	1492	6765
D.	**Independent Feeder**							
1	**New HT Lines**							
	Length of new HT line	Km	60	76	86	95	108	425
2	**New LT Lines**							
	Length of new LT line	Km						
3	**Transformers**							
	a. 25 KVA	Nos						
	b. 50 KVA	Nos						
	c. 100 KVA	Nos						
	d. 200 KVA	Nos						
	e. others KVA	Nos						
	Sub Total							
4	**11 KV Panel**	Nos	23	26	27	28	29	**133**
5	**11KV 500 MCM S/C Cable @ 300 Meter/Feeder**	Km	6.9	7.8	8.1	8.4	8.7	**39.9**

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 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 types of assemblies are selected which is used commonly and estimation for a specific assembly is made separately.

For economical and safety purpose, PC Poles will be utilized along with Steel structure for extension of HT/LT lines in the areas under electrification. The ratio of steel structures and PC' poles will be maintained as 10:90. ACSR and AAC will be used for the purpose of current carrying from the Grid Station to the point of DS/utilization. 25 KVA, 50 KVA, 100 KVA, 200 KVA sizes of Distribution Transformers will be used. Span length of structures and P.C Poles has been worked out according to SDI so as to ensure adequate clearance, safety as well as avoiding obstruction in normal life.

Evaluation of Material Requirements

Scope of material requirements under the Distribution Expansion Project is calculated as per data collected upto 06/2024 and detailed in the following section.

The Expansion BOQs for different DOP measures have been developed as follows:

New 11 KV Switchgear (Control Panels)

11 KV panels to be added according to the following break-up:

Panels for express feeders to be built for Shifting/bifurcation of existing feeders	188 Nos

ACSR Conductors for new express line construction

It is estimated that 188-Nos feeders will require construction of express lines for their bifurcation. On average 6 km of 3-phase HT line will be constructed per feeder based on historical construction data. The overall share of different ACSR conductors in the total of

1128 km of lines is estimated based on historical construction data and the segregate is given as below:

Km Line

Osprey	30%	1128 x 0.30	338.4 Km
Dog	68.33%	1128x 0.6833	770.81 Km
500 MCM	1.66%	1128 x 0.01666	18.79 Km
		Total	1128 Km

Calculation of Material for 11 KV System

(i) 11 kV Line Re-conductoring

Estimated re-conductoring per feeder based on sample studies, works out to be = 5.70 Km

Estimated % share of different Conductors in re-conductoring:

Osprey	14.03%
Dog	63.15%
Rabbit	22.80%

Number of feeders for rehabilitation		188 Nos.
Therefore, total re-conductoring length	188 x 5.70	1071.6 Km

The quantities of ACSR conductors required for re-conductoring are therefore:

Km Line

Osprey	14.03%	1071.6 x .1403	150.40 KM
Dog	63.15%	1071.6 x .6315	676.85 KM
Rabbit	22.80%	1071.6 x .2280	244.35 KM
		Total	1071.60 KM

(ii) Capacitor Applications for Power Factor Improvement

The sample studies indicate that at an average, one capacitor bank of 450 kVAR is needed per feeder for improving the power factor to 95% from existing average power factor of 85% on the selected feeders. For 188 No. 11 kV feeders, requirement of capacitor banks of 450 kVAR will be two numbers for each feeder, therefore, be 376 Nos.

(iii) Augmentation of Over-loaded Transformers

The number of transformers required for replacement against overloading is worked out as follows:

Share of Transformers required for Augmentation.

25 kVA	624	Nos.
50 kVA	6277	Nos.
100 kVA	6443	Nos.
200 kVA	3100	Nos.
	Total: 16444	**Nos.**

(iv) New LT Lines

Each new transformer is estimated to have at least three LT circuits of (235 M). Based on this estimation, the LT line conductor is calculated as follows:

Total LT line required: $\frac{235 \times 16444}{1000}$ = 3864 Km

The final estimated conductor lengths are therefore:

New 3-φ LT line (Wasp)	247 km
New 3-φ LT line (Ant)	3289 km
ABC 4x95 mm²	164 km
ABC 4x70 mm²	164 km

(v) LT Line Reconductoring

The average LT line reconductoring per LT rehabilitation proposal is estimated based on historical as:

3-φ, Wasp conductor line		0.06 km
3-φ, Ant Conductor line		0.007 km
ABC 4x95 mm²		0.01 km
ABC 4x70 mm²		0.01 km
LT line reconductoring (3-φ, Wasp)	16444 x 0.06	987 km
LT line reconductoring (3-φ, Ant)	16444 x 0.007	115 km

ABC 4x95 mm²	16444 x 0.01	164 km
ABC 4x70 mm²	16444 x 0.01	164 km

(vi) Energy Meters

The requirement of energy meters for installation of new meters is estimated as per PMS data. Year wise installation of meters is estimated according to the increase in the growth rate for next five year.

Village Electrification:

- The estimation of scope of work in next five years is based on the historical data of the previous years which was provided by the office of PD (C&O) PESCO.

Dedicated 11-kv Feeders:

- The estimation of scope of work in next five years is based on the historical data of the financial years 2020-21, 2021-22, 2022-23 and 2023-24 which was provided by the office of CE (Planning) PESCO.

Scope of Work for 11 kV and Below Rehabilitation		**unit**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
A.								
1	**Rehabilitation of HT Lines**							
	Number of proposals	Nos	74	74	75	77	77	377
	New Line	Km	444	444	450	462	462	2262
	Reconductoring	Km	422	422	428	439	439	2149
2	**New Transformers**							
	a. 25 KVA	Nos	132	139	146	153	160	729
	b. 50 KVA	Nos	1355	1423	1494	1569	1647	7487
	c. 100 KVA	Nos	1336	1403	1473	1547	1624	7382
	d. 200 KVA	Nos	685	719	755	793	833	3785
	e. others KVA	Nos	0	0	0	0	0	0
	Sub Total		3508	3683	3868	4061	4264	19384
3	**Installation of 11 kV Panels**	Nos	74	74	75	77	77	377
4	**11kV 500 MCM Cable**	Km	22	22	23	23	23	113
Scope of Work for LT Rehabilitation								
B.								
1	**LT Lines Rehabilitation**							
	Length of new LT line (Total Wasp+ANT)	Km	753	792	832	873	917	4168
	Length of new LT line (Total ABC 70 & 90mm²)	Km	70	74	78	82	86	388
	Reconductoring of LT Line	Km	305	320	336	353	371	1686

2	**New 11 KV Lines**							
	Rabbit (Conversion LT Feeders)	Km	702	737	774	812	853	3877
	Insulated Rabbit	Km	74	77	81	85	90	407
	Sub Total		775	814	855	897	942	4284
3	**Other Equipments and Material**							
	a. Single Phase Meters	Nos	186051	195353	205121	215377	226146	1028048
	b. Three Phase AMR Meters	Nos	17897	18791	19731	20717	21753	98890
	c. MDI	Nos	365	383	403	423	444	2018
	Sub Total		204312	214528	225254	236517	248343	1128955

The narrative, assumptions and details explaining the scope above are hereunder:

Methodology for Rehabilitation

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 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 types of assemblies are selected which is used commonly and estimation for a specific assembly is made separately.

For economical and safety purpose, PC Poles will be utilized along with Steel structure for extension of HT/LT lines in the areas under electrification. The ratio of steel structures and PC' poles will be maintained as 10:90. ACSR and AAC will be used for the purpose of current carrying from the Grid Station to the point of DS/utilization. 25 KVA, 50 KVA, 100 KVA, 200 KVA sizes of Distribution Transformers will be used. Span length of structures and P.C Poles has been worked out according to SDI so as to ensure adequate clearance, safety as well as avoiding obstruction in normal life.

Evaluation of Material Requirements

Scope of material requirements under the Distribution Rehabilitation Project is calculated as per data collected upto 06/2024 and detailed in the following section.

The BOQs for different ELR measures have been developed as follows:

New 11 KV Switchgear (Control Panels)

11 KV panels to be added according to the following break-up:

Panels for express feeders to be built for
Shifting/bifurcation of existing feeders 377 Nos

ACSR Conductors for new express line construction

It is estimated that 377-Nos feeders will require construction of express lines for their bifurcation. On average 6 km of 3-phase HT line will be constructed per feeder based on historical construction data. The overall share of different ACSR conductors in the total of 2262 km of lines is estimated based on historical construction data and the segregate is given as below:

Km Line

Osprey	30%	2262 x 0.30		678.6 Km
Dog	68.33%	2262x 0.6833		1545.74 Km
500 MCM	1.66%	2262 x 0.01666		37.68 Km
			Total	2262 Km

Calculation of Material for 11 KV System Rehabilitation

(i) 11 kV Line Re-conductoring

Estimated re-conductoring per feeder based on sample studies, works out to be 5.70 Km
Estimated % share of different Conductors in re-conductoring:

Osprey	14.03%
Dog	63.15%
Rabbit	22.80%

Number of feeders for rehabilitation 377 Nos.

Therefore, total re-conductoring length 377 x 5.7 2149 Km

The quantities of ACSR conductors required for re-conductoring are therefore:

Km Line

Osprey	14.03%	2149 x 0.1403	381.58 KM
Dog	63.15%	2149 x 0.6315	1357.09 KM
Rabbit	22.80%	2149 x 0.2280	489.97KM
			Total 2149 KM

(ii) Capacitor Applications for Power Factor Improvement

The sample studies indicate that at an average, two capacitor banks of 450 kVAR ar needed per feeder for improving the power factor to 95% from existing average power factor of 85% on the selected feeders. For 377 No. 11 kV feeders, the requirement of capacitor banks of 450 Kvar each will, therefore, be 754 Nos.

(iii) Installation of New Transformers

The number of new transformers required for installation is worked out as follows.

Share of Transformers

25 kVA	729	Nos.
50 kVA	7487	Nos.
100 kVA	7382	Nos.
200 kVA	3785	Nos.
	Total: 19384	**Nos.**

(iv) New LT Lines

Each new transformer is estimated to have at least seven LT circuits of (235 M). Based on this estimation, the LT line conductor is calculated as follows:

Total LT line required: $\frac{235 \times 19384}{1000}$ = 4555 Km

The final estimated conductor lengths are therefore:

New 3-φ LT line (Wasp)	291 km
New 3-φ LT line (Ant)	3877 km
ABC 4x95 mm²	194 km
ABC 4x70 mm²	194 km

(v) LT Line Reconductoring

The average LT line reconductoring per LT rehabilitation proposal is estimated based on historical as:

3-φ, Wasp conductor line		0.06 km
3-φ, Ant Conductor line		0.007 km
ABC 4x95 mm²		0.01 km
ABC 4x70 mm²		0.01 km
LT line reconductoring (3-φ, Wasp)	19384 x 0.06	1162.66 km
LT line reconductoring (3-φ, Ant)	19384 x 0.007	135.55 km
ABC 4x95 mm²	19384 x 0.01	193.72 km
ABC 4x70 mm²	19384 x 0.01	193.72 km

(vi) New 11 KV Lines

The final estimated conductor lengths are therefore:

Rabbit (Conversion LT Feeders)	3877 km
Insulated Rabbit	307 km

(vii) Energy Meters

The requirement of energy meters for replacement of defective meters is estimated as per Historic data which is distributed year wise.

- **World Bank Project (Best Case) – Scope**

Compt:	Name of Project	No. of Projects	Type of Projects	Detail
1 (b)	Installation of 11kV capacitor banks	1	Reactive Power Compensation	27x12 MVAR switch shunt capacitors
	Upgradation of 132kV bus bars	1	Bus Bar Upgradation	20 No. 132 kV Grid Stations
	Extension of Power T/Fs	04	Installation of Additional Power T/Fs	Installation of Power T/Fs at existing 132 kV Grid Stations
	Augmentation of Power T/Fs	14	Replacement of Existing 26 MVA T/Fs	Installation of 14x40 MVA Power T/Fs for replacement of 26MVA T/Fs
1 (c)	Reconductoring with HTLS/Greely	4	Replacement of low-capacity conductor	Installation of high-capacity conductor at 4 No. Transmission Lines (49km)
2 (a)	Billing & IT infrastructure	1	Upgradation of existing system	Billing & IT infrastructure improvement
	Transformer Monitoring System	1	Installation of TMS	60 No's 11 kV feeders in Peshawar & Khyber Circles selected for installation of ABC
	Up gradation of PESCO GIS infrastructure	1	GIS mapping	Up gradation to Arc-GIS Enterprise

2 (b)	AMI Meters	1	Installation of AMI Meters	65,000 Meters (5-20kW consumers)
	ABC	1	Installation of ABC	60 No's 11 kV feeders in Peshawar & Khyber Circles (1298 km)
3 (a, b & c)	Technical Assistance	1	Improvement and facilitation of the system, Consultancy Services	Equipment for M&T, T/Fs Workshops, T&P, PPE, IT, vehicles, STG spares, Project Implementation support, Training and capacity building.

- **Installation of APMS (Best Case) – Scope**

Sr. No.	DISCO	General Duty Distribution Transformers		Total	
		100 kVA (Nos.)	200 kVA (Nos.)	Numbers	MVA
1	PESCO	14,092	4,343	18,435	2277.8

Year Wise Breakup of Installation, Testing & Commissioning of APMS Works (Nos)

DISCO	Year 1			Year 2			Year 3			Total
	100 kVA	200 kVA	Sub total	100 kVA	200 kVA	Sub total	100 kVA	200 kVA	Sub total	
PESCO	2818	869	3,687	5,637	1,737	7,374	5,637	1,737	7,374	18,435

- **Expansion and Rehabilitation (Optimally Achievable Case) - Scope**

The table DIIP 16 captures the complete scope under Achievable Case for distribution system:

DIIP16 - Distribution System (Optimally Achievable Case)

Sr. No.	Description	Unit	Quantities					
			2023-24	2024-25	2025-26	2026-27	2027-28	Total
Scope of Work for 11 kV and Below Expansion								
A.								
1	**New HT Lines**							
	Number of proposals	Nos	10	11	11	11	12	55

	Length of new HT line	Km	60	66	66	66	72	330
	HT Reconductoring	Km	57	63	63	63	68	314
2	**Transformers**							
	a. 25 KVA	Nos	10	10	11	11	11	53
	b. 50 KVA	Nos	223	230	237	244	251	1184
	c. 100 KVA	Nos	272	280	289	297	306	1444
	d. 200 KVA	Nos	69	71	73	75	78	366
	e. others KVA	Nos	0	0	0	0	0	0
	Sub Total		574	591	609	627	646	3047
3	**11 KV Capacitors**							
	a. Fixed 450 KVAR	Nos	20	22	22	22	24	110
	b. Fixed 900 KVAR	Nos	0	0	0	0	0	0
	c. Others	Nos	0	0	0	0	0	0
	Sub Total		20	22	22	22	24	110
4	**11 KV Panel**	Nos	10	11	11	11	12	55
5	**11kV 500 MCM Cable**	km	3	3.3	3.3	3.3	3.6	17
Scope of Work for LT Expansion								
B.								
1	**New LT Lines**							
	Number of proposals	Nos	574	591	609	627	646	3047
	Length of new LT line (Total Wasp+ANT)	Km	124	127	131	134	139	655
	Length of new LT line (Total ABC 4*95 + 4*70mm²)	Km	12	12	12	12	12	60
	LT Line Reconducting	Km	50	51	53	55	56	265
2	**LT Capacitors**							
	a. Different KVARs	Nos						
3	**New 11 Kv lines**							
	Conversion LT Feeder	km	115	118	122	125	129	609
	Insulated Rabbit	Km	12	12	13	13	14	64
4	**Other Equipments and Material**							
	a. Single Phase Meters	Nos	128071	130633	133245	137243	144105	673297
	b. Three Phase AMR Meters	Nos	8505	8808	9100	9500	9700	45613
	c. MDI	Nos	101	120	140	155	160	676
	Sub Total		136677	139561	142485	146898	153965	719586
5	**Combing**							
	Meters	Nos	80000	80000	80000	80000	80000	400000
Scope of Cost Deposit Work								
C.	**Village Electrification**							
1	**New HT Lines**							

	Length of new HT line	Km	269	283	297	312	327	1488
2	**New LT Lines**							
	Length of new LT line	Km	718	754	791	831	872	3966
3	**Transformers**							
	a. 25 KVA	Nos	115	121	128	135	142	641
	b. 50 KVA	Nos	815	856	899	944	992	4506
	c. 100 KVA	Nos	252	265	279	293	308	1397
	d. 200 KVA	Nos	39	41	44	47	50	221
	e. others KVA							
	Sub Total	Nos	1221	1283	1350	1419	1492	6765
D.	**Independent Feeder**							
1	**New HT Lines**							
	Length of new HT line	Km	51	57	63	69	75	315
2	**New LT Lines**							
	Length of new LT line	Km						
3	**Transformers**							
	a. 25 KVA	Nos						
	b. 50 KVA	Nos						
	c. 100 KVA	Nos						
	d. 200 KVA	Nos						
	e. others KVA	Nos						
	Sub Total							
4	**11 KV Panel**	Nos	11	14	16	18	20	79
5	**11KV 500 MCM S/C Cable @ 300 Meter/Feeder**	Km	3.3	4.2	4.8	5	6	23.3

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 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 types of assemblies are selected which is used commonly and estimation for a specific assembly is made separately.

For economical and safety purpose, PC Poles will be utilized along with Steel structure for extension of HT/LT lines in the areas under electrification. The ratio of steel structures and PC' poles will be maintained as 10:90. ACSR and AAC will be used for the purpose of current carrying from the Grid Station to the point of DS/utilization. 25 KVA, 50 KVA, 100 KVA, 200 KVA sizes of Distribution Transformers will be used. Span length of structures and P.C Poles has

been worked out according to SDI so as to ensure adequate clearance, safety as well as avoiding obstruction in normal life.

Evaluation of Material Requirements

The scope of material requirements under the Distribution Expansion Project is calculated and detailed in the following section.

The Expansion BOQs for different DOP measures have been developed as follows:

New 11 KV Switchgear (Control Panels)

11 KV panels to be added according to the following break-up:

Panels for express feeders to be built for Shifting/bifurcation of existing feeders	55 Nos

ACSR Conductors for new express line construction

It is estimated that 55-Nos feeders will require construction of express lines for their bifurcation. On average 6 km of 3-phase HT line will be constructed per feeder based on historical construction data. The overall share of different ACSR conductors in the total of 960 km of lines is estimated based on historical construction data and the segregate is given as below:

Km Line

Osprey	30%	330 x 0.30	99 Km
Dog	68.33%	330x 0.6833	225.48 Km
500 MCM	1.67%	330 x 0.0167	5.51 Km
		Total	330 Km

Calculation of Material for 11 KV System

(i) 11 kV Line Re-conductoring

Estimated re-conductoring per feeder based on sample studies, works out to be 5.70 Km

Estimated % share of different Conductors in re-conductoring:

Osprey	14.03%
Dog	63.15%
Rabbit	22.80%

Number of feeders for rehabilitation		55 Nos.
Therefore, total re-conductoring length	55 x 5.7	314 Km

The quantities of ACSR conductors required for re-conductoring are therefore:

Km Line

Osprey	14.03%	314 x 0.1403	44.05 KM
Dog	63.15%	314 x 0.6315	198.29 KM
Rabbit	22.80%	314 x 0.2280	71.59 KM
		Total	314 KM

(ii) Capacitor Applications for Power Factor Improvement

The sample studies indicate that at an average, two number of capacitor banks of 450 kVAR are needed per feeder for improving the power factor to 95% from existing average power factor of 85% on the selected feeders. For 55 No. 11 kV feeders, requirement of capacitor banks of 450 kVAR each will, therefore, be 110 Nos.

(iii) Augmentation of Over-loaded Transformers

The number of transformers required for replacement against overloading is worked out as follows:

Share of Transformers required for Augmentation.

25 kVA	53	Nos.
50 kVA	1184	Nos.
100 kVA	1444	Nos.
200 kVA	366	Nos.
	Total: 3047	**Nos.**

(iv) New LT Lines

Each new transformer is estimated to have at least two LT circuits. Based on this estimation, the LT line conductor is calculated as follows:

Total LT line required = 716 Km

The final estimated conductor lengths are therefore:

New 3-φ LT line (Wasp)	46 km
New 3-φ LT line (Ant)	609 km

ABC 4x95 mm²	30 km
ABC 4x70 mm²	30 km

(v) LT Line Reconductoring

The average LT line reconductoring per LT rehabilitation proposal is estimated based on historical data as follow:

3-φ, Wasp conductor line	183 km
3-φ, Ant Conductor line	21 km
ABC 4x95 mm²	30 km
ABC 4x70 mm²	30 km

(vi) New 11 kv Lines

The final estimated conductor lengths are therefore:

Rabbit (Conversion LT Feeders)	609 km
Insulated Rabbit	64 km

(vii) Energy Meters

The requirement of energy meters for installation of new meters is estimated as per our demand for each year.

Scope of Work for 11 kV and Below Rehabilitation		**unit**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
A.								
1	**Rehabilitation of HT Lines**							
	Number of proposals	Nos	20	20	20	20	21	101
	New 11KV Line	Nos	120	120	120	120	126	606
	Reconductoring	Km	114	114	114	114	120	576
2	**New Transformers**							
	a. 25 KVA	Nos	6	6	6	7	7	32
	b. 50 KVA	Nos	240	247	255	262	270	1274
	c. 100 KVA	Nos	243	250	258	266	273	1290
	d. 200 KVA	Nos	84	87	89	92	95	446
	e. others KVA	Nos	0	0	0	0	0	0

	Sub Total		573	590	608	626	645	3042
3	**Installation of 11 kV Panels**	Nos	20	20	20	20	21	101
4	**11kV 500 MCM Cable**	km	6	6	6	6	6	30
Scope of Work for LT Rehabilitation								
B.								
1	**LT Lines Rehabilitation**							
	New LT Line	Km	135	139	143	147	152	715
	Reconductoring of LT Line	Km	50	51	53	54	56	265
2	**New 11 Kv lines**							
	(Conversion LT Feeders)	Km	115	118	122	125	129	608
	Insulated Rabbit	Km	12	12	13	13	14	64
3	**Other Equipments and Material**							
	a. Single Phase Meters	Nos	140000	142000	145000	147000	150000	724000
	b. Three Phase AMR Meters	Nos	8000	8100	8300	8500	8700	41600
	c. MDI	Nos	80	85	87	91	96	439
	Sub Total	Nos	148080	150185	153387	155591	158796	766039

Methodology for Rehabilitation

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 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 types of assemblies are selected which is used commonly and estimation for a specific assembly is made separately.

For economical and safety purpose, PC Poles will be utilized along with Steel structure for extension of HT/LT lines in the areas under electrification. The ratio of steel structures and PC' poles will be maintained as 10:90. ACSR and AAC will be used for the purpose of current carrying from the Grid Station to the point of DS/utilization. 25 KVA, 50 KVA, 100 KVA, 200 KVA sizes of Distribution Transformers will be used. Span length of structures and P.C Poles has been worked out according to SDI so as to ensure adequate clearance, safety as well as avoiding obstruction in normal life.

Evaluation of Material Requirements

The scope of material requirements under the Distribution Rehabilitation Project is calculated and detailed in the following section.

The BOQs for different ELR measures have been developed as follows:

New 11 KV Switchgear (Control Panels)

11 KV panels to be added according to the following break-up:

Panels for express feeders to be built for Shifting/bifurcation of existing feeders	101 Nos

ACSR Conductors for new express line construction

It is estimated that 101-Nos feeders will require construction of express lines for their bifurcation. On average 6 km of 3-phase HT line will be constructed per feeder based on historical construction data. The overall share of different ACSR conductors in the total of 606 km of lines is estimated based on historical construction data and the segregate is given as below:

Km Line

Osprey	30%	606 x 0.30	181.8 Km
Dog	68.33%	606 x 0.6833	414.07 Km
500 MCM	1.67%	606 x 0.0167	10.12 Km
		Total	606 Km

Calculation of Material for 11 KV System Rehabilitation

(i) 11 kV Line Re-conductoring

Estimated re-conductoring per feeder based on sample studies, works out to be 5.7 Km

Estimated % share of different Conductors in re-conductoring:

Osprey	14.03%
Dog	63.15%
Rabbit	22.80%

Number of feeders for rehabilitation		101 Nos.
Therefore, total re-conductoring length	101 x 5.7	576 Km

The quantities of ACSR conductors required for re-conductoring are therefore:

Km Line

Osprey	14.03%	576 x 0.1403	80.81 KM
Dog	63.15%	576 x 0.6315	363.74 KM

Rabbit	22.80%	576 x 0.2280	131.32 KM
			Total 576 KM

(ii) Capacitor Applications for Power Factor Improvement

The sample studies indicate that at an average, two number of capacitor banks of 450 kVAR are needed per feeder for improving the power factor to 95% from existing average power factor of 85% on the selected feeders. For 101 No. 11 kV feeders, requirement of capacitor banks of 450 kVAr each will, therefore, be 202 Nos.

(iii) Installation of New Transformers

The number of new transformers required for installation is worked out as follows:

Share of Transformers required.

25 kVA	32	Nos.
50 kVA	1274	Nos.
100 kVA	1290	Nos.
200 kVA	446	Nos.
	Total: 3042	**Nos.**

(iv) New LT Lines

Each new transformer is estimated to have at least two LT circuits. Based on this estimation, the LT line conductor is calculated as follows:

Total LT line required = 715 Km

The final estimated conductor lengths are therefore:

New 3-φ LT line (Wasp)	46 km
New 3-φ LT line (Ant)	608 km
ABC 4x95 mm²	30 km
ABC 4x70 mm²	30 km

(v) LT Line Reconductoring

The average LT line reconductoring per LT rehabilitation proposal is estimated based on historical data as follow:

3-φ, Wasp conductor line	183 km

3-φ, Ant Conductor line	21 km
ABC 4x95 mm²	30 km
ABC 4x70 mm²	30 km

(vi) New11 kv Lines

The final estimated conductor lengths are therefore:

Rabbit (Conversion LT Feeders)	608 km
Insulated Rabbit	64 km

(vii) Energy Meters

The requirement of energy meters for replacement of defective meters is estimated as per Historic data which is distributed year wise.

- **World Bank Project (Optimally Achievable Case) – Scope**

Compt:	Name of Project	No. of Projects	Type of Projects	Detail
1 (b)	Installation of 11kV capacitor banks	1	Reactive Power Compensation	27x12MVAR switch shunt capacitors
	Upgradation of 132kV bus bars	1	Bus Bar Upgradation	20 No. 132 kV Grid Stations
	Extension of Power T/Fs	04	Installation of Additional Power T/Fs	Installation of Power T/Fs at existing 132 kV Grid Stations
	Augmentation of Power T/Fs	14	Replacement of Existing 26 MVA T/Fs	Installation of 14x40 MVA Power T/Fs for replacement of 26MVA T/Fs
1 (c)	Reconductoring with HTLS/Greely	4	Replacement of low capacity conductor	Installation of high capacity conductor at 4 No. Transmission Lines (49km)
2 (a)	Billing & IT infrastructure	1	Upgradation of existing system	Billing & IT infrastructure improvement
	Transformer Monitoring System	1	Installation of TMS	60 No's 11 kV feeders in Peshawar & Khyber Circles selected for installation of ABC

	Up gradation of PESCO GIS infrastructure	1	GIS mapping	Up gradation to Arc-GIS Enterprise
2 (b)	AMI Meters	1	Installation of AMI Meters	65,000 Meters (5-20kW consumers)
	ABC	1	Installation of ABC	60 No's 11 kV feeders in Peshawar & Khyber Circles (1298 km)
3 (a, b & c)	Technical Assistance	1	Improvement and facilitation of the system, Consultancy Services	Equipment for M&T, T/Fs Workshops, T&P, PPE, IT, vehicles, STG spares, Project Implementation support, Training and capacity building.

- **Installation of APMS (Optimally Achievable Case) – Scope**

Sr. No.	DISCO	General Duty Distribution Transformers		Total	
		100 kVA (Nos.)	200 kVA (Nos.)	Numbers	MVA
1	PESCO	14,092	4,343	18,435	2277.8

Year Wise Breakup of Installation, Testing & Commissioning of APMS Works (Nos)

DISCO	Year 1			Year 2			Year 3			Total
	100 kVA	200 kVA	Sub total	100 kVA	200 kVA	Sub total	100 kVA	200 kVA	Sub total	
PESCO	2818	869	3,687	5,637	1,737	7,374	5,637	1,737	7,374	18,435

C. Other Functional Improvement Plans:

i. Commercial Improvement Plan

This plan covers the commercial improvement activities including but not limited to metering (including AMRs), Digital Mobile meter reading, improvement in billing systems, anti-theft initiatives, consumer's database update, customer's services improvement initiatives etc. The scope that what will be done in each of the five years are provided here. The narrative shall is supported by justification.

DIIP18 - Commercial Improvement Plan (For Best Case)

Commercial Improvement Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
A	AMR Metering	1742	2236	953	0	0	4932
B	Consumer Census	0	0				0
C	Data Center	2	0				2
D	Email Hosting	1	1				2
E	Billing SMS	6	0				6
F	PITC Addl Services regarding CCMS	18	19	20	22	23	101
G	Creation of 4 New Computer Center	110	0	121	127	0	358
H	Replacement/Extension of Central AC Plant	21					21
I	HHUs/Mobiles for meter reading	25	35	37	40	42	179
J	Apps Analysis, Design, Development and Deployment	15	15	15	15	15	75
K	IBS Technology License Support	20	20	20	20	20	100
L	Service level agreements for Maintenance (SLAs)			25	25	25	75
M	Network (LAN/WAN)	5	5	5	5	5	25
N	Online Payment System	20	8	8	8	8	52
O	Internet and Intranet Connectivity	80	10	10	10	10	120
P	DR Site for Datacenter	300	15	15	15	15	360
Q	Vehicles for visits	15					15
R	Licenses and support	96	0				96
Total		2475	2364	1230	287	163	6519

(For Achievable Case)

Commercial Improvement Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	Data Center	2					2
2	Email Hosting	1					1
3	Billing SMS	6					6
4	Safety SMS	1	1	1	1	1	5
5	PITC Addl Services regarding CCMS	18	19	20	22	23	101
6	Creation of New Computer Center	110		121	127		358
7	Replacement/Extension of Central AC Plant	21					21
8	HHUs/Mobiles for meter reading	23	33	35	38	40	171
9	Apps Analysis, Design, Development and Deployment	15	15	15	15	15	75
10	IBS Technology License Support	20	20	20	20	20	100
11	Network(LAN/WAN)	15	5	5	5	5	35
12	Service level agreements for Maintenance(SLAs)			25	25	25	75
13	Licenses and support	96					96
Total		327	93	243	253	129	1045

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. Additional goals and objectives include:

Please refer to table DIIP-4 for complete mapping of ICIP with goals and objectives. Here are the highlights related to commercial interventions:

- Improving PESCO's operational efficiency through:
    - Reduced commercial losses by 4% progressively over the period of five years.

- Improving customer care and services:
    - Reducing complaints related to billings to less than 0.1%
    - Minimizing new connections installation duration to comply with NEPRA's requirements.
    - Minimizing reconnection installation duration to comply with NEPRA's requirements.

- Maximizing the time between date of receipt of bill and due date (10 days)

- Improving PESCO's infrastructure:
  - Implementing CIS and its rollout to overcome billing errors and ensure more controls over billing through modern technology.

Other related objectives:

- Streamlined procedure without compromising system of internal controls.
- Re-direction of documents on an efficient path to reduce revenue cycle and process cycle time.
- Faster complaint resolution and timely availability of accurate information for better decision making.
- Increased accuracy of billing through reduction of human interface in commercial processes
- Increased efficiency, easy access and administration through an online complaint system

Problem Statement (Baseline-Defined)

The current commercial operations of DISCOs are legacy based and do not offer much in terms of transparency, data accuracy, system efficiency and services to consumers. Therefore, there is a dire need to improve commercial procedures and bring them at par or close to the best practices adopted by utilities worldwide. The commercial cycle starts with meter readings (which is manual), billing (which is being done through a legacy billing system), collections and customers services, which also needs considerable improvements.

Response

As a result of comprehensive planning exercise, PESCO has identified some low cost and quick impact interventions that would transform the way PESCO operates commercially and would bring a paradigm shift in its commercial operations. The ICIP is an optimal fusion of all the activities that would be implemented through the course of five years to revolutionize the business practices adopted by PESCO and take its commercial operations further.

To improve the efficiency and accuracy of the consumer billing process, CIS will be scaled up. The updated consumer database from the consumer census will be utilized to populate the CIS database i.e. through IMR. In addition, the data on electricity consumption, whether received from AMR meters or mobiles for meter reading, will be processed through CIS. This will shorten the meter reading and billing cycle thus ensuring that cash flows hit the ledgers of DISCO much sooner and with less effort. Further, in order to curb potential theft and non-recovery, a surveillance unit will also be set up across the DISCOs that will be responsible to monitor incidents of theft and guard the revenues of the company. This cell will also force the nonpaying consumers to pay their outstanding dues. To achieve excellence in customer services, the Customer Service Centers (CSCs) will be upgraded in each subdivision. These centers will facilitate the consumers and improve the brand image of PESCO in the eyes of the consumers. In conjunction, a Customers Management System (CMS) will be launched all across PESCO, along with a toll-free number where consumers can file their complaints.

All these integrated commercial efforts will create a synergized effect of improving the commercial performance of PESCO and making it a more profitable entity. Therefore, based on the return on investment offered, these projects have been chosen.

Customers Information System (CIS)

The operations of DISCOs are characterized by manual and cumbersome processes, inadequate controls, insufficient commercial focus, limited transparency and a lack of reliable information. As a result, operations are highly inefficient with substantial revenue leakages and poor customer orientation. Integrating and automating core commercial functions like meter reading and billing/collections will minimize the human element in commercial processes and lay the foundation for sustainable revenue cycle reforms.

Integrating and automating core commercial functions like meter reading and billing/collections that will minimize the human element in commercial processes and lay the foundation for sustainable revenue cycle reforms is being planned. From customer care and metering to billing, payments, credit and collections, these applications enable the customer experience and support all aspects of billing and revenue collections. Augmented with mobiles for meter reading, the CIS will generate accurate consumer bills and a one-window customer services facility will provide improved customer experience. This will result in improved operational efficiency, increased accuracy of bills, reduced process cycle time and more efficient customer services with a reduction in customer complaints.

Therefore, CIS, which is the critical backbone of customer care and commercial operations, is being implemented at PESCO and Power Information Technology Company (PITC) at PESCO.

CIS is a web-based application system. The required servers and allied hardware is being provided that has the capacity to cover the entire company's customer base. PITC has developed the CIS application whereas Oracle license for database was purchased by PESCO. The CIS rollout comprises of numerous elements including the application software, database engine, computer hardware and networks (LANs and WANs), network installation and testing, data conversion from legacy system to a new system, data cleansing, pre-installation and on-the-job training, and operational support for a limited time. All these activities will be done by PESCO.

ii. Financial Management Improvement Plan

PESCO is implementing ERP and the costs for ERP implementation are already covered. Further PESCO started work to improve the internal audit function and audit and accounting manuals. Under this plan PESCO envisages to conduct specialized studies like Assets tagging and valuation. Provision for covering the bandwidth operational costs is also made under this DIIP for ERP.

DIIP19 - Financial Management Improvement Plan (For Best Case)

Financial Improvement Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Total	Total	Total	Total	Total	Total
A	ERP system implementation	80.04	74.82	70.47	66.99	70.47	362.79
B	Revamping the Internal Audit						
C	Other studies and models preparation						

D	**IT infrastructure to support new initiatives**						
E	**Others etc…**						
Total		80.04	74.82	70.47	66.99	70.47	362.79

(For Achievable Case)

Financial Improvement Plan Items (Illustrations below)		**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
		Total	**Total**	**Total**	**Total**	**Total**	**Total**
A	**ERP system implementation**	62.64	59.16	56.55	54.81	57.42	290.58
B	**Revamping the Internal Audit**						
C	**Other studies and models preparation**						
D	**IT infrastructure to support new initiatives**						
E	**Others etc…**						
Total		62.64	59.16	56.55	54.81	57.42	290.58

iii. Human Resource Improvement Plan

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. Under this section scope that what will be done in each of the five years under are discussed. The narrative shall also be supported by justification.

DIIP20 - Human Resource Improvement Plan (For Best Case)

HR Improvement Plan Items (Illustrations below)		**FY-2025-26**	**FY-2026-27**	**FY-2027-28**	**FY-2028-29**	**FY-2029-30**	**Total**
		Million Rs.	**Million Rs.**	**Million Rs.**	**Million Rs.**	**Million Rs.**	**Million Rs.**
A	**Training of employees through external training institutions**	33.3	36.6	36.6	36.6	36.6	179.7

B	**Human Resource Information System Implementation**	5.3	6.3	7.6	9.1	10.9	39.2
C	**Conducting the yard stick study**	2.0	2.0	2.0	2.0	2.0	10.0
D	**Any Others Item to be included in HR Improvement plan etc…**						
E	**Hiring Against Vacant Posts**	1023.2	1023.2	1023.2	1023.2	1023.2	5116.0
Total		**1063.7**	**1068.1**	**1069.4**	**1070.9**	**1072.7**	**5344.9**

(For Achievable Case)

HR Improvement Plan Items (Illustrations below)		**FY-2025-26**	**FY-2026-27**	**FY-2027-28**	**FY-2028-29**	**FY-2029-30**	**Total**
		Million Rs.	**Million Rs.**	**Million Rs.**	**Million Rs.**	**Million Rs.**	**Million Rs.**
1	**Training of employees through external training institutions**	33.3	36.6	36.6	36.6	36.6	179.7
2	**Training of employees of Legal Directorate**		1.5	1.5	1.5		4.5
3	**Human Resource Information System Implementation**	5.3	6.3	7.6	9.1	10.9	39.2
4	**Conducting the yard stick study**	2	2	2	2	2	10
6	**Hiring Against Vacant Posts**	880	880	880	880	880	4400
Total		**920.6**	**926.4**	**927.7**	**929.2**	**929.5**	**4633.4**

The Human Resource Improvement Plan (HRIP) broadly aims to increase the functional capacity of DISCO staff by providing the institutional model for technical and behavioral skills among the company's employees. It also aims to increase the productivity and quality of services provided both internally and externally, creating a foundation for sustainable HR operations. Additional goals and objectives include:

Human-ware:

- Improving PESCO's infrastructure:

- Starting training and capacity building initiatives
- Improving the recruitment process
- Fulfilling the basic requirement for needs to operate for field staff
- Improving communications with staff
- Identifying a turnaround group

Org-ware:

- Org A&R review and implementation
- Improving office facilities/work environment
- Conducting yardstick study for HR
- Conducting motivational campaigns
- Career planning
- Improving health and educational facilities for employees

Others:

- Streamlined HR procedure and system of internal controls.
- Increased efficiency and effectiveness of the departments.
- Increased knowledge and skills of staff in their functional areas

The current operations and budgets of DISCOs lack a focus towards the improvement of human resource functions and significantly neglect the skill development of employees which often times is a major contributing factor towards the poor overall performance of the organization. Therefore, there is a dire need to improve human resource functions and bring them at par with best practices adopted by utilities worldwide. As a result of DISCOs' operational audits, which identified some interventions that would transform the way these DISCOs operate and bring a paradigm shift in their human resource functions. The HRIP is an optimal fusion of all the activities that would be implemented through the course of five years to revolutionize the business practices adopted by PESCO and ensure the development of its human capital.

The HRIP offers a holistic approach as it not only targets one of the main goals of the organization, i.e. increased efficiency but also takes the employees' perspective into consideration through improved facilities/work environment. The HRIP starts with striking the heart of human resource development i.e. training and capacity building of the staff. For this purpose, PESCO will begin the process of adequately funding the proper training function by allocating training and development specific budget at two percent of the operating budget and increasing it by almost one percent per year. To be effective, the trainings must be a continuing process that steadily enhance the technical skills and reinforce safe working practices especially amongst the linemen.

All these efforts will create a synergized effect of improving the human resource functions of the DISCO and making it a more profitable entity.

iv. Communications Improvement Plan

This plan 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. Under this section scope of work is provided to be done in each of the five years.

DIIP 22- Communication improvement Plan (For Best Case)

Communications Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Total	Total	Total	Total	Total	Total
A	Improving Internal Communications with Employees	22.5	22.5				45
B	Improving External Communications with Customers	5	5				10
C	Communication material	1	1				2
D	Others etc…						
Total		28.5	28.5				57

(For Achievable Case)

Communications Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Total	Total	Total	Total	Total	Total
A	Improving Internal Communications with Employees	3	3				6
B	Safety Awareness Campaign	4	4	4	4	4	20
C	Improving External Communications with Customers	1	1				2
D	Communication material	1	1				2
E	Others etc…						0
Total		9	9	4	4	4	30

PESCO often receive negative coverage in the local media due to the absence of active communications and media strategy. Moreover, the basic functions of communications are undermined with little or no communications budget. The public relations department lacks the resources, manpower and expertise that prevent PESCO from achieving corporate communication standards and creating a positive image among their consumers. The Communications Improvement Plan (CIP) thus, offers a holistic approach because it not only emphasizes the importance of public awareness and image building initiatives for the DISCO but also the internal communication. Apart

from this, it also focuses on improving the internal communication among staff specially the officer cadre who are involved in the decision making and for the purpose, require immediate access to the information, when and where required.

This plan identified some low-cost interventions that would transform the way PESCO operates their PR department. Frequent consumer awareness campaigns and regular interaction with consumers are few of the highly recommended activities targeting educated and well-informed consumers who are bound to play their role in energy conservation and spread positive messages. In addition, PESCO will allocate a clearly defined budget and resources for consumer awareness activities. The CIP is an optimal fusion of all such activities that would be implemented through the course of five years by PESCO to take its communications and outreach further.

Through the initiatives indicated, the CIP aims to improve PESCO's branding with recognition among local communities and consumers and improved understanding among the young generation regarding their role in energy conservation along with improved corporate communication and increase in the usage of email and telephonic communication amongst PESCO's staff.

All these efforts will create a synergized effect of improving the communications function of the DISCO and making it a corporate entity at par with utilities worldwide. Therefore, based the maximum band for the buck, these projects have been chosen.

A. Internal Communication:

Mail Servers:
Before PESCO 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, PESCO should acquire the basis infrastructure that would help the staff to have affective communication among them. The modes of communication that are needed to be strengthened by PESCO 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, PESCO employees in the officer cadre need to have in their possession, at least an email address to communicate within the boundaries of PESCO 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.

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, PESCO 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 PESCO 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.

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

B. Public Communication & Outreach Activities:

PESCO's Public Relations (PR) Departments comprise one PR officer and two clerical 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 PESCO, better customer services and better-informed customers through a series of outreach campaigns.

I.Mass Media Campaigns

The Public Relations and Customer Services Departments of PESCO will design localized campaigns to target consumers on both energy conservation and the timely payments of bills. These campaigns will help PESCO in its image promotion as a well-run and progressive power distribution company. PESCO staff will be given an opportunity to talk to consumers through radio, TV and newspapers to educate consumers regarding the distribution business of PESCO.

In the long run, these campaigns will result in an improved image of PESCO 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 PESCO.

II.Public Outreach & Awareness Programs

Consumer outreach activities will help build a relationship between PESCO 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 PESCO.

A variety of interventions at schools and colleges will be held including energy conservation seminars, lectures on PESCO's role as a DISCO, debating, essay writing and painting competitions. These will help in the image promotion of PESCO 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 PESCO therefore targeting industrialists, through seminars at the Chamber of Commerce, will spread energy conservation awareness and the effectiveness of energy audits. Speakers from PESCO will be arranged to speak with industrialists on selected topics e.g. energy conservation, better relationships between PESCO 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 PESCO's conservation material in prominent locations.

Farmers, in addition to being important consumers of PESCO, can play a significant role in the conservation of energy through the use of efficient tubewells and legally managing their connections. Improved relationships between farmers and PESCO are the key to discouraging theft and soliciting timely bill payments.

III. Design and printing of Customer Awareness Material

PESCO's corporate image requires steps to be taken for its improvement and to promotion as a DISCO rather than an electricity generation and supply control entity. A localized media campaign will be designed and executed to create awareness among consumers regarding PESCO and energy conservation. Material will include news articles, brochures and leaflets, billboards, pamphlets, local cable advertisements and documentaries. A new corporate tagline (slogan) along with business cards will help introduce a uniform public face of the company at the professional level and will be proposed to PESCO management.

As part of the overall branding campaign, PESCO'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 PESCO's role as a DISCO and the different energy conservation measures they can adopt.

IV. 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. For instance, replacing an incandescent light bulb with an energy saver will help reduce consumption by 50%, resulting in money saving and increased availability of electricity.

V. Radio Talk shows

Talk shows aired through radio are one of the cost effective ways to directly reach the consumers and to tame their minds by talking about the positive developments being carried out by PESCO and showing the positive side of the picture. These talk shows also provide an opportunity to the consumers to take part in the ongoing discussions with the senior officials of PESCO, turn attention to their complaints, or provide their feedback.

VI. Monthly News Letter

Any progressive organization would like to update the society in general and its employees and consumers in particular, in a progressive manner, about the achievement it is making throughout the course of time. Newsletter is an effective matter to get this done. PESCO will publish monthly newsletter that will not only contain the updates about the organization but will also include news, events, articles, consumer feedback and other topics of interest.

Rather than presenting the scope in a table it is narrated and explained below:

A. Internal Communications

For enhancing email internal communication via email, the company will deploy physical IT infrastructure consisting of one Mail Server and associated paraphernalia. In addition, scanners will be provided in all the distinguished offices of PESCO to facilitate email communication. Further, to facilitate swift communication amongst the officers, smart phones will be designated for all the officers enabling them not only to make calls but also to check and respond to the emails on the go.

Apart from investments in the communications technology, PESCO will invest in the human aspect as well by arranging at least one Employee Recognition Event each year. It will be a formal event attended by all the employees of PESCO in which the high achievers will be acknowledged for their services and successes.

B. External Communications

Public Outreach Office of PESCO will be strengthened by provision of a Toyota Hiace for rapid outdoor mobility of staff for performing outreach activities in the field.

At least four mass media campaigns in a year will be arranged within the territory of PESCO, two campaigns will be based on the theme of anti-theft while two will focus energy conservation. These will include publishing advertisement in leading local newspapers and relaying the message using the electronic media: TV, Cable and FM Radio. In addition, billboards, pole streamers and similar mediums will also be utilized to spread the message among the consumers.

Apart from these campaigns, public outreach programs and awareness sessions will be arranged at university, community, and district levels. It is anticipated that at least four sessions per year at each level will be organized to reciprocate the message.

Printed material is an effective way to penetrate within the masses therefore, consumer awareness material will be designed and printed which includes but not limited to brochures, pamphlets, leaflets, flyers etc. In addition, a newsletter will be also published each month.

v. Tools and Vehicles

PESCO 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.

Please refer below for details of Vehicle scope for best and achievable case which are same.

Rs in Million

A&S Improvement Plan (Vehicles)						Total
Description	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	
Field Formations		512	240	410		1162
Safety	24	24	24	24		96
Mirad	50					50
Legal	15	5				20
Security	12					12
Commercial	15					15
Total	**116**	**541**	**264**	**434**		**1355**

The Peshawar Electric Supply Company ("PESCO") has also formulated a Transport Policy in order to reduce its transport related expenditure to an acceptable low level and monetization of transport for its officers.

The objectives of the Policy include:
a) To increase the effectiveness and quality of services rendered by the officers now possessing fuel efficient and reliable vehicles by virtue of this policy.
b) To curtail un-necessary transport expenditure and to restrict I limit the running and maintenance expenditure of these vehicles.
c) To eliminate the misuse of official vehicles.
d) To overcome the shortage of vehicles and drivers.
e) To provide a regular mechanism for replacement of old vehicles with new ones after every five years.
f) To observe the austerity measures regarding monetization of vehicles.

The above framed policy if implemented will impact current implication of vehicles requirements as depicted in above table for next five years.

vi. Employee & Public Safety Improvement Plan

Currently PESCO has serious dearth in Transport, Tools and Personal Protective Equipment for Linemen. Further PESCO operate its safety through Deputy Manager Safety with two safety inspectors, in one research it is concluded that in a well-run power utility its safety personnel ratio to its employees should be 1/250, whereas PESCO has such ratio 1/4000. To improve such ratio PESCO Safety Organization needs restructuring immediately.

In this business plan PESCO 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 and Ravis for supply complaints handling, communication (mobile phones provision for all LM), Linemen equipment and PPEs have been catered with to make PESCO lineman safe, effective and efficient (that includes miscellaneous gang-tools, individual tools, personal protective equipment are planned to be procured). This plans also includes provision for customized trainings for PESCO's LM.

This plan under safety when executed well save PESCO 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. Please refer below for details of best and achievable case.

Best case

S.N	Description of Projects	2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Nos	Nos	Nos	Nos	Nos	Nos
1	Transport (3 door jeep) for visit to sites	2	2	2	2		8
2	Provision of Insulated Bucket fitted vehicle at Circle	20	20	20	20	20	100
3	Provision of Crane Mounted Vehicle 3 ton for field	25	25	25	25	25	125
4	Safety SMS	180000	180000	180000	180000	180000	900000
5	Safety seminars. 1 seminar per month @ Rs 0.025 Mn per seminar	12	12	12	12	12	60
6	Safety Certificate Courses for Safety Directorate and selected employees. NEBOSH, IOSH, LEAD AUDITOR ISO 9001, 45001, 14001 etc.	50	50	50	50	50	250
7	Public Safety Awareness campaign; through Print and Elecronic media (Flexis, posters for field circles)	50	50	50	50	50	250
8	Monthly safety reward & Incentive scheme. Reward for best safety @ Rs 0.010 suggestions, best safety performer. @ 0.010	30	30	30	30	30	150
9	Annual Safety leader award function	10	10	10	10	10	50
10	Purchase of Safety Inspectors field kit	2	2	2	2	0	8
11	IR Camera for location of hot spots in network.	2	2	1	1	1	7
12	Digital Camera for taking pics and making videos at hazard sites and accident sites.	2	2	2	1	1	8
13	Lap top and associated hardware & software for safety Inspectors	2	2	1	0	0	5
14	External audits	1	1	1	1	1	5
15	Annual T&P/PPE Procurment	50	50	50	50	50	250
16	Drone Camera	2	2	1			5
17	CCTV Camera for Grid Stations	20	20	20	20	20	100

Optimally Achievable Case

S.N	Description of Projects	2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Nos	Nos	Nos	Nos	Nos	Nos
1	Provision of Crane Mounted Vehicle 3 ton for field	4	4	4	4	4	20
2	Safety seminars. 1 seminar per month @ Rs 0.025 Mn per seminar	12	12	12	12	12	60
3	Safety Certificate Courses for Safety Directorate and selected employees. NEBOSH, IOSH, LEAD AUDITOR ISO 9001, 45001, 14001 etc.	10	10	10	10	10	50
4	Public Safety Awareness campaign; through Print and Elecronic media (Flexis, posters for field circles)	40	40	40	40	40	200
5	Monthly safety reward & Incentive scheme. Reward for best safety @ Rs 0.010 suggestions, best safety performer. @ 0.010	12	12	12	12	12	60
6	Annual Safety leader award function	5	5	5	5	5	25
7	Purchase of Safety Inspectors field kit	2	2	2	2	0	8
8	Digital Camera for taking pics and making videos at hazard sites and accident sites.	1	1	1	1	0	4
9	Lap top and associated hardware & software for safety Inspectors	2	2	1	0	0	5
10	External audits	1	1	1	1	1	5
11	Annual T&P/PPE Procurement	50	50	50	50	50	250
12	Drone Camera	1	1				2
13	CCTV Camera for Grid Stations	20	20	20	20	20	100

vii. Civil Works:

Civil works for maintenance at grid stations and housing colonies encompass various critical tasks. At grid stations, these civil works typically involve the construction and upkeep of equipment foundations, tower support structures for distribution lines, and ensuring adequate distances from residential areas for safety and efficiency reasons. This includes regular inspections, repairs, and maintenance to ensure uninterrupted electricity supply and the safety of the infrastructure. In housing colonies associated with grid stations, civil works may include the construction of residential facilities, roads, and other infrastructure necessary for the well-being of the personnel working at the station. These works are essential to maintain the functionality and safety of both grid stations and housing colonies, ensuring a reliable power supply and the well-being of those working in these critical facilities. **Best case and achievable cases are the same.**

Sr. No.	Description	Unit	Million					
			2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	**Civil Works**							
	Works	Amount	550.07	600.13	635.14	650.12		2435.46

viii. MIRAD Improvement Plan

Capacity building within the Mirad section encompasses a multifaceted approach to enhance the capabilities of staff. This involves training and skill development to ensure that the team is equipped to efficiently fulfill their responsibilities. Additionally, vehicles play a crucial role in planning and monitoring activities, facilitating field visits, data collection, and timely response to emergencies. Adequate vehicle resources are vital for effective implementation.

Automation is another essential component, streamlining data management and analysis, optimizing decision-making processes, and enhancing the overall efficiency of the section. Beyond this, other activities, such as stakeholder engagement, resource allocation, and performance evaluation, are integral to the Mirad section's successful operation.

The holistic approach to capacity building, combined with the necessary resources and automation, enables the section to carry out its duties effectively and contribute to the overall objectives of the organization. The Mirad improvement plan is the same for both best and achievable case.

Rs in Million

MIRAD Improvement Plan						Total
Description	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	
Capacity Building	30	40	50			120
Automation & Others	20	25	30			75
Total	**50**	**65**	**80**			**195**

ix. Security Plan

(Best Case)

Rs in Million

Sr No	Items	2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	Anti Roit Equipment (Sheild, Helmet, Jackets) Kit	1.6	0.5	0.4	0.4	0.4	3.4
2	CCTV camera and allied material	16.0	4.0	4.0	4.0	4.0	32.0
3	CCTV Consultant	1.4	1.8	1.8	1.9	2.0	8.9
4	Security Training	0.6	0.6	0.6	0.6	0.6	2.9
5	Guns(weapons)	6.0	2.5	2.5	2.5	2.5	16.0
6	Blanks(Rounds)	0.1	0.0	0.0	0.0	0.0	0.2

7	Vehicles	12.0	0.0	0.0	0.0	0.0	12.0
8	Motor Cycle	0.5	0.3	0.3	0.3	0.3	1.5
9	Barbed Wire	2.0	2.0	2.0	2.0	2.0	10.0
Total		**40.2**	**11.7**	**11.6**	**11.7**	**11.8**	**86.9**

(Achievable Case)

Rs in Million

Sr NO	Items	2025-26	2026-27	2027-28	2028-29	2029-30	**Total**
1	Anti Roit Equipment (Sheild, Helmet,Jackets) Kit	0.8	0.3	0.2	0.2	0.2	1.7
2	Security Training	0.3	0.3	0.3	0.3	0.3	1.4
3	Guns(weapons)	6.0	2.5	2.5	2.5	2.5	16.0
4	Blanks(Rounds)	0.0	0.0	0.0	0.0	0.0	0.1
5	Barbed Wire	1.0	1.0	1.0	1.0	1.0	5.0
Total		**8.1**	**4.1**	**4.0**	**4.0**	**4.0**	**24.3**

x. Technical Services Wing (TSW)

(Best and Achievable Case)

TSW Improvement Plan Items (Illustrations below)		**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
		Millions (Rs)				
Capacity building Program						
1	Bid evaluation trainings (Technical + Financial)	0.5	0.5	0.5		
2	Preparation of bidding documents for single stage single envelope procedure, single stage two envelope Procedures	0.5	0.5			
3	Training for Pre-qualification of firms		0.5	0.5		
4	Purchase of Auto cad software for preparation of drawings and designs including trainings		10	0.5		
5	Research & Development		15	10	10	10
Total Cost		**1**	**26.5**	**11.5**	**10**	**10**

xi. Legal Plan

(Best and Achievable)

Legal Improvement Plan for FY 2025-26 to FY 2029-30							
Sr. No.	**Project Description**	**Cost in Millions**					
		2025-26	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
1	Consultancy Hiring for Gap Analysis and need assessment	20					20
2	Digitalization of Legal Documents		5	5			10
3	Software Application for Legal Procedures		1.5	1.5	1.5		4.5
4	Office Accessories (PC etc)	3					3
5	Any other Project based on Consultants Recommendations		2.5	2.5			5
Total Cost		**23**	**9**	**9**	**1.5**		**42.5**

xii. Material Management Plan

(Best and Achievable)

Improvement Plan for FY 2025-26 to FY 2029-30							
Sr No	**Project Description**	**Cost in Millions**					
		2025-26	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
1	**IT Infrastructure Development:** Purchase of Laptops, Printer, UPS (for each store.)	5.32	5.32	1.90			12.54
2	**Improvement of Security of Stores:**	45.4	45.40	31.40	31.40	0.40	154.00
	Installation of Security Cameras along with UPS (All Stores)						
	Construction of Security Pikit at 05 Consignee Stores, 9 No F/Stores						
	05 pikits at each consignee Store						
3	**Infrastructure Development Building & Remodeling**	0.56	0.56	0.56	0.56	0.56	2.80

	Furniture for 14 No. Stores						
4	**Building & Remodeling** Construction of Racks for Material & T&P for 14 No. Stores	2.80	2.80	2.80	2.80	2.80	14.00
Total Cost		**54.1**	**54.08**	**36.66**	**34.76**	**3.76**	**183.34**

Section -VI
Costs and Financing Plan

A. Capital Expenditure and additional Operating Costs for Expansion and Rehabilitation (this section also includes the total cost of DIIP)

x. Details of Costing

The detailed costs of Transmission, Distribution and functional plans is provided hereunder, with more details Annexed.

xi. STG-Expansion and Rehabilitation (Best Case)

a. Grid Stations

DIIP 25 - STG Expansion and Rehabilitation (Best Case): Grid Stations

Rs. In Million

Sr. No	Description	Total Cost	Total Capacity (MVA)	2025-26	2026-27	2027-28	2028-29	2029-30
1	**New**							
a	132 KV	25710	1372	4310	7100	5500	3400	5400
2	**Conversion**							
a	66 to 132 KV	2162	130	262				1900
b	33 to 132 KV							
3	**Augmentation**							
A	132 KV	2850	307		1400	750	700	
B	66 KV							
4	**Extension (Transformer)**							
A	132 KV	2670	504	1020	150	400	1100	
B	66 KV							
5	**Rehabilitation**							
A	132 KV	100		100				
B	66 KV							
	Total	**33492**	**2313**	**5692**	**8650**	**6650**	**5200**	**7300**

b. Transmission Lines (Best Case)

i. New Line

DIIP 26 - STG Expansion and Rehabilitation (Best Case): Transmission Lines (Best Case): New Lines

Rs. In Million

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	T/Line D/C	7620	2260	1680	1980	670	1030
2	T/Line SDT	800	100				700

ii. Rehabilitation/Reconductoring/Up-gradation (Best Case)

DIIP 27 - STG Expansion and Rehabilitation (Best Case): Transmission Lines (Best Case): Rehabilitation/Reconductoring/Up-gradation

Rs. In Million

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C	500				500	
2	132 KV SDT	5680			1200	1920	2560
3.	132 KV Addl: Ckt	2980			990	450	1540

iii. Reconductoring and Rerouting (Best Case)

DIIP 28 - STG Expansion and Rehabilitation (Best Case): Transmission Lines (Best Case): Reconductoring and Rerouting

Rs. In Million

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C						
2	132 KV SDT						
	Total Cost	**Nil**					

iv. Capacitor

DIIP 29 - STG Expansion and Rehabilitation (Best Case): Transmission Lines (Best Case): Capacitor

Rs. In Million

Sr. No.	Description	Total (MVAR)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV Capacitor						
2	11 KV Capacitor	648		220	390	210	

- **STG- Expansion and Rehabilitation (Optimally Achievable Case)**

a. Grid Stations

DIIP 30 - Expansion and Rehabilitation (Optimally Achievable Case): Grid Stations

Rs. In Million

Sr. No	Description	Total Cost	Total Capacity (MVA)	2025-26	2026-27	2027-28	2028-29	2029-30
1	**New**							
a	132 KV	18760	1042	3110	6200	3900	2550	3000

2	**Conversion**							
a	66 to 132 KV	662	78	262				400
b	33 to 132 KV							
3	**Augmentation**							
A	132 KV	800	223		350	450		
B	66 KV							
4	**Extension (Transformer)**							
A	132 KV	2320	464	1020		100	1000	200
B	66 KV							
5	**Rehabilitation**							
A	132 KV	100		100				
B	66 KV							
	Total	**22642**	**1807**	**4492**	**6550**	**4450**	**3550**	**3600**

b. T/Lines (Optimally Achievable Case)

i. New Line

DIIP 31- Expansion and Rehabilitation (Optimally Achievable Case): Transmission Lines (Optimally Achievable Case): New Line

Rs. In Million

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	T/Line D/C	7540	2260	1530	1980	810	960
2	T/Line SDT	800	100				700

ii. Rehabilitation/Reconductoring/Up-gradation

DIIP 32 - Expansion and Rehabilitation (Optimally Achievable Case): Transmission Lines (Optimally Achievable Case): Rehabilitation/Reconductoring/Up-gradation

Rs. In Million

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C	500				500	
2	132 KV SDT	2680			1200	620	860
3	132 KV Addl: Ckt	2980			990	450	1540

iii. Reconductoring and Rerouting

DIIP 33 - Expansion and Rehabilitation (Optimally Achievable Case): Transmission Lines (Optimally Achievable Case): Reconductoring and Rerouting

Rs.In Million

Sr. No.	Description	Total Cost	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV D/C						
2	132 KV SDT						
	Total Cost	**Nil**					

iv. Capacitor

DIIP 34- Expansion and Rehabilitation (Optimally Achievable Case): Transmission Lines (Optimally Achievable Case): Capacitor

Sr. No.	Description	Total (MVAR)	2025-26	2026-27	2027-28	2028-29	2029-30
1	132 KV Capacitor						
2	11 KV Capacitor	648		220	390	210	

xii. Distribution System-Expansion and Rehabilitation (Best Case)

DIIP35 - Distribution System Expansion and Rehabilitation (Best Case)

Sr. No.	Description	Rs. In Million					
		2025-26	2026-27	2027-28	2028-29	2029-30	Total
Cost of Work for 11 kV and Below Expansion							
A.							
1	**Expansion of HT Lines**						
	New Line	874	924	949	974	974	4697
	Reconductoring	412	436	448	460	460	2215
	Sub Total	**1286**	**1360**	**1397**	**1434**	**1434**	**6912**
2	**Transformers**						
	a. 25 KVA	55.2	58.0	60.8	63.9	67.1	304.96
	b. 50 KVA	774.3	813.1	853.7	896.4	941.2	4278.76
	c. 100 KVA	1146.5	1203.8	1264.0	1327.2	1393.5	6334.95
	d. 200 KVA	1083.4	1137.6	1194.5	1254.2	1316.9	5986.63
	e. others KVA						
	Sub Total	**3059.4**	**3212.4**	**3373.0**	**3541.7**	**3718.8**	**16905.3**

3	**11 KV Capacitors**						
	a. Fixed 450 KVAR	11	12	12	13	13	61
	b. Fixed 900 KVAR						
	c. Others						
	Sub Total	**11**	**12**	**12**	**13**	**13**	**61**
4	**11 KV Panels**	**86**	**91**	**93**	**96**	**96**	**461**
5	**11 kV 500 MCM Cable**	**31**	**33**	**34**	**35**	**35**	**168**
Cost of Work for LT Expansion							
B.							
1	**New LT Lines**						
	New LT line	1313.804	1379.495	1448.469	1520.893	1596.938	7259.599
	Reconductoring	370.796	389.336	408.803	429.243	450.705	2048.88
	Sub Total	**1684.6**	**1768.831**	**1857.272**	**1950.136**	**2047.643**	**9308.479**
2	**LT Capacitors**						
	a. Different KVARs						
3	**New 11 KV Lines**						
	Conversion LT Feeders	931.140	977.697	1026.581	1077.910	1131.806	5145.134
	Insulated Rabbit	9.499	9.974	10.473	10.997	11.547	52.490
4	**Other Equipments and Material**						
	a. Single Phase Meters	881.412	925.483	971.757	1020.345	1071.362	4870.36
	b. Three Phase AMR Meters	458.635	481.566	505.645	530.927	557.473	2534.25
	c. MDI	28.907	30.353	31.870	33.464	35.137	159.73
	Sub Total	**1368.954**	**1437.402**	**1509.272**	**1584.735**	**1663.972**	**7564.335**
Total A(1-5)+B(1-4)		**8469**	**8902**	**9313**	**9742**	**10151**	**46577**
Other charges (Store, installation, escalation, contingency etc)		4270.73	4489.923	4696.818	4913.566	5118.736	23489.77
Total DOP Cost		**12740**	**13392**	**14010**	**14656**	**15270**	**70067**
Cost of Cost Deposit Work							

C.	**Village Electrification**						
1	**New HT Lines**						
	New HT line	**73.2**	**76.9**	**80.7**	**84.7**	**89.0**	**404.5**
2	**New LT Lines**						
	New LT line	**145.4**	**152.7**	**160.3**	**168.3**	**176.8**	**803.5**
3	**Transformers**						
	a. 25 KVA	42.8	45.0	47.6	50.2	52.8	238.5
	b. 50 KVA	460.7	483.8	508.1	533.6	560.7	2546.9
	c. 100 KVA	204.1	214.7	226.0	237.3	249.5	1131.6
	d. 200 KVA	68.6	72.1	77.4	82.6	87.9	388.5
	e. others KVA						
Sub Total		**776.1**	**815.6**	**859.1**	**903.8**	**950.9**	**4305.5**
Total Cost C (1-3)		**995**	**1045**	**1100**	**1157**	**1217**	**5513**
Other charges (Store, installation, escalation etc.)		429	450	474	499	524	2377
Total Cost of Project		**1424**	**1495**	**1574**	**1656**	**1741**	**7890**
D.	**Independent Feeder**						
1	**New HT Lines**						
	New HT line	**254.7**	**323.0**	**365.5**	**406.6**	**455.1**	**1804.9**
2	**New LT Lines**						
	New LT line	Nil	Nil	Nil	Nil	Nil	Nil
3	**Transformers**						
	a. 25 KVA						
	b. 50 KVA						
	c. 100 KVA						
	d. 200 KVA						
	e. others KVA						
	Sub Total						
4	**11 KV Panel**	**56.3**	**63.7**	**66.1**	**68.6**	**71.0**	**325.8**
5	**11KV 500 MCM S/C Cable @ 300 Meter/Feeder**	**20.5**	**23.2**	**24.1**	**25.0**	**25.9**	**98.2**
Total Cost D (1-5)		**331.6**	**409.9**	**455.7**	**500.2**	**552.1**	**815.9**
Other charges (Store, installation, escalation etc.)		142.8	176.7	196.4	215.5	237.9	351.6
Total Cost of Project		**474.4**	**586.6**	**652.1**	**715.7**	**790.0**	**1167.5**

Cost of Work for 11 kV and Below Rehabilitation

Sr.	Description	Rs. In Million					
A.		2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	**Rehabilitation of HT Lines**						
	New Line	1849	1849	1874	1924	1924	9418
	Reconductoring	872	872	884	907	907	4442
	Sub Total	**2721**	**2721**	**2758**	**2831**	**2831**	**13860**
2	**New Transformers**						
	a. 25 KVA	65	68	71	75	78	356
	b. 50 KVA	924	970	1018	1069	1123	5104
	c. 100 KVA	1314	1379	1448	1521	1597	7259
	d. 200 KVA	1323	1389	1459	1531	1608	7310
	e. others KVA						
	Sub Total	**3625**	**3806**	**3996**	**4196**	**4406**	**20028**
3	**Fixed 11 KV 450 KVAR**	**24**	**24**	**24**	**25**	**25**	**123**
4	**Installation of 11 kV Panels**	**181**	**181**	**184**	**189**	**189**	**924**
5	**11kV 500 MCM Cable (km)**	**66**	**66**	**67**	**69**	**69**	**337**
Cost of Work for LT Rehabilitation							
B.							
1	**LT Lines Rehabilitation**						
	New LT Line	1549	1626	1707	1793	1882	8557
	Reconductoring of LT Line	437	459	482	506	531	2415
	Rabbit (Conversion LT Feeder)	1109	1164	1222	1284	1348	6127
	Sub Total	**3095**	**3249**	**3412**	**3582**	**3761**	**17099**
2	**Other Equipment's and Material**						
	a. Single Phase Meters	843	885	929	976	1024	4657
	b. Three Phase AMR Meters	295	310	326	342	359	1632
	c. MDI	12	13	14	14	15	68

	Sub Total	1150	1208	1268	1332	1398	6357
Total A (1-5) + B (1-2)		10862	11255	11709	12223	12679	58728
Other charges (Store, installation, escalation etc.)		5477	5676	5905	6165	6394	29618
Total ELR Cost		16339	16931	17614	18388	19073	88346

Note:
The details of other charges are mentioned below:

1. **12% Store Charges**
2. **8% Installation Charges**
3. **5% dismantling Charges**
4. **Miscellaneous @1%**
5. **Authority Supervisory Charges 0.5%**
6. **Contingency @5%**
7. **Escalated Cost @ 13% (It is requested to the authority that it should be based on NCPI)**

xiii. Cost of World Bank Project (Best Case)

Compt:	Name of Project with Detail	Cost ($ Million)
1 (b)	27x12 MVAR switch shunt capacitors	4.74
	Upgradation of 132kV Bus Bars at 20 No. G/Ss	1.31
	Extension of Power T/Fs with 40 it MVA at 4 No. G/Ss	3.53
	14 No. Augmentation of 26 MVA Power T/Fs with 40MVA	9.49
1 (c)	Reconductoring with HTLS/Greely 04 No. T/Lines (49km)	4.01
2 (a)	Billing & IT infrastructure Upgradation	2.80
	Installation of Transformer Monitoring System (TMS) at 60 No's 11 kV Feeders in Peshawar & Khyber Circles	2.68
	Up gradation of PESCO GIS infrastructure to Arc-GIS Enterprise	3.74
2 (b)	65,000 AMI Meters Installation (5-20kW consumers)	6.50
	ABC installation 60 No's Feeders in Peshawar & Khyber Circles (1298 km)	12.20

3 (a)	Technical Assistance (Equipment for M&T, T/Fs Workshops, T&P, PPE, IT, vehicles etc.)	9.53
3 (b)	Training & Capacity Building	0.45
3 (c)	Project Implementation Support	2.00
Sub Total		62.99
A	IDC	3.34
B	Price Contingency	1.89
C	Physical Contingency	1.89
D	Project Overhead (PESCO Support)	3.34
Total		**73.44**

ANNUAL BREAKDOWN AND AMOUNT TO BE SPENT ON PROJECT

USD Million

Comp:	Description	2024-25	2025-26	2026-27	Total Cost($)
1	11 kV Capacitors, 132 kV Bus Bars, Extension / Augmentation of PTF & Reconductoring of 132 kV T/Lines	2.356	15.564	8.223	26.1446
2	IT Infrastructure, APMS, GIS Mapping, AMI Meters & ABC installation	2.787	18.406	9.741	30.9344
3	Technical Assistance (Equipment for M&T, T/Fs Workshops, T&P, PPE, IT, vehicles Consultancy, etc.)	1.476	9.749	5.135	16.3609
Total		**6.62**	**43.72**	**23.4**	**73.44**

xiv. Cost of Installation of APMS (Best Case)

Project Installation of APMS	**Year 1**	**Year 2**	**Year 3**	**Total cost of Project (Rs. Million)**
PESCO	1,831	3,812	4,040	9,683

xv. Distribution System- Expansion and Rehabilitation (Optimally Achievable Case)

DIIP36 - Distribution System Expansion and Rehabilitation (Optimally Achievable Case)

Sr. No.	Description	Rs. In Millions					
		2025-26	2026-27	2027-28	2028-29	2029-30	Total
Cost of Work for 11 kV and Below Expansion							
A.							
1	**Expansion of HT Line**						
	New HT line	250	274.81	275	275	300	1374
	Reconductoring	118	129.61	130	130	141	648
	Sub Total	**368**	**404.42**	**405**	**405**	**441**	**2022**
2	**Transformers**						
	a. 25 KVA	4.9	5.0	5.2	5.3	5.5	25.93
	b. 50 KVA	152.0	156.6	161.3	166.1	171.1	807.02
	c. 100 KVA	267.4	275.5	283.7	292.2	301.0	1419.89
	d. 200 KVA	133.3	137.3	141.4	145.6	150.0	707.47
	e. others KVA						
	Sub Total	**557.6**	**574.3**	**591.5**	**609.3**	**627.6**	**2960.3**
3	**11 KV Capacitors**						
	a. Fixed 450 KVAR	3	3.58	4	4	4	18
	b. Fixed 900 KVAR						
	c. Others						
	Sub Total	**3**	**3.58**	**4**	**4**	**4**	**18**
4	**11 KV Panel**	**24**	**26.95**	**27**	**27**	**29**	**135**
5	**11kV 500 MCM Cable**	**9**	**9.82**	**10**	**10**	**11**	**49**
Cost of Work for LT Expansion							
B.							
1	**New LT Lines**						
	New LT line (Total Wasp+ANT+ABC)	253.4	261.0	268.8	276.9	285.2	1345.3
	Reconductoring	71.5	73.7	75.9	78.1	80.5	379.7
	LT Feeders Conversion	181.4	186.9	192.5	198.3	204.2	963.2
	Sub Total	**506.3**	**521.5**	**537.2**	**553.3**	**569.9**	**2688.3**
2	**LT Capacitors**						
	a. Different KVARs	Nill	Nill	Nill	Nill	Nill	Nill
3	**Other Equipments and Material**						
	a. Single Phase Meters	580.2	591.8	603.6	621.7	652.8	3050.0

	b. Three Phase AMR Meters	425.3	440.4	455	475	485	2280.7
	c. MDI	5.1	6.0	7.0	7.8	8.0	33.8
	Sub Total	**1010.5**	**1038.2**	**1065.6**	**1104.5**	**1145.8**	**5364.5**
4	**Combing**						
	Sub total	**330**	**330**	**330**	**330**	**330**	**1650**
Total of A(1-5) + B(1-4)		**2809**	**2909**	**2969**	**3042**	**3158**	**14887**
Other charges (Store, installation, escalation etc.)		1416	1467	1497	1534	1593	7508
Total DOP Cost		**4225**	**4376**	**4466**	**4576**	**4751**	**22395**
Cost of Cost Deposit Work							
C.	**Village Electrification**						
1	**New HT Lines**						
	New HT line	**73.2**	**76.9**	**80.7**	**84.7**	**89.0**	**404.5**
2	**New LT Lines**						
	New LT line	**145.4**	**152.7**	**160.3**	**168.3**	**176.8**	**803.5**
3	**Transformers**						
	a. 25 KVA	42.8	45.0	47.6	50.2	52.8	238.5
	b. 50 KVA	460.7	483.8	508.1	533.6	560.7	2546.9
	c. 100 KVA	204.1	214.7	226.0	237.3	249.5	1131.6
	d. 200 KVA	68.6	72.1	77.4	82.6	87.9	388.5
	e. others KVA						
Sub Total		**776.1**	**815.6**	**859.1**	**903.8**	**950.9**	**4305.5**
Total Cost C (1-3)		**994.7**	**1045.1**	**1100.1**	**1156.8**	**1216.6**	**5513.4**
Other charges (Store, installation, escalation etc.)		442.3	464.9	489.9	515.2	541.4	2453.6
Total Cost of Project		**1437**	**1510**	**1590**	**1672**	**1758**	**7967**
D.	**Independent Feeder**						
1	**New HT Lines**						
	New HT line	**174.3**	**191.1**	**212.4**	**233.7**	**255.1**	**1066.6**
2	**New LT Lines**						
	New LT line	Nil	Nil	Nil	Nil	Nil	Nil
3	**Transformers**						
	a. 25 KVA						
	b. 50 KVA						
	c. 100 KVA						
	d. 200 KVA						

	e. others KVA						
	Sub Total						
4	**11 KV Panel**	**26.9**	**34.3**	**39.2**	**44.1**	**49**	**193.5**
5	**11KV 500 MCM S/C Cable @ 300 Meter/Feeder**	**9.8**	**12.5**	**14.3**	**14.9**	**17.9**	**69.3**
Total Cost D(1-5)		**211.1**	**237.9**	**265.9**	**292.7**	**321.9**	**1329.5**
Other charges (Store, installation, escalation etc.)		128.9	145.1	162.1	179.3	197.1	812.5
Total Cost of Project		**340**	**383**	**428**	**472**	**519**	**2142**

Note:
The details of other charges are mentioned below:

1. **12% Store Charges**
2. **8% Installation Charges**
3. **5% dismantling Charges**
4. **Miscellaneous @1%**
5. **Authority Supervisory Charges 0.5%**
6. **Contingency @5%**
7. **Escalated Cost @ 13% (It is requested to the authority that it should be based on NCPI)**

Cost of Work for 11 kV and Below Rehabilitation (Rs. In Millions)							
A.		**Rs. In Millions**					
1	**Rehabilitation of HT Lines**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
	New line	500	500	500	500	525	2523
	Reconductoring	236	236	236	236	247	1190
	Sub Total	**736**	**736**	**736**	**736**	**772**	**3713**
2	**New Transformers**						
	a. 25 KVA	2.9	3.0	3.1	3.2	3.3	15.6
	b. 50 KVA	163.6	168.5	173.6	178.8	184.1	868.5
	c. 100 KVA	238.9	246.1	253.5	261.1	268.9	1268.5
	d. 200 KVA	162.2	167.1	172.1	177.3	182.6	861.3
	e. others KVA						
	Sub Total	**567.7**	**584.7**	**602.3**	**620.3**	**638.9**	**3013.9**
3	**11 KV Capacitors**						

	a. Fixed 450 KVAR	6.5	6.5	6.5	6.5	6.8	32.9
	b. Fixed 900 KVAR						
	c. Others						
Sub Total		**6.5**	**6.5**	**6.5**	**6.5**	**6.8**	**32.9**
4	**Installation of 11 kV Panels**	**49.0**	**49.0**	**49.0**	**49.0**	**51.4**	**247.4**
5	**11kV 500 MCM Cable**	**18**	**18**	**18**	**18**	**19**	**90**
Cost of Work for LT Rehabilitation							
B.							
1	**LT Lines Rehabilitation**						
	New LT Line	253.0	260.5	268.4	276.4	284.7	1343.0
	Reconductoring of LT Line	71.4	73.5	75.7	78.0	80.4	379.0
	Rabbit (Conversion LT Feeders+ Insulated Rabbit)	328.8	338.7	348.9	359.3	370.1	1745.8
Sub Total		**653.2**	**672.7**	**693**	**713.7**	**735.2**	**3467.8**
2	**Other Equipment's and Material**						
	a. Single Phase Meters	634.2	643.2	656.8	665.9	679.5	3279.7
	b. Three Phase AMR Meters	400	405	415	425	435	2080
	c. MDI	4	4.25	4.35	4.56	4.79	21.96
	Sub Total	**1038.2**	**1052.5**	**1076.2**	**1095.4**	**1119.2**	**5381.6**
Total Cost A(1-5)+B(1-2)		**3068**	**3119**	**3180**	**3238**	**3343**	**15947**
Other charges (Store, installation, escalation etc.)		1547	1572	1604	1633	1685	8043
Total ELR Cost		**4615**	**4691**	**4784**	**4871**	**5028**	**23990**

Note:
The details of other charges are mentioned below:

1. **12% Store Charges**
2. **8% Installation Charges**
3. **5% dismantling Charges**
4. **Miscellaneous @1%**
5. **Authority Supervisory Charges 0.5%**
6. **Contingency @5%**
7. **Escalated Cost @ 13% (It is requested to the authority that it should be based on NCPI)**

xvi. Cost of World Bank Project (Optimally Achievable Case)

Compt:	Name of Project With Detail	Cost ($ Million)
1 (b)	27x12MVAR switch shunt capacitors	4.74
	Upgradation of 132kV Bus Bars at 20 No. G/Ss	1.31
	Extension of Power T/Fs with 40MVA at 4 No. G/Ss	3.53
	14 No. Augmentation of 26 MVA Power T/Fs with 40MVA	9.49
1 (c)	Reconductoring with HTLS/Greely 04 No. T/Lines (49km)	4.01
2 (a)	Billing & IT infrastructure Upgradation	2.80
	Installation of Transformer Monitoring System (TMS) at 60 No's 11 kV Feeders in Peshawar & Khyber Circles	2.68
	Up gradation of PESCO GIS infrastructure to Arc-GIS Enterprise	3.74
2 (b)	65,000 AMI Meters Installation (5-20kW consumers)	6.50
	ABC installation 60 No's Feeders in Peshawar & Khyber Circles (1298 km)	12.20
3 (a)	Technical Assistance (Equipment for M&T, T/Fs Workshops, T&P, PPE, IT, vehicles etc.)	9.53
3 (b)	Training & Capacity Building	0.45
3 (c)	Project Implementation Support	2.00
Sub Total		62.99
A	IDC	3.34
B	Price Contingency	1.89
C	Physical Contingency	1.89
D	Project Overhead (PESCO Support)	3.34
Total		**73.44**

ANNUAL BREAKDOWN AND AMOUNT TO BE SPENT ON PROJECT

USD Million

Comp:	Description	2024-25	2025-26	2026-27	Total Cost
1	11 kV Capacitors, 132 kV Bus Bars, Extension / Augmentation of PTF & Reconductoring of 132 kV T/Lines	2.356	15.564	8.223	26.1446
2	IT Infrastructure, APMS, GIS Mapping, AMI Meters & ABC installation	2.787	18.406	9.741	30.9344
3	Technical Assistance (Equipment for M&T, T/Fs Workshops, T&P, PPE, IT, vehicles Consultancy, etc.)	1.476	9.749	5.135	16.3609
Total		**6.62**	**43.72**	**23.4**	**73.44**

xvi. Cost of Installation of APMS (Optimally Achievable Case)

Project Installation of APMS	**Year 1**	**Year 2**	**Year 3**	**Total cost of Project (Rs. Million)**
PESCO	1,831	3,812	4,040	9,683

B. Capital Expenditure and Additional Operating Costs for Other Functional Improvement Plans:

Summary of Capital and Operational Expenditure Costs

The Scope and Cost of Functional Plans for best case is same which is mentioned below.

DIIP37 - Summary of Capital and Operational Expenditure Costs

(For Best Case)

Support Plan Total						
Year	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
Commercial	2475	2364	1230	287	163	6518.66
HR	1064	1068	1069	1071	1073	5344.90
Safety	2362	2362	2359	2358	2334	11775.00
Civil	550	600	610	625	650	3035.00
MM	54	54	37	35	4	183.34
Finance	80.04	74.82	70.47	66.99	70.47	362.79
Operation	2049	2280	2830	1248	1400	9806.50
A&S	749	823	906	996	1095	4569.00
TSW	1	27	12	10	10	59.00
Security	40	12	12	12	12	86.92
MIRAD	100	65	80			245.00
Communications	29	29				57.00
Legal	38	21	16	3	0	77.00
Sub Total	**9590**	**9778**	**9230**	**6711**	**6811**	**42120**
Escalation 13%	1246.7	1271.1	1199.9	872.5	885.4	5475.6
Total after Escalation	10837	11049	10430	7584	7696	47596
Contigency 5%	541.8	552.4	521.5	379.2	384.8	2379.8
G. Total	**11379**	**11601**	**10951**	**7963**	**8081**	**49976**

Commercial Improvement Plan

Commercial Improvement Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
A	**AMR Metering**	1742	2236	953	0	0	4932
C	**Consumer Census**	0	0				0
D	**Data Center**	2	0				2
E	**Email Hosting**	1	1				2
F	**Billing SMS**	6	0				6

G	**PITC Addl Services regarding CCMS**	18	19	20	22	23	101
H	**Creation of 4 New Computer Center**	110	0	121	127	0	358
I	**Replacement/Extension of Central AC Plant**	21					21
J	**HHUs/Mobiles for meter reading**	25	35	37	40	42	179
K	**Apps Analysis, Design, Development and Deployment**	15	15	15	15	15	75
L	**IBS Technology License Support**	20	20	20	20	20	100
M	**Service level agreements for Maintenance(SLAs)**			25	25	25	75
N	**Network(LAN/WAN)**	5	5	5	5	5	25
	Online Payment System	20	8	8	8	8	52
	Internet and Intranet Connectivity	80	10	10	10	10	120
	DR Site for Datacenter	300	15	15	15	15	360
O	**Vehicles for visits**	15					15
P	**Licenses and support**	96	0				96
Total		**2475**	**2364**	**1230**	**287**	**163**	**6519**

Finance Improvement Plan

Financial Improvement Plan Items (Illustrations below)		**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
		Total	**Total**	**Total**	**Total**	**Total**	**Total**
A	**ERP system implementation**	80.04	74.82	70.47	66.99	70.47	362.79
B	**Revamping the Internal Audit**						
C	**Other studies and models preparation**						
G	**IT infrastructure to support new initiatives**						
F	**Others etc…**						
Total		80.04	74.82	70.47	66.99	70.47	362.79

Costing of Human Resource Improvement Plan (Best Case)

HR Improvement Plan Items (Illustrations below)		FY-2025-26	FY-2026-27	FY-2027-28	FY-2028-29	FY-2029-30	Total
		Million Rs.	Million Rs.	Million Rs.	Million Rs.	Million Rs.	Million Rs.
A	Training of employees through external training institutions	33.3	36.6	36.6	36.6	36.6	179.7
B	Human Resource Information System Implementation	5.3	6.3	7.6	9.1	10.9	39.2
C	Conducting the yard stick study	2.0	2.0	2.0	2.0	2.0	10.0
D	Any Others Item to be included in HR Improvement plan etc…						
E	Hiring Against Vacant Posts	1023.2	1023.2	1023.2	1023.2	1023.2	5116.0
Total		1063.7	1068.1	1069.4	1070.9	1072.7	5344.9

Costing of Communications Improvement Plan

Communications Plan Items (Illustrations below)	2025-25	2026-27	2027-28	2028-29	2029-30	Total
Improving Internal Communications with Employees	22.5	22.5				45
Improving External Communications with Customers	5	5				10
Communication material	1	1				2
Others etc…						0
Total	28.5	28.5		0		57

Costing of Tools and Vehicles

Sr. No.	Description	Cost (In Million)					
		2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	Vehicles	749	823	906	996	1095	4569
Grand Total		749	823	906	996	1095	4569

Costing of Employee & Public Safety Improvement Plan

S.N	Description of Projects	2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Million Rs					
1	Transport (3 door jeep) for visit to sites	24	24	24	24		96
2	Provision of Insulated Bucket fitted vehicle at Circle	600	600	600	600	600	3000
3	Provision of Crane Mounted Vehicle 3 ton for field	750	750	750	750	750	3750
4	Safety SMS	1	1	1	1	1	5
5	Safety seminars. 1 seminar per month @ Rs 0.025 Mn per seminar	0.3	0.3	0.3	0.3	0.3	1.5
6	Safety Certificate Courses for Safety Directorate and selected employees. NEBOSH, IOSH, LEAD AUDITOR ISO 9001, 45001, 14001 etc.	8	8	8	8	8	40
7	Public Safety Awareness campaign; through Print and Elecronic media (Flexis, posters for field circles)	20	20	20	20	20	100
8	Monthly safety reward & Incentive scheme. Reward for best safety @ Rs 0.010 suggestions, best safety performer. @ 0.010	0.3	0.3	0.3	0.3	0.3	1.5
9	Annual Safety leader award function	1	1	1	1	1	5
10	Purchase of Safety Inspectors field kit	0.3	0.3	0.3	0.3	0.3	1.5
11	IR Camera for location of hot spots in network.	3	3	1.5	1.5	1.5	10.5
12	Digital Camera for taking pics and making videos at hazard sites and accident sites.	1	1	1	1	1	5
13	Lap top and associated hardware & software for safety Inspectors	1	1	0.5	0	0	2.5
14	External audits	0.8	0.8	0.8	0.8	0.8	4
15	Annual T&P/PPE Procurment	900	900	900	900	900	4500

16	Drone Camera	1	1	0.5			2.5
17	CCTV Camera for Grid Stations	50	50	50	50	50	250
Total		**2362**	**2362**	**2359**	**2358**	**2334**	**11775**

Costing of MIRAD Improvement Plan

MIRAD Improvement Plan						Total
Description	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	
Capacity Building	30	40	50			120
Automation & Others	20	25	30			75
Vehicles for MIRAD	50					50
Total	**100**	**65**	**80**			**245**

Costing of Security

Sr NO	Items	2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	Anti Roit Equipment (Sheild, Helmet,Jackets) Kit	1.6	0.5	0.4	0.4	0.4	3.4
2	CCTV camera and allied material	16.0	4.0	4.0	4.0	4.0	32.0
3	CCTV Consultant	1.4	1.8	1.8	1.9	2.0	8.9
4	Security Training	0.6	0.6	0.6	0.6	0.6	2.9
5	Guns(weapons)	6.0	2.5	2.5	2.5	2.5	16.0
6	Blanks(Rounds)	0.1	0.0	0.0	0.0	0.0	0.2
7	Vehicles	12.0	0.0	0.0	0.0	0.0	12.0
8	Motor Cycle	0.5	0.3	0.3	0.3	0.3	1.5
9	Barbed Wire	2.0	2.0	2.0	2.0	2.0	10.0
Total		**40.2**	**11.7**	**11.6**	**11.7**	**11.8**	**86.9**

Costing of Technical Service Wing (TSW)

TSW Improvement Plan Items (Illustrations below)		**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
		Millions (Rs)					
1	Bid evaluation trainings (Technical + Financial)	0.5	0.5	0.5			1.5
2	Preparation of bidding documents for single stage single envelope procedure, single stage two envelope Procedures	0.5	0.5				1
3	Training for Pre-qualification of firms		0.5	0.5			1

4	Purchase of Auto cad software for preparation of drawings and designs including trainings		10	0.5			10.5
5	Research & Development		15	10	10	10	45
Total Cost		**1**	**26.5**	**11.5**	**10**	**10**	**59**

Costing of Material Management

Improvement Plan for FY 2025-26 to FY 2029-30						
Sr No	**Project Description**	**Cost in Millions**				
		2025-26	**2026-27**	**2027-28**	**2028-29**	**2029-30**
1	**IT Infrastructure Development:** Purchase of Laptops, Printer, UPS (for each store.)	5.32	5.32	1.90		
2	**Improvement of Security of Stores:** Installation of Security Cameras along with UPS (All Stores) Construction of Security Pikit at 05 Consignee Stores, 9 No F/Stores 05 pikits at each consignee Store	45.4	45.40	31.40	31.40	0.40
3	**Infrastructure Development Building & Remodeling** Furniture for 14 No. Stores	0.56	0.56	0.56	0.56	0.56
4	**Building & Remodeling** Construction of Racks for Material & T&P for 14 No. Stores	2.80	2.80	2.80	2.80	2.80
Total Cost		**54.1**	**54.08**	**36.66**	**34.76**	**3.76**

Costing of Legal Improvement Plan

Legal Improvement Plan for FY 2025-26 to FY 2029-30							
Sr. No.	**Project Description**	**Cost in Millions**					
		2025-26	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
1	Consultancy Hiring for Gap Analysis and need assessment	20					20
2	Digitalization of Legal Documents		10	10			20

3	Training of Field Staff (SDO/XEN/RO etc)		1.5	1.5	1.5		4.5
4	Office Accessories (PC etc)	3					3
5	Vehicles	15	5				20
6	Software Application for Legal Procedures		1.5	1.5	1.5	0	4.5
7	Any other Project based on Consultants Recommendations		2.5	2.5			5
Total Cost		**38**	**20.5**	**15.5**	**3**	**0**	**77**

Costing of Civil Works

Sr. No.	Description	Unit	In Million					
			2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	**Civil Works**							
	Works	Amount	**550**	**600**	**610**	**625**	**650**	**3035**

Costing of Operation

Operation Improvement Plan for FY 2025-26 to FY 2029-30						
Sr No	Projet Description	Cost in Millions				
		2025-26	2026-27	2027-28	2028-29	2029-30
1	Combing	540	630	715	816	910
2	APMS	1500	1650	1815		
3	Transformer Reclamation			300	350	400
4	Insuated Rabbit Conductor				82	90
5	Softwares/ IT infratsructure for Reclaimed Transformers	8.5				
Total Cost		**2048.5**	**2280**	**2830**	**1248**	**1400**

Cost Summary of Functional Plan (Achievable)

Achievable Support Plan Total (Remaining PESCO)						
Year	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
Commercial	327	93	243	253	129	1045
HR	920.6	926.4	927.7	929.2	929.5	4633.4
Safety	530	530	530	530	530	2651
Civil	550	600	635	650	0	2435
MM	54	54	37	35	4	183
A&S	116	541	264	434	0	1355
TSW	1	27	12	10	10	59
Legal	23	9	9	2	0	43
Finance	63	59	57	55	57	291
MIRAD	50	65	80			195
Communications	9	9	4	4	4	30
Security	8	4	4	4	4	24
Total	**2651.6**	**2917.4**	**2802.7**	**2906.2**	**1667.5**	**12944.4**
Escalation 13%	344.708	379.262	364.351	377.806	216.775	1682.772
Total after Escalation	2996.308	3296.662	3167.051	3284.006	1884.275	14627.17
Contingency 5%	149.8154	164.8331	158.3526	164.2003	94.21375	731.3586
G.total	**3146.1**	**3461.5**	**3325.4**	**3448.2**	**1978.5**	**15359**

Costing of Commercial Improvement Plan

Commercial Improvement Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	**Data Center**	2	0				2
2	**Email Hosting**	1	0				1
3	**Billing SMS**	6	0				6
4	**Safety SMS**	1	1	1	1	1	5
5	**PITC Addl Services regarding CCMS**	18	19	20	22	23	101
6	**Creation of 4 New Computer Center**	110	0	121	127	0	358
7	**Replacement/Extension of Central AC Plant**	21					21
8	**HHUs/Mobiles for meter reading**	23	33	35	38	40	171

9	Apps Analysis, Design, Development and Deployment	15	15	15	15	15	75
10	IBS Technology License Support	20	20	20	20	20	100
11	Network(LAN/WAN)	15	5	5	5	5	35
12	Service level agreements for Maintenance(SLAs)	0	0	25	25	25	75
13	Licenses and support	96	0				96
Total		327	93	243	253	129	1045

Costing of Human Resource

HR Improvement Plan Items (Illustrations below)		FY-2025-26	FY-2026-27	FY-2027-28	FY-2028-29	FY-2029-30	Total
		Million Rs.	Million Rs.	Million Rs.	Million Rs.	Million Rs.	Million Rs.
1	Training of employees through external training institutions	33.3	36.6	36.6	36.6	36.6	179.7
2	Training of employees of Legal Directorate		1.5	1.5	1.5		4.5
3	Human Resource Information System Implementation	5.3	6.3	7.6	9.1	10.9	39.2
4	Conducting the yard stick study	2	2	2	2	2	10
6	Hiring Against Vacant Posts	880	880	880	880	880	4400
Total		920.6	926.4	927.7	929.2	929.5	4633.4

Costing of Safety

S.N	Description of Projects	2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Million Rs					
1	Provision of Crane Mounted Vehicle 3 ton for field	100	100	100	100	100	500
2	Safety seminars. 1 seminar per month @ Rs 0.025 Mn per seminar	0.3	0.3	0.3	0.3	0.3	1.5

3	**Safety Certificate Courses for Safety Directorate and selected employees. NEBOSH, IOSH, LEAD AUDITOR ISO 9001, 45001, 14001 etc.**	2	2	2	2	2	10
4	**Public Safety Awareness campaign; through Print and Elecronic media (Flexis, posters for field circles)**	4	4	4	4	4	20
5	**Monthly safety reward & Incentive scheme. Reward for best safety @ Rs 0.010 suggestions, best safety performer. @ 0.010**	0.24	0.24	0.24	0.24	0.24	1.2
6	**Annual Safety leader award function**	0.5	0.5	0.5	0.5	0.5	2.5
7	**Purchase of Safety Inspectors field kit**	0.25	0.25	0.25	0.25	0.25	1.25
8	**Digital Camera for taking pics and making videos at hazard sites and accident sites.**	0.4	0.4	0.4	0.4	0.4	2
9	**Lap top and associated hardware & software for safety Inspectors**	1.5	1.5	1.5	1.5	1.5	7.5
10	**External audits**	0.8	0.8	0.8	0.8	0.8	4
11	**Annual T&P/PPE Procurment**	400	400	400	400	400	2000
12	**Drone Camera**	0.4	0.4				0.8
13	**CCTV Camera for Grid Stations**	20	20	20	20	20	100
Total		**530**	**530**	**530**	**530**	**530**	**2650.75**

Costing of Civil Works

S.NO	Name of Work	Estimated cost	2025-26	2026-27	2027-28	2028-29
		Million	Million	Million	Million	Million
1	Construction of Pesco headquarter at Peshawar	800	150	250	200	200
2	Construction of project director gsc office Peshawar	290	86.5	64.5	62.5	76.5
3	Construction of offical complex at 132kv gss fort comprising of SE Peshawar office ,RM m&t office & 02 nos XENs under SE Peshawar & 2nos XENs under rm m&t along with connected sdo offices at Khyber bazar Peshawar	350.52	87.63	87.63	87.63	87.63
4	Construction of se complex at pesco d.i khan	80	80			
5	Construction of 2 nos xen/sdo/ro office at nissata road mardan	140	70	30	40	

6	Construction of xen/sdo/ro office at 132kv gss matta swat	70		70		
	Construction of xen/sdo/ro office at pesco colony nishterabad nowshehra	70		35	35	
7	Construction of 2 nos xen/sdo/ro office at old colony charsadda	140		63	43	34
8	Construction of c-type store at 132kv gss mardan-4 at behram khan kali mardan	30.12	30.12			
9	Construction of shed (truss member shed) at regional store nowshehra	50				50
10	Construction of c 03 nos c-type store at regional store nowshehra	90.36				90.36
11	Remodling of sewerage system at pesco rtc charsadda	6				6
12	Extension in pmu office pesco h/q sakhi chashma peshawar.	8				8
13	Construction of room & hall at m&t office mardan	8				8
14	Construction of rest house at sakhi chashma colony pesco peshawar	60.14			49.07	11.07
15	Construction of office building for xen ss&tl & xen construction at 132kv gss mardan-4 bahram khan kali mardan	45.82	45.82			
16	Construction of 04 bed officers hostel at pesco swabi circle swabi	33.97			28.97	5
17	Construction of 04 bed officers hostel at pesco bannu circle bannu	28.97			28.97	
18	Construction of 12 nos cat-iii multi story flats (03 nos block) at pesco colony sakih chashma peshawar by dismantling the obselete multistory building	120			60	60
19	Construction of mosque at 132kv gss mardan-4 at behram khan kali mardan	13.56				13.56
	TOTAL	**2435.46**	**550.07**	**600.13**	**635.14**	**650.12**

Costing of Material Management

Improvement Plan for FY 2025-26 to FY 2029-30							
Sr No	**Project Description**	**Cost in Millions**					
		2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	**IT Infrastructure Development:** Purchase of Laptops, Printer, UPS (for each store.)	5.32	5.32	1.90			12.54

2	**Improvement of Security of Stores:** Installation of Security Cameras along with UPS (All Stores) Construction of Security Pikit at 05 Consignee Stores, 9 No F/Stores 05 pikits at each consignee Store	45.4	45.40	31.40	31.40	0.40	154.00
3	**Infrastructure Development Building & Remodeling** Furniture for 14 No. Stores	0.56	0.56	0.56	0.56	0.56	2.80
4	**Building & Remodeling** Construction of Racks for Material & T&P for 14 No. Stores	2.80	2.80	2.80	2.80	2.80	14.00
Total Cost		**54.1**	**54.08**	**36.66**	**34.76**	**3.76**	**183.34**

Costing of Admin and Services

A&S Improvement Plan (Vehicles)						Total
Description	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	
Field Formations	0	512	240	410		1162
Safety	24	24	24	24		96
Mirad	50	0	0			50
Legal	15	5				20
Security	12					12
Commercial	15					15
Total	**116**	**541**	**264**	**434**		**1355**

Costing of Technical Services Wing (TSW)

TSW Improvement Plan Items		**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
		Millions (Rs)					
1	**Bid evaluation trainings (Technical + Financial)**	0.5	0.5	0.5			1.5
2	**Preparation of bidding documents for single stage single envelope procedure, single stage two envelope Procedures**	0.5	0.5				1
3	**Training for Pre-qualification of firms**		0.5	0.5			1

4	Purchase of Auto cad software for preparation of drawings and designs including trainings		10	0.5			10.5
5	Research & Development		15	10	10	10	45
Total Cost		1	26.5	11.5	10	10	59

Costing of Legal Improvement Plan

Legal Improvement Plan for FY 2025-26 to FY 2029-30							
Sr. No.	Project Description	Cost in Millions					
		2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	Consultancy Hiring for Gap Analysis and need assessment	20					20
2	Digitalization of Legal Documents		5	5			10
3	Software Application for Legal Procedures		1.5	1.5	1.5	0	4.5
4	Office Accessories (PC etc)	3					3
5	Any other Project based on Consultants Recommendations		2.5	2.5			5
Total Cost		23	9	9	1.5	0	42.5

Costing of Finance Plan

Financial Improvement Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Total	Total	Total	Total	Total	Total
A	ERP system implementation	62.64	59.16	56.55	54.81	57.42	290.58
B	Revamping the Internal Audit						
C	Other studies and models preparation						
G	IT infrastructure to support new initiatives						
Total		62.64	59.16	56.55	54.81	57.42	290.58

Costing of MIRAD Improvement Plan

MIRAD Improvement Plan (In Million)						Total
Description	2025-26	2026-27	2027-28	2028-29	2029-30	
Capacity Building	30	40	50			120
Automation & Others	20	25	30			75
Total	50	65	80			195

Costing of Communications Plan

Communications Plan Items (Illustrations below)		2025-26	2026-27	2027-28	2028-29	2029-30	Total
		Total	Total	Total	Total	Total	Total
A	Improving Internal Communications with Employees	3	3				6
B	Safety Awareness Campaign	4	4	4	4	4	20
C	Improving External Communications with Customers	1	1				2
D	Communication material	1	1				2
E	Others etc…						0
Total		9	9	4	4	4	30

Costing of Security Plan

Sr NO	Items	2025-26	2026-27	2027-28	2028-29	2029-30	Total
1	Anti Roit Equipment (Sheild, Helmet,Jackets) Kit	0.8	0.3	0.2	0.2	0.2	1.7
2	Security Training	0.3	0.3	0.3	0.3	0.3	1.4
3	Guns(weapons)	6.0	2.5	2.5	2.5	2.5	16.0
4	Blanks(Rounds)	0.0	0.0	0.0	0.0	0.0	0.1
5	Barbed Wire	1.0	1.0	1.0	1.0	1.0	5.0
Total		8.1	4.1	4.0	4.0	4.0	24.3

C. Summary Costs for the Integrated Investment Plan

Summary of Cost for Best Case

DIIP 48- Summary Costs for the Investment Plan: Summary of Cost for Best Case

Business Plan- DIIP PESCO (TOTAL COST OF BEST CASE) Local Currency (Million PKR)						
DESCRIPTION	2025-26	2026-27	2027-28	2028-29	2029-30	TOTAL
Distribution cost without deposit	29079	30323	31624	33044	34343	158413
Installation of APMS	1831	3812	4040			9683
Transmission cost without Others	8052	10330	10820	8740	13130	51072
Support Plan	11379	11601	10951	7963	8081	49975
ABC Cable installation	848					848
Evacuation of power from 220/132 kv Swabi Grid	400					400
Establishment of 132 kv Puran Grid	460					460
Total Cost	52049	56066	57435	49747	55554	270851

DESCRIPTION	2025-26	2026-27	2027-28	2028-29	2029-30	TOTAL
Distribution deposit cost	1898.4	2081.6	2226.1	2371.7	2531	11108.8
Transmission cost Others		220	390	210		820
Total Cost	1898.4	2301.6	2616.1	2581.7	2531	11928.8

Foreign Currency (Million USD)

DESCRIPTION	2025-26	2026-27	2027-28	2028-29	2029-30	TOTAL
World Bank Project	43.72	23.10				66.82
Total Cost $	43.72	23.10				66.82

Summary of Cost for Optimally Achievable Case

DIIP49- Summary Costs for the Investment Plan: Summary of Cost for Optimally Achievable Case

Business Plan- DIIP PESCO (TOTAL COST OF ACHIEVABLE CASE) Local Currency (Million PKR)						
DESCRIPTION	2025-26	2026-27	2027-28	2028-29	2029-30	TOTAL
Distribution cost without deposit	8840	9067	9250	9447	9779	46383
Installation of APMS	1831	3812	4040			9683
Transmission cost without Others	6852	8080	8620	5930	7660	37142
ABC Cable installation	848					

Evacuation of power from 220/132 kv Swabi Grid	400					
Establishment of 132 kv Puran Grid	460					
Support Plan	3146.1	3461.5	3325.4	3448.2	1978.5	15359
Total Cost	22377.1	24420.5	25235.4	18825.2	19417.5	108567

DESCRIPTION	2025-26	2026-27	2027-28	2028-29	2029-30	TOTAL
Distribution deposit cost	1777	1893	2018	2144	2277	10109
Transmission cost Others		220	390	210		820
Total Cost	1777	2113	2408	2354	2277	10929

Foreign Currency (Million USD)

DESCRIPTION	2025-26	2026-27	2027-28	2028-29	2029-30	TOTAL
World Bank Project	43.72	23.10				66.82
Total Cost $	43.72	23.10				66.82

Summary of O&M Costs

DIIP 50- Summary Costs for the Investment Plan: Summary of O&M Costs

O&M COST (ACHIEVABLE CASE)						
DESCRIPTION	2025-26	2026-27	2027-28	2028-29	2029-30	TOTAL
Distribution O&M cost	177	182	185	189	196	928
Transmission O&M cost without other	137	162	172	119	153	743
Distribution deposit O&M cost	6.8	7.66	8.56	9.44	10.38	42.84
Transmission O&M cost with Others		4.4	7.8	4.2		16.4
Installation of APMS O&M Cost	128.17	266.8	282.8			677.8
World Bank Project O&M Cost	100	42.8				142.84
ABC Cable installation	16.96					16.96
Evacuation of power from 220/132 kv Swabi Grid	8					8
Establishment of 132 kv Puran Grid	9.2					9.2
Total O&M Cost	583.13	665.66	656.16	321.64	359.38	2585.04

D. Financing Plan:

DIIP 51- Financing Plan

Peshawar Electric Supply Company							
Investment Plan (Local Currency PKR)							
Description	**Unit**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
		Projected	Projected	Projected	Projected	Projected	
Investment Plan							
DOP	[Mln Rs]	4225	4376	4466	4576	4751	22394
ELR	[Mln Rs]	4615	4691	4784	4871	5028	23989
STG	[Mln Rs]	6852	8080	8620	5930	7660	37142
Others							
ABC Cable installation	[Mln Rs]	848					
Evacuation of power from 220/132 kv Swabi Grid	[Mln Rs]	400					
Establishment of 132 kv Puran Grid	[Mln Rs]	460					
Deposit Work	[Mln Rs]	1777	1893	2018	2144	2277	10109
Support plan	[Mln Rs]	3146.1	3461.5	3325.4	3448.2	1978.5	15359
Capacitor Banks	[Mln Rs]		220	390	210		820
Installation of APMS (Own/ADB/WB))	[Mln Rs]	1831	3812	4040			9683
Total	[Mln Rs]	**24154**	**26534**	**27643**	**21179.2**	**21695**	**119496**

Investment Plan (Foreign Currency Million USD)							
Description	**Unit**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
		Projected	Projected	Projected	Projected	Projected	
Investment Plan							
World Bank Project	[Mln USD]	43.72	23.10				66.82
Total Investment (USD)	[Mln USD]	**43.72**	**23.10**	**0.00**			**66.82**

Note:

The cost of the investment plan in foreign currency is $ 66.82 Million USD but if the approval is granted for ADB Loan then the cost of $ 200 Million USD will be further added. As per initial understanding the projects will include single phase AMR, SCADA, GIS Grids, process improvement etc. The Scope and Financing of APMS project depends on the GOP decision.

The year-wise details are mentioned below.

Investment Plan (Foreign Currency Million USD)							
Description	**Unit**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**	**Total**
		Projected	Projected	Projected	Projected	Projected	
World Bank Project	[Mln USD]	43.72	23.10				66.82
ADB Project	[Mln USD]	50	50	50	50		200
Total Investment (USD)	[Mln USD]	**93.72**	**73.1**	**50**	**50**		**266.82**

Section - VII
Benefits and Financial Analysis

A. Expansion and Rehabilitation of Secondary Transmission and Distribution System:

i. Tangible Benefits

Additional Energy Available for Sales (for Transmission)				
Year	Best		Achievable	
	MVA Added	Additional Energy for Sales (MKWH)	MVA Added	Additional Energy for Sales (MKWH)
2025-26	816	1518.98	698	2078.92
2026-27	506	941.92	306	911.39
2027-28	345	642.22	277	825.02
2028-29	332	618.02	264	786.30
2029-30	314	584.51	262	780.34

Transmission - Loss Reduction				
Year	MW		MKWh	
	Ideal	Realistic	Ideal	Realistic
2025-26	5.92	5.76	28.52	33.30
2026-27	8.0	5.2	38.54	30.06
2027-28	9.7	6.4	46.73	37.00
2028-29	6.5	1.7	31.32	10.18
2029-30	7.4	2.08	35.65	12.03

Distribution - Loss Reduction						
Year	HT Saving		LT Saving		Total	
	Units MKWh		Units MKWh		Units MKWh	
	Ideal	Realistic	Ideal	Realistic	Ideal	Realistic
2025-26	84.7	33	45.38	8.03	130.08	41.03
2026-27	174.9	67.1	107.47	16.30	282.37	83.4
2027-28	304.7	101.2	138.55	24.82	443.25	126.02
2028-29	434.5	135.3	170.78	33.59	605.28	168.89
2029-30	559.9	171.6	204.21	42.63	764.11	214.23

Saving of World Bank Project

S.No	Description	Saving of the Project (MW)	Annual Energy Saving (MKWH)
1	STG Projects	6.4	30.84
Total		6.4	30.84

Saving of APMS Project

Year	APMS	
	Saving (MKWH)	Cumulative Saving (MKWH)
2025-26	23.35	23.35
2026-27	47.57	70.92
2027-28	47.53	118.45

* The project will be commenced subject to approval of PC-1

ii. Non-tangible Benefits

The other benefits like improvement in voltage profile, improving the overloading of the network will be achieved after completion of project.

Section - VIII

Financial Projections

Please find below the income statement, balance sheet, and cash flow of PESCO for the tariff control period.

Financial Statements

Rs. In Millio

INCOME STATEMENT	Audited	Audited	Audited	Projected	Projected	Projected	Projected	Projected	Projected	Projected
	PESCO	PESCO	PESCO	PESCO	PESCO	PESCO	PESCO	PESCO	PESCO	PESCO
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
QUANTITATIVE DATA										
NO. OF CUSTOMERS (Million)					0.16	0.32	0.48	0.64	0.81	0.97
Growth in No. of customers(%)					4.70%	4.70%	4.70%	4.70%	4.70%	4.70%
UNITS SOLD (Mill. kWh)	9,608	10,355	7,414	6,695	6,949	7,227	7,516	7,800	8,101	8,440
UNITS PURCHASED (Mill kWh)	15,542	16,562	12,722	11,638	11,838	11,951	12,226	12,481	12,761	13,091
Growth in units purchased (%)										
UNITS LOST / DISTRIBUTION LOSSES (Mill. kWh)	5,934	6,207	5,308	4,943	4,890	4,724	4,710	4,680	4,660	4,651
FREE ELECTRICITY										
UNITS LOST / DISTRIBUTION LOSSES (% Age) *	38.18%	37.48%	41.72%	42.47%	41.30%	39.53%	38.53%	37.50%	36.52%	35.53%
AVERAGE SALES TARIFF (Rs./kWh)										
DISTRIBUTION CHARGE(Rs./kWh)										
Company TARIFF (Rs./kWh)	20.35	21.56	28.70	36.69	40.65	44.71	45.16	48.32	49.77	51.26
Consumer Tariff	13.92	16.59	24.61	34.35	38.06	41.87	42.29	45.25	46.60	48.00
PURCHASE PRICE (Rs./kWh)	12.11	17.68	20.80	24.72	26.97	27.22	27.47	27.72	27.97	28.22
SALES										
Sale of Power	133,645	171,782	182,402	229,932	264,472	302,555	317,804	352,928	377,528	405,133
			-							
Rental & Service income	59	49	41	46	48	51	53	56	59	62
Total Sales	**133,704**	**171,831**	**182,443**	**229,978**	**264,520**	**302,606**	**317,857**	**352,984**	**377,586**	**405,195**
Subsidy	**61,816**	**51,390**	**30,348**	**15,632**	**17,977**	**20,565**	**21,602**	**23,989**	**25,661**	**27,538**
Amortization of deferred Credit.	1,852	2,071	2,015	2,473	2,716	2,992	3,281	3,585	3,917	4,280
	197,373	**225,292**	**214,806**	**248,083**	**285,213**	**326,163**	**342,740**	**380,559**	**407,165**	**437,012**
			-							
Purchase of Power	**188,258**	**292,803**	**264,673**	**287,639**	**319,330**	**325,349**	**335,896**	**346,024**	**356,978**	**369,484**
Gross Profit	**9,115**	**-67,510.6**	**-49,867**	**-39,556**	**-34,118**	**815**	**6,844**	**34,534**	**50,187**	**67,528**
OPERATING EXPENSESS			-							
Establishment Cost	23,829	25,367	24,577	34,881	38,378	45,321	46,463	51,128	56,266	61,923
Maintenance & repair and Others	1,177	1,039	862	1,841	2,387	3,095	4,012	5,203	6,746	8,746
Depreciation	3,296	3,709	3,556	3,767	4,144	4,558	5,014	5,515	6,067	6,673
Provision for Bad Debt	8,428	8,060	10,558	12,245	13,470	14,817	16,299	17,929	19,721	21,694
Total Operating Expenses	**36,730**	**38,175**	**39,554**	**52,734**	**58,378**	**67,791**	**71,788**	**79,774**	**88,799**	**99,036**
OPERATING PROFIT / (LOSS)	**-27,615**	**-105,686**	**-89,421**	**-92,290**	**-92,496**	**-66,976**	**-64,944**	**-45,240**	**-38,613**	**-31,508**
ADD: Other Income	7,744	7,735	9,481	12,504	12,865	13,296	13,552	13,570	13,588	13,606
EBIT	**-19,871**	**-97,951**	**-79,940**	**-79,786**	**-79,631**	**-53,680**	**-51,392**	**-31,670**	**-25,024**	**-17,902**
LESS: Interest Expense	708	1,914	1,066	756	1,656	1,688	1,728	1,729	1,731	1,733
PROFIT / (LOSS) BEFORE TAX	**-20,579**	**-99,866**	**-81,006**	**-80,542**	**-81,287**	**-55,368**	**-53,121**	**-33,399**	**-26,755**	**-19,635**
Income Tax/Turnover tax	**2,166**	**2,262**	**3,153**	**3,019**	**4,009**	**4,584**	**4,817**	**5,349**	**5,723**	**6,142**
NET PROFIT/LOSS FOR THE YEAR	**-22,746**	**-102,128**	**-84,159**	**-83,561**	**-85,296**	**-59,952**	**-57,938**	**-38,748**	**-32,478**	**-25,777**

Financial Statements

Rs. In Million

Balance Sheet	Audited	Audited	Audited	Projected	Projected	Projected	Projected	Projected	Projected	Projected
Assets	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Fixed Assets										
Gross Fixed Assets	94,444	107,485	102,515	117,896	136,468	159,017	182,990	206,214	228,895	251,325
LESS: Accumulated Depreciation	35,431	39,112	35,914	40,508	45,550	51,604	58,484	66,300	74,953	84,477
Net Fixed Assets	**59,013**	**68,373**	**66,601**	**77,388**	**90,918**	**107,413**	**124,506**	**139,914**	**153,942**	**166,848**
Capital Work in Progress	**26,649**	**33,544**	**31,312**	**32,766**	**48,831**	**59,289**	**63,033**	**61,063**	**59,636**	**58,976**
Long Term Advances, Deposit	**8**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Current Assets										
Inventory / Stores & Spares	4,894	9,580	9,985	11,661	12,245	12,857	13,500	14,175	14,883	15,628
Account Receivable	154,426	171,016	185,575	233,098	244,753	254,543	262,179	267,423	270,097	271,448
Less: Provision for Bad Debt	83,978	92,038	101,140	113,650	118,196	122,924	126,611	129,144	130,435	131,087
Net Accounts Receivable	70,448	78,977	84,436	118,895	126,557	131,619	135,568	138,279	139,662	140,360
Receivable from Associated Companies	1,344	1,543	2,779	2,834	2,891	2,949	3,008	3,068	3,129	3,192
Receivable from TESCO	42,817	44,916	46,944	50,596	51,608	52,640	53,693	54,767	55,862	56,980
Advances, Deposits, Prepay. & Other Rec.	111,701	94,673	76,743	76,405	77,934	79,492	81,082	82,704	84,358	86,045
Cash & Bank Balances	13,476	9,252	8,828	8,116	8,279	8,444	8,613	8,785	8,961	9,140
Total Current Assets	**244,680**	**238,942**	**229,714**	**268,509**	**279,513**	**288,002**	**295,463**	**301,778**	**306,856**	**311,344**
TOTAL ASSETS	**330,350**	**340,861**	**327,628**	**378,663**	**419,262**	**454,705**	**483,004**	**502,756**	**520,435**	**537,170**
Liabilities & Equity										
Shareholders' Equity	20,176	92,855	128,046	201,383	211,452	212,509	213,571	214,639	215,713	216,791
Retained Earnings	-331,304	-452,222	-543,424	-638,815	-724,111	-784,063	-842,001	-880,748	-913,226	-939,003
Total Equity	**-311,128**	**-359,367**	**-415,378**	**-437,433**	**-512,659**	**-571,554**	**-628,429**	**-666,109**	**-697,514**	**-722,212**
Long Term / Deferred Liabilities										
ADB Loans/PHP Loan	6,555	7,868	7,119	8,961	8,811	8,661	8,511	8,361	8,211	8,061
Liabilty against govt.loan	50,187	50,187	50,187	0	0	0	0	0	0	0
Deferred Credits (Consumer's Capital Cont. etc.)	35,052	39,222	38,372	44,482	49,747	55,434	60,910	66,492	72,021	77,576
Employees Retirement Benefits	103,404	126,421	127,428	148,226	163,048	171,201	179,761	188,749	198,186	208,095
Total Long Term / Deferred Liability	**195,199**	**223,698**	**223,106**	**201,669**	**221,608**	**235,299**	**249,186**	**263,606**	**278,424**	**293,739**
Payable to CPPA for Supplies-Plan deficit & Others	407,209	434,968	449,165	538,113	629,441	706,058	773,116	815,231	845,012	866,421
Payable to Associated Companies	964	1,312	498	496	506	516	526	537	548	559
Creditors, Accrued & Other Liabilities	38,105	40,249	70,237	75,818	80,367	84,386	88,605	89,491	93,965	98,664
Total current Liabilities	**446,278**	**476,530**	**519,900**	**614,427**	**710,314**	**790,960**	**862,248**	**905,259**	**939,526**	**965,643**
TOTAL LIABILITIES AND EQUITY	**330,350**	**340,861**	**327,628**	**378,663**	**419,262**	**454,705**	**483,004**	**502,756**	**520,435**	**537,170**

PESCO Investment Plan											
											Rs. in mln
GROSS	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2029-30**
DOP	2,500	1,413	1,586	1,513	4,137	4,345	4,225	4,376	4,466	4,576	4,751
RE		-	-	-	-	-					
ELR	1,500	1,570	2,412	2,738	8,191	8,408	4,615	4,691	4,784	4,871	5,028
ELECTRIFICATION OF DIFFERENT VALLEY CHITRAL		112	94	42	800	344					
ABC	-	280	299	209	1,276	1,027	3,608	5,705	6,058	2,144	2,277
World bank						1,840	12,154	6,422			
Anticipated ADB							13,900	13,900	13,900	13,900	
STG	3,500	5,510	4,366	5,042	12,251	8,168	6,852	8,080	8,620	5,930	7,660
Other	950	5,120	11,206	8,763	2,101	2,175	4,854	3,682	3,715	3,658	1,979
Total investment	**8,450**	**14,005**	**19,963**	**18,307**	**28,756**	**26,307**	**50,208**	**46,855**	**41,543**	**35,079**	**21,695**
NET											
DOP	2,500	1,413	1,586	1,513	4,137	4,345	4,225	4,376	4,466	4,576	4,751
RE	-	-	-	-	-	-	-	-	-	-	-
ELR	1,500	1,570	2,412	2,738	8,191	8,408	4,615	4,691	4,784	4,871	5,028
GSC	-	392	393	251	2,076	1,371	3,608	5,705	6,058	2,144	2,277
World bank						1,840	12,154	6,422	-	-	
Anticipated ADB						-	13,900	13,900	13,900	13,900	
STG	3,500	5,510	4,366	5,042	12,251	8,168	6,852	8,080	8,620	5,930	7,660
other	950	5,120	11,206	8,763	2,101	2,175	4,854	3,682	3,715	3,658	1,979
Net Total investment	**8,450**	**14,005**	**19,963**	**18,307**	**28,756**	**26,307**	**50,208**	**46,855**	**41,543**	**35,079**	**21,695**
Note Dollar rate is RS.278 for world bank investment.											

Section - IX
Investment Plan Implementation

Business Planning Organization for Preparation of Investment Plans

The stewardship responsibility of the Board of Directors (the Board) is to have an oversight role over the management of the PESCO, which is responsible for the day-to-day conduct of the business. The Board must assess and ensure systems are in place to identify and manage the risks of the Company's business with the underline objective of preserving Company's assets and steering it in a strategic direction that ensures fulfilling its objectives. The Board, through the Chief Executive Officer (CEO), sets the attitude and disposition of the Company towards achieving sets of goals and objectives, in compliance with applicable laws and regulations. Business Plan is a tool that helps a company to achieve its goals and objectives.

PESCO has started the business planning initiative / DIIP that will entail company's goals and objectives to the initiatives that are required to meet those objectives. The integrated cross-functional plan will cover the core business (transmission and distribution system expansion and rehabilitation) and support business (improving the commercial, financial, HR and other functional improvement) initiatives to meet the stated objectives. The PESCO's business plan for 2025-26 to 2029-30 is prepared by PESCO MIRAD team and will be update each year. In order to sustain this initiative, a strategic planning organization is required within PESCO, who can assist the CEO of the Company to prepare, maintain, improve, monitor and get implemented the business plan.

Section - X
Implementation, Monitoring Plan and Reporting

Transmission Expansion and Rehabilitation
Distribution Expansion and Rehabilitation:

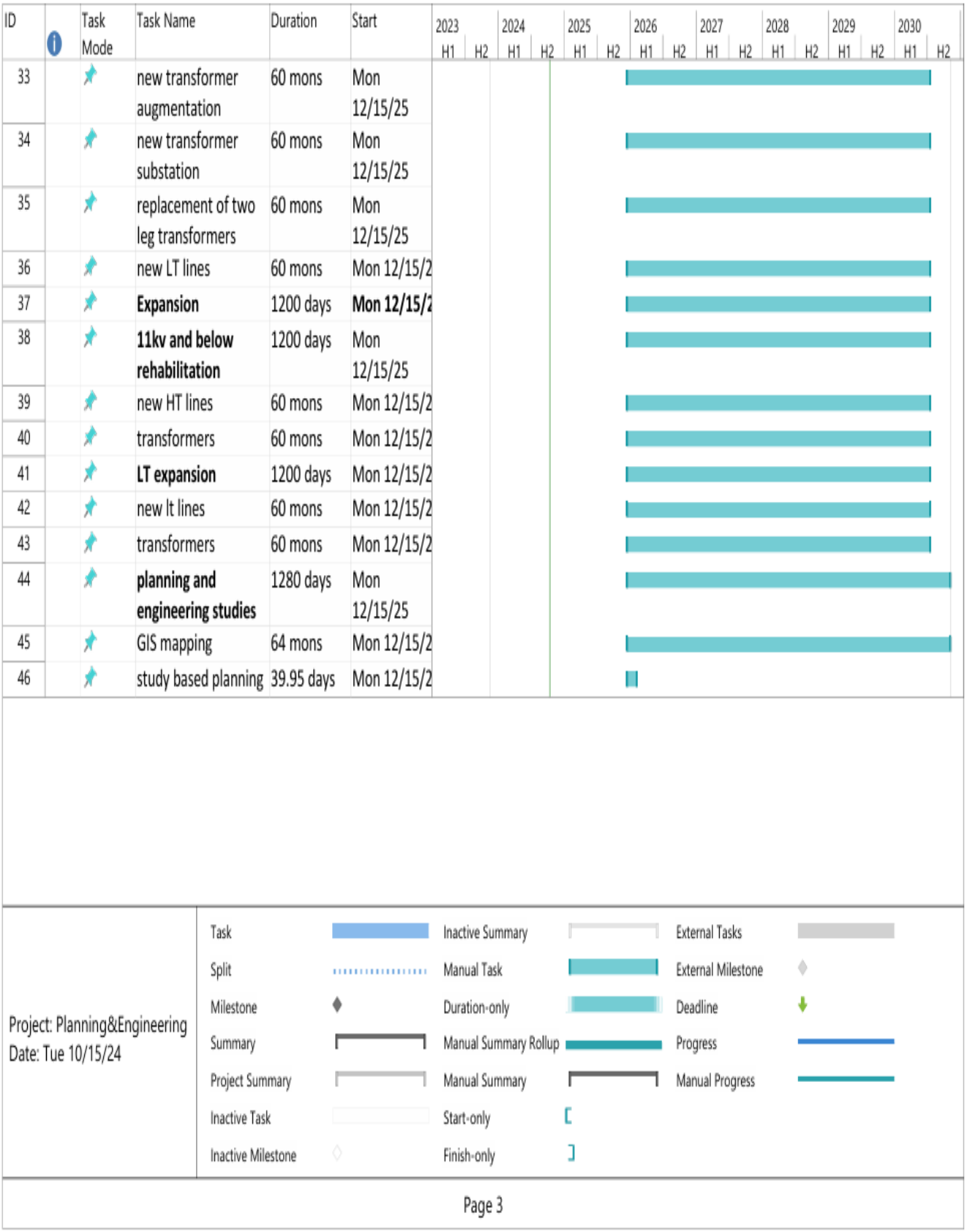
ID	Task Mode	Task Name	Duration	Start
1		**Integrated generation, transmission and**	700 days	Tue 7/1/25
2		**grid station expansion and**	700 days	Tue 7/1/25
3		**designing and procurement**	240 days	Tue 7/1/25
4		Procurement	6 mons	Tue 7/1/25
5		delivery	6 mons	Tue 7/1/25
6		**expansion and rehabilitation**	600 days	Mon 12/15/25
7		new grid construction	600 days	Mon 12/15/2
8		conversion	6 mons	Mon 12/15/2
9		augmentation	6 mons	Mon 12/15/2
10		extention	6 mons	Mon 12/15/2
11		transmission lines	6 mons	Mon 12/15/2
12		**designing and procurement**	240 days	Tue 7/1/25
13		designing and develompent	6 mons	Tue 7/1/25
14		procurement	6 mons	Tue 7/1/25
15		delivery of material	6 mons	Tue 7/1/25
16		**expansion and rehabilitation**	650 days	Mon 12/15/25
17		**new transmission line**	650 days	Mon 12/15/2

ID	Task Mode	Task Name	Duration	Start
18		reconductoring and upgrading	60 mons	Mon 12/15/25
19		reconductoring and rerouting	60 mons	Mon 12/15/25
20		fixed and switched capacitor installation	60 mons	Mon 12/15/25
21		**distribution system**	720 days	Tue 7/1/25
22		**rehabilitation and reconductoring**	720 days	Tue 7/1/25
23		**designing and procurement**	240 days	Tue 7/1/25
24		designing and develompent	6 mons	Tue 7/1/25
25		Procurement	6 mons	Tue 7/1/25
26		delivery	6 mons	Tue 7/1/25
27		**11kv and below rehabilitation**	700 days	Mon 12/15/25
28		rehabilitation of ht lin	60 mons	Mon 12/15/2
29		new HT lines	60 mons	Mon 12/15/2
30		transmission lines	1200 days	Mon 12/15/2
31		rehabilitation of LT lin	60 mons	Mon 12/15/2
32		over loaded transformer augmentation	60 mons	Mon 12/15/25

Project: Planning&Engineering
Date: Tue 10/15/24

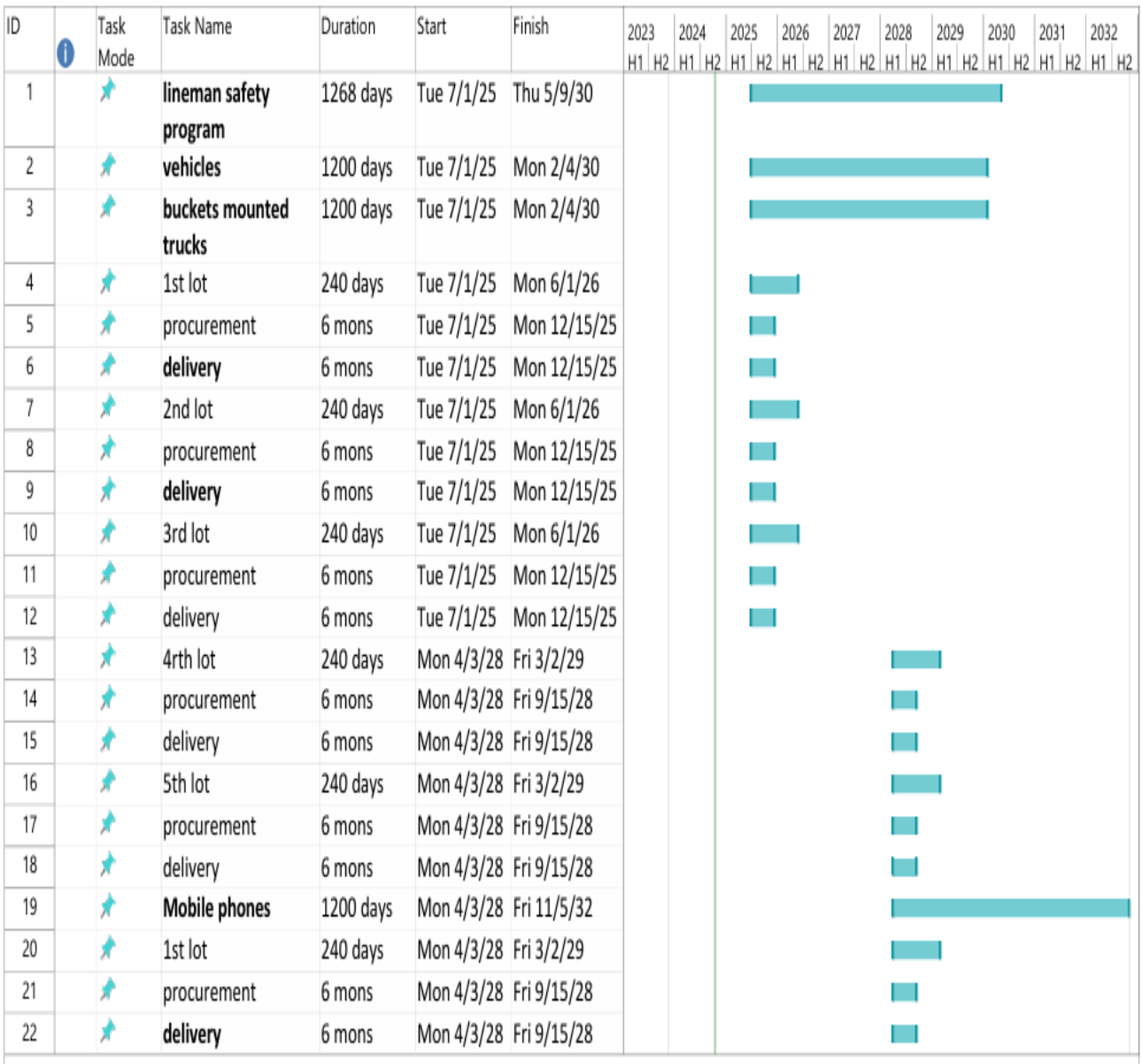
Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

Page 2


ID
Task Mode
Task Name
Duration
Start
2023 H1 H2
2024 H1 H2
2025 H1 H2
2026 H1 H2
2027 H1 H2
2028 H1 H2
2029 H1 H2
2030 H1 H2
33 new transformer augmentation 60 mons Mon 12/15/25
34 new transformer substation 60 mons Mon 12/15/25
35 replacement of two leg transformers 60 mons Mon 12/15/25
36 new LT lines 60 mons Mon 12/15/2
37 Expansion 1200 days Mon 12/15/2
38 11kv and below rehabilitation 1200 days Mon 12/15/25
39 new HT lines 60 mons Mon 12/15/2
40 transformers 60 mons Mon 12/15/2
41 LT expansion 1200 days Mon 12/15/2
42 new lt lines 60 mons Mon 12/15/2
43 transformers 60 mons Mon 12/15/2
44 planning and engineering studies 1280 days Mon 12/15/25
45 GIS mapping 64 mons Mon 12/15/2
46 study based planning 39.95 days Mon 12/15/2
Project: Planning&Engineering
Date: Tue 10/15/24
Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress
Page 3

LM Safety, Tools and Equipment:

ID	Task Mode	Task Name	Duration	Start	Finish
1		**lineman safety program**	1268 days	Tue 7/1/25	Thu 5/9/30
2		**vehicles**	1200 days	Tue 7/1/25	Mon 2/4/30
3		**buckets mounted trucks**	1200 days	Tue 7/1/25	Mon 2/4/30
4		1st lot	240 days	Tue 7/1/25	Mon 6/1/26
5		procurement	6 mons	Tue 7/1/25	Mon 12/15/25
6		**delivery**	6 mons	Tue 7/1/25	Mon 12/15/25
7		2nd lot	240 days	Tue 7/1/25	Mon 6/1/26
8		procurement	6 mons	Tue 7/1/25	Mon 12/15/25
9		**delivery**	6 mons	Tue 7/1/25	Mon 12/15/25
10		3rd lot	240 days	Tue 7/1/25	Mon 6/1/26
11		procurement	6 mons	Tue 7/1/25	Mon 12/15/25
12		delivery	6 mons	Tue 7/1/25	Mon 12/15/25
13		4rth lot	240 days	Mon 4/3/28	Fri 3/2/29
14		procurement	6 mons	Mon 4/3/28	Fri 9/15/28
15		delivery	6 mons	Mon 4/3/28	Fri 9/15/28
16		5th lot	240 days	Mon 4/3/28	Fri 3/2/29
17		procurement	6 mons	Mon 4/3/28	Fri 9/15/28
18		delivery	6 mons	Mon 4/3/28	Fri 9/15/28
19		**Mobile phones**	1200 days	Mon 4/3/28	Fri 11/5/32
20		1st lot	240 days	Mon 4/3/28	Fri 3/2/29
21		procurement	6 mons	Mon 4/3/28	Fri 9/15/28
22		**delivery**	6 mons	Mon 4/3/28	Fri 9/15/28



Project: safty
Date: Tue 10/15/24

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

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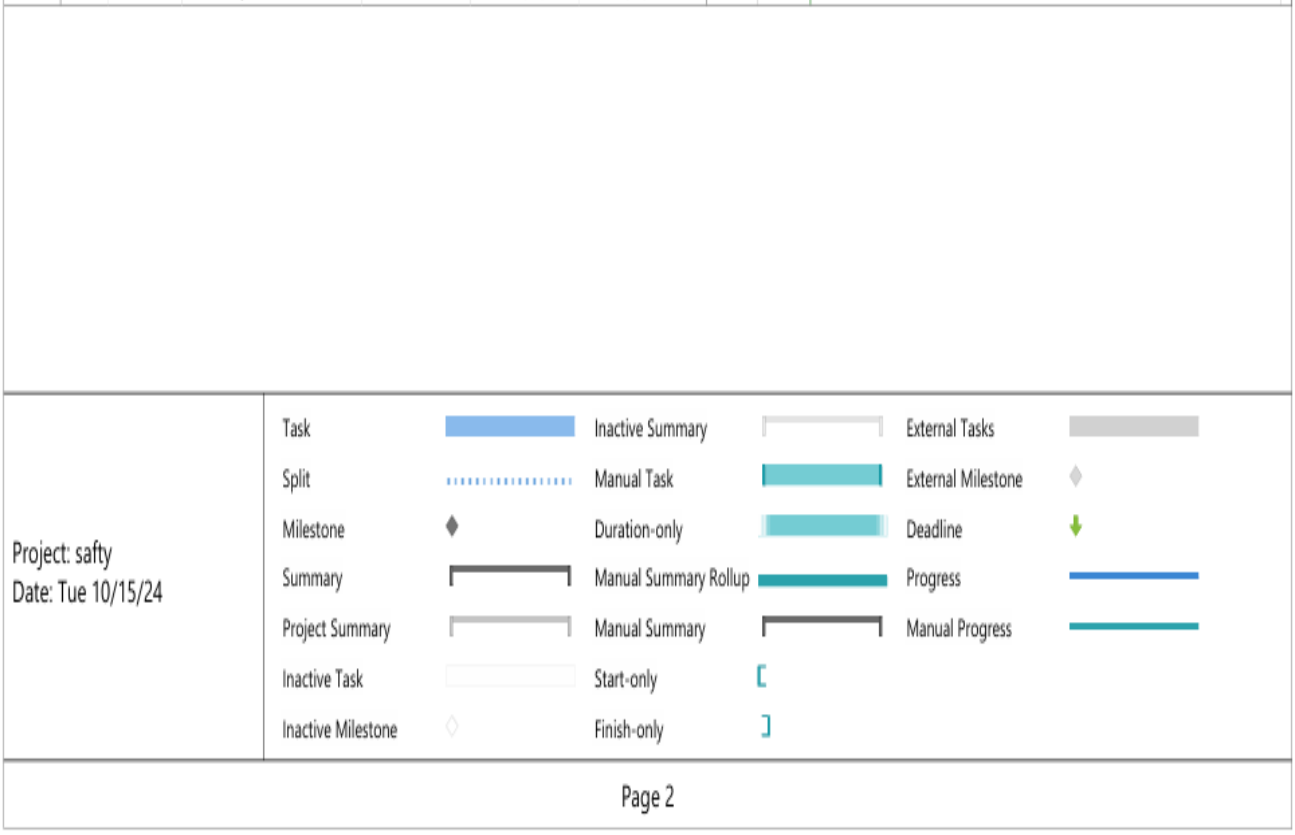
ID	Task Mode	Task Name	Duration	Start	Finish
23		2nd lot	240 days	Mon 4/3/28	Fri 3/2/29
24		procurement	6 mons	Mon 4/3/28	Fri 9/15/28
25		**delivery**	6 mons	Mon 4/3/28	Fri 9/15/28
26		3rd lot	240 days	Mon 4/3/28	Fri 3/2/29
27		procurement	6 mons	Mon 4/3/28	Fri 9/15/28
28		delivery	6 mons	Mon 4/3/28	Fri 9/15/28
29		4rth lot	240 days	Mon 4/3/28	Fri 3/2/29
30		procurement	6 mons	Mon 4/3/28	Fri 9/15/28
31		delivery	6 mons	Mon 4/3/28	Fri 9/15/28
32		5th lot	240 days	Mon 4/3/28	Fri 3/2/29
33		procurement	6 mons	Mon 4/3/28	Fri 9/15/28
34		delivery	6 mons	Mon 4/3/28	Fri 9/15/28
35		**tools and PPEs**	60 mons	Mon 4/3/28	Fri 11/5/32
36		procurement	60 mons	Mon 4/3/28	Fri 11/5/32
37		delivery	60 mons	Mon 4/3/28	Fri 11/5/32



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Commercial Plan Schedule:

ID	Task Mode	Task Name	Duration	Start	Finish
1		<New Task>			
2		**commercial improvement plan**	**721 days**	**Tue 7/1/25**	Tue 4/4/28
3		**PESCO wide HHU expansion**	**479 days**	**Tue 7/1/25**	Fri 4/30/27
4		**mobile HHUs**	**240 days**	**Tue 7/1/25**	Mon 6/1/26
5		procurement	6 mons	Tue 7/1/25	Mon 12/15/25
6		delivery	6 mons	Thu 12/18/25	Wed 6/3/26
7		**other equipments**	**240 days**	**Tue 7/1/25**	Mon 6/1/26
8		**PCs(142 units)**	**240 days**	**Tue 7/1/25**	Mon 6/1/26
9		procurement	6 mons	Tue 7/1/25	Mon 12/15/25
10		delivery	6 mons	Wed 12/16/25	Tue 6/1/27
11		**Printers(142 units)**	**240 days**	**Tue 7/1/25**	Mon 6/1/26
12		procurement	6 mons	Tue 7/1/25	Mon 12/15/25
13		delivery	6 mons	Tue 7/1/25	Mon 12/15/25
14		**DSL connections(137 units)**	**240 days**	**Tue 7/1/25**	Mon 6/1/26
15		procurement	6 mons	Tue 7/1/25	Mon 12/15/25
16		delivery	6 mons	Wed 12/16/25	Tue 6/1/27
17		**furniture & accessaries(150**	**240 days**	Tue 7/1/25	**Mon 6/1/26**
18		procurement	6 mons	Tue 7/1/25	Mon 12/15/25
19		delivery	6 mons	Wed 12/16/25	Tue 6/1/27

Project: Commercial
Date: Tue 10/15/24

Task	Inactive Summary	External Tasks	
Split	Manual Task	External Milestone	
Milestone	Duration-only	Deadline	
Summary	Manual Summary Rollup	Progress	
Project Summary	Manual Summary	Manual Progress	
Inactive Task	Start-only		
Inactive Milestone	Finish-only		

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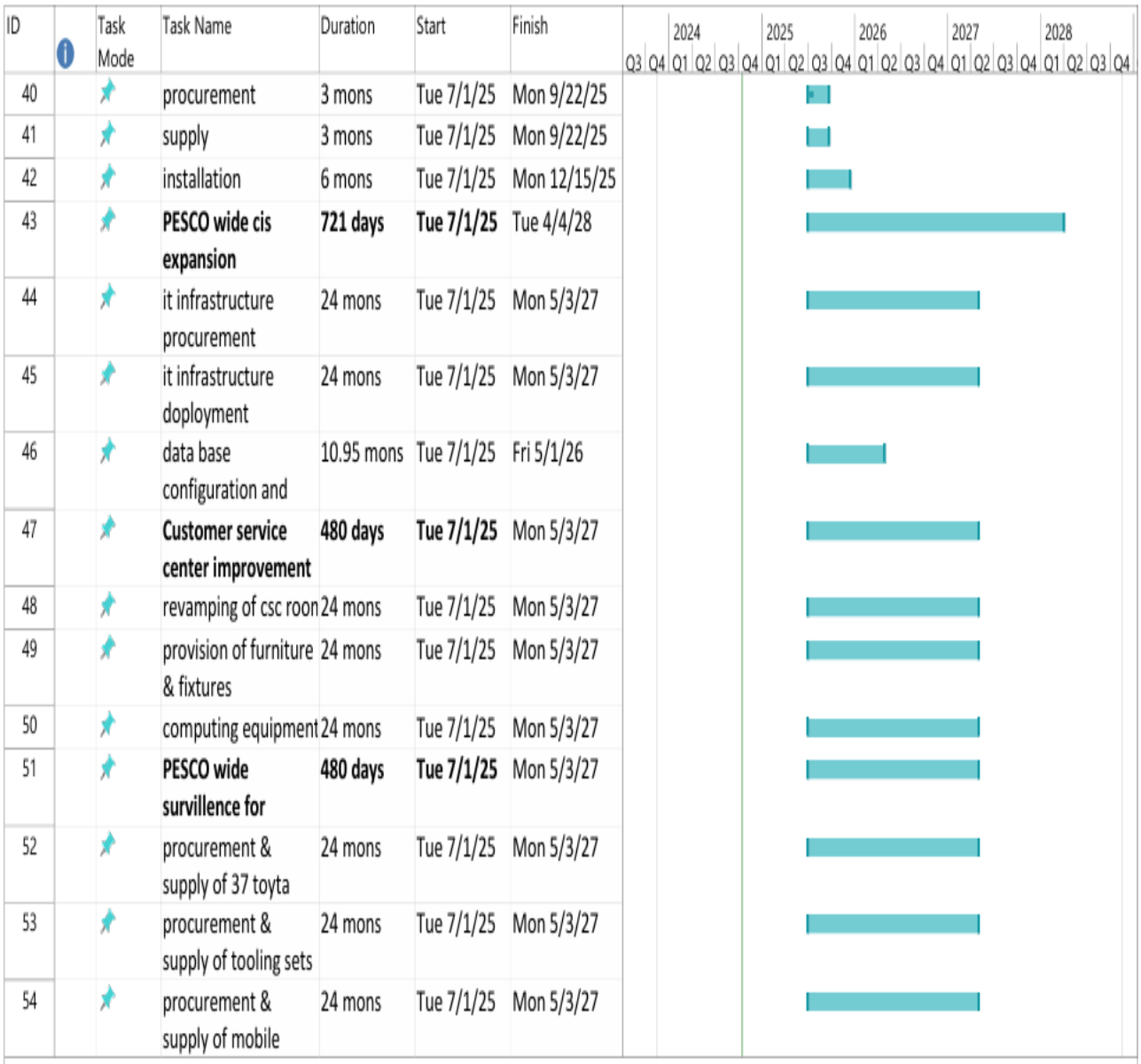
ID	Task Mode	Task Name	Duration	Start	Finish
40		procurement	3 mons	Tue 7/1/25	Mon 9/22/25
41		supply	3 mons	Tue 7/1/25	Mon 9/22/25
42		installation	6 mons	Tue 7/1/25	Mon 12/15/25
43		**PESCO wide cis expansion**	**721 days**	**Tue 7/1/25**	Tue 4/4/28
44		it infrastructure procurement	24 mons	Tue 7/1/25	Mon 5/3/27
45		it infrastructure doployment	24 mons	Tue 7/1/25	Mon 5/3/27
46		data base configuration and	10.95 mons	Tue 7/1/25	Fri 5/1/26
47		**Customer service center improvement**	**480 days**	**Tue 7/1/25**	Mon 5/3/27
48		revamping of csc roon	24 mons	Tue 7/1/25	Mon 5/3/27
49		provision of furniture & fixtures	24 mons	Tue 7/1/25	Mon 5/3/27
50		computing equipment	24 mons	Tue 7/1/25	Mon 5/3/27
51		**PESCO wide survillence for**	**480 days**	**Tue 7/1/25**	Mon 5/3/27
52		procurement & supply of 37 toyta	24 mons	Tue 7/1/25	Mon 5/3/27
53		procurement & supply of tooling sets	24 mons	Tue 7/1/25	Mon 5/3/27
54		procurement & supply of mobile	24 mons	Tue 7/1/25	Mon 5/3/27



Project: Commercial
Date: Tue 10/15/24

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

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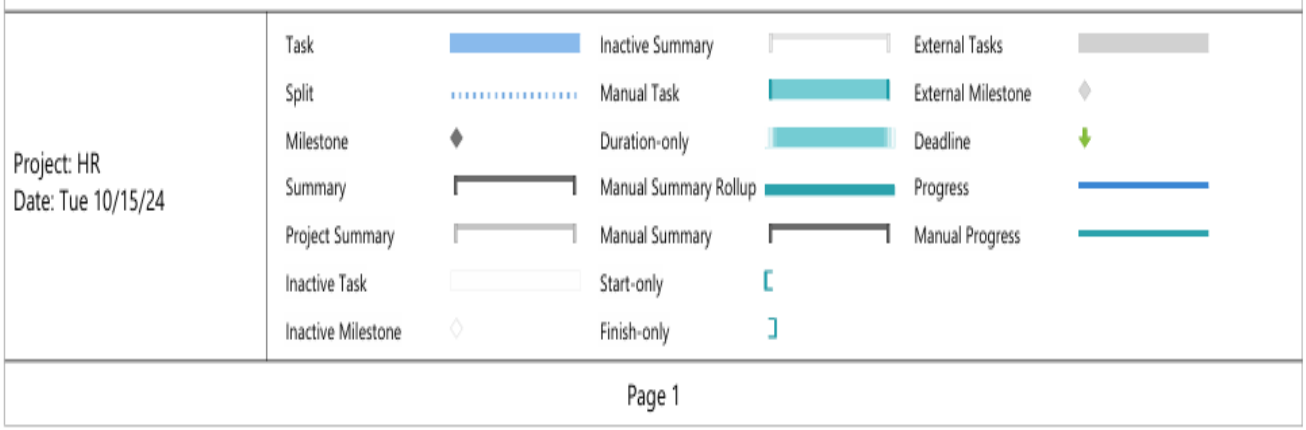
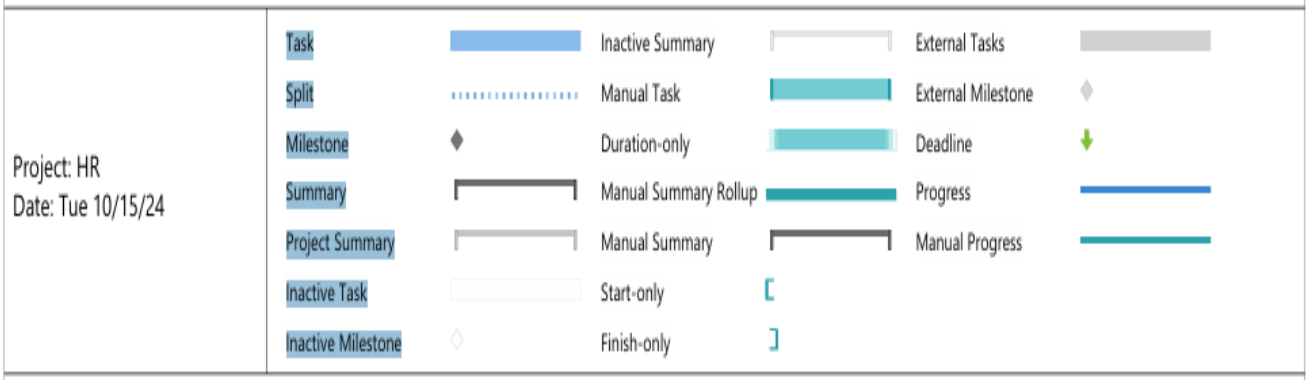
HR Plan Schedule:

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**HR improvement plar**	1305 days	Tue 7/1/25	Mon 7/1/30	
2		**training & capacity building**	1044 days	Tue 7/1/25	Fri 6/29/29	
3		**management training**	12 mons	Tue 7/1/25	Mon 6/1/26	
4		international exchang	12 mons	Tue 7/1/25	Mon 6/1/26	
5		ctc upgrade(3 ctcs)	12 mons	Tue 7/1/25	Mon 6/1/26	
6		**CTc #1**	1044 days	Tue 7/1/25	Fri 6/29/29	
7		procurement of furniture	1 day	Tue 7/1/25	Tue 7/1/25	
8		civil works	1 day	Tue 7/1/25	Tue 7/1/25	
9		**renevation & revamp**	1 day	Tue 7/1/25	Tue 7/1/25	
10		ctc # 2	1 day	Tue 7/1/25	Tue 7/1/25	
11		pr	1 day	Tue 7/1/25	Tue 7/1/25	
12		external communications	1280 days	Tue 7/1/25	Mon 5/27/30	
13		mass media campaign	1200 days	Tue 7/1/25	Mon 2/4/30	
14		news papers ads in leading local news paper	60 mons	Tue 7/1/25	Mon 2/4/30	
15		cable TV spots through out peshawar and its	60 mons	Tue 7/1/25	Mon 2/4/30	
16		public service announement local FM radio	60 mons	Tue 7/1/25	Mon 2/4/30	



ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
17		billboards & street poles streamers	60 mons	Tue 7/1/25	Mon 2/4/30	
18		radio talk shows	60 mons	Tue 7/1/25	Mon 2/4/30	
19		**public outreach & awareness programmes**	1200 days	Tue 7/1/25	Mon 2/4/30	
20		university campus sessions	60 mons	Tue 7/1/25	Mon 2/4/30	
21		local immam masjid sessions	60 mons	Tue 7/1/25	Mon 2/4/30	
22		**community center sessions**	60 mons	Tue 7/1/25	Mon 2/4/30	
23		chamber of commerce sessions	60 mons	Tue 7/1/25	Mon 2/4/30	
24		press club meetings	60 mons	Tue 7/1/25	Mon 2/4/30	
25		**energy conservation walk**	60 mons	Tue 7/1/25	Mon 2/4/30	
26		painting & debate competition	60 mons	Tue 7/1/25	Mon 2/4/30	
27		monthly news letter	64 mons	Tue 7/1/25	Mon 5/27/30	



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Section - XI
Environmental and Social Assessment and Mitigation Plans

There will be environmental and social impacts of implementing these projects. A detailed environmental and social assessment is required to be carried out to successfully complete this project.

Section - XII
Annexures

Annexure-1: PESCO’s Demand Forecast
Annexure-2: Generation Plan
Annexure-3: Power Acquisition Plan
Annexure-4: Goals and Objectives
Annexure-5: PESCO’s Transmission System Expansion Plan
Annexure-6: PESCO’s Transmission Lines Loadings
Annexure-7: PESCO’s Network Single line Diagrams
Annexure-8: PESCO’s Overloaded 11kV feeders

ANNEXURE-1: PESCO's DEMAND FORECAST

ANNEXURE-2: GENERATION PLAN

ANNEXURE-3: POWER ACQUISITION PLAN

ANNEXURE-4:
GOALS & OBJECTIVES

ANNEXURE-5: PESCO's TRANSMISSION EXPANSION PLAN

ANNEXURE-6: PESCO's TRANSMISSION LINES LOADING

ANNEXURE-7: PESCO's NETWORK SINGLE LINE DIAGRAM

ANNEXURE-8
PESCO's 11kV
OVERLOADED FEEDERS