



**SPECIAL STUDY REPORT
ON
POWER GENERATION IN GILGIT-BALTISTAN**

AUDIT YEAR 2022-23

AUDITOR-GENERAL OF GILGIT-BALTISTAN

SERVING THE NATION BY PROMOTING ACCOUNTABILITY,
TRANSPARENCY AND GOOD GOVERNANCE IN THE MANAGEMENT
AND USE OF PUBLIC RESOURCES FOR THE CITIZENS

PREFACE

Section-98(4) of the Government of Gilgit-Baltistan Order, 2018 read with Section 9 & 11 of Auditor-General of Gilgit-Baltistan (Functions, Powers and Terms and Conditions of Service) Act, 2012 mandates the Auditor-General of Gilgit-Baltistan to conduct audit / Special studies on the accounts of the Government of Gilgit-Baltistan.

The Directorate General Audit, Gilgit-Baltistan conducted the special study on power generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22 during the audit year 2022-23 with a view to reporting significant findings to the concerned stakeholders. In addition, audit also assessed, on test check basis, whether the management complied with applicable rules and laws in the planning, generation, transmission, distribution and billing of electricity in all districts of Gilgit-Baltistan.

The Special Study indicates specific action that, if taken, will help the management and policy makers to improve their service delivery in future.

The Special Study Report has been finalized in the light of written responses and discussions in Departmental Accounts Committee (DAC) meeting held on 09.06.2023.

The Special Study Report is submitted to Governor of the Gilgit-Baltistan in pursuance of Section-98(6) of Government of Gilgit-Baltistan Order, 2018 for causing it to be laid before the Gilgit-Baltistan Assembly.

Islamabad
Dated:

(Muhammad Ajmal Gondal)
Auditor-General of Gilgit-Baltistan

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ABBREVIATIONS & ACRONYMS

ABC	Aerial Bundled Cable
ACA	All Aluminum Conductor
ADP	Annual Development Program
AGGB	Auditor-General of Gilgit-Baltistan
AGP	Auditor- General of Pakistan
AMRI	Automatic Meter Reading Infrastructure
AMRS	Automated Meter Reading System
ARE	Alternative and Renewable Energy
CE	Chief Engineer
CED	Civil Engineering Division
CMIT	Chief Minister Inspection Team
CPEC	China Pakistan Economic Corridor
DAC	Departmental Accounts Committee
DGAGB	Director General Audit Gilgit-Baltistan
DISCO	Distribution Company
EE	Executive Engineer
EPP	Energy Purchase Price
FSA	Fuel Supply Agreement
FY	Financial Year
GBEPA	Gilgit-Baltistan Environmental Protection Agency
GBPDB	Gilgit-Baltistan Power Development Board
GBHEW	Gilgit-Baltistan Hydro Electric Workshop
GEP	Generation Expansion Plan

GFR	General Financial Rule
GoP	Government of Pakistan
GoGB	Government of Gilgit-Baltistan
GBC	Gilgit-Baltistan Council
GWH	Giga Watt Per Hour
IA	Implementation Agreement
ICB	International Competitive Bidding
IPP	Independent Power Producer
KWH	Kilo Watt Per Hour
LOI	Letter of Intent
LOS	Letter of Support
MW	Mega Watt.
NEPRA	National Electric Power Regulatory Authority
NMB	Net Metering and Billing
NOC	No Objection Certificate
NTDC	National Transmission and Dispatch Company
NRER	Non-Renewable Energy Resources
PAC	Public Accounts Committee
PAO	Principal Accounting Officer
PC-I	Planning Commission Perform-I
P&DD	Planning and Development Department
PD	Project Director
PEC	Pakistan Engineering Council
PPA	Power Purchase Agreement
PPIB	Private Power and Infrastructure Board

PPMI	Pakistan Planning and Management Institute
PSDP	Public Sector Development Program
RER	Renewable Energy Resources
RFP	Request for Proposals
Rs	Rupee
SRO	Statutory Regulatory Order
TEP	Transmission Expansion Plan
WPDGB	Water & Power Department Gilgit-Baltistan

EXECUTIVE SUMMARY

The Directorate General of Audit, Gilgit-Baltistan, Gilgit conducted Special Study on Power Generation in Gilgit-Baltistan for the period 2015-22. Special Study was approved by the Auditor-General of Gilgit-Baltistan in the Audit Plan 2022-23.

The Special Study was conducted during March-April, 2023 with a view to report significant findings to the concerned stakeholders and management with recommendations for improving performance of the Water & Power Department of Gilgit-Baltistan.

Water & Power Department Gilgit-Baltistan was established in December 2005 for the generation and distribution of electricity to the population of GB under the administrative control of Secretary Water & Power Gilgit-Baltistan. Audit studied the overall performance of the department while examining the record for the financial years 2015-16 to 2021-22.

During Special Study, it was observed that since its establishment, in 2005, Water & Power Department GB could not prepare and approve its independent power generation policy/necessary rules and regulations. Therefore, significant issues have been pointed out through audit observations in order to focus the attention of the management towards formulation of power generation policy, generation of electricity as per public demands, taking corrective measures for reduction of the line losses, collection of revenue against electricity billing in commensurate with distribution / consumption of electricity, imparting training to the concerned staff to boost up the performance of the incumbents.

KEY AUDIT FINDINGS

- I. Non-Performance of mandatory functions and non-approval of power generation policy
- II. Abnormal delay in execution of Hydel Power Projects -Rs.11, 262.709 million
- III. Non- monitoring of development schemes

- IV. Loss to the government due to under-utilization of Hydel Power Stations as compared to the power installed capacity
- V. Short fall in achievement of annual revenue receipt targets–Rs.2,185.501 million
- VI. Non-recovery of outstanding dues on account of electricity charges – Rs.628.188 million
- VII. Loss due to line losses – Rs. 8,378.519 million
- VIII. Loss to the government due to generating electricity at higher cost and billing to the consumer at nominal rates-Rs.16,269.520 million
- IX. Non-receipt of vouched accounts and non-mutation of land-779.300 Kanals

RECOMMENDATIONS

- I. A case may be taken-up with Gilgit-Baltistan Government to resolve the issue of overlapping of the functions of W&P and Power Development Board besides obtaining the approval of power generation policy from concerned forum.
- II. A high-level committee may be constituted to determine the causes of delay in execution of projects.
- III. A monitoring cell should be established in the Water & Power Secretariat to monitor the schemes on regular basis in order to ensure the efficient execution of projects.
- IV. Efforts should be made to establish regional grid stations, replacing outdated power stations besides adopting tangible measures to produce electricity as per the capacity of Hydel power stations.
- V. Necessary measures should be taken to achieve the revenue targets.
- VI. A policy may be devised for recovery of outstanding dues from the defaulters.
- VII. Arrangements may be made for installation of ABC cable/lines in order to reduce the theft and line losses.

- VIII. A regularity authority like NEPRA may be established to determine tariff and regulate the power sector.
- IX. Measures may be taken to decrease the line and other losses.
- X. Vouched accounts may be obtained from revenue department besides making arrangement for mutation of land in the name of W&P department.

1. INTRODUCTION

Gilgit-Baltistan is one of the strategic tourist regions in the north of Pakistan as it connects Afghanistan to the north, Xingjian province of China to the Northeast, Jammu, and Kashmir to the southeast and serves as the gateway to the China Pakistan Economic Corridor (CPEC). Gilgit-Baltistan covers an area of 72971 sqkm and has a population of approximately 1.5 million. With the advent of CPEC and increasing tourism, the future energy demand of Gilgit-Baltistan is expected to grow rapidly in the years to come. In addition to the above factors, there is also a concern to establish procedures and policies for power production capacity expansion at the regional level to meet the objectives of satisfying the growing energy demand.



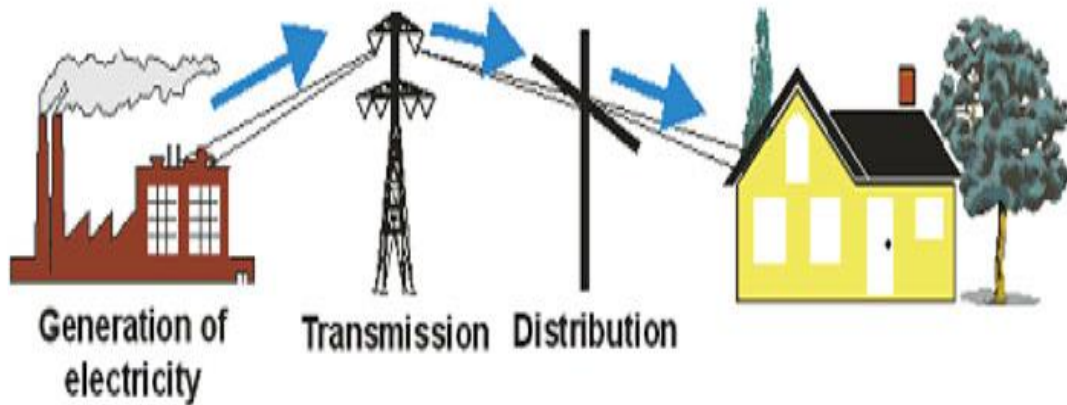
Water & Power Department Gilgit-Baltistan was established vide Services & General Administration Department's notification No. SO (S)-1-2(2)/2004

dated 8th December, 2005 and as per GB Rules of Business, 2009, the main functions of the Water and Power Department are as under:

- i. Administration of Electricity Act, 1910 and Rules, 1937.
- ii. Administrative control & check on the work of electric officials and all technical matters including court case relating to the officials of electric offices.
- iii. Electrical accidents in connection with generation, transmission distribution and use of electric energy.
- iv. Standardization of specifications in respect of electric appliances, machinery and installations.
- v. Matters connected with distribution of power.
- vi. Acquisition, revocation or amendment of licenses of electric supply undertaking and approval of loads.
- vii. Matters connected with electricity duty under the West Pakistan Finance Act, 1964 and Rule there under.
- viii. Service matters except those entrusted to S&GAD Department.
- ix. Purchase of stores and capital goods for the department.
- x. Development of Small & Medium Hydel Stations.
- xi. Development & Maintenance of Local Transmission lines.

Water and Power Department Gilgit-Baltistan was mandated to harness, develop, generate, transmit and distribute clean and renewable energy in Gilgit-Baltistan. The department is working to meet the local electricity needs with an installed capacity of 215.900 MW and distribution lines spanning approximately 10,000 KM. The department installed 75-hydropower stations with capacity of 187.250 MW and 24- thermal power stations with capacity of 28.650 MW. There is a usual shortfall of 134.170 MW in summer and 361.760 MW in winter seasons. The Water & Power Department planned to enhance the power generation from renewable sources to cover the deficiency of clean energy in the Gilgit-Baltistan.

The Gilgit-Baltistan Power Sector is classified into three segments (i) Generation (ii) Transmission and (iii) Distribution.

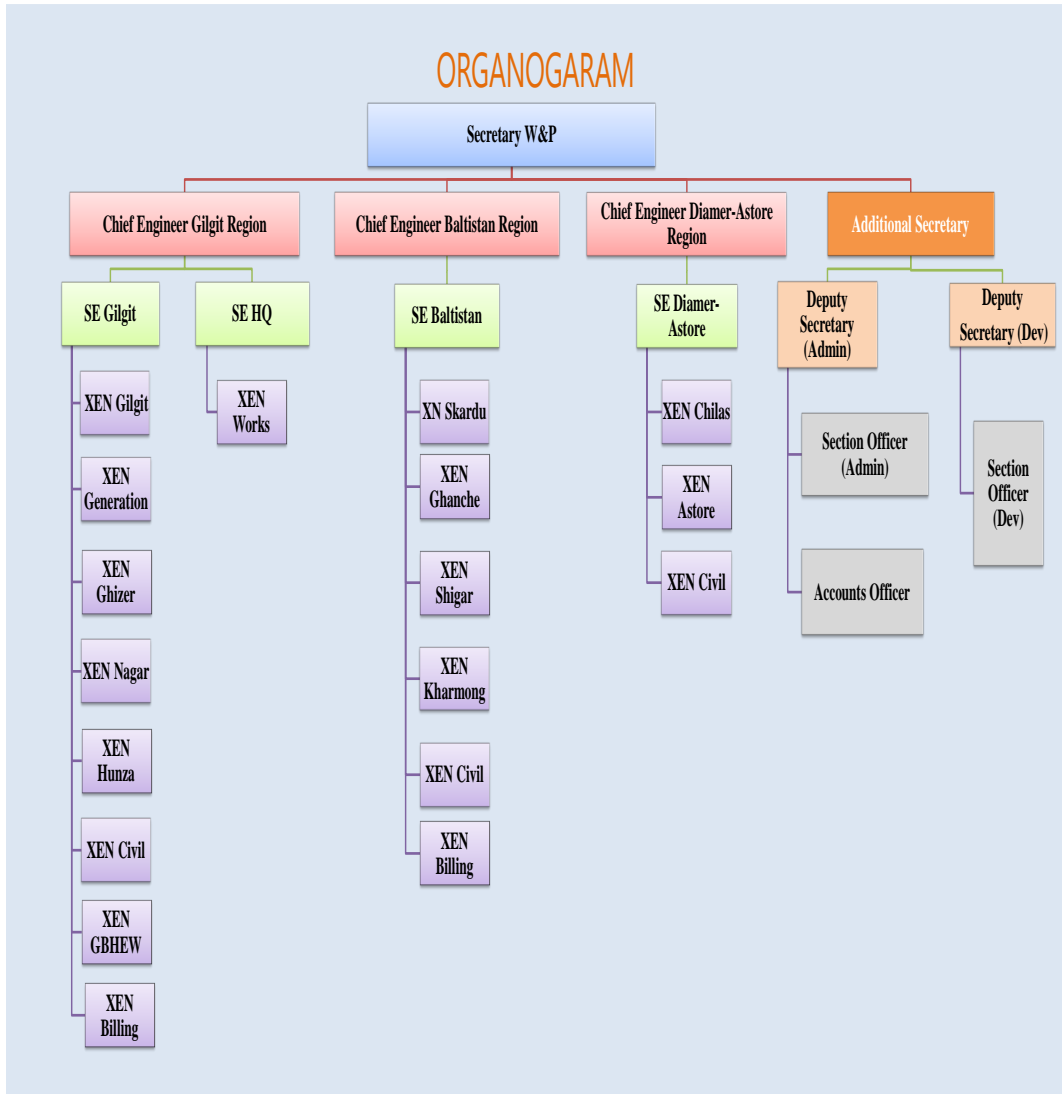


Since, its establishment in 2005, Water and Power Department Gilgit-Baltistan did not formulate its Power Generation Policy and Rules/Regulations. The business of the department is governed to some extent through Electricity Act, 1910 and Electricity Rules, 1937. Year wise detail of budget and expenditure against development and non-development heads is tabulated below:

(Rs. in million)

S. No.	Financial Year	Budget Release			Expenditure Incurred		
		Development	Non-Development	Total	Development	Non-Development	Total
1.	2015-16	3,976.776	2,246.618	6,223.394	3,976.776	2,245.780	6,222.556
2.	2016-17	3,833.492	2,619.980	6,453.472	3,833.492	2,600.470	6,433.962
3.	2017-18	3,575.752	2,345.817	5,921.569	3,575.752	2,336.542	5,912.294
4.	2018-19	3,419.522	3,238.371	6,657.893	3,419.522	3,238.956	6,658.478
5.	2019-20	2,843.731	3,317.183	6,160.914	2,843.731	3,315.713	6,159.444
6.	2020-21	3,567.326	3,613.493	7,180.819	3,567.326	3,604.698	7,172.024
7.	2021-22	2,436.252	6,173.422	8,609.674	2,436.252	6,169.511	8,605.763
Total		23,652.851	23,554.884	47,207.735	23,652.851	23,511.669	47,164.520

Water and Power Department Gilgit-Baltistan is working under the administrative control of the Secretary Water and Power Department Gilgit-Baltistan as shown in the given below organogram.



Water & Power Department Gilgit-Baltistan is producing 120.650 MW electricity in summer and 90.430 MW Electricity in winter which was 47.34% of total demand in summer and 20% of total demand in winter causing shortfall of electricity as 134.170MW in summer and 361.760MW in winter up to 22.06.2023 as detailed below:

Present Status of Electricity Supply & Demand In GB										
S.#	Name of Division	Installed Capacity			Generation		Demand		Shortfall	
		Hydel (MW)	Thermal (MW)	Total (MW)	Summer (MW)	Winter (MW)	Summer (MW)	Winter (MW)	Summer (MW)	Winter (MW)
A.	Gilgit Region									
1	Gilgit	60.000	8.000	68.000	49.000	31.800	49.890	94.510	0.890	62.710
2	Ghizer	19.570	0.700	20.270	12.500	9.380	38.880	71.340	26.380	61.960
3	Nagar	6.300	1.000	7.300	4.560	2.560	9.270	16.970	4.710	14.410
4	Hunza	6.800	3.200	10.000	4.710	3.580	12.830	20.610	8.120	17.030
	Total Gilgit Region	92.670	12.900	105.570	70.770	47.320	110.870	203.430	40.100	156.110
B.	Baltistan Region									
5	Skardu	35.100	9.400	44.500	14.200	16.200	50.600	94.470	36.400	78.270
6	Ghanche	13.940	0.250	14.190	8.090	5.160	25.500	48.520	17.410	43.360
7	Shigar	4.700	0.000	4.700	3.500	2.000	10.350	18.360	6.850	16.360
8	Kharmong	10.580	0.000	10.580	9.000	5.000	6.650	12.540	-2.350	7.540
B.	Total Baltistan Region	64.320	9.650	73.970	34.790	28.360	93.100	173.890	58.310	145.530
C.	Diamer-Astore Region									
9	Diamer	22.200	5.600	27.800	10.590	10.750	36.020	50.340	25.430	39.590
10	Astore	8.060	0.500	8.560	4.500	4.000	14.830	24.530	10.330	20.530
C.	Diamer-Astore Region	30.260	6.100	36.360	15.090	14.750	50.850	74.870	35.760	60.120
	G. Total W&P GB	187.250	28.650	215.900	120.650	90.430	254.820	452.190	134.170	361.760

2. DEFINE STUDY

The purpose and scope of the Special Study has been narrated as under:

2.1 Purpose of Study

The purpose of Special Study on power generation in GB was to:

- i. Assess saving of foreign exchange by not importing fuel that is used in alternate thermal projects.
- ii. Check the generation of electricity through hydro power plants/stations instead of thermal plants.
- iii. Evaluate the financial and economic benefits.
- iv. Check the measures taken to mitigate production of toxic gases and their impact on environment.
- v. Ensure provision of electricity to poor and vulnerable consumers.
- vi. Ascertain the causes of line losses and necessary measures taken to mitigate the line losses.
- vii. Ascertain reasons of delay in execution of projects.
- viii. Ascertain weaknesses of internal control system.
- ix. Ascertain the reasons for production of low electricity as compared to the production capacity and demand of the electricity in summer and winter seasons.
- x. Ensure employment opportunities created, as a result of installation and establishment of power generation system.

2.2 Scope of Study

The scope of Special Study on power generation covered the entire jurisdiction of water and power department Gilgit, consisting of ten districts of Gilgit-Baltistan. The Special Study was carried out in accordance with the Auditing Standards of the International Organization of Supreme Audit Institutions (INTOSAI) issued by the Department of Auditor-General of Pakistan. The legal cover, service delivery and financial management issues of the Water & Power Department was analyzed and studied within the preview of Electricity Act, 1910, Electricity Rules, 1937, GB Rules of Business, 2009 and National

Power Generation Policy 2015 as well as relevant provisions governing the operations of the department.

2.3 Beneficiaries of Study

Following are the main beneficiaries of the study:

- i. Policy makers
- ii. General Public
- iii. Government of the Gilgit-Baltistan as well as Govt. of Pakistan.
- iv. Management of Water & Power Department, GB.
- v. National as well as Foreigner Investors who want to invest in power sector of Gilgit-Baltistan.

2.4 Study Design

The Special Study was designed and concluded as detailed below:

2.4.1 Time Period

The study was approved in Audit Plan 2022-23. The field activities were carried out during March-April, 2023. The record of the department for the Financial Years 2015-16 to 2021-22 was examined in detail.

2.4.2 Data Sources

The requisite data was obtained from financial statements, reports, vouched accounts, directives of administrative department of Water & Power, PC-1, and contract agreements, physically inspection of different power stations and from presentation and discussions with management. Further, data was also obtained from Electricity Act, 1910, Electricity Rules, 1937, Gilgit-Baltistan Rules of Business, 2009, Gilgit-Baltistan Power Development Board Act, 2012, Environment Protection Agency (EPA) Gilgit-Baltistan and National Power Generation Policy 2015. Audit also consulted secondary data available at the websites of Water & Power Department Gilgit-Baltistan and other relevant websites.

2.4.3 Methodology

Audit conducted desk audit & analyzed the relevant Acts, Ordinances and Rules of Business 2009 governing the operations of Water & Power Department. Service delivery component was assessed by Audit through structured interviews of the management, presentations, study of computerized system, vouched accounts and different Performa's were devised to obtain information. The feedback of such interviews and data analysis through different types of Performa's helped the Audit to form an independent and impartial opinion. In addition to above, following methodology was adopted:

- i. Study of notifications / circulars/instructions issued by government.
- ii. Scrutiny of office record like budgets, vouchers of receipt and payments.
- iii. Scrutiny of record of out sourced as well as self-managed services.
- iv. Site visits of Thermal and Hydel power stations, GBHEW and Grid station in Gilgit during operational days.

3. DATA ANALYSIS

Following data analysis was carried out:

- i. Evaluation of feedback from different Divisions and Sub-divisions as well as management.
- ii. Comparison of revenue and expenditure. The revenue was generated through sale of electricity and meter installation fee from consumers.
- iii. Trend analysis of production of electricity in the light of its increasing demand by different sectors of GB.
- iv. Evaluation of status of compliance of directives issued by Ministry of Water & Power and government of Gilgit-Baltistan as well as objectives set in Electricity Act, 1910, Electricity Rules, 1937 and National Power Generation Policy, 2015.

4. RESULTS OF STUDY

The results of this Special Study are presented here in accordance with purposes of study in addition of other findings noticed during the course of Special Study.

5. STUDY FINDINGS

5.1 Non-Performance of core mandatory functions and non-approval of power generation policy -Rs.35.575 million

Section-8 of the Gilgit-Baltistan Power Development Board Act, 2012, empowered the Board to:

- i. Prepare a comprehensive plan for the development and utilization of the power and energy resources of the Gilgit-Baltistan.
- ii. Frame schemes for Gilgit-Baltistan for generation of power.
- iii. Make policies for power generation in Gilgit-Baltistan in collaboration with the private sector based on the national and international best practices.

During special study on power generation for the period from 2015-16 to 2021-22, it was observed that the department did not perform its core mandatory functions as no performance in this regard was forthcoming from the produced record.

Further, audit observed that Water & Power Department and Gilgit-Baltistan Power Development Board did not formulate any Power Generation Policy and business of the department was running through Electricity Act-1910 and Electricity Rules-1937.

Gilgit-Baltistan Power Development Board prepared a draft policy for installation of Captive Power generation projects in Gilgit-Baltistan in July, 2015 and Gilgit-Baltistan Power Generation Policy in 2019, however, both the policies are still unapproved by the competent forum. Gilgit-Baltistan Power Development Board could not achieve its core objectives regarding preparation / approval of policies and plan for power generation in Gilgit-Baltistan and incurred an expenditure of Rs.35.574 million on account of salaries and operational expenditure since its inception in 2014 to June 2022, which was considered unjustified.

Audit is of the view that the Water & Power department could not achieve the laid down objectives.

The irregularity was pointed out in April, 2023. The management replied that the department is mandated to perform various functions, including those listed in the Gilgit-Baltistan Rules of Business-2009. However, there were shortcomings in fulfilling these functions and the efforts are being made to strengthen internal controls to ensure compliance with Rules of Business. Regarding Gilgit-Baltistan Power Development Board role, it was stated that a case will be taken up with government of Gilgit-Baltistan for appropriate action to optimize power generation and use of public funds.

The reply was not accepted as after lapse of seventeen years power generation policy could not be got approved.

The DAC in its meeting held on 09.06.2023 directed the management to diligently pursue the matter with GB Power Development Board for obtaining approval of power generation policy from competent forum besides aligning the operations with mandate and functions as elucidated in the Gilgit-Baltistan Rules of Business-2009.

Audit recommends that the decision of the DAC may be implemented.

5.2 Abnormal delay in execution of projects -Rs.11,262.709 million

Para 7.1 of Manual of Development states that the objectives of any effort in project planning and analysis is to have a project that can be implemented to the benefit and socio-economic uplift of the society. The objectives of initiating of project is to making it fully functional and getting them fully underway for achieving the goals envisaged without any time and cost over-run, in order that the economic benefits accrue according to the promises made in the scheme.

During Special Study on Power Generation in Gilgit-Baltistan for period from 2015-16 to 2021-22, it was noted that forty-one Hydel projects involving cost of Rs.11,262.709 million with generation capacity of 94.100 MW were under execution stage since 2008. Total expenditure worth Rs.5,532.662 million (Annex-A) was incurred against these projects upto June-2022. The overall financial progress of the projects was 49.00 %.

Audit observed that the Water & Power Department / Project Management could not complete the projects even after lapse of sixteen years. Due to delay not only, the projects confronted with price hikes, costs, but people of the area were also deprived of the electricity facility.

Audit is of the view that delays in completion of the projects occurred due to lack of proper monitoring / supervision system and non-adherence to the provision of the Project Management Guidelines.

The irregularity was pointed out in April, 2023. The management replied that the development projects in Gilgit-Baltistan have been delayed due to natural calamities and the Covid-19 Pandemic. To expedite the completion of the projects, the management has initiated actions such as strengthening monitoring and supervision, adhering to project management guidelines, enhancing collaboration and coordination, and streamlining budget allocation. It was stated that the projects will be completed within the shortest possible time.

The reply was not accepted as the projects started in 2008 but has not been completed despite lapse of fifteen years period.

The DAC in its meeting held on 09.06.2023 directed the management to constitute a committee under chairman ship of SE to determine the causes of delay in execution of project and to submit the report within three months.

Audit recommends that the decision of the DAC may be implemented.

5.3 Non- monitoring of development schemes– Rs.5,532.662 million

Para-5.2 of Guidelines for Project Management states that monitoring of project is the responsibility of sponsoring Ministries/Divisions and executing agencies who are directly involved in project formulation, appraisal/approval and implementation of the projects.

During special study on power generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted that forty-one hydel power projects were under execution at different stages in Water and Power Department of

Gilgit-Baltistan and an expenditure of Rs.5,532.662 million was incurred up to June-2022 (Annex-B).

Audit observed that the Water & Power Department Gilgit-Baltistan neither carried out proper monitoring of the projects nor any mechanism was devised for monitoring and evaluation of the projects.

Audit is of the view that the lapses occurred due to non-adherence to the provision of guidelines for Project Management and inefficient implementation of the internal controls.

The irregularity was pointed out in April, 2023. The management replied that Natural calamities, global warming, Covid-19 pandemic, political unrest, and currency fluctuation were the major causes of delays in HPPs in the region.

The reply was not accepted as no monitoring mechanism was not in placed in the department to keep check on the progress of the projects.

The DAC in its meeting held on 09.06.2023 directed that a monitoring cell should be established in the Secretary office for proper monitoring of the schemes and reporting to the higher officers in order to watch the progress and to ensure efficient execution of projects.

Audit recommends that the decision of the DAC may be implemented.

5.4 Loss to the government due to under-utilization of Hydel Power Stations as compared to the installed power capacity-Rs.1,213.960 million

Para-7.1 of Manual of Development states that the objectives of any effort in project planning and analysis is to have a project that can be implemented to the benefit and socio-economic uplift of the society. The objectives of initiating of project is to making it fully functional and getting them fully underway for achieving the goals envisaged without any time and cost over-run, in order that the economic benefits accrue according to the promises made in the scheme.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted that the Water and Power

Department Gilgit-Baltistan was operating 215.900 MW capacity Hydel / Thermal power stations throughout the region.

Audit observed that 120.650 MW (55.88 % of total capacity) electricity was generated in summer and 90.430 MW (41.88% of total capacity) electricity was generated in winter causing shortfall of electricity to the extent of 95.250 MW in summer and 125.470 in winter respectively. This short fall also resulted in loss of revenue to Govt. amounting to Rs.1,213.960 million {220.720 MW (95.250+125.470 MW) X1,000,000, @ of Rs.5.50 (average) per unit}, in one year (Annex-C). Electricity was produced at the rate of Rs.17.86 per KWH.

Audit is of the view that under-utilization of plants is not only resulted in less generation of electricity but department also sustained a loss of Rs.1,213.960 million in form of less receipt of revenue on the other side public was also deprived of the basic necessity of the electricity.

The irregularity was pointed out in April, 2023. The management replied that it is not possible to run Hydel power stations on 100 % capacity. The demand / requirement at night is less than actual electricity generation as there is no mechanism to transfer the extra electricity to other needy areas in GB. The issue of under generation can be resolved once the regional grid is established.

The reply was not accepted because the activities of department shown lack of planning and substantial measures to address the issue of under-utilization.

The DAC in its meeting held on 09.06.2023 directed that regional grid station may be established at the earliest to address the capacity issue besides replacing outdated power stations, and adopting other tangible measures to produce more electricity as per the capacity of Hydel power stations.

Audit recommends that the decision of the DAC may be implemented.

5.5 Short fall in achievement of annual revenue receipt targets– Rs.2,185.501 million

Para-6 (v) of Gilgit-Baltistan Council System of Financial Control and Budgeting Rules- 2010 states that in the matter of receipts pertaining to the wings, departments and subordinate offices, the Principal Accounting Officer is expected to ensure that adequate machinery exists for due collection and bringing to account of all receipts of any kind connected with the functions of the wings, departments and subordinate offices under his control.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22 it was noted that the Finance Department Gilgit-Baltistan fixed the year wise revenue receipt targets against sale of electricity Rs.6,281.116 million (for the years 2016-2022).

It was observed that department could not achieve the revenue receipt targets set by Finance Department Gilgit-Baltistan for the financial years 2015-16 to 2021-22. This resulted in short fall of revenue receipt worth Rs.2,185.501 million, whereas the management incurred non-development expenditure of Rs.23,511.669 million during the said period. Details are given in Annex-D.

Audit is of the view that non-achievement of targets occurred due to non-adherence to government rules and negligence on the part of management with end result of depriving the government from huge revenue receipt.

The irregularity was pointed out in April, 2023. The management replied that the Finance Department Gilgit-Baltistan established year-wise revenue receipt targets based on electricity bills, but failed to consider factors like winter generation, line losses, theft, outdated meters and distribution system. However, the department is committed to address the revenue shortfall and taking corrective measures to improve revenue collection. In this regard the departments will carry out an assessment of the power transmission and distribution infrastructure, besides strengthening the anti-theft measures, and replacing outdated billing meters with modern, accurate, and tamper-proof meters.

The reply was not accepted as the neither the estimates were made realistically nor any mechanism was devised for accurate billing and timely collection.

The DAC in its meeting held on 09.06.2023 directed that necessary measures should be taken to address the revenue shortfall issue, including action against officers who did not achieve the targets, besides improving the efficiency and effectiveness of revenue collection system.

Audit recommends that the decision of the DAC may be implemented.

5.6 Non-recovery of outstanding dues on account of electricity charges – Rs.628.188 million

Para-26 of GFR states that it is the duty of the controlling officer to see that all sums due to Government are regularly and promptly assessed, realized and duly credited to Public Account.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted the department collected revenue of Rs.4,119.055 million.

Audit observed that the electricity charges amounting to Rs.628.188 million were outstanding against domestic consumers and other government organization/departments. (Annex-E)

Audit is of the view that non-recovery of government dues occurred due to non-adherence to the government rules and non-pursuance of the recovery with end result of depriving the government from huge revenue receipt.

The irregularity was pointed out in April, 2023. It was replied that the department will review the outstanding bills against domestic consumers and other government organizations/departments, and will initiate a special drive against defaulters.

The reply was not accepted as the data of outstanding was for the financial years from 2015-16 to 2021-22, department failed to recover the dues and the amount was increased with passage of time.

The DAC in its meeting held on 09.06.2023 directed to run a special drive to recover the outstanding dues from the defaulters.

Audit recommends that the decision of the DAC may be implemented.

5.7 Loss due to line losses – Rs. 8,378.519 million

Para-23 of GFR states that every Government officer should realize fully and clearly that he would be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or negligence.

During Special Study on Power Generation, it was noted that the Water and Power Department Gilgit generated 3,010.19 GWH during the financial year 2015-16 to 2021-22. However, electricity was billed for 1,317.37 GWH (Annex-F).

Audit observed that 1,692.630 GWH electricity was booked as line losses (transmission line losses, distribution line losses and administrative line losses) which was 56.23% of total power generated. Whereas, in accordance with NEPRA record, and as discussed with the officers of the department tolerance limit of line losses was up to 10%. Due to so huge percentage of line losses not only the public faced the problem of energy crisis but the government was also deprived of the revenue receipt worth Rs. 8,378.519 million.

S. No.	Description	Effect/Result
1.	Electricity generated	3010.190 GWH
2.	Electricity billed	1,317.370 GWH
3.	Line losses	1,692.630 GWH
4.	Tolerance limit as per NEPRA	10% = 169.263 GWH
5.	Line losses over and above tolerance limit	1,523.367 GWH (56.23%)
6.	Average electricity tariff per GWH	Rs.5.50 per KWH
7.	Loss of revenue receipt	Rs. 8,378.519 million (1,523.367 X1,000,000X5.5)

Audit is of the view that line losses occurred due to old transmission / distribution lines, theft of electricity from distribution lines through illegal connections and lack of trained technical staff etc. besides weak internal controls.

The irregularity was pointed out in April, 2023. The management replied that the main causes of high line losses are outdated infrastructure, technical faults, inadequate maintenance, theft and unauthorized connections, and lack of resources and funding for maintenance activities. The department is planning to implement advanced metering infrastructure, loss reduction programs, and training and capacity building of field staff to reduce line losses and ensure sustainable power supply.

The reply was not accepted as the department has not formulated any mechanism so far to control the line losses.

The DAC in its meeting held on 09.06.2023 directed the management to take necessary measures for installation of Aerial Bundled Cable (ABC) lines and other measures to decrease the line losses.

Audit recommends that the decision of the DAC may be implemented.

5.8 Loss of revenue to the Government due to generating electricity at higher cost and billing to the consumer at very nominal rates- Rs.16,269.520 million

The W&P department Gilgit-Baltistan vide notification No.SWP-Admn-1 (15)/2014/272 dated 13.01.2015 fixed the tariff rates for domestic and other consumers an average rate of Rs.5.50 for domestic and Rs.7.50 per unit for industrial and other consumers.

During examination of the relevant accounts record for the period from 2015-16 to 2021-22, it was noted that Water and Power Department incurred an expenditure worth Rs.23,511.669 million on account of salaries and operational expenditure (Annex-G) during the period from 2015-16 to 2021-22 and total electricity under the same period was billed as 1,317.370 GWH (1,317,370,000 KWH).

Audit observed electricity was produced at the rate of Rs.17.86 per KWH (23,511,669,275/1,317,370,000) and was billed to consumers at average rate of Rs.5.50 per KWH. Due to this the government sustained as loss of Rs.16, 269.520 million $\{(17.85-5.50) \times 1,317,370,000\} = 16,269.520$ during the period from 2015-16 to 2021-22.

Audit is of the view that that loss of revenue to the government occurred due to production of electricity at higher rates.

The irregularity was pointed out in April, 2023. The management replied that the government of Gilgit-Baltistan has taken measures to subsidize the electricity tariff in order to ensure that citizens of the region have access to affordable electricity. This resulted in an apparent loss of revenue to the government, estimated at Rs.16,269.520 million. The higher production cost is primarily driven by factors unique to Gilgit-Baltistan, such as using thermal power stations for electricity generation in the winter season, repair and maintenance of generators, transformers, and other parts of the Hydel stations through contractors, unprecedented line losses, and the need for specialized technical staff.

The reply was not accepted as no concrete measures were taken to reduce the cost of electricity and increase the tariff.

The DAC in its meeting on 09.06.2023 directed to establish an entity like NEPRA for tariff determination and regulations in the Power Sector of Gilgit-Baltistan to reduce the cost of electricity. DAC directed to initiate action accordingly and steps should also be taken to decrease the other allied losses to reduce the cost of electricity.

Audit recommends that the decision of the DAC may be implemented for reducing the gap between cost of production and sale.

5.9 Non-receipt of vouched accounts- Rs.765.301 million and non-mutation of land

Para-207 (3) of GFR states that the recipient organization is required to submit vouched accounts or audited statement of the accounts to the sanctioning

authority, in order to ensure that the grant was utilized for the purpose for which it was provided.

Para-11 of GFR provides that each head of a department is responsible for enforcing financial order and strict economy at every step. He is responsible for observance of all relevant financial rules and regulations both by his own office and by subordinate disbursing officers.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted that the department made an advance payment amounting Rs.765.301 million against various development projects to the respective Deputy Commissioners/Land Acquisition Collectors on account of acquisition of 3,508.91 Kanals land out of which only 2,729.61 Kanals was mutated in the name of the department leaving 779.300 Kanals land as un-mutated and without ownership of the land the department may face problems in future (Annex-H).

Audit observed that the management neither received complete vouched account nor mutated acquired land in favour of government i.e. Water & Power Department.

Audit is of the view that non-adjustment of the advances and non-mutation of the acquired land in the name of Gilgit-Baltistan Government was due to non-pursuance of the matter with the district revenue offices concerned.

The irregularity was pointed out in April, 2023. The management replied that the instructions have been issued to concerned offices to obtain vouched account and mutate the acquired lands in the name of department to complete the mutation process, but there has been a lack of cooperation from the revenue authorities.

The reply was not accepted as the management has not obtained adjustment accounts and mutation of land upto June-2022.

The DAC in its meeting held on 09.06.2023 directed to obtain vouched accounts from revenue department and record relating to mutation of land.

Audit recommends that the decision of the DAC may be implemented.

5.10 Non-recovery of outstanding dues of special lines consumers- Rs.345.942 million

Rule- 26 of GFR states that it is the duty of the controlling officer to see that all sums due to Government are regularly and promptly assessed, realized and duly credited to Public Account.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted that department provided special lines / connections to different consumers (Annex-I). The provisions of special lines are specifically for the hospitals and some sensitive departments.

Audit observed that an amount of Rs.345.942 million was outstanding against the special lines consumers and no effort was made to pursue the recovery.

Audit is of the view that non-recovery from special lines consumers resulted in loss to the government.

The irregularity was pointed out in April, 2023. The management replied that the department faced difficulties in curbing pilferage and theft, leading to revenue losses. Dedicated recovery teams have been deployed to ensure effective collection without any loss before closing financial year 2023.

The reply of the department was not accepted as outstanding dues were increasing with passage of time and no concrete measures were taken to make recovery from the concerned.

The DAC in its meeting held on 09.06.2023 directed the management to make efforts to recover the outstanding dues from the defaulters at the earliest.

Audit recommends that the decision of the DAC may be implemented.

5.11 Non-auction of material of abandoned Hydel Power Stations – Rs.102.553 million

Para-167 of GFR provides that unserviceable store may be disposed of by sale or otherwise under the order of the authority competent.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted that 37 No of Hydel Power Stations in Water & Power Department were lying abandoned since long having old / scrap material valuing Rs.102.553 million (Total weight 512,763 KgXR_s.200=102.553) (Annex-J).

Audit observed that the management has not devised any mechanism of auction of the scrap material. Whereas, the department is required to expedite the disposal of the material through auction and crediting the realized amount to the government account accordingly otherwise chances of theft / misappropriation of the same material cannot be ruled out.

Audit is of the view that the non-auction of abandoned Hydel Power Stations materials occurred due to non-adherence to the government rules and inadequate implementation of the internal controls.

The irregularity was pointed out in April, 2023. The management replied that the department has made significant progress since 2021-22 to rectify the situation and ensure the expeditious disposal of the unserviceable machinery and equipment from abandoned Hydel Power Stations.

The reply was not satisfactory as no disposal of scrape has been made so far despite lapse of considerable time.

The DAC in its meeting held on 09.06.2023 directed to made assessment of these abandoned materials and initiate auction process as soon as possible.

Audit recommends that the decision of the DAC may be implemented.

5.12 Provision of 3,350 electricity connections without installation of meters and non-replacement of 8,848 out of order meters

Rule-26 (5) (1) of Electricity Act, 1910 states that a consumer shall not connect any meter maximum demand indicator and other measuring apparatus with any electric supply-line through which energy is supplied by a licensee, or disconnect the same from any such electric supply-line without obtaining the consent of the licensee in writing which shall not be un-reasonably withheld by the licensee.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted the department installed 59876 meters all over the GB.

Audit observed that in Diamer Region total 7,793 electricity connections were provided by the department to the people of the area, out of which 4,443 were provided with meters whereas, remaining 3,350 were allowed without installing meters since 2019-20.

Audit further observed that total 8,848 meters (8,145 Non-digital meters +614 Digital meters+89 smart meters) were found out of order since long (Annex-K). The billing is done on estimated/provisional basis. In absence of exact utilization of electricity units its billing amount could not be ascertained to determine the financial loss.

Audit is of the view that lapses occurred due to inefficiency of the respective divisional offices and non-adherence to the prevailing government instructions / rules.

The irregularity was pointed out in April, 2023. The management replied they have been consistently billing the consumers of out of orders meters and without meters based on their connected load to ensure revenue collection. The department further replied that a new policy is implementing whereby faulty meters will be replaced.

The reply was not accepted as the department did not provide any evidence for payment of bills and disconnection of connections provided without installation of meters.

The DAC in its meeting held on 09.06.2023 directed the management to pursue the matter vigorously.

Audit recommends that illegal connections without meters may be disconnected besides repairing/ replacement of out of order meters.

5.13 Installation of ninety-eight illegal electricity connections in Kharmang district

Rule-26 (5) (1) of Electricity Act, 1910 states that a consumer shall not connect any meter maximum demand indicator and other measuring apparatus with any electric supply-line through which energy is supplied by a licensee, or disconnect the same from any such electric supply-line without obtaining the consent of the licensee in writing which shall not be un-reasonably withheld by the licensee.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted the department installed 59,876 meters all over the Gilgit-Baltistan.

Audit observed that ninety-eight consumers of Kharmang district were consuming electricity without installation of meters since 2018-19, detail given as under:

Financial year	No. of illegal electricity connections
2018-19	29
2019-20	20
2020-21	26
2021-22	23
Total	98

Audit further observed that the department did not take any measures to disconnect the illegal connections in order to safeguard the government interest.

Audit is of the view that illegal connections were allowed due to collusive practice, non-adherence to the provision of Electricity Act-1910 and weak administrative controls.

The irregularity was pointed out in April, 2023. The management replied that the teams have been deployed to persuade consumers to install proper meters and educate them about the importance of obtaining legal connections.

The reply was not satisfactory, as the management has not disconnected the illegal connections.

The DAC in its meeting held on 09.06.2023 directed to legalize the connections and provide documentary evidence of the recovery from the connection holders.

Audit recommends disconnecting all the illegal connections and installing meters against thereupon.

5.14 Non-obtaining of NOC from environment protection agency Gilgit before construction / installation of power stations

According to Part-VI, SI:16 (1,2 (a) (b)) of Gilgit-Baltistan Environmental Protection Act,2014, no proponent of a project shall commence construction or operation unless he has filed with Agency an initial environmental examination or environmental impact assessment, and has obtained from the Agency approval in respect thereof.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was noted that one hundred and thirty-two (132) Hydel Power Stations (75 built + 57 under construction) and 31 Thermal power stations (24 installed + 7 under installation) (Annex-L). These projects were executed during the period under audit.

Audit observed that the department did not obtain NOC / approval from Gilgit-Baltistan Environment Protection Agency (EPA) before execution of these power stations.

Audit is of the view that irregularity was occurred due non-adherence to the provisions of the EPA Act.

The irregularity was pointed out in April, 2023. The management replied the provision of EPA Act will be followed in future while preparing PC-I of such schemes.

The reply was not accepted as the department did not follow the provisions of Gilgit-Baltistan Environment Protection Agency (EPA).

The DAC in its meeting held on 09.06.2023 directed the management to strictly follow the provision of EPPA Act.

Audit recommends that the decision of the DAC may be implemented besides fixing the responsibility for not following the provisions of EPA Act.

5.15 Non-compliance of recommendations of inquiry committees

According Gilgit-Baltistan Rules of Business-2009, Water and Power Department is responsible for administrative control & check on the work of electric officials and all technical matters including court case relating to the officials of electric offices.

During scrutiny of the accounts record of Water and Power Department GB for the period from 2015-16 to 2021-22, it was noted that five projects related inquiries (Annex-M) were conducted from 2014 to onward.

Audit observed that management did not initiate any action on the recommendations of the inquiries against the officers / officials who were involved in these cases.

Audit is of the view that management's failure to comply with the recommendations of the inquiry committees rendered the efforts of the committees ineffective.

The irregularity was pointed out in April, 2023. The management replied that the required information submitted to the competent authority for further action in the light of recommendations of inquiries.

The reply was not accepted as no action has been taken in the light of recommendations of the inquiries.

The DAC in its meeting held on 09.06.2023 was assured that recommendations of the inquiries would be followed vigorously.

Audit recommends that compliance of inquiry recommendations be expedited besides strengthening of administrative control.

5.16 Non-Conduct of Physical Verification of Stores of Water& Power Department Gilgit-Baltistan

Para-159 of GFR states that “a physical verification of all stores should be made at least once in every year under the rules prescribed by competent authority, and subject to the condition that the verification is not interested to the person”

- i. Who is the custodian, the ledger keeper, or the accountant of the stores to be verified, or who is a nominee of or is employed under the custodian, the ledger keeper or the accountant or
- ii. Who is not conversant with the classification, nomenclature and technique of the particular classes of stores to be verified.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was observed that no departmental exercise towards physical verification of assets was forthcoming from the produced record. Whereas, physical verification of assets was necessary to ascertain worth and availability of assets regularly to avoid theft/ misappropriation of the assets and become help for future planning.

The irregularity was pointed out in April, 2023. The management replied that a Departmental Committee has been formed to verify the assets of the department and ensure their condition and efficient utilization.

The management accepted the audit point of view and committed to carry out the physical verification of the W&P department.

The DAC in its meeting held on 09.06.2023 was informed that a Departmental Committee has been constituted to verify the assets and their condition. DAC directed to comply with the matter.

Audit recommends that the decision of the DAC may be implemented.

5.17 Non-Conducting of Internal Audit

Para-9 of Gilgit-Baltistan Council System of Financial Control and Budgeting Rules- 2010 states that Finance and Accounts officer shall conduct the internal audit of the Departments and Subordinate Offices and incorporate the results of these inspections in the form of an inspection report and furnish the Internal Audit Report to the Principal Accounting Officer. The Principal Accounting Officer shall, after scrutiny of the reports, communicate to Audit, copies of the reports alongwith remarks and orders/action(s) taken thereon.

During Special Study on Power Generation in Gilgit-Baltistan for the period from 2015-16 to 2021-22, it was observed that internal audit of the accounts records of the Water & Power Department Gilgit-Baltistan Gilgit was not conducted by the Finance and Accounts Officer / PAO in violation of the above rules which reflected serious irregularity / weak internal controls.

The irregularity was pointed out in April, 2023. The management replied that the Water & Power Secretariat has been entrusted with a lot of responsibilities, but the strength of the human resource is limited to 25.

The reply was not relevant, W&P department chalk out a plan to conduct the internal audit of the department.

The DAC in its meeting held on 09.06.2023 was informed that the department's reply was irrelevant. DAC directed to constitute a team to conduct internal audit of the W& P department on regular basis.

Audit recommends that the decision of the DAC may be implemented.

6. RECOMMENDATIONS

The recommendations of special study on power generation in Gilgit-Baltistan for management of water & power, Board for policy makers are separately provided as under:

6.1 Recommendations for organization

Audit recommends that:

- i. Realize outstanding government dues / receipt on account of electricity bills from defaulters.
- ii. Install Aerial Bundled Cable (ABC) lines and other measures to minimize the chances of line losses and electricity theft.
- iii. Ensure NOC from Gilgit-Baltistan Environmental Protection Agency (EPA), before starting the construction of Power Plants in GB.
- iv. Enhance annual fund allocation of ADP, PSDP and repair / maintenance to complete ongoing projects timely and repair / maintain the existing power stations / infrastructure.
- v. Enhance the capacity of technical and non-technical staff of Water & Power Department GB through imparting necessary trainings regularly.
- vi. Diversification of energy Mix with special focus on solar and wind energy.
- vii. Construct dams / water reservoirs to store water to fulfill the energy requirements in the winter season.
- viii. Ensure prompt posting transfer of meter reading staff to avoid undue favour to the electricity consumer in term of unit consumption / illegal connections.
- ix. Develop mechanism to strengthen the internal and external monitoring / supervision control system.

6.2 Recommendation for policy makers

On the basis of special study on power generation in Gilgit-Baltistan audit recommends following policy decision to be considered by the policy makers:

- i. Formulation of Policy for Power Generation in Gilgit-Baltistan, making Private Power and Infrastructure Board (PPIB) an agent of Govt. of GB to promote private investment in power sector and establishment of an entity just like National Electric Power Regulatory Authority (NEPRA) for tariff determination and regulations in Power Sector.
- ii. Complete construction of Regional Grids at the earliest and pursue their connectivity with National grid system through National Transmission and Dispatch Company (NTDC).
- iii. Construction of the hydro power projects at main tributaries to curb the need of electricity in the summer and winter seasons.
- iv. Determination of electricity tariff in line with the per unit electricity production cost to save the Govt. exchequer from any financial loss.

7. CONCLUSION

The Water & Power Department Gilgit-Baltistan failed to perform its functions especially in relation to generation, transmission, distribution and billing of electricity. Such failure was mainly attributed to abnormal delay in execution of ADP/PSDP development projects, construction of hydro power projects at sub tributaries instead at main tributaries, transmission and distribution line losses. Moreover, billing of electricity at very low tariff as compared to per unit production cost of electricity also resulted in loss to the Government. Further, lack of internal and external monitoring / supervision, non-construction of dams/reservoirs to store the water for winter season, non-formulation of power generation policy, rules and regulations by the department affected the performance and efficiency of the department.

Keeping in view the above, the water & power department Gilgit-Baltistan is required to devise a mechanism to address these issues for enhancing the efficiency and production of the electricity in accordance with potential and requirement of the area.

Annexure-A Para No.5.2

Abnormal Delay in Execution of Hydel Power Projects for the period from 2015-16 to 2021-22

S. No.	Name of Division	PC-I Cost (Rs in million)	Date of Start	Stipulated Date of Completion	Actual Date of Completion	Upto Date Expenditure	Power to be generated (MW)	Actual Power Generated (MW)	Short Fall (MW)
1.	Generation Division Gilgit	3345.710	2015-16	2021-22	Under execution till June-2022	1076.773	26.8	0	26.8
2.	Ghizer	827.121	-do-	-do-	-do-	463.171	1.8	0	1.8
3.	Nagar	724.974	-do-	-do-	-do-	584.015	4	0	4
4.	Hunza	580.241	-do-	-do-	-do-	298.807	1.00	0	1.00
Total Gilgit Region		5478.046	-do-	-do-	-do-	2422.766	33.250	0.000	33.250
1.	Skardu	761.868	-do-	-do-	-do-	177.528	4.000	0.000	4.000
2.	Ghanche	341.025	-do-	-do-	-do-	340.987	2.000	0.900	1.100
3.	Shigar	0.000	-do-	-do-	-do-	0.000	0.000	0.000	0.000
4.	Kharmang	785.250	-do-	-do-	-do-	24.266	0.000	0.000	0.000
Total-Baltistan Region		1888.143	-do-	-do-	-do-	542.781	6.000	0.900	5.100
1.	Diamer	2162.490	-do-	-do-	-do-	1675.624	7.700	0.000	7.700
2.	Astore	1734.030	-do-	-do-	-do-	891.491	7.900	1.370	0.130
Total- Diamer Astore Region		3896.520	-do-	-do-	-do-	2567.115	54.850	1.370	53.48
G. Total W&P Department		11262.709	-do-	-do-	-do-	5532.662	94.100	2.270	91.830

Source: Information provided by the management of the department.

Annexure-B Para No.5.3

Non-monitoring of Development schemes for the Period from 2015-16 to 2021-22

S. No.	Name of Division	PC-I Cost (Rs in million)	Date of Start	Stipulated Date of Completion	Actual Date of Completion	Upto Date Expenditure	Power to be generated (MW)	Actual Power Generated (MW)	Short Fall (MW)
1.	Generation Division Gilgit	3345.710	2015-16	2021-22	Under execution till June-2022	1076.773	26.8	0	26.8MW
2.	Ghizer	827.121	-do-	-do-	-do-	463.171	1.8	0	1.8
3.	Nagar	724.974	-do-	-do-	-do-	584.015	4.00	0	4.00
4.	Hunza	580.241	-do-	-do-	-do-	298.807	1.00	0	1.00
Total Gilgit Region		5478.046	-do-	-do-	-do-	2422.766	33.60	0.000	33.60
1.	Skardu	761.868	-do-	-do-	-do-	177.528	4.000	0.000	4.000
2.	Ghanche	341.025	-do-	-do-	-do-	340.987	2.000	0.900	1.100
3.	Shigar	0.000	-do-	-do-	-do-	0.000	0.000	0.000	0.000
4.	Kharmang	785.250	-do-	-do-	-do-	24.266	0.000	0.000	0.000
Total-Baltistan Region		1888.143	-do-	-do-	-do-	542.781	6.000	0.900	5.100
1.	Diamer	2162.490	-do-	-do-	-do-	1675.624	7.700	0.000	7.700
2.	Astore	1734.030	-do-	-do-	-do-	891.491	7.900	1.370	0.130
Total- Diamer Astore Region		3896.520	-do-	-do-	-do-	2567.115	54.850	1.370	7.830

Source: Information provided by the management of the department.

Annexure-C Para No.5.4

Under-utilization of Hydel Power Stations

S. No.	Name of Division	Installed Capacity			Actual Generation		Demand		Shortfall	
		Hydel	Thermal	Total	Summer	Winter	Summer	Winter	Summer	Winter
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
A-Gilgit Region										
1	Gilgit	60	8	68	49	31.8	49.89	94.51	0.89	62.71
2	Ghizer	19.57	0.7	20.27	12.5	9.38	38.88	71.34	26.38	61.96
3	Nagar	6.3	1	7.3	4.56	2.56	9.27	16.97	4.71	14.41
4	Hunza	6.8	3.2	10	4.71	3.58	12.83	20.61	8.12	17.03
Total Gilgit Region		92.67	12.9	105.6	70.77	47.32	110.87	203.43	40.1	156.11
B-Baltistan Region										
1	Skardu	35.1	9.4	44.5	14.2	16.2	50.6	94.47	36.4	78.27
2	Ghanche	13.94	0.25	14.19	8.09	5.16	25.5	48.52	17.41	43.36
3	Shigar	4.7	0	4.7	3.5	2	10.35	18.36	6.85	16.36
4	Kharmang	10.58	0	10.58	9	5	6.65	12.54	-2.35	7.54
Total Baltistan Region		64.32	9.65	73.97	34.79	28.36	93.1	173.89	58.31	145.53
C-Diamer-Astore Region										
1	Diamer	22.2	5.6	27.8	10.59	10.75	36.02	50.34	25.43	39.59
2	Astore	8.06	0.5	8.56	4.5	4	14.83	24.53	10.33	20.53
Total Diamer-Astore Region		30.26	6.1	36.36	15.09	14.75	50.85	74.87	35.76	60.12
G. Total W&P GB		187.3	28.65	215.9	120.65	90.43	254.82	452.19	134.17	361.76

Source: Information provided by the management of the department.

Annexure-D Para No. 5.5

Detail of Outstanding Revenue and receipt targets on Account of Electricity Charges

for the period from 2015-16 to 2021-22

S. No.	Division	Revenue Receipts Target fixed by the Finance Deptt. On Account of Electricity Bills (Rs in Million)	Actual Revenue Receipts Realized (Rs in Million)	Revenue Receipt Outstanding (Rs in Million) (3-4)
1	2	3	4	5
A. Gilgit Region				
1.	Operation Gilgit	2429.906	1508.371	933.599
2.	Ghizar	581.555	474.892	107.572
3.	Nagar	249.855	129.025	120.830
4.	Hunza	293.101	214.594	78.507
Total- Gilgit Region		3554.417	2326.882	1240.508
B. Baltistan Region				
1.	Skardu	1080.812	865.686	251.612
2.	Ghanche	483.455	330.550	159.320
3.	Shigar	93.176	78.201	41.292
4.	Kharmang	242.569	135.353	107.216
Total-Baltistan Region		1900.012	1409.79	559.44
C. Diamer-Astore Region				
1.	Diamer	567.256	188.807	378.449
2.	Astore	259.431	193.578	7.104
Total-Diamer Astore		826.687	382.385	385.553
G.Total W&P GB		6281.116	4119.057	2185.501
Year wise total				
1.	2015-16	526.503	423.956	110.111
2.	2016-17	633.576	462.758	169.355
3.	2017-18	675.284	478.637	190.545
4.	2018-19	881.590	619.096	255.790
5.	2019-20	972.106	537.107	423.837
6.	2020-21	1218.857	606.758	602.566
7.	2021-22	1373.200	990.745	433.297
Total		6281.116	4119.057	2185.501

Source: Information provided by the management of the department.

Annexure-E Para No. 5.6

**Details of Non-recovery of outstanding dues on account of Electricity Charges
for the period from 2015-16 to 2021-22**

S. No.	Name of Division	Total Units of Electricity Produced GWH	Total Units against which billing raised by Department	Total Revenue on account of electricity bills received (In Million)	Total Revenue on Account of electricity bills outstanding (In Million)
A. Gilgit Region					
1	Operation Gilgit	1623.204	450.294	1,508.371	179.816
2	Ghizar	222.257	157.629	474.891	11.915
3	Nagar	83.321	50.008	129.024	111.156
4	Hunza	93.043	74.435	214.594	8.710
Total- Gilgit Region		2021.825	732.366	2,326.880	311.597
B. Baltistan Region					
1	Skardu	240.516	168.516	865.686	96.716
2	Ghanche	293.687	150.89	330.550	18.362
3	Shigar	28.884	22.811	78.201	3.642
4	Kharmang	68.2	45.467	135.353	9.908
Total-Baltistan Region		631.287	387.684	1,409.790	128.628
C. Diamer-Astore Region					
1	W&P Division Diamer	199.494	94.786	188.807	178.515
2	Astore	157.58	102.535	193.578	9.448
Total Diamer Astore		357.074	197.321	382.385	187.963
G.Total W&P GB		3010.19	1317.37	4,119.055	628.188

Annexure-F Para No. 5.7

Details of line losses for the period from 2015-16 to 2021-22

S. No.	Name of Division	Units Generated (GWH) GIGA WAAT PER HOUR	Units Billed	Cost Units Recovered	Amount Billed (Rs. In Million)	Amount Recovered (Rs. In Million)	Amount Outstanding (Rs. In Million)	Line loses %
A. Gilgit Region								
1.	Generation Gilgit	1623.204	450.294	562.729	1688.187	1508.371	179.816	60-82 %
2.	Ghizer	222.257	157.629	157.172	486.806	474.891	11.915	29%
3.	Nagar	83.321	50.008	36.864	139.591	129.024	111.156	29-47%
4.	Hunza	93.043	74.435	71.531	223.304	214.594	8.710	20%
Total Gilgit Region		2021.825	732.366	828.296	2537.888	2326.88	311.597	
B. Baltistan Region								
1.	Skardu	240.516	168.516	164.132	962.402	865.686	96.716	4-40%
2.	Ghanche	293.687	150.890	142.797	348.912	330.550	18.362	46-49%
3.	Shigar	28.884	22.811	20.219	85.714	78.201	3.642	6-30%
4.	Kharmang	68.200	45.467	48.340	131.495	135.353	9.908	33%
Total-Baltistan Region		631.287	387.684	375.488	1528.523	1409.79	128.628	
C. Diamer Astore Region								
1.	Diamer	199.490	94.79	53.94	367.32	188.81	178.52	48-54%
2.	Astore	157.580	102.535	97.797	203.026	193.5780	9.448	30-39%
Total Diamer Astore		357.070	197.32	151.74	570.35	382.39	187.96	
G.Total W&P GB		3010.19	1317.37	1355.53	4636.76	4119.06	628.19	

Annexure-G Para No. 5.8

**Detail of Budget Expenditure Statement for the period from 2015-16 to 2021-22
in respect of Water and Power Department GB**

S · N o.	Financial Year	Budget allocation			Budget Release			Expenditure Incurred		
		Develop ment	Non- Develop ment	Total	Develop ment	Non- Develop ment (Salary and other operating expenditu re)	Total	Develop ment	Non- Develop ment (Salary and other operating expenditu re)	Total
1	2015-16	3,976.78	1,461.13	5,437.91	3,976.78	2,246.62	6,223.39	3,976.78	2,245.78	6,222.56
2	2016-17	3,833.49	1,684.40	5,517.89	3,833.49	2,619.98	6,453.47	3,833.49	2,600.47	6,433.96
3	2017-18	3,575.75	1,989.63	5,565.38	3,575.75	2,345.82	5,921.57	3,575.75	2,336.54	5,912.29
4	2018-19	3,419.52	2,739.98	6,159.50	3,419.52	3,238.37	6,657.89	3,419.52	3,238.96	6,658.48
5	2019-20	2,843.73	2,724.63	5,568.36	2,843.73	3,317.18	6,160.91	2,843.73	3,315.71	6,159.44
6	2020-21	3,567.33	2,659.53	6,226.85	3,567.33	3,613.49	7,180.82	3,567.33	3,604.70	7,172.02
7	2021-22	2,436.25	3,826.90	6,263.16	2,436.25	6,173.42	8,609.67	2,436.25	6,169.51	8,605.76
	Total	23,652.85	17,086.20	40,739.06	23,652.85	23,554.88	47,207.74	23,652.85	23,511.67	47,164.52

Annexure-H Para No. 5.9

**Detail Non-receipt of vouched accounts and Non-Mutation of Land acquired
for the period from 2015-16 to 2021-22**

S. No.	Name of Division	Land with cost Provided in the approved PC-I	Cost of Land paid (In Million)	Area of Land acquired (In Kanal)	Area of land mutated in the name of Department.	Efforts made for mutating the land in the name of Department.
A. Gilgit Region						
1.	Civil Engineering Division Gilgit	252.731	211.500	410.500		Letter to all Deputy Commissioner (Gilgit, Hunza, Nagar, Ghizer) vide Letter No:EE/WP/CED/Admn-1(101)/2022-23/588 dated: 18-01-2023 districts of Gilgit Region
2.	Ghizer	64.159	96.373	360.960	360.960	
3.	Nagar	34.752	34.752	79.850	79.850	
4.	Hunza	29.780	31.170	106.650	8.250	
Total-Gilgit Region		381.422	373.795	957.96	449.06	
B. Baltistan Region						
1.	Skardu	148.257	150.772	1809.100	1809.100	
2.	Ghanche	49.247	48.210	121.600	121.600	
3.	Shigar	4.495	4.495	5.000	5.000	
4.	Kharmang	23.617	23.617	87.100	87.100	
Total-Baltistan Region		225.616	227.094	2022.800	2022.8	
C. Diamer-Astore Region						

1.	Diamer	104.243	89.944	257.75 0	257.750	
2.	Astore	83.930	74.468	270.40 0	0.000	The Deputy Commissioner / land collector District Astore has requested for mutation the acquired land vide this office letter No.EE-W&P-A-HQ (LC) /2019/20/542 dated 9th March,2023.
Total- Diamer Astore		188.173	164.412	528.15	257.75	
G.Total W&P GB		795.211	765.301	3508.9 1	2729.61	

Annexure-I Para No. 5.10

**Detail of Special lines Connection, along with amount outstanding
for the period from 2015-16 to 2021-22**

S. No.	Name of Division	No. of Connection to Departments	No. of Connection to Public	Total Amount recoverable from Consumers (In million)	Total Amount Recovered (In million)	Total Amount Outstanding (In million)
A. Gilgit Region						
1.	Operation Division Gilgit	467	7861	1688.187	1508.371	179.816
2.	Ghizer	1365	219733	474.892	474.892	3.866169
Total- Gilgit Region		1832	227594	2163.079	1983.263	183.6822
B. Baltistan Region						
1.	Skardu	340	8277	962.483	962.483	96.797
2.	Shigar	1921	39925	85.714	78.201	7.513
3.	Kharmang	722	40001	131.495	135.353	48.465
Total-Baltistan Region		2983	88203	1179.692	1176.037	152.775
C. Diamer-Astore Region						
1.	Astore	1892	79366	250.486	241.001	9.485
Total-Diamer Astore		1892	79366	250.486	241.001	9.485
G. Total		6707	395163	3593.257	3400.301	345.942

Annexure-J Para No.5.11

**Detail of non-auction of abandoned hydel power stations
for the period from 2015-16 to 2021-22**

S. No.	Division	Number of projects	Installed Capacity MW	Weight of Penstock Pipe i/e TG Set (kg)	Present Worth (Rs.200 per kg)
A. Gilgit Region					
1.	Generation Division Gilgit	7-Projects	1.394	75880.000	15.176
2.	Ghizer	2-Projects	0.208	24400.000	4.880
3.	Nagar	2-Projects	0.150	8888.000	1.778
4.	Hunza	3-Projects	0.900	129406.000	25.881
Total Gilgit Region			2.652	238574.000	47.715
B. Baltistan Region					
1.	Skardu	8-Projects	2.780	51396.000	10.279
2.	Ghanche	3-Projects	0.428	59785.000	11.957
3.	Shigar	3-Projects	0.430	26367.000	5.273
4.	Kharmang	4-Projects	0.708	51636.000	10.327
Total Baltistan Region			4.346	189184.000	37.837
C. Diamer-Astore Region					
1.	Diamer	4-Projects	0.595	57400.000	11.480
2.	Astore	3-Projects	0.576	27605.000	5.521
Total Diamer-Astore Region			1.171	85005.000	17.001
Total W&P GB			8.169	512763.000	102.553
Total weight X rate per kg= Total value			512,763X200=102,552,600=102.553		

Annexure-K Para No. 5.12

**Detail of metered and out of order connections in Gilgit-Baltistan
for the period from 2015-16 to 2021-22**

S. No.	Name of Division	No of Electromechanical Meters		No of Digital Meters		No of Smart Meters	
		In Order	Out of Order	In Order	Out of Order	In Order	Out of Order
A. Gilgit Region							
1.	Operation Division Gilgit	26640	4410	2650	15	10769	89
2.	Ghizer	35089	126	1013	0	0	0
3.	Nagar	8790	0	1052	0	0	0
4.	Hunza	92	0	168	0	0	0
Total- Gilgit Region		70611	4536	4883	15	10769	89
B. Baltistan Region							
1.	Skardu	48055	0	21	0	0	0
2.	Ghanche	19561	0	20805	599	0	0
3.	Shigar	9517	80	250	0	0	0
4.	Kharmang	8626	29	0	0	0	0
Total-Baltistan Region		85759	109	21076	599	0	0
C. Diamer-Astore Region							
1.	Diamer	4443	0	0	0	0	0
2.	Astore	7970	3500	1880	0	0	0
Total-Diamer Astore Region		12413	3500	1880	0	0	0
Total W&P GB		168783	8145	27839	614	10769	89

Annexure-L Para No.5.14

**Hydel & Thermal Power Stations installed / under installation
without NOC from environment protection agency for the period
from 2015-16 to 2021-22**

S. #	Name of Division	No. of Hydel Power Stations Installed		No. of Thermal Stations Installed	
		No. of Power Stations Installed	No. of Power Stations under Installation	No. of Thermal Stations Installed	No. of Thermal Stations under Installation
A. Gilgit Region					
1.	Operation Division	1	3	5	5
2.	Generation Division	19	5	0	0
3.	Ghizar	7	5	1	1
4.	Nagar	6	12	0	0
5.	Hunza	4	1	3	0
Total-Gilgit Region		37	26	9	6
B. Baltistan Region					
1.	Skardu	5	3	11	0
2.	Ghanche	7	7	1	1
3.	Shigar	1	5	0	0
4.	Kharmang	7	6	0	0
Total-Baltistan Region		20	21	12	1
C. Diamer-Astore Region					
1.	Diamer	11	7	3	0
2.	Astore	7	3	0	0
Total-Diamer Astore		18	10	3	0
Total W&P GB		75	57	24	7

Annexure-M Para No.5.15

Details of non-compliance of recommendations of inquiry committee pertaining to officers / officials of Water & Power Department Gilgit-Baltistan

S. #	Name of Project	Subject of Inquiry	Inquiry recommendations	Inquiry conducted by CMIT
1.	Addition of 1.6 MW TG Sets in Phase-I & Phase-II Jaglote Gah including penstock pipe and other civil structure	Incurrence of expenditure on unfeasible scheme	All the officers / officials of W&P GB who were involved in planning the project, processing of the project administrating the irrelevant tenders including award of work, appropriation of funds, incurrence of irregular expenditure and also failed to perform their due role diligently, warrant for departmental inquiry under the E&D rules-2011 to fix the responsibility besides transferring of all alleged officers / officials from field duties to desk job.	1. Mr. Satrap Hussain, Economist / Planner (Member) 2. Engr. Muhammad Sibtain Akbar, (Member Technical) 3. Eng. Muhammad Ashique Director General CMIT
2.	2- MW Hydro Power Project at Shigar Phase-III	Failure of the project during its commissioning	1. Get rectified the shortcomings in construction of penstock pipe anchor for successful commissioning and sustainable future operation of the project. 2. Inquiry was conducted by Secretary W&P for violation of standing instructions for taking disciplinary action against the defaulters.	1. Eng.SherAbbas XEN GBHEW Gilgit (Member) 2. Engr. Muhammad Sibtain Akbar, (Member Technical CMIT GB (Convener)
3.	Suspension bridge ISPAY and 400 KW HPP ISPAY Astore	To assess the existing suspension bridge regarding its load bearing capacity for transportation of heavy machinery / TG sets for construction of Power project across the river at ISPAY Astore	1. Water & Power Department should repair bridge on war footing basis from the approved PC-I under head of 3% physical contingencies Rs.2.049 million 2. Action should be taken against the person at fault who were involved in preparation of faulty PC-I and in execution / monitoring / supervision of the Project.	Engr. Muhammad Sibtain Akbar, (Member Technical (Electrical), CMIT GB (Inquiry Officer)
4.	Project "1.3 MW HPP at Thoi	Delay in Development Project "1.3 MW HPP at	W&P Division Ghizer violated rules and standing instructions and made advance and overpayments	Engr. Muhammad Sibtain Akbar, (Member Technical (Electrical),

	Yasin District Ghizer”	Thoi Yasin District Ghizer”	to the contractors beyond the scope of PC-I, CA and TS estimates. Therefore, exemplary punishment is to be given to the officers /officials at fault.	CMIT GB (Inquiry Officer)
5.	Construction of 12 KM Jeep Road and electricity project at Saindo (Hilalabad) to Marbroq Kharmang	Faulty Construction of 12 KM Jeep Road and electricity project at Saindo (Hilalabad) to Marbroq Kharmang	Rectification of defects in retaining / breast walls. Ensure restoration of damaged accessories, transmission line and H type poles as per design and contract agreement. Take appropriate action against the officers / involved in execution of substandard quality work.	<ol style="list-style-type: none"> 1. Engr. Saleem Raza 2. Imtiaz Ali, Research Officer 3. Engr. Mohammad Sibtain Akbar (Member Technical Electrical) 4. Rashid Ali, DG, CMIT, GB