

PERFORMANCE AUDIT REPORT ON THE ACCOUNTS OF HYDERABAD ELECTRIC SUPPLY COMPANY (HESCO) MINISTRY OF ENERGY (POWER DIVISION) AUDIT YEAR 2021-22

AUDITOR GENERAL OF PAKISTAN

PREFACE

The Auditor General of Pakistan conducts audit subject to Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan 1973, read with Sections 8 & 12 of the Auditor-General's (Functions, Powers and Terms and Conditions of Service) Ordinance, 2001. The performance audit of Hyderabad Electric Supply Company (HESCO) was carried out accordingly.

The Directorate General Audit (Power), Lahore conducted performance audit of Hyderabad Electric Supply Company (HESCO) during April 2022 for the financial years 2019-20 and 2020-21 with a view to report significant findings to stakeholders. The main objectives of the audit were to evaluate the economy, efficiency and effectiveness aspects of Hyderabad Electric Supply Company (HESCO). In addition, Audit also assessed, on test check basis whether the management complied with applicable laws, rules and regulations in managing the affairs of HESCO. The Performance Audit Report indicates specific actions that, if taken, will help the management realize the objectives of HESCO. The audit observations, included in this report, have been finalized in the light of discussions in the DAC meeting held on June 09, 2022.

The Performance Audit Report is submitted to the President of Pakistan in pursuance of Article 171 of the Constitution of the Islamic Republic of Pakistan 1973, for causing it to be laid before both Houses of Majlis-e-Shoora (Parliament).

Islamabad Dated: 29 November, 2023 -sd-(**Muhammad Ajmal Gondal**) Auditor-General of Pakistan

TABLE OF CONTENTS

EXECUTIVE SUMMARY

| S | ECTI | ONS | Page No. |
|----|------|---------------------------------|----------|
| 1. | INTF | RODUCTION | 1 |
| 2. | AUD | IT OBJECTIVES | 3 |
| 3. | AUD | IT SCOPE AND METHODOLOGY | 4 |
| 4. | AUD | IT FINDINGS AND RECOMMENDATIONS | 9 |
| | 4.1 | Organization and Management | 9 |
| | 4.2 | Financial Management | 23 |
| | 4.3 | Asset Management | 27 |
| | 4.4 | Monitoring & Evaluation | 33 |
| | 4.5 | Sustainability | 37 |
| | 4.6 | Overall Assessment | 37 |
| 5. | CON | CLUSION | 38 |
| | ACK | NOWLEDGEMENT | 41 |
| | ANN | EXES | 45 |

ABBREVIATIONS AND ACRONYMS

| AoA | Articles of Association |
|---------------|--|
| AT & C Losses | Aggregate Technical and Commercial Losses |
| BoD | Board of Directors |
| CEO | Chief Executive Officer |
| CIA | Chief Internal Auditor |
| CGR | Corporate Governance Rules |
| CoI | Conflict of Interest |
| CPPA (G) | Central Power Purchasing Agency (Guarantee) |
| DISCOs | Distribution Companies |
| EoI | Expression of Interest |
| EROs | Equipment Removal Orders |
| GoB | Government of Balochistan |
| GoP | Government of Pakistan |
| GST | General Sales Tax |
| HESCO | Hyderabad Electric Supply Company |
| HP | Horse Power |
| HR | Human Resource |
| HT/LT | High Tension/Low Tension |
| INTOSAI | International Organization of Supreme Audit Institutions |
| IPPs | Independent Power Producers |
| IPSAS | International Public Sector Accounting Standard |
| IT | Information Technology |
| KPIs | Key Performance Indicators |
| M&T | Metering & Testing |
| MoA | Memorandum of Association |
| MYT | Multi Year Tariff |
| NEPRA | National Electric Power Regulatory Authority |
| NTDC | National Transmission and Distribution Company |
| PER | Performance Evaluation Report |
| PPRA | Public Procurement Regulatory Authority |
| PSCs | Public Sector Companies |
| | |

| PSDR | Performance Standard (Distribution) Rules |
|-------|--|
| PSR | Preliminary Survey Report |
| SAIDI | System Average Interruption Duration Index |
| SAIFI | System Average Interruption Frequency Index |
| SECP | Securities and Exchange Commission of Pakistan |
| T&D | Transmission and Distribution |
| ToR | Terms of Reference |
| WAPDA | Water and Power Development Authority |
| | |

EXECUTIVE SUMMARY

Hyderabad Electric Supply Company Limited (HESCO) is a Public limited Company. It was incorporated on 23rd April, 1998 under the repealed Companies Ordinance 1984 and started its commercial operations w.e.f. 1st July 1998. HESCO is responsible for providing reliable and uninterrupted electric power to consumers of Hyderabad.

Directorate General Audit Power conducted Performance Audit of HESCO during April, 2022 for the financial years 2019-20 to 2020-21. The main objectives of the audit were to evaluate the economy, efficiency and effectiveness of the company.

The Auditor General of Pakistan approved the assignment of Performance Audit of HESCO for the financial years 2019-20 and 2020-21.

a) Key Audit Findings

- 1. Heavy accumulated losses due to weak operational management Rs 224,749.04 million.¹
- 2. Less recovery of billed amount -Rs. 36,695.20 million.²
- 3. Loss of revenue due to abnormal line losses beyond NEPRA's targets Rs.24,348.849 million.³
- 4. Losses on independent feeders beyond permissible limit- Rs.275.397 million.⁴
- 5. Loss due to abnormal increase in AT&C losses.⁵
- 6. Non-recovery of receivables from persistent energy defaulters-Rs. 52,083.77 million.⁶
- 7. Loss of revenue due to non-billing of electricity on sick feeders Rs. 122.315 million.⁷
- ¹ Para-4.1.1
- ² Para-4.1.2
- ³ Para-4.1.3
- ⁴ Para-4.1.4
- ⁵ Para-4.1.5
- ⁶ Para-4.1.6
- ⁷ Para-4.1.9

- 8. Undue generation of revenue through overbilling to private and government connections Rs.1,121.431 million.⁸
- 9. Unnecessary accumulation of huge quantities of spare parts due to non-verification of physical inventory Rs. 2,053.849 million.⁹
- 10. Non-evaluation of performance of Board members.¹⁰

b) Recommendations: -

- HESCO management needs to strengthen its internal controls in an economic, efficient and effective manner to achieve the objectives by monitoring the operational performance, recoveries, line losses, subsidies, coordination & monitoring of SDGs schemes, third party material inspection of company, monitoring and review of circular debt, monitoring of cash collection, retention and remittances to CPPA-G on account of purchase of power, for smooth running of the Company.
- Devise an effective business plan/viable strategy to increase customers and sales revenue and to reduce losses.
- Expedite recovery of arrears from energy defaulters by launching robust recovery campaign.
- Devise an effective inventory utilization plan /viable strategy to increase proper utilization and to reduce losses due to piling up of inventory and its obsolesce/deterioration.
- Ensure complete implementation of Electrical Equipment Removal Orders (EROs).
- Devise an effective safety plan/viable strategy in order to decrease fatalities and launch training program for employees and campaign for general public for safety awareness
- Investment be made in line with proper plan of action to enhance system technically and administratively.
- Upgrade obsolete transmission lines to avoid line/AT&C losses caused by theft of electricity, tripping, law and order conditions etc.

⁸ Para-4.1.10

⁹ Para-4.3.1

¹⁰ Para-4.4.4

- Investigate and fix responsibility for:
 - > Heavy accumulated losses due to inefficient operational activities.
 - Negative value of working capital.
 - > Non-implementation of strategy/procedure for early recovery.
 - > Heavy accumulation of inventory since starting operations
 - Non-implementation of strategy/procedure for recovery of detection charges.
 - Non-implementation of strategy/procedure for implementation of EROs and recovery of arrears
 - > Fatal non-fatal accidents and impose penalties on persons at fault.
 - Non achievement of NEPRA targets regarding reduction of T&D losses.

1. INTRODUCTION

As per Memorandum and Articles of Association, Hyderabad Electric Supply Company Limited (HESCO) is a Public limited Company. It was incorporated on 23rd April, 1998 under the repealed Companies Ordinance, 1984 and commence its business from 1st July 1998. As a result of WAPDA Corporatization and Commercialization process, its former Electricity Area Boards were transformed into Companies and HESCO took over the business of Assets and liabilities of WAPDA. However, DISCOs at present are under the administrative control of Government of Pakistan Ministry of Energy (Power Division). The principal activities of the Company are to own, operate and maintain the power distribution network located within licensee's jurisdiction area to provide reliable and uninterrupted electric power to consumers of Hyderabad.

1.1 Mission Statement of HESCO

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

1.2 Vision Statement of HESCO

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

1.3 Objectives of HESCO

The objectives of Hyderabad Electric Supply Company (HESCO) are to acquire/takeover the assets, legal rights, and liabilities of previously known Area Electricity Board (AEB) Hyderabad to ensure as a progressive power distribution

company, and to carry on, extend/expand the business, infrastructure, facilities and activities to ensure smooth and consistent flow/supply of electricity within the geographical boundaries (Province of Sindh except Karachi) with best possible customer services.

| Manpower | 7,689 |
|---|-----------|
| 11 KV FEEDERS | 562 |
| No. of Customers | 1,172,990 |
| Distribution Transformers | 43,873 |
| Length of Lines (KMs) | 43,527.74 |
| 11 KV (HT) | 28,470.55 |
| 0.4 KV (LT) | 15,057.19 |
| ~ | |

1.4 Brief Profile of HESCO

Source: Progress report HESCO

1.5 Circles/Divisions/Sub-Divisions under HESCO

To ensure uninterrupted supply of electricity and most intimate customer services to about 1,172,990 consumers. HESCO's jurisdiction is divided into twelve (12) districts of Sindh Province with four (4) operation Circles, fifteen (15) operation Divisions and 68 operation Sub-divisions along with nine (9) construction divisions, and four (4) M&T divisions. The company is striving day and night for efficient and effective running of the business. Circle is headed by Manager (Operations), Divisions are managed by Deputy Manager (Operations) and Subdivisions are run by Sub Divisional Officers (SDOs). Each division has an Assistant Manager (Commercial).

| Formation | Circle | Divisions | Sub-Divisions |
|--------------|--------|-------------|-------------------|
| Operation | 04 | 15 | 68 |
| GSO | 01 | 04 | 21 |
| GSC | 01 | 04 | 06(Including |
| | | | 01Civil Division) |
| Construction | 01 | 04 | 09 |
| RM M & T | 01 | 04 CM M & T | Nil |

Source: HESCO official website data

1.6 Organogram of HESCO:



2. AUDIT OBJECTIVES

The main objectives of performance audit are to ensure: -

- 1. Compliance of NEPRA Targets
- 2. Adjustments of balances with other DISCOs
- 3. Capitalization of Completed works
- 4. Efficient processing of ELR/DOP/Deposit Works
- 5. Removal of equipment after issuance of ERO
- 6. Recovery from permanently disconnected consumers
- 7. Timely reconciliation with CPPA-G
- 8. Correct energy units to consumers
- 9. Finalization of Theft cases in HESCO

The main objective of performance audit is to ensure whether HESCO had successfully envisaged and executed the supply of electricity, augmentation and construction of new transmission lines in an economical, efficient and effective manner with maximum utilization of resources.

3. AUDIT SCOPE AND METHODOLOGY

The Scope of audit was to focus on the main activity of HESCO i.e., to provide reliable and uninterrupted electric power to consumers and to generate revenue. The period under review of Performance Audit was financial year 2019-20 & 2020-21. Audit activity started with preparation of Preliminary Survey Report (PSR).

Each distribution company is required to submit to NEPRA an Annual Performance Report (APR) in a prescribed format, according to performance standards (distribution) Rules (PSDR) 2005. Based on the data provided, NEPRA publishes a Performance Evaluation Report (PER) each year and similarly NEPRA has PER of Distribution Companies for the Financial Years 2019-20 and 2020-21. Therefore, verification of the facts and figures mentioned in these reports will be the audit methodology during the course of Performance Audit of HESCO.

Following audit methodology was also adopted during execution of Performance Audit: -

- i) Interview and discussion with the management
- ii) Examination of Financial Statement and note accompanied together.
- iii) Analysis of contract agreements of supply & procurement of material and execution of works
- iv) Assessment of rules and regulation compliance.
- v) Review of relevant files, statistical returns and reports.
- vi) Testing and analysis of provided data.
- vii) Examination of vouchers where necessary.

3.1 PERFORMANCE EVALUATION OF NEPRA TARGETS

The National Electric Power Regulatory Authority (NEPRA) has adopted ten parameters while analyzing/evaluating the annual performance of DISCOs. The analysis is based on these following parameters: -

- 1. Transmission & Distribution Losses.
- 2. Recovery in percentage.
- 3. System Average Interruption Frequency Index (SAIFI).
- 4. System Average Interruption Duration Index (SAIDI).
- 5. Percentage consumers who were not given new connections in permitted time period.
- 6. Total number of consumers who made complaints about voltages.
- 7. Average Duration of load shedding (hrs.).
- 8. Total Consumer services complaints received by DISCO during the year.
- 9. Fault Rate (faults/km) of distribution system.
- 10. Electrical incidents resulting in death or permanent serious injury/disability to the member of staff or public.

| Sr | Description | | 2020-21 | | | 2021-22 | |
|-----|--|-----------------------|-------------------------|------------------------|-----------------------|---|-------------|
| No. | | | | | | 2021-22 Achieved by Breach of Target 28.20% 6.91% 76.70% 23.30% 137.10 Far away 7,852.2 Far | |
| | | Target by NEPRA | Achieved by HESCO | Breach of Target | Target by NEPRA | by | of |
| 1 | Transmission & Distribution Losses | 19.47% | 27.40% | 7.93% | 21.29% | 28.20% | 6.91% |
| 2 | Recovery in percentage | 100% | 75.10% | 24.90% | 100% | 76.70% | 23.30% |
| 3 | System Average Interruption Frequency Index (SAIFI) | 13 | 134.05 | Far Away | 13 | 137.10 | |
| 4 | System Average Interruption Duration Index (SAIDI) | 14 | 7,558 | Far Away | 14 | 7,852.2 | Far away |
| 5 | Percentage consumers who | 5% | 0.04% | 0% | 5% | 0.03% | 0% |

The above performance indicators/parameters were analyzed as under:

| | were not given new connections in permitted time period | | | | | | |
|----|--|-----------------|-------------------|------------------|-----------------|--------------------|------------------|
| 6 | Nominal Voltages (% of consumers whose voltages remained beyond prescribed limit) | 5% | 0.016% | Within target | 5% | 0.016% | Within target |
| 7 | Average Duration of load shedding (Hrs.) | 0 | 8 Hrs | 8 Hrs | - | 6 Hrs | 0 |
| 8 | Total Consumer services complaints received by DISCO during the year | 0 | 117,716 | 0 | 0 | 126,437 | 0 |
| 9 | Fault Rate (faults/km) of distribution system | 0 | 1.18 faults/Km | 0 | 0 | 0.827 faults/Km | 0 |
| 10 | Electrical incidents resulting in death or permanent serious injury/disability to the member of staff or public | 0 fatalities | 35 fatalities | 35 fatalities | 0 fatalities | 32 fatalities | 32 fatalities |

It is clear from the above table that performance targets regarding Transmission & Distribution Losses, Recovery in percentage, System Average Interruption Frequency Index (SAIFI), System Average Interruption Duration Index (SAIDI) and electrical incidents of fatalities were not achieved for which separate audit observations were raised in the subsequent section of this report.

4. AUDIT FINDINGS AND RECOMMENDATIONS

4. AUDIT FINDINGS

4.1 Organization and Management

4.1.1 Heavy accumulated losses due to weak operational management - Rs 224,749.04 million

According to rule 4(3) of the Public Sector Companies (Corporate Governance Rules 2013), the chief executive is responsible for the management of the Public Sector Company and for its procedures in financial and other matters, subject to the oversight and directions of the Board, in accordance with the Ordinance. His responsibilities include implementation of strategies and policies approved by the Board, making appropriate arrangements to ensure that funds and resources are properly safeguarded and are used economically, efficiently and effectively and in accordance with all statutory obligations.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-22 & 2020-21, it was observed that accumulated losses rose to Rs. 224,749.04 million upto June 30th 2021. The financial position of the company was as under:

(Rs in million)

| Sr. No | Financial Year | Income | Expenditure | Annual Loss | Accumulated Losses |
|-----------|-------------------|-----------|-------------|----------------|-----------------------|
| 1 | 2019-20 | 88,719.71 | 106,464.03 | (17,744.32) | (223,046.89) |
| 2 | 2020-21 | 87,917.39 | 89,619.55 | (1,702.15) | (224,749.04) |

It is clear from the above table that accumulated losses increased up to Rs. 224,749.04 million in 2020-21. Main reasons for such increase in the accumulated losses were increase in operational expenditure including depreciation, huge provision of doubtful debts and slow-moving stock, heavy expenditure on repair & maintenance, finance cost and actuarial loss on measurement of post-retirement benefits. Thus, no steps were taken to ensure commercial viability of the company. This showed a weak financial management. Audit is of the view that weak financial management resulted into occurrence of losses of the company.

Non-existence of business plan/viable strategy to increase consumer base, reduce T&D losses and control the expenditure resulted into accumulated losses showing an increasing trend.

The matter was reported to the management in May, 2022. The management replied that an enquiry committee had been constituted to investigate the reasons of heavy accumulation of losses since starting operations to fix responsibility. The outcome of enquiry report would be provided to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within 15 days to the Ministry and Audit. DAC also directed the management to submit action plan regarding minimizing losses, through its BOD within one week and implement that plan within one month and submit position and progress to the Ministry and Audit authorities. No further progress was reported till finalization of the report.

Audit recommends that the management needs to ensure compliance with DAC's decision.

4.1.2 Less recovery of billed amount - Rs. 36,695.20 million

NEPRA set 100% recovery targets of amount billed by DISCOs for the financial year 2019-20 and 2020-21.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-20 & 2020-21, it was observed that the Company billed units amounting to Rs.71,455.4 million in 2020-21 as compared to units billed amounting to Rs.65,249.2 million in 2019-20 showing an increase of 9.56%. The detail of operational and financial results regarding billing and recovery during the last two years is as under:

| | | 20 | 19-20 | (Rs. in million | 1) |
|-------------------|-----------|------------|---------------------|------------------------------|--------------------------|
| Name of Circle | Billing | Collection | % Recovery Ratio | Pending Recovery (2-3) | % Non- recovery Ratio |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Hyderabad | 22,450.90 | 15,233.20 | 67.90 | 7,217.70 | 32.10 |
| LAAR | 21,086.00 | 16,042.90 | 76.10 | 5,043.10 | 23.90 |
| Nawab Shah | 14,295.20 | 9,397.30 | 65.70 | 4,897.90 | 34.30 |
| Mir Pur Khas | 7,416.10 | 5,033.00 | 72.50 | 2,383.10 | 27.50 |

Billing and Recovery for 2019-20 & 2020-21

| Total | 65,249.20 | 45,707.00 | 70.0 | 19,542.20 | 30.00 |
|--------------|-----------|-----------|---------|------------------|-------|
| | | 20 | 20-2021 | (Rs. in million) | |
| Hyderabad | 24,541.20 | 17,791.90 | 72.50 | 6,749.30 | 27.50 |
| LAAR | 23,663.90 | 19,383.60 | 81.90 | 4,280.30 | 18.10 |
| Nawab Shah | 15,375.50 | 11,298.80 | 73.50 | 4,076.70 | 26.50 |
| Mir Pur Khas | 7,874.10 | 5,828.10 | 74.00 | 2,046.00 | 26.00 |
| Total | 71,455.40 | 54,302.40 | 76.00 | 17,153.00 | 24.00 |
| | | | | 36,695.20 | |

The above data indicated that company recovered 70.0% and 76.0% of their billed amount during the period 2019-20 and 2020-21 respectively. The actual receipts of billed amount were Rs 45,707 million in 2019-20 and Rs 54,302.4 million in 2020-21 (**Annex-I**) showing an increase of 6.0% yet accumulated losses rose to Rs. 224,749.047 million. Poor recovery percentage of HESCO resulted in less recovery of revenue.

Audit is of the view that despite increase in collection, accumulated loss was increased up to Rs. 224,749.047 million in 2020-21 which shows that the Company's financial position is further deteriorated which needs to be looked into by implementing proper business plan and financial strategies in order to reduce heavy accumulation of losses.

The matter was reported to the management in May 2022. The management replied that efforts were being made to increase the recovery position. HESCO major portion based on domestic consumers. The domestic consumers paid partial payment of electricity bills, along with current bill amount.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee constituted by HESCO within 15 days to the Ministry and audit. DAC also directed the management to submit action plan through its BOD, regarding achievement of objectives by financial management, within one week of implementation besides exercising the plan within one month and also submit position and progress to the Ministry and Audit authorities. No further progress was reported till finalization of the report.

Audit recommends that the management needs to implement DAC's decision.

4.1.3 Loss of revenue due to abnormal line losses beyond NEPRA's targets - Rs. 24,348.849 million

According NEPRA determination No.NEPRA/R/ADG(Trf)TRF-509/HESCO-2019/43984 dated 08.12.2020 the target of line losses assigned by NEPRA for HESCO were fixed at 19.47% and 21.29% for the financial years 2019-20 and 2020-21 respectively.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was noticed that percentage of line losses on three hundred and thirty-two (332) feeders ranged between 19.47% to 100%, in 2019-20 and percentage of line losses at three hundred and ten (310) feeders ranged between 21.29% to 100%, in 2020-21 which was abnormally higher than the target of line losses set by the NEPRA (**Annex-III**). Hence, 1,014.524 million units and 858.464 million units were lost in 2019-20 & 2020-21 respectively, entailing revenue loss of Rs.24,348.849 million. The line losses were caused by theft of electricity, tripping, law and order conditions etc.

Non-adherence to NEPRA's target resulted in loss of revenue amounting to Rs. 24,348.849 million due to abnormal line losses beyond NEPRA's targets up to the financial year 2020-21.

The matter was reported to the management in May 2022. The management replied that an enquiry committee has been constituted to investigate the reasons of heavy line losses and fix responsibility on person at fault. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.1.4 Losses on independent feeders beyond permissible limit -Rs. 275.397 million

According to table-5 chapter 5 of Distribution Rehabilitation Guidelines (September, 2003) "The maximum permissible limit for annual energy losses for H.T circuit is 3%".

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that the percentage of energy losses of seventy-two (72) independent H.T industrial feeders were in excess of the permissible limit of 3% during the year 2019-20 and 2020-21 (**Annex-V**). The total losses over and above the permissible limit amounting to Rs.275.397 million were either because of illegal extension of load or inability of carrying the running load. Either the said loss was to be recovered from the independent consumers or responsibility be fixed. The management of the company and consumers both were responsible to keep the energy losses within permissible parameters.

Non-adherence to Distribution Rehabilitation Guidelines resulted in line losses of Rs.275.397 million beyond permissible limit during the financial years 2019-21.

The matter was reported to the management in May 2022. The management replied that an enquiry committee has been constituted to investigate the matter of energy losses on independent feeders and fix responsibility on person(s) at fault. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.1.5 Loss due to abnormal increase in Aggregate Technical & Commercial (AT&C) losses

According to Clause 4.2 of NEPRA determination of distribution tariff under MYT regime for the FY 2020-21 TO FY 2024-25 for HESCO, NEPRA should approve the investment plan before considering the MYT petition. Similarly, the investment plan should be linked with the actual performance of HESCO. These targets should be realistic and should incorporate performance incentives for the DISCOs to retain earnings, if they do better than the targeted AT&C loss levels.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that AT&C losses were varying due to different factors. Such substantial AT&C losses show the weakness of internal control system. Load shedding on account of Aggregate Technical and Commercial (AT&C) losses is one of the reasons of poor governance, instead of improving their distribution network, checking the theft of electricity and improving the recovery. The circle wise detail of AT&C losses for the last three years 2018-21 is as under:

| | · · · · | | | | | | | |
|-------|----------------|-------------|-------------|-------------|--|--|--|--|
| Sr No | Name of Circle | 2021 (%age) | 2020 (%age) | 2019 (%age) | | | | |
| 1 | Hyderabad | 46.74 | 51.44 | 48.59 | | | | |
| 2 | LAAR | 40.31 | 45.59 | 45.18 | | | | |
| 3 | Nawabshah | 42.60 | 49.62 | 43.25 | | | | |
| 4 | Mirpur Khas | 44.20 | 48.80 | 41.37 | | | | |
| | TOTAL | 43.32 | 48.80 | 45.39 | | | | |

Circle wise analysis of Aggregate Technical and Commercial Losses (AT&C)

It is clear from the above table that the Aggregate Technical & Commercial losses were increased from 45.39% in 2018-19 to 48.80% in 2019-20 but then reduced to 43.32% in 2020-21 which is also high in range despite huge investment in sixty-five (65) HT proposal works carried out in 2019-20 and 2020-21 for the betterment of transmission system and to minimize the AT&C losses.

Non-adherence to NEPRA directives resulted in abnormal increase in AT&C losses despite huge investment in system augmentation and maintenance.

The matter was reported to the management in May 2022. The management replied that an enquiry committee has been constituted to investigate the matter of abnormal increase in AT&C losses and fix responsibility on person at fault. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. Further progress was not reported till finalization of report. Audit recommends that the management needs to implement DAC's decision.

4.1.6 Non-recovery of receivables from persistent energy defaulters -Rs. 52,083.77 million

According to Para-1.3 of commercial Procedure, "the Revenue Officer and Assistant Manager are responsible for: (i) implementing in conjunction with the Executive Engineer, the commercial policy laid down from time to time by the Authority through the Company (ii) efficient application of billing and collection procedure".

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-20 & 2020-21, it was observed that an amount of Rs.52,083.77 million was recoverable from energy consumers (Private & Government) having arrears for last many years. However, no efforts were made by the management to accelerate the recovery from defaulters. Owing to increasing trend of receivables, HESCO was facing difficulties in discharging its obligations towards CPPA(G), Power Sector Companies (PSCs) and Independent Power Producers (IPPs). Detail of outstanding receivables is tabulated as under:

| | Receivables 2019 | Receivables 2020 | %Age Inc/ (Dec 2019 to 2020 | Receivables 2021 | %Age Inc/ (Dec 2020 to 2021 | %Age Inc/(Dec) 2019 to 2021 |
|---|---------------------|---------------------|---|---------------------|--------------------------------------|--------------------------------------|
| Gross Receivables | 60,216.37 | 75,689.78 | 25.69 | 82,273.17 | 8.69 | 36.62 |
| Provision for doubt debts | (22,497.90) | (27,913.40) | 24.07 | (30,189.40) | 8.10 | 34.19 |
| Net Receivables | 37,718.47 | 47,776.38 | 26.66 | 52,083.77 | 9.01 | 38.09 |
| Gross receivables due for more than 3 years | 30,406.341 | 40,371.869 | 32.78 | | | |

Detail of pending receivables as on 30.06.2021 (Rs. in million)

The above data indicated that trade receivables increased from Rs. 37,718.47 million in 2019 to Rs. 52,083.77 million in 2021 registering an increase of 38.09% but a huge amount was provided in the accounts i.e., Rs. 30,189.40 million as provision for doubtful debts during the year 2020-21.

Furthermore, gross receivables amounting to Rs. 40, 372 million for the year 2020 were more than 3 years old which comes to 53% of total receivables. The continuous accumulation of HESCO's receivables from Govt. of Pakistan has remained a major concern for the Company and has a significant impact on the Company's working capital position.

Non-adherence to Commercial Procedure resulted in non-recovery of Rs. 52,083.77 million from energy defaulters up to the Financial Year 2020-21.

The matter was reported to the management in May 2022. The management replied that the receivable amount shown by Audit included active running defaulter consumers and dead defaulter consumers. The recovery of Mukhtiarkar has been directed to recover the outstanding electricity amount from dead defaulter consumers as well as instructions have also been issued to field formations to disconnect the electricity of running defaulters. The progress achieved would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to develop strategy/special campaign regarding recovery through its BOD and submit weekly position and progress of recovery to the Ministry and Audit. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.1.7 Non-recovery of detection charges / pending units from consumers - Rs.19,008.10 million

According to Para-1.3 of commercial Procedure, "the Revenue Officer and Assistant Manager are responsible for: (i) implementing in conjunction with the Executive Engineer, the commercial policy laid down from time to time by the Authority through the Company (ii) efficient application of billing and collection procedure".

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that energy meters of consumers of various categories were physically checked by the surveillance teams / metering & testing (M&T) department and detection charges of Rs.19,008.10 million for the last two years i.e., 2019-20 and 2020-21 on account of slowness, tempering in meters and pending units etc. were approved

| Year | Number of detection bill | Total units charged (M.kWh) | Total amount of detection bills charged (Rs. in Millions) | Total amount of detection bills recovered (Rs. in Millions) | Outstanding receivables | %age Recovery against detection bill |
|---------|-----------------------------------|--------------------------------------|---|---|----------------------------|--|
| 2020-21 | 1,332,832 | 921.7 | 10,830.4 | 439.0 | 10,391 | 4.1% |
| 2019-20 | 1,094,467 | 882.6 | 9,027.0 | 409.9 | 8,617.1 | 4.5% |
| Total | 2,427,299 | 1,804.3 | 19,857.4 | 848.9 | 19,008.1 | 4.27% |

for recovery from the consumers which were not recovered. Detail is as under:

As per data the recovery % age of detection charges has reduced by 0.4% from 4.5% in 2019-20 to 4.1% in 2020-21 which shows negligence on the part of management in recovering the amounts from the defaulters.

Non-adherence to Commercial Procedures resulted in non-recovery of detection charges amounting to Rs. 19,008.1 million from the consumers up to the Financial Year 2020-21.

The matter was reported to the management in May, 2022. The management replied that an enquiry committee has been constituted to investigate the matter. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. DAC also directed the management to develop strategy/special campaign regarding recovery through its BOD and also submit weekly position and progress of recovery to the Ministry and Audit authorities. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.1.8 Non-recovery of arrears due to non-removal of electrical equipment (EROs) Rs.99,780.20 million

According to Para-3 of Authority's circular dated April 15, 1998, "Disconnections will be affected through removal of meters, transformers, span or any other equipment to ensure that no possibility of loop hole is left for unauthorized use of energy during the period of disconnection. The equipment after having been removed from site was required to be returned to store".

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that 0.714 million industrial / commercial / tubewell consumers defaulted the payment of energy charges of Rs. 99.780.20 million for the last two years 2019-21 and were permanently disconnected. The equipment removal orders (EROs) were issued but were executed partially as only meters were removed whereas transformers were not removed from sites, the circle wise detail of which is as under:

| Sr No | Name of Circle | 2020 | | 20 | 021 | Grand Total | |
|-------|-------------------|------------|--------------|------------|--------------|-------------|-----------------|
| | | No of EROs | Amount (Rs.) | No of EROs | Amount (Rs.) | No of EROs | Amount (Rs.) |
| 1 | Hyderabad | 122,809 | 19,057.2 | 125,016 | 23,344.6 | 247, 825 | 42,401.8 |
| 2 | LAAR | 90,067 | 13,014.5 | 87,577 | 14,991.5 | 177, 644 | 28,006.0 |
| 3 | Nawab Shah | 88,725 | 10,184.2 | 82,921 | 11,458.1 | 171, 446 | 21,642/3 |
| 4 | Mirpur Khas | 57,256 | 3,398.4 | 60,469 | 4,332.1 | 117, 725 | 7,730.1 |
| | TOTAL | 358,857 | 45,654.3 | 355,983 | 54,126.3 | 714, 840 | 99,780.20 |

As per above data the equipment removal orders (EROs) needs to be implemented along with removal of all the allied electric material/equipment in order to stop the defaulters for using electricity without payments of dues.

Non-implementation of Authority's instructions resulted in non-removal of the transformers and allied material from the sites and non-recovery of outstanding energy charges of Rs. 99.780.20 million for the period 2019-21.

The matter was reported to the management in May 2022. The management replied that an enquiry committee has been constituted to investigate the matter. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. DAC also directed the management to develop strategy/special campaign regarding recovery through its BOD and also submit weekly position and progress of recovery to the Ministry and Audit authorities. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.1.9 Loss of revenue due to non-billing of electricity on sick feeders - Rs. 122.315 million

According to Para-1.3 of Commercial Procedure, the Revenue Officer and Assistant Manager are responsible for; i) implementing in conjunction with the Executive Engineer, the commercial policy laid down from time to time by the Authority through the Company, ii) efficient application of billing and collection procedures.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was noticed that 6,344,856 units of energy were received through seventeen (17) feeders and 3,064,007 units received through seven (07) feeders respectively in 2019-20 and 2020-21 (**Annex-II**) but units billed there against remained Nil throughout the year and showing 100% units lost amounting to Rs. 122.315 million without billing to the consumers. This scenario indicated the theft of electricity on these sick feeders and company sustained loss amounting to Rs.122.315 million. The feeder wise detail is as under:

| Year | No. of Feeders | Units Received Progressively | Units billed progressively | Units lost progressively | %Age Lost Progressively | Average Rate | Amount |
|---------|-------------------|------------------------------------|-------------------------------|-----------------------------|----------------------------|-----------------|-------------|
| 2019-20 | 17 | 6,344,856 | 0 | 6,344,856 | 100.00% | 13 | 82,483,128 |
| 2020-21 | 7 | 3,064,007 | 0 | 3,064,007 | 100.00% | 13 | 39,832,091 |
| TOTAL | | 9,408,863 | | 9,408,863 | 100.00% | 13 | 122,315,219 |

STATEMENT SHOWING THE DETAIL OF LOSS OF REVENUE DUE TO NON-BILLING OF ELECTRICITY ON SICK FEEDRES

Non-adherence to the Commercial Procedure and non-billing to the consumers resulted into loss of Rs.122.315 million due to theft of electricity during the financial years 2019-21.

The matter was reported to the management in May 2022. The management replied that an enquiry committee has been constituted to

investigate the matter. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.1.10 Overbilling to private and government connections -Rs.1,121.431 million

According to the instructions issued by PEPCO dated December 12, 2010. "Strict disciplinary action, without any exception, shall be taken against the officers and staff found involved in overbilling."

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was noticed that total 401,455,710 units were billed against 356,605,052 units received at sixty-nine (69) dedicated feeders in 2019-20 and 267,093,582 units were billed against 225,680,274 units received at 46 Nos. dedicated feeders in 2020-21, which caused negative line losses (**Annex-IV**). This scenario indicated that over billing of Rs.1,121.431 million was made to the consumers just to conceal the line losses and theft of energy.

Non-adherence to the Commercial Procedure resulted in undue generation of revenue of Rs.1,121.431 million through overbilling to private and government connections up to the financial year 2020-21.

The matter was reported to the management in May 2022. The management replied that an enquiry committee has been constituted to investigate the matter of overbilling and fix responsibility on person at fault. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.2 FINANCIAL MANAGEMENT

4.2 Financial Management

4.2.1 Imprudent working capital management

Working capital management involves the relationship between a Company's short-term assets and its short-term liabilities. The goal of working capital management is to ensure that a Company is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses. The Generally Accepted Standard ratio of working capital is 2:1.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that net working capital was Rs. 122,708.958 million (negative value) as on June 30, 2020 which was slightly reduced to Rs. 121,527.972 million (negative value) as on June 30, 2021. The working capital position showed that company was facing problems in running the day-to-day operations due to shortage of funds. Comparative position of net working capital, current ratio and Leverage/Debt ratio during the period 2019-20 & 2020-2021 is tabulated as under:

| Year | Current Assets | Current Liabilities | Net Working Capital | Current Ratio | Total Liabilities | Total Assets | Leverage/ Debt Ratio |
|-------------|-------------------|------------------------|------------------------|------------------|----------------------|--------------|----------------------------|
| 2019- 20 | 149,650.022 | 272,358.982 | (122,708.958) | 0.54:1 | 270,362.867 | 159,986.809 | 1.69 |
| 2020- 21 | 189,430.182 | 310,958.154 | (121,527.972) | 0.60:1 | 326,262.153 | 195,070.642 | 1.67 |

(Rs in million)

The above data indicated that the current ratio (current assets / current liabilities), has deteriorated ranging from 0.54 to 0.60 at times which was far below than the generally accepted standard ratio of 2:1. The above facts indicated that company was not generating sufficient cash to meet their operational expenses. Furthermore, the Leverage/Debt ratio (Total Liabilities / Total Assets) measure the ability of the business to meet its long-term (one year or longer) debt obligations. HESCO Leverage ratio was ranging from 1.67:1 to 1.69:1 during 2019-20 and 2020-21 which is below the general benchmark of 0.5:1.

The matter was reported to the management in May, 2022. The management replied that an enquiry committee has been constituted to investigate the reasons for negative value of working capital and fix responsibility on person(s) at fault. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee constituted by HESCO within fifteen days to the Ministry and Audit. DAC also directed the management to submit action plan regarding improvement in working capital, through its BOD within one week and implement that plan within one month and submit position and progress to the Ministry and Audit authorities. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.3 ASSET MANAGEMENT

4.3 Assets Management

4.3.1 Unnecessary accumulation of huge quantities of spare parts due to non-verification of physical inventory - Rs. 2,053.849 million

According to clause 5(b) of Corporate Governance Rules, 2013 for Public Sector Companies, the Board shall exercise its powers and carry out its fiduciary duties with a sense of objective judgment and independence in the best interest of the company using the funds, assets and resources of the Public Sector Company with due diligence and care.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that a large number of stores and spare parts valuing Rs.2,053.849 million were lying un-used since long and the management declared huge inventory as slow-moving items without following the prescribed procedure. The spare parts were procured un-necessarily or without assessment of their actual requirement as most of the items were purchased and stored on urgent/critical basis but could not be utilized since their purchase date. Improper internal controls and weak inventory management caused un-necessary accumulation of such huge quantities of stores and spare parts valuing Rs 2,053.849 million. Hence, the Company sustained loss due to such irregular procurements. Furthermore, no physical stock taking of the stores and spares was held by the company neither provided evidence for verification of valuation of the stores and spares as on June, 30,2020. Therefore, the external auditors raised a qualification regarding non-verification of opening and closing stores and spares enter into the determination of the financial performance of the company. Detail of inventory is as under:

| | Store and spares 2019 | Store and spares 2020 | Store and spares 2021 | %age Inc/(Dec) |
|--|-----------------------|-----------------------------|-----------------------------|----------------|
| Stores | 3,139.943 | 2,866.321 | 2,716.448 | (13.48) |
| Spares | 58.787 | 31.430 | 31.430 | (46.53) |
| Gross stores and spares | 3,198.731 | 2,897.751 | 2,747.878 | (14.094) |
| Provision for slow moving and obsolete | (167.544) | (694.028) | (694.028) | 314.23 |
| Net stores and spares | 3,031.187 | 2,203.722 | 2,053.849 | (32.24) |

Detail of stores and spares as on 30.06.2021

(Rs. in million)

It is clear from the above table that the obsolete inventory amounting to Rs 2,053.849 million mainly consists of spares relating to different electricity meters, transformers, HT/LT cables, conductors, steel and PCC poles and structures etc. With the passage of time the stores and spare parts become rusty and even lose its scrap value. Retention of the obsolete inventory for such long time without its future utilization may cause heavy losses. The spares are not likely to be used at any stage in future. It is indicative that the items/parts were purchased either without need or assessing their actual requirement which showed negligence of concerned user departments as well as store officers for accumulation of un-wanted inventory. Due to long storage of the inventory, the precious money of HESCO amounting to Rs 2,053.849 million was blocked unnecessarily. Improper internal controls and weak inventory valuing Rs 2,053.849 million which became useless and hence loss to the company.

Non-adherence to Corporate Governance Rules resulted in un-necessary accumulation of huge quantities of spare parts valuing Rs.2,053.849 million due to non-verification of physical inventory.

The matter was reported to the management in May 2022. The management replied that an enquiry committee has been constituted to investigate the reasons for un-necessary accumulation of inventory. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. DAC also directed the management (CFO) to submit action plan regarding improvement in inventory control management, through its BOD within one week and implement that plan within one month and also submit position and progress to the Ministry and Audit authorities. Further progress was not reported till the finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.3.2 Un-justified excessive provision of slow-moving/obsolete stock - Rs. 694.028 million

According to clause 5(b) of Corporate Governance Rules, 2013 for Public Sector Companies, the Board shall exercise its powers and carry out its fiduciary

duties with a sense of objective judgment and independence in the best interest of the company using the funds, assets and resources of the Public Sector Company with due diligence and care.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that the management made unjustified excessive provision of slow-moving/obsolete stock valuing Rs.694.028 million in 2020-21. The slow moving/obsolete stock was procured un-necessarily or without assessment of their actual requirement but could not be utilized since their purchase date. Detail is as under:

Detail of stores and spares as on 30.06.2021

(Rs. in million)

| | Store and spares 2019 | Store and spares 2020 | Store and spares 2021 | %age Inc/(Dec) |
|--|-----------------------|-----------------------------|-----------------------------|----------------|
| Gross stores and spares | 3,198.731 | 2,897.751 | 2,747.878 | (14.094) |
| Provision for slow moving and obsolete | (167.544) | (694.028) | (694.028) | 314.23 |
| Net stores and spares | 3,031.187 | 2,203.722 | 2,053.849 | (32.24) |

It is clear from the above table that the provision for slow moving stock was increased from Rs. 167.544 million in 2019-20 to Rs. 694.028 million in 2020-21 registering an increase of 314.23% which needs justification.

Audit is of the view that the excessive increase in provision for slow moving/obsolete stock without assessing the actual requirement of maintaining the provision on such items is unjustified and held irregular.

The matter was reported to the management in May 2022. The management replied that an enquiry committee has been constituted to investigate the reasons for un-necessary provision of slow moving and obsolete inventory. The outcome of enquiry report would be submitted to Audit.

The DAC in its meeting held on June 09, 2022 directed the management to submit recommendations of enquiry committee within fifteen days to the Ministry and Audit. DAC also directed the management (CFO) to submit action plan regarding improvement in inventory control management, through its BOD within one week and implement that plan within one month and also submit position and progress to the Ministry and Audit authorities. Further progress was not reported till the finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.4 MONITORING & EVALUATION

4.4 Monitoring & Evaluation

4.4.1 Non implementation/monitoring of Health and Safety Policy standards

According to HESCO's Health, Safety and Environment Policy 2020 objectives # 3 (i), HESCO shall Run its business in a manner that protects the health and safety of employees, contractors and others involved in our business, the community in which we operate along with our assets.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that neither the company provided standardized safety equipment with kits to its employees nor the proper awareness training programme was launched for use of safety tools. This resulted in 22 fatal and non-fatal accidents including 19 employees and 3 general public (8 fatal and 14 non-fatal cases) for the financial year 2019-20. Likewise, a total of 57 fatal and non-fatal accidents were occurred during the financial year 2020-21, in which 14 employees and 43 general public (32 fatal case and 25 non-fatal) suffered. This indicates poor performance in implementing safety standards by HESCO. Detail is as under:

| Financial | Em | ployees | Pu | blic | Т | 'otal | Grand | | |
|-----------|-------|-----------------------|----|-------|------|-------|-------|--|--|
| Year | Fatal | Fatal Non- Fatal Non- | | Fatal | Non- | total | | | |
| | | Fatal | | Fatal | | Fatal | | | |
| 2019-20 | 6 | 13 | 2 | 1 | 8 | 14 | 22 | | |
| 2020-21 | 2 | 12 | 30 | 13 | 32 | 25 | 57 | | |

It is clear from the above table that Company did not implement the safety standards properly and no safety programmes were introduced to safeguard the company's personal assets which caused loss of precious human life.

Non-adherence to Health, Safety and Environment Policy objectives resulted in increase of fatal and non-fatal accidents of employees and general public.

The matter was reported to the management in May 2022. The management replied that HESCO preferred to adhere with rules of safety for its employees and general public. It is the policy of the company that "no operating

conditions or urgency of service can ever justify endangering the life of anyone." But unfortunately, accidents happened as a result of the unsafe act of the individuals, as a result 40 fatalities and 39 non-fatal accidents of employees and general public occurred during the year 2019-20 and 2020-21.

The DAC in its meeting held on June 09, 2022 directed the management to implement Health & Safety Policy in letter and spirit in order to avoid such losses in the future. Further progress would be reported in due course of time.

Audit recommends that the management needs to implement DAC's decision.

4.4.2 Non-achievement of NEPRA's System Average Interruption Duration Index (SAIDI-Minutes)

According to rule 4 (b) of Performance Standards (Distribution) Rules 2005, "A distribution company shall ensure that the System Average Interruption Duration Index (SAIDI) of supply of power per consumer per annum does not exceed fourteen minutes."

System Average Interruption Duration Index (SAIDI-Minutes) SAIDI is a Key Performance Indicator used to gauge the Company's performance in terms of duration of outages in minutes for which consumer suffer electricity supply dysconnectivity in a year.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that the duration of outages of electricity reported by HESCO was 9,751.00 minutes during the Financial Year 2019-20 against the NEPRA's allowed target of 4,450.88 minutes and 7,852.2 minutes was reported in the financial year 2020-21 against the NEPRA target of 14 minutes. Therefore, a breach of target of 5,300.12 minutes occurred in Financial Year 2019-20 and 7,838.2 minutes occurred in Financial Year 2020-21.

| Financial Year | Reported (Minutes) | NEPRA Target (Minutes) | Breach of Target (Minutes) |
|----------------|-----------------------|---------------------------|-------------------------------|
| 2019-20 | 9,751.00 | 4,450.88 | 5,300.12 |
| 2020-21 | 7,852.2 | 14 | 7,838.2 |

It is clear from the above table that HESCO management failed to meet NEPRA target in providing electricity to their consumers resultantly less revenue generated due to less sale of energy to consumers.

Non-adherence to Performance Standards (Distribution) Rules 2005 resulted in failure to meet the NEPRA target by the management.

The matter was reported to the management in May 2022. The management replied that the data contained regarding **SAIDI-minutes** in the table was gradually decreasing during the years 2019-21. The HESCO carried out preventive maintenances of the Transmission lines, Grid stations, Power T/Fs, Circuit Breakers, Line isolators, 11Kv outgoing feeders, Distribution T/Fs and L.T lines during the mentioned years to improve stability and reliability of the system network regarding SAIDI index.

The DAC in its meeting held on June 09, 2022 directed the management to justify the reasons for not achieving the targets of NEPRA Performance Standards. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.4.3 Non-achievement of NEPRA's System Average Interruption Frequency Index (SAIFI-Number) standard

According to Rule 4(a) of Performance Standards (Distribution) Rule, 2005, "A distribution company shall ensure that the System Average Interruption Frequency Index (SAIFI) of supply of power per consumer per annum does not exceed thirteen.

SAIFI is a key performance indicator and is normally used to assess the performance of company as a whole. It can be simply interpreted as it is the average number of times that a consumer experiences an outage during a year.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that HESCO did not achieve the target of SAIFI as in FY 2019-20 reported No. of interruptions were 162.85 against the target of 115.67 and in the FY 2020-21 it was 137.1 against the target of 13.

| Financial Year | Reported (No) | NEPRA Target (No) | Breach of Target (No) |
|-------------------|---------------|----------------------|--------------------------|
| 2019-20 | 162.85 | 115.67 | 47.18 |
| 2020-21 | 137.1 | 13.00 | 124.1 |

It is clear from the above table that HESCO management failed to meet NEPRA target in providing electricity to their consumers resultantly less revenue generated due to less sale of energy to consumers.

Non-adherence to Performance Standards (Distribution) Rules 2005 resulted in failure to meet NEPRA target by the management.

The matter was reported to the management in May 2022. The management replied that the data contained regarding **SAIFI-Numbers** in the table was gradually decreasing during the 2019-20 & 2020-21 years. HESCO carried out preventive maintenances of the Transmission lines, Grid stations, Power T/Fs, Circuit Breakers, Line isolators, 11KV outgoing feeders, Distribution T/Fs and L.T lines during the mentioned years to improve stability and reliability of the system network regarding SAIFI index.

The DAC in its meeting held on June 09, 2022 directed the management to justify the reasons for not achieving the targets of NEPRA Performance Standards. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.4.4 Non-evaluation of performance of Board members

As per Rule 8(1) of the Corporate Governance Rules 2013, the performance evaluation of the members of the Board including the chairman and the chief executive shall be undertaken for which the Board shall establish a process, based on specified criteria, and the chairman of the Board shall take ownership of such an evaluation. The committees shall also carry out their evaluation on an annual basis.

During performance audit of Hyderabad Electric Supply Company Limited (HESCO) for the period 2019-21, it was observed that a huge amount was spent on Board meeting and Company's management failed to comply with the Corporate Governance Rules regarding evaluation of performance of Board members. Thus, the performance of the Board members has not been evaluated.

Non-adherence to Corporate Governance Rules resulted in non-evaluation of performance of the Board members of HESCO.

The matter was reported to the management in May 2022. The management replied that as per Public Sector Companies (Corporate Governance Rules 2013) amended upto 04/2017 vide Section 8 (I) "The performance evaluation of members of the board including the Chairman & the Chief Executive Officer shall be under taken annually by the Government for which the Government shall enter into performance contract. The performance agreement / contract for financial year 2021-2022 between Ministry of Energy / BOD members has already been signed.

The DAC in its meeting held on June 09, 2022 directed the management to submit detailed expenditure on BOD meetings and also submit performance of BOD members as per performance agreement. Further progress was not reported till finalization of report.

Audit recommends that the management needs to implement DAC's decision.

4.5 Sustainability

The persistent losses of the company have bulged to Rs.224,749 million which put the company sustainability as going concern into jeopardy. A credible sustainability system needs to be introduced to drive positive social, environmental, and economic impacts and to eliminate or remediate negative impacts. The management should plan strategies for achieving company's objectives. These strategies will seek to address the root causes of sustainability issues. The system will strive to create/add value by operating efficiently through costs minimization.

4.6 Overall Assessment

The performance audit of HESCO revealed that the management of the Company was unable to achieve the objectives for which it was established. The performance audit was focused on electricity distribution and other aspects observed to gauge performances which are as under: -

i) Effectiveness: To meet the Company's objectives it was required to enhance the consumer base and to collaborate with present demand of electricity for commercial and industrial consumers but Audit has observed that no efforts were found in the achievement of these objectives. The present operations management system did not prove effective and beneficial to the company as it caused heavy losses to the company's exchequer in the shape of unnecessary and surplus procurement, frequent damage and theft of electrical equipment, Theft of Electricity etc. These instances were frequently observed during course of performance audit. This state of affair was mainly due to mismanagement, slackness, untimely procurement, weak internal control system and nontransparency within the working of company's formations.

ii) Efficiency: The main objective of efficient working of DISCO is to maintain uninterrupted distribution of electricity, carry out operational activities smoothly, and maintain investment in assets at a lean level to maximize profitability. But the management of HESCO was unable to achieve its objectives due to lack in achieving recovery targets set by NEPRA (100% achievement) as only 70% and 76% recovery targets were achieved during 2019-20 and 2020-21 respectively. Furthermore, it could not minimize the losses due to theft of electricity and did not recover the huge receivables from the private and government consumers which resulted in weak financial position of the Company.

iii) Economy: The operational expenditure has followed an erratic trend with abnormal increases. The Company made huge provision of spare parts and procured un-necessarily or without assessment of their actual requirement as most of the items were purchased and stored on urgent/critical basis but could not be utilized since their purchase date. Thus, improper internal controls caused unnecessary accumulation of inventory. Furthermore, PPRA rules were not followed in true letter and spirit resultantly economy was not achieved.

5. CONCLUSION

In the light of above narrated facts, it is concluded that:

- HESCO was providing services to its stakeholders including Government of Pakistan/Sindh, general public, and other private organizations but HESCO management could not resolve issues of over billing, average billing, detection, theft of electricity, non-replacement of defective meters, installation of new connections, and redressal of consumer complaints.
- Public Sector Companies (Corporate Governance) rules, 2013 had not been implemented resultantly proper monitoring and evaluation system at each level could not be placed to ensure good governance.
- HESCO management failed to recover long outstanding receivables relating to private and government consumers and resultantly accumulated a huge receivable.
- Overall HESCO could not achieve NEPRA targets and standards as specified in Performance Standard (Distribution) Rules 2005. The data related to SAIFI and SAIDI was away from ground facts as the same dissimilarity was also confirmed by the NEPRA Professional. There was a sheer need of proper data base system regarding recording of interruption and its duration.
- HESCO Management could not consider the high losses feeder for bifurcation as well as augmentation of distribution and power transformers running above 80% load.
- The key reasons for high transmission and distribution losses in HESCO was the absence of any mechanism for tracking of electricity flow from the points of their electricity purchases down to the final consumers at each voltage level starting from 132 KV, 11 KV and 400/230 Volts, to eliminate theft, as well as to diagnose actual technical problems / losses. NEPRA has also directed to all DISCOs to install AMR and AMI at all each voltage level starting from 132KV, 11 KV and 400/230 Volts upto June, 2016 but progress of HESCO was disappointed especially for the voltage level of 400/230.
- The theft of energy due to high un-affordable energy demand suppression tariff is also one of the major factors contributing towards loss of revenue attributed as line losses.

- HESCO failed to achieve its recovery to reduce its receivable for the purpose of bringing improvement in its liquidity and reducing the circular debt as recovery plays a key role in financial health of distribution companies.
- HESCO management failed to achieve the overall standard for safety and resultantly increase in fatal/non-fatal accidents.

ACKNOWLEDGEMENT

We wish to express our appreciation to the management and staff of HESCO for the assistance and cooperation extended to the auditors during this assignment.

ANNEXES

Annex-I (Para No 4.1.2)

| | ANALYSIS OF PROGRESSIVE BILLING & COLLECTION 2019-20 vs 2020-21 | | | | | | | | | | |
|--------|---|----------|--------------|-----------|----------|----------------------|-----------------|--|--|--|--|
| | | | HES | CO | | | (RS.IN MILLION) | | | | |
| | | | BILLING (RS) | | | COLLECTION (I | RS) | | | | |
| CIRCLE | PERIOD | GOVT | PVT | TOTAL | GOVT | PVT | TOTAL | | | | |
| HYD-I | 2019-20 | 3,118.40 | 19,332.60 | 22,451.00 | 1,518.50 | 13,714.70 | 15,233.20 | | | | |
| | 2020-21 | 3,089.00 | 21,452.20 | 24,541.20 | 2,702.80 | 15,089.10 | 17,791.90 | | | | |
| LAAR | 2019-20 | 2,885.90 | 18,200.00 | 21,085.90 | 1,841.80 | 14,201.10 | 16,042.90 | | | | |
| | 2020-21 | 3,328.30 | 20,335.60 | 23,663.90 | 2,954.60 | 16,429.00 | 19,383.60 | | | | |
| | 2019-20 | 1,745.10 | 12,550.10 | 14,295.20 | 745.10 | 8,652.30 | 9,397.40 | | | | |
| N.SHAH | 2020-21 | 1,966.90 | 13,408.00 | 15,374.90 | 1,555.50 | 9,743.40 | 11,298.90 | | | | |
| M.P | 2019-20 | 1,193.70 | 6,222.40 | 7,416.10 | 519.40 | 4,513.70 | 5,033.10 | | | | |
| KHAS | 2020-21 | 1,332.00 | 6,542.10 | 7,874.10 | 881.00 | 4,947.10 | 5,828.10 | | | | |
| HESCO | 2019-20 | 8,944.10 | 56,305.10 | 65,249.20 | 4,625.10 | 41,081.90 | 45,707.00 | | | | |
| | 2020-21 | 9,716.40 | 61,739.00 | 71,455.40 | 8,093.80 | 46,208.60 | 54,302.40 | | | | |

Annex-II

(Para No 4.1.9)

STATEMENTS SHOWING THE DETAIL OF 100% ENERGY LOSSES FOR THE YEAR 2019-20

| Sr. No | FEEDER CODE | | NAME | NO OF CONSUMERS | UNITS RECVD | UNITS BILLED | UNITS LOST | %AGE LOST | Avg Rate | Amount |
|-----------|----------------|---------|------------|--------------------|----------------|-----------------|---------------|--------------|-------------|------------|
| 1 | 20919 | Gajello | Sharif | 0 | 782,048 | - | 782,048 | 100.00% | 13 | 10,166,624 |
| 2 | 107805 | 11KV | KAPRI MOR | 0 | 465,663 | - | 465,663 | 100.00% | 13 | 6,053,619 |
| 3 | 6322 | 11 K | V LABOUR F | 0 | 9,600 | - | 9,600 | 100.00% | 13 | 124,800 |
| 4 | 116908 | 11Kv | Abdullah | 0 | 80 | - | 80 | 100.00% | 13 | 1,040 |
| 5 | 7214 | 11KV | NEW CHINA | 1 | 398,152 | - | 398,152 | 100.00% | 13 | 5,175,976 |
| 6 | 63910 | 11KV | HI-TECH | 1 | 13 | - | 13 | 100.00% | 13 | 169 |
| 7 | 73107 | 11KV | ANOUD PO | 1 | 348,680 | - | 348,680 | 100.00% | 13 | 4,532,840 |
| 8 | 73116 | 11 K | V H.R COTT | 1 | 1,530 | - | 1,530 | 100.00% | 13 | 19,890 |
| 9 | 39204 | 11kV | PIR SAKHI | 0 | 1,093,840 | - | 1,093,840 | 100.00% | 13 | 14,219,920 |
| 10 | 21306 | 132K | V THATTA C | 1 | 10,800 | - | 10,800 | 100.00% | 13 | 140,400 |
| 11 | 14419 | 11KV | ALLAH wal | 0 | 2,588,240 | - | 2,588,240 | 100.00% | 13 | 33,647,120 |
| 12 | 85902 | 11KV | CHEMI VIS | 1 | 6,350 | - | 6,350 | 100.00% | 13 | 82,550 |
| 13 | 85906 | 11KV | LABOUR FL | 0 | 34,260 | - | 34,260 | 100.00% | 13 | 445,380 |
| 14 | 30209 | 11KV | PAF | 0 | 367,706 | - | 367,706 | 100.00% | 13 | 4,780,178 |
| 15 | 13532 | DHQ | | 0 | 33,932 | - | 33,932 | 100.00% | 13 | 441,116 |
| 16 | 86104 | 11KV | T.A YAR S | 0 | 179,360 | - | 179,360 | 100.00% | 13 | 2,331,680 |
| 17 | 116003 | 11KV | CITY-II | 0 | 24,602 | - | 24,602 | 100.00% | 13 | 319,826 |
| | TOTAL | | | 6,344,856 | | 6,344,856 | | | 82,483,128 | |

| SR.NO | FEEDER CODE | NAM | E OF FEEDER | NO OF CONSUMERS | UNITS RECEIVED PROGRESSIVE | UNITS BILLED PROGRESSIVE | UNITS LOST PROGRESSIVE | %AGE LOST PROGR. | Average Rate | Amount |
|-------|----------------|-------|-------------|--------------------|-------------------------------|-----------------------------|---------------------------|------------------------|-----------------|------------|
| 1 | 6322 | 11 K | LABOUR F | 0 | 10,320 | 0 | 10,320 | 100.00% | 13 | 134,160 |
| 2 | 81115 | 11 K | VNEW COMP | 0 | 1,291,880 | 0 | 1,291,880 | 100.00% | 13 | 16,794,440 |
| 3 | 105710 | 11KV | QAMAR HOS | 0 | 19,138 | 0 | 19,138 | 100.00% | 13 | 248,794 |
| 4 | 63916 | 11KV | QUETTA TE | 2 | 800 | 0 | 800 | 100.00% | 13 | 10,400 |
| 5 | 73107 | 11KV | ANOUD PO | 1 | 389,290 | 0 | 389,290 | 100.00% | 13 | 5,060,770 |
| 6 | 21011 | 11 KV | INDUSTRI | 0 | 1,192,819 | 0 | 1,192,819 | 100.00% | 13 | 15,506,647 |
| 7 | 85910 | 11KV | S.B.A. UN | 0 | 159,760 | 0 | 159,760 | 100.00% | 13 | 2,076,880 |
| | Total | | | 3,064,007 | 0 | 3,064,007 | | | 39,832,091 | |

STATEMENTS SHOWING THE DETAIL OF 100% ENERGY LOSSES FOR THE YEAR 2020-21

Annex-III (Para No 4.1.3)

STATEMENTS SHOWING THE DETAIL OF ENERGY LOSSES BEYOND NEPRA TARGETS FOR THE YEAR 2019-21

| Year | No. of Feeders | Units Received Progressively | Units Billed progressively | Units Lost progressively | Excess Units Lost Beyond NEPRA Target | Average Rate | Amount (Rs. in million) |
|---------|-------------------|---------------------------------|-------------------------------|-----------------------------|--|-----------------|----------------------------|
| 2019-20 | 332 | 6,457,160,860 | 4,185,223,489 | 2,271,937,371 | 1,014,524,212 | 13 | 13,188.815 |
| 2020-21 | 310 | 6,114,260,262 | 3,953,932,802 | 2,160,327,460 | 858,464,195 | 13 | 11,160.034 |
| TOTAL | 642 | 12,571,421,122 | 8,139,156,291 | 4,432,264,831 | 1,872,988,407 | 13 | 24,348.849 |

Annex-IV (Para No 4.1.10)

STATEMENT SHOWING THE DETAIL OF UNDUE GENERATION OF REVENUE FOR THE YEAR 2019-21

| Year | No. of Feeders | Units Received Progressively | Units Billed progressively | Excess Units billed | Average Rate | Amount In million |
|---------|-------------------|---------------------------------|-------------------------------|---------------------|-----------------|----------------------|
| 2019-20 | 69 | 356,605,052 | 401,455,710 | (44,850,658) | 13 | (583.058) |
| 2020-21 | 46 | 225,680,274 | 267,093,582 | (41,413,308) | 13 | (538.373) |
| TOTAL | 115 | 582,285,326 | 668,549,292 | (1,250,834,618) | 13 | (1,121.431) |

STATEMENTS SHOWING THE DETAIL OF ENERGY LOSSES BEYOND PERMISSIBLE LIMIT 3% ON INDEPENDENT FEEDRES FOR THE YEAR 2019-21

| YEAR | No. of Feeders | Units Received Progressively | Units Billed progressively | Units Lost progressively | Excess Units Lost Beyond NEPRA limit 3% | Average Rate | Amount |
|---------|-------------------|------------------------------------|-------------------------------|-----------------------------|--|-----------------|---------|
| 2019-20 | 35 | 147,896,256 | 132,289,557 | 15,606,699 | 11,169,811 | 13 | 145.208 |
| 2020-21 | 37 | 971,197,88 | 84,191,683 | 12,928,105 | 10,014,511 | 13 | 130.189 |
| TOTAL | 72 | 245,016,044 | 216,481,240 | 28,534,804 | 21,184,322 | 13 | 275.397 |