



**PERFORMANCE AUDIT REPORT
ON
POWER TRANSMISSION SYSTEM FOR
WIND PROJECTS IN SINDH WIND
CORRIDOR
AUDIT YEAR 2019-20**

AUDITOR-GENERAL OF PAKISTAN

PREFACE

The Auditor General conducts audits in terms of Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan 1973, read with Sections 8 and 12 of the Auditor General's (Functions, Powers, Terms and Conditions of Service) Ordinance 2001. The performance audit of Power Transmission System for Wind Projects in Sindh Wind Corridor Under USAID Grant Activity Agreement No. 391-PEPA-ENR-WTL-00 (NTDCL) was carried out accordingly.

The Directorate General of Audit Power conducted performance audit of Power Transmission System for Wind Projects in Sindh Wind Corridor Under USAID Grant Activity Agreement No. 391-PEPA-ENR-WTL-00 (NTDCL) in National Transmission Dispatch Company Limited (NTDCL) during June, 2020 for the period 2016-17 to 2019-20 with a view to report significant findings to the relevant stakeholders. Audit examined the economy, efficiency and effectiveness aspects of the Power Transmission System for Wind Projects in Sindh Wind Corridor in NTDCL. In addition, Audit also assessed on test check basis, whether the management complied with applicable laws, rules and regulations in planning, executing and operating the project. The Performance Audit Report indicates specific actions that, if taken, will help the management realize the objectives of the Power Evacuation in NTDCL. Most of the observations included in this report have been finalized in the light of discussions in the DAC meeting.

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].

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Islamabad
Dated: 04 January, 2024

(Muhammad Ajmal Gondal)
Auditor General of Pakistan

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
BoD	Board of Directors
CE	Chief Engineer
CEO	Chief Executive Officer
COD	Commercial Operation Date
CPPA-G	Central Power Purchase Agency Guarantee Limited
DAC	Departmental Accounts Committee
DISCOs	Distribution Companies
DLP	Defect Liability Period
EOT	Extension of Time
EMCO	Electrical Equipment Manufacturing Company
EHV	Extra High Voltage
EPA	Energy Purchase Agreement
FFC	Fauji Fertilizer Company
FD	Finance Director
GSO	Grid System Operation
GST	General Sales Tax
GWh	Giga Watt Hour
KV	Kilo Volt
KW	Kilo Watt
LD	Liquidated damages
MIMDR	Monitoring Inspection Milestone Verification & Design Review
MoWP	Ministry of Water and Power
MP&M	Material Procurement& Management
MW	Mega Watt
NEPRA	National Electric Power Regulatory Authority
NESPAK	National Engineering Services Pakistan
NGK	Nihon Gaishi kabushikigaisha
NPPC	National Power Control Center
NPMV	Non-Project Missed Volume
NTDCL	National Transmission & Dispatch Company Limited
O&M	Operation and Maintenance
OC	Operation Code

PC-I	Planning Commission Proforma-I
PC-III	Planning Commission Proforma-III
PEC	Pakistan Engineering Council
PECO	Pakistan Engineering Company
PEPA	Pakistan Enhanced Partnership Agreement
PEPCO	Pakistan Electric Power Company
PC	Planning Commission
PD	Project Director
PPMCL	Power Planning & Monitoring Company Limited
PKR	Pakistani Rupees
PMU	Project Management Unit
PO	Purchase Order
PPRA	Public Procurement Regulatory Authority
PPR	Public Procurement Rules
RTV	Room Temperature Vulcanizing
SO	System Operator
SOP	Standard Operating Procedure
SVC	Static VAR Compensator
T&G	Transmission and Grid
TNO	Transmission Network Operator
UoSC	Use of System Charges
USAID	United States Agency for International Development
US\$	United State Dollar
VAR	Volt-Amps Reactive
WAPDA	Water and Power Development Authority
WPP	Wind Power Producers
WTG	Wind Turbine Generator

EXECUTIVE SUMMARY

The Directorate General Audit Power conducted performance audit of Power Transmission System for Wind Projects in Sindh Wind Corridor Under USAID Grant Activity Agreement No.391-PEPA-ENR-WTL-00 in NTDC during June, 2020. Main objectives of the audit were to evaluate economy, efficiency and effectiveness of successful execution of Power Transmission System for Wind Projects in Sindh. The audit was conducted in accordance with prevailing rules and regulations.

The National Transmission Dispatch Company Limited (NTDC) being a state-owned entity, is responsible to operate, manage, and develop the national power transmission network of 500/220 kV capacity. The NTDC, in coordination with the then Ministry of Water and Power (MoWP), had prepared a Transmission Sector Road Map, 2007-2017 in order to overcome the shortcomings of the power transmission system by recommending rehabilitation, augmentation, and expansion projects and power evacuation from the planned power stations. The principal activity of NTDC is to receive electricity from Hydel / Thermal / Nuclear Power Stations, Renewable Energy Plants and IPPs, which is transmitted to National Grid for distribution to all DISCOs and K-Electric. NTDC is also responsible to construct, operate and maintain 220 KV and 500 KV transmission system comprising transmission lines and grid stations. This transmission system links all power plants including IPPs, WAPDA / PEPCO unbundled generation companies, nuclear power plant and hydroelectric plants owned and operated by WAPDA.

NEPRA granted transmission license to NTDC in December, 2002 to engage in exclusive transmission business for a term of 30 years. The core functions associated with NTDC are:

1. Transmission Network Operator (TNO)
2. System Operator (SO)
3. Wire Business
4. System Operation and Dispatch

The Company operates and maintains fourteen (14) 500 KV Grid Stations and thirty-eight (38) 220 KV grid stations along with 5,077 KM 500 KV transmission lines, and 7,359 KM 220 KV transmission lines in Pakistan.

a) **Key Audit Findings**

- Irregular award of Consultancy Agreement in violation of PPRA Rules- Rs.190.711 million
- Loss due to power dispersal issues at 220 KV Jhimpir Grid and allied Transmission Lines-273.50 million
- Unstable and sub-standard construction of 220 KV Jhimpir Grid Station and Allied Transmission Line causing power evacuation issues from Wind Power Plants- US\$ 43.00 million
- Poor planning of design department NTDC to recommend non-compatible and faulty Disc Insulators
- Poor Performance of Grid Station and Allied Transmission Line resulted in payment of Non-Project Missed Volume Rs.8,648.601 million.
- Non-conduct of Technical Audit of 220 KV & 132 KV Transmission Lines
- Non-achieving the envisaged benefits due to delay in completion of project-Rs.1,805.85 million
- Grid tripping beyond technical limits resulted in hazard to plant reliability of Wind Power Producers and a loss of Rs.30 million to M/s FFC Wind Power Plant
- Non-preparation of transient stability study to ensure power stability co-ordination
- Abnormal Cost escalation due to change in type of foundations Rs 183.794 million

b) **Recommendations**

The NTDC management needs to strengthen its internal controls and institute transparency for better planning, design, executing and operational management in an economic, efficient and effective manner to achieve the desired objectives of power transmission from Sindh Wind Corridor. On the basis of audit findings, the management is required to: -

- Ensure detailed and comprehensive planning of power

- transmission project at design and procurement level.
- Investigate and fix responsibility for;
 - Non-achievement of envisaged benefits due to delay in project completion
 - Installation of non-compatible disc insulators
 - Irregular award of consultancy contract without open competitive bidding
 - Abnormal increase in contract price due to change in design
 - Vulnerability of grid station equipment and health of human resource to environmental pollution
 - Huge payments of Non-project Missed Volume
 - Loss due to power dispersal issues
 - Poor survey conducted by NESPAK
 - Grid tripping beyond permissible limit
 - Non-preparation of transient stability study
 - Non-imposition of Liquidated Damages on M/s Al-Hussain

1. INTRODUCTION

The Directorate General Audit Power conducted performance audit of Power Transmission System for Wind Projects in Sindh Wind Corridor Under USAID Grant Activity Agreement No. 391-PEPA-ENR-WTL-00 (NTDCL) in NTDC during June, 2020. The Sindh Wind Corridor, located in the southern province of Sindh, Pakistan, is a region renowned for its significant potential for wind energy development. The corridor is characterized by consistent and robust wind patterns, making it an ideal location for harnessing wind power. The Sindh Wind Corridor has attracted attention from renewable energy developers and investors due to its favorable wind conditions, offering an opportunity to contribute substantially to Pakistan's growing energy needs through clean and sustainable wind energy projects. The establishment of wind energy projects in Jhimpir has potential economic benefits, including job creation and infrastructure development, contributing to the overall socio-economic progress of the region.

The establishment of a transmission line project in the Sindh Wind Corridor, facilitated by the United States Agency for International Development (USAID), represents a collaborative effort to enhance the infrastructure for harnessing wind energy in Pakistan. Recognizing the region's significant potential for wind power generation, USAID has played a pivotal role in supporting the development of transmission infrastructure to facilitate the efficient transfer of wind-generated electricity. The project involves the construction of transmission lines to connect wind farms in the Sindh Wind Corridor to the national grid, ensuring the seamless integration of clean energy into the broader energy infrastructure of Pakistan. This initiative aligns with USAID's commitment to promoting sustainable development and addressing energy challenges.

Under the Power Policy 2002 and Renewable Energy Policy 2006, evacuation of power from all power producers is the responsibility of NTDCL. In the year 2010, USAID signed an Agreement with Islamic Republic of Pakistan for Power Enhancement Partnership Agreement to provide funding, information and procedures for the implementation of assurance described therein, including for current and future energy projects. An Activity Agreement amounting to US\$ 43.00 million for funding of Power Transmission System for Wind Projects in

Sindh Wind Corridor was signed between NTDC and USAID in September 2015 which included the following components:

1. Construction of 84.5 Km long double circuit 220 KV transmission line from 220 KV Jhimpir substation to the 220 KV T.M Khan Road Substation.
2. Construction of double circuit 132 KV transmission line from 220 KV Jhimpir substation to the 132 KV T.M Khan Road Substation (75 Km long).
3. Extension at 132 KV Tando Muhammad Khan substation and 220 KV Tando Muhammad Khan Road station.
4. Construction of a new 220/132 KV Jhimpir substation.
5. Construction of double circuit 132 KV transmission line for interconnection of Wind Power Projects with the new 220/132 Jhimpir substation.

Since the project was completed by NTDC in 2017, installed capacity had reached 786 MW and the energy transmitted since then was 1,333 Giga Watt-hour (GWh).

2. AUDIT OBJECTIVES

The main objective of performance audit was to check whether NTDC being Executing/Implementing Agency had successfully executed or not the projects of construction of new 220/132 transmission lines and 220/132 grid station under the grant in an economical, efficient and effective manner with maximum utilization of grant proceeds.

3. AUDIT SCOPE AND METHODOLOGY

Scope of the performance audit would include audit of projects under USAID Grant Activity Agreement No. 391-PEPA-ENR-WTL-00 for US\$ 43 million. The methodology during execution of performance audit was as under:

- Interview and discussion with the management.
- Review of grant agreement rules, regulations, technical instructions, process and procedure.

- Study and analysis of Grant agreement, project PC-I, USAID procurement guidance/contract/purchase orders documents, year wise progress reports, financial statements and Environmental Assessment Reports.
- Review of material inspection Reports, issuance of material to intended projects, repeat / variation order, extension of time, tendering procedures, bids and bids evaluation, award of contracts etc.
- Examination of selected records and necessary auditable documents.

4 **AUDIT FINDINGS AND RECOMMENDATIONS**

4.1 **Procurement and Contract Management**

4.1 Procurement and Contract Management

4.1.1 Irregular award of Consultancy Agreement in violation of PPRA Rules – Rs. 190.711 million

According to Rule-20 of PPRA Rules-2004, “save as otherwise provided, the procuring agencies shall use open competitive bidding as the principal method of procurement for the procurement of goods, services and works”.

During Performance audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that a Consultancy Agreement valuing Rs. 435.924 million to provide consultancy services for 500 KV Transmission Line 3rd circuit Jamshoro-Moro-Dadu to Rahim Yar Khan (600km) and Moro substation Project was awarded to M/s NESPAK in March, 2010 with the completion date of November, 2010 and February, 2014 for Phase-I and Phase-II respectively. Thereafter, further additional work valuing Rs.190.711 million for providing additional services pertaining to the detailed survey works of 220/132 KV Transmission Lines about 220km of proposed New Jhimpir and design review was awarded to the same consultant through two and three (2&3) amendments without open competitive bidding which was irregular.

Non-adherence to PPRA rules resulted in irregular award of consultancy agreement amounting to Rs.190.741 million.

The matter was taken up with the management in August, 2020 and reported to the Ministry in September, 2020. The management replied that there was a clear urgency/emergency in the requirements due to timelines for evacuation of power from Wind Power Producers (IPPs) as there was not enough time left for NTDC. The prospect of penalty due to any unforeseen event could have attracted claims worth Billions of rupees on account of demurrage /capacity payments. This invites PPRA Rule No. 42 (c & d) which allow to acquire services through direct Contracting/Single Source Contracting or through negotiated tendering from one source.

DAC in its meeting held on 24th February, 2022 observed that under PPRA rule 42-C, a procuring agency can engage indirect contracting in case of emergency provided that the procuring agency shall specify appropriated fora vested with necessary authority to declare an emergency. Moreover, PPRA rules 42-D provide that the circumstances invoked to justify extreme urgency must not be attributable to the procuring agency. DAC directed the management to justify

the position by making rate comparison and revised/cogent reply thereof be submitted to Audit within 15 days. No reply was furnished up till finalization of the report.

Audit desires that the management needs to ensure compliance of DAC's directives and get approval of the Competent Authority, at the time of invoking PPRA Rule 42-D, verified from Audit.

4.1.2 Irregularities in purchase of Transmission Line Hardware Material and Dampers -US\$ 374,034.56

According to the clause 4 of Public Procurement Rules 2004 that Procuring agencies, while engaging in procurements, shall ensure that the procurements are conducted in a fair and transparent manner, the object of procurement brings value for money to the agency and the procurement process is efficient and economical.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that a contract (WPP-08-2013 Lot-VI & VIII) for supply of Transmission Line Hardware Material with Dampers for Sindh Power Plants at Jhimpir and Gharo Cluster to M/s Guanzhou Xinyuan Hengye China was awarded on 28.10.2014 against contract price of US\$ 374,034.56. The contractor was required to deliver the material within 150 days. Later on, NTDC issued contract termination notices to the contractor due to non-submission of type/pre-shipment inspection testing. However, the contractor expressed its serious concerns over termination notices and stated that type test never failed and four inspectors nominated by MP&M and Design Department stayed more than 45 days for type testing in VEIKI Hungry & China to witness the type testing. Moreover, the firm stated that type testing delayed due to change in nomination of inspectors by three times and MP&M could not arrange to clear the material at Karachi Port and Letter of Credit with the bank to release the documents for clearance of goods. Audit desires to investigate the matter for non submission of type /pre-inspection test report and nomination of HESCO representatives without prior approval from Design department of NTDC. In addition, reasons for declaring M/s Guanzhou technically responsive at the first place also needed to be inquired.

Non adherence to PPRA Rule resulted in irregularity in purchase of transmission line and hardware material and damper costing US \$ 374,034.56.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020. The management informed DAC that the contract was never terminated however, termination notice was served due to delay in delivery/type testing by the contractor which was part of expediting strategy. The material was installed after approved type testing. Bid evaluation report along with completion report would be furnished to audit.

DAC in its meeting held on 24th February, 2022 directed the management to get the record verified from audit within 15 days. No reply was furnished up till the finalization of the report.

Audit recommends that the management needs to ensure compliance of DAC's directives.

4.1.3 Non-blacklisting of M/s EMCO Industries Limited for supplying sub-standard Disc Insulators - Rs. 37.038 million

According to the clause 19 of Public Procurement Rules 2004, the procuring agencies shall specify a mechanism and manner to permanently or temporarily bar, from participating in their respective procurement proceedings, suppliers and contractors who either consistently fail to provide satisfactory performances or are found to be indulging in corrupt or fraudulent practices. Such barring action shall be duly publicized and communicated to the Authority. Provided that any supplier or contractor who is to be blacklisted shall be accorded adequate opportunity of being heard.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that a Tender No.WPP-05-2014 (LOT-IV) was awarded to M/s EMCO Industries Limited for supplying 62,000 Disc Insulators amounting to Rs.37.038 million. Out of 62,000-disc insulators procured / received from supplier, 54,643 Disc Insulators were allocated and installed on Jhimpir-Tando Muhammad Khan Transmission Line. Just after two months of energization, frequent tripping and breakdown was reported due to unsatisfactory performance of EMCO make Disc Insulators. Later on, these faulty Disc Insulators were completely replaced with NGK make (Japan). Inquiry Committee in its findings concluded that disc insulators broke down due to poor

workmanship and use of substandard material in manufacturing due to which M/s EMCO was held responsible for frequent tripping of all breakdowns of transmission line. Matter was referred to NTDC Right Protection Committee for blacklisting the M/s EMCO for supplying poor quality Disc Insulators which was pending. Audit is of the view that the quality of material and performance of disc insulator was not ensured by conducting required inspection of material and performance test of Disc Insulators.

Non adherence to PPRA rules resulted in non blacklisting of contractor for supply of substandard Disc insulator amounting to Rs.37.039 million.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

DAC held on 24th February, 2022, the management replied that unprecedented changes with respect to pollution levels were causing flashovers and damages to the insulators and hardware in the entire coastal belt. Moreover, necessary steps for resolution of the matter at hand and allegations of quality of insulator supplied by M/s EMCO was resolved by both parties with major cost recoveries for NTDC. As a result of the settlement, M/s EMCO paid NTDC Rs.83 million in compensation in lieu of return of disc insulators (where faults had been reported) to the manufacturer for in-house studies for causes of faults.

DAC directed the management to conduct inquiry at PPMC level. The TORs of inquiry committee would be mutually decided by Audit and PPMC. The committee would finalize its report within one month. TORs were eventually decided by audit and PPMCL but no further progress was received from PPMCL up till finalization of the report.

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

4.1.4 Non-imposition of liquidated damages on M/s Al-Hussain Traders - Rs.63.357 million

As per clause 47.1 of contract, if the contractor fails to comply with the time for completion in accordance with clause 48 for the whole of the works or, if applicable, any section within the relevant time prescribed by clause 43, then the contractor shall pay to the Employer the relevant sum stated in appendix to tender as liquidated damages for such default for every day or part of a day.

During Performance audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that a Contract (WPP-06-2014) for Survey for Tower Staking, Foundations, Erection, Stringing, Testing and Commission of 220 KV Transmission Line Jhimpir New-T.M Khan from Intermediate Point A to T.M Khan Road Grid Station (Lot-II) was awarded to M/s Al-Hussain Traders Construction on 17.03.2015 for an amount of Rs.412.271 million with completion period of 360 days i.e. 24.02.2017. Later on, contract price increased to Rs.633.570 million after two Variation Order No.01&02. M/s Al-Hussain Trader Construction could not complete the work within stipulated period and delayed the work for 490 days. As such, the contractor was liable to pay the Liquidated Damages amounting to Rs.63.357 million but the amount was not recovered by the management.

Non adherence to PPRA rules resulted in non-imposition of liquidated damages amounting to Rs. 63.357 million.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

In DAC held on 24th February, 2022, the management replied that the delay was due to Right of Way issues which was not attributable towards the contractor's account and had a continuing delaying impact on the project completions. Moreover, final EOT and liquidated damages had been finalized by BOD in its meeting held on 06.12.2021.

DAC directed the management to provide working papers and approval of BOD to audit and get the record verified within 15 days but no reply was furnished up till finalization of the report.

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

4.1.5 Loss due to power dispersal issues at 220 KV Jhimpir Grid and allied Transmission Lines - Rs.273.50 million

According to the clause 4.9.3.2 of Operation code of NEPRA Grid Code, the system operator shall have available and shall implement when required, generation, re-dispatch plan and schedule for likely contingency event so that, if system moves to an unexpected state, the system operator can follow re-dispatch and return the system to a normal state. The system operator shall make and available and implement emergency operating procedures to deal with system

contingencies. The system operator shall be available all time and be in a position to implement system restoration plans for the situation in which the system moves to an islanded state or suffers a cascading break up resulting in a Black-Out condition.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that the Company had to sustain a loss of Rs. 273.50 million due to grid failure and tripping of allied transmission lines (as detailed below):

Power dispersal issues	220 KV G/station Jhampir	220 KV Jhampir-TMK T/Line	Financial impact (Rs in million)
Grid failure	12 times		96.461
Tripping		144 times	177.039
		Total loss due to inefficiency	273.5

Source: tripping and grid data

Power dispersal issues (frequent grid failure and tripping) at grid and allied transmission lines resulted in disconnection from Wind Power Producers at certain connected load and ultimately a loss to the National Exchequer of Rs.273.50 million. Frequent grid failure and tripping of allied transmission line showed that system operator did not implement standard operating procedures to devise re-dispatch plan to avoid Black-Out conditions.

Non adherence to Grid Operating Code put the company in to a loss of Rs.273.50 million.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

In DAC meeting held on 24th February, 2022, the management informed that the tripping of 220KV D/C Jhampir-Tando Muhammad khan transmission line and ultimately grid failures were not due to below standard, operation and maintenance by Asset Management department. It was all due to inferior quality disc insulator supplied by M/s EMCO company.

DAC directed the Management to furnish revised reply in consideration with NPCC and GSO (Grid System Operator) and submit to Audit within 15 days but no reply was furnished up till finalization of the report.

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

4.2 CONSTRUCTION AND WORKS

4.2 Construction and works

4.2.1 Unstable and sub-standard construction of 220 KV Jhimpir Grid Station and Allied Transmission Line causing power evacuation issues from Wind Power Plants - US\$ 43.00 million

According to the section 6.02 of activity agreement of Power Transmission System for Wind Projects in Sindh Wind Corridor, the Parties will undertake rigorous monitoring and evaluation of the Project. The Grantee will be responsible for monitoring and evaluation actions according to its "PC-III" form (Planning Commission standard format for "Annual Targets and Performance Reporting"), as well as quarterly reports and other processes and procedures agreed upon by both Parties. If available, copies of the annually prepared PC-III shall be given to USAID. To the extent that additional staff and resources are required to implement thorough monitoring and evaluation efforts, USAID or its designee may also undertake monitoring and evaluation of the Project directly. The Grantee shall ensure reasonable access by USAID or its designee to all necessary sites, documentation, individuals and information to monitor, evaluate and verify the Project and the use of USAID funding under this Activity Agreement, and will require a provision to this effect in all sub-awards or contracts financed by funds reserved under this Activity Agreement.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, an activity agreement was made under USAID and NTDC for an amount of US\$ 43 million for construction of double circuit 220/132 KV Jhimpir Grid Station and 220KV Jhimpir-Tando Muhammad Khan Road Transmission Line and other related works. Just after two months of commissioning and energization of transmission lines, frequent tripping in line and grid failure were reported. Due to which the system was not able to evacuate power from connected Wind Power Plant. National Electric Power Regulatory Authority (NEPRA) also took serious notice of instability of 220 KV Grid and Transmission Line and directed to fix the responsibility of sub-standard work and poor workmanship. But the management did not make any enquiry in this context. Installation of sub-standard material and poor evaluation and monitoring during project execution resulted in poor construction of Grid Station and Transmission Line to evacuate power from Wind Power Plants.

Non-adherence to clauses of activity agreement of power transmission system of Wind Project leads toward instability and substandard construction of US \$43.00 million.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

In DAC held on 24th February, 2022, the management replied that most of the Tripping highlighted occurred in 2018 which was mainly due to the failure of Disc Insulators installed on the 220kV Jhampir – Tando Muhammad Khan Transmission Line and the same were replaced by Asset Management/GSO NTDC.

DAC directed to conduct inquiry at PPMC level along with Para 4.1.4. The TORs of inquiry committee would be mutually decided by Audit and PPMCL. TORs were eventually decided by audit and PPMCL but no further progress was received from PPMCL up till finalization of the report.

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

4.2.2 Installation of non-compatible Disc Insulators due to recommendation of Design Department (NTDC)

According to section 5.2 of PC-I of project, “the main objective of the project is evacuation of 1224MW power from the Wind Power Producers (WPPs) envisaged to be installed at Jhampir wind cluster”. The proposed scheme involves the construction of a new 220kV Grid Station at Jhampir (Jhampir-II) along with allied 220kV transmission lines (35km). Moreover, approximately 220km 132kV-transmission lines are also required for interconnection of Wind Power Producers (WPPs) with Jhampir I and Jhampir-II Grid Station. The benefits associated with the proposed project primarily include: Environment friendly power availability, Dispersal of power from upcoming WPPs reliably, improvement in voltage profile of HESCO and NTDC Grid System, improvement in reliability of NTDC and HESCO networks at/around Jhampir I and Gharo New.

During Performance Audit of Power Transmission for Wind Projects in Sindh Wind Corridor, it was noticed that Design Department of NTDC decided to purchase and install EMCO make Disc Insulators regardless of the fact that

EMCO make Disc Insulator had already been replaced due to poor performance at Jamshoro-KDA-33 transmission lines with NJK Japan make Disc Insulators. NTDC faced severe power dispersal issues in evacuation of power from Wind Power Producers.

Non-adherence to PC-I guidelines resulted in poor planning of design department which led toward installation of incompatible Disc insulator.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

In DAC held on 24th February, 2022, the management informed that the Insulators for 220 /132kV Transmission lines allied with Jhampir Substation were procured by NTDC strictly in accordance with PPRA Rules through Open Competitive Bidding. The material was accepted after performance of all necessary tests as per relevant IEC/NTDC/WAPDA specifications / standards. The material was of the same specifications which are proven and design of insulator strings was according to the creepage distance specified as per IEC and best industry / system practices in vogue. Moreover, NTDC Management had focused on improvement of Insulation levels on the affected Transmission Lines by addition of extra insulators besides implementation of innovative technologies on emergent basis including application of RTV coating which has substantially improved the performance. Further, Long Rod Insulator technologies are also being introduced in line with world best practices.

DAC directed to conduct inquiry at PPMC level along with para 4.1.4. The TORs of inquiry committee would be mutually decided by Audit and PPMC. The committee would finalize its report within one month. TORs were eventually decided by audit and PPMCL but no further progress was received from PPMCL up till finalization of the report.

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

4.2.3 Undue reactive power loading at 220 KV Grid Station Jhampir

According to the clause 8 of NEPRA Grid code that a Wind Power Plant shall manage at the point of interconnection the reactive power control to maintain the power factor within the range of 0.95 lagging to 0.95 leading, over the full range of plant operation, as per the dispatch instruction and/or voltage adjustment/ requirements within the above range of power factor".

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that Wind Power Producers (WPP) (as detailed below) had not installed Static VAR Compensator (SVC) at their end generation facilities to quickly and reliably control the power voltage. Resultantly, these Wind Power Producers (WPPs) imported reactive power from 220 KV Grid Station Jhimpir which affected voltage profile and reduced power handling capacity of 220 KV Grid Jhimpir.

S. No	Name of Circuit	Reactive Power (MVar)	
		Import	Export
1.	132 KV Jhim-ZephyerE14Q1	-	23
2.	132 KV Jhim-TGS E9Q1	-	3
3.	132 KV Jhim-TGTE8Q1	-	2
4.	132 KV Jhim-SachalE7Q1	-	3
5.	132 KV Jhim-Metro E5Q1	-	1.8

Undue reactive power loading at 220 KV Grid results in power curtailment with available 3x250 MVA Auto Transformers and 132 KV Double Circuit transmission line for power evacuation of wind power from Jhimpir wind cluster.

Non-adherence to NEPRA Grid Code led toward undue reactive power loaded at 220 Grid Station Jhampir.

The matter was taken up with the management in August, 2020 and reported to the Ministry in September, 2020.

In DAC held on 24th February, 2022, the management replied that static VAR compensator were installed at Wind Power Plants and certificate in this regard was taken from Wind Power Plants. DAC directed the management to furnish required documents for verification within 15 days but no reply was furnished up till the finalization of the report.

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

4.3 Monitoring & Evaluation

4.3 Monitoring & Evaluation

4.3.1 Project Cost over-run –Rs.277.113 million

According to the Amendment No.04 (additional work given to M/s NESPAK)“consultant shall conduct detailed survey and supervise the construction of the following:

- i) 132 KV Double Circuit Transmission Line from Jhimpir New to 132 KV Tando Muhammad Khan Grid Station (21 approx.75km)
- ii) 220 KV Double Circuit Transmission Line from Jhimpir to New 220 KV T.M Khan Road Hyderabad G/station
- iii) 220 KV Double Circuit Transmission Line from Gharo to Jhimpir New”.

During Performance audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that a Contract (WPP-04I-2014) for Survey of Transmission Line Jhimpir New-Tando Muhammad Khan from Location No.182 to Location No.132 KV Tando Muhammad Khan Grid Station (37km) (Lot-II) was awarded to M/s Usman & Company on 26.07.2015 for an amount of Rs.181.129 million with completion period of 10 months i.e., upto 21.05.2016. Afterward, quantities of priced bill abruptly increased due to soil investigation report. As per soil strata, earth for tower from location No 182 to 193 were rocky/hard, from tower location No 194 to 218 were extensively water logged due to nearby River Indus whereas from tower No.227 to 132 KV Tando Muhammad Khan G/station location fall in water logging area. Further, as per soil investigation report, more than 15m depth of reinforced concrete single pile per footing of 600mm done without pile cap were required for maximum towers which significantly caused to increase the project cost. Audit is of the view that NESPAK had not conducted detailed initial survey of subject work. Design Department of NTDC approved the subject line without having complete detail of line profile. Moreover, Employer (NTDC), Engineer (C.E. EHV-II) and Consultant (NESPAK) prepared and released incomplete details/profile of subject work to Contractor which caused increase in project cost significantly and abruptly.

Non-adherence to the rules/guidelines resulted in cost overrun of Rs.277.113 million.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

In DAC meeting held on 24th February, 2022, the management replied that the services of best firm in Pakistan were obtained for consulting services at rates agreed 03-04 years prior to this project.

DAC directed the management to provide revised reply may be submitted but no reply was furnished up till the finalization of the report.

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

4.3.2 Unjustified Cost escalation due to change in type of foundations -Rs 183.794 million

According to clause 1.4 of section VI of contract that the work to be performed under this specification shall be carried out at the proposed site of towers after the field and laboratory test results confirmation. The location of investigations boreholes and piles on the ground shall be established by the contractor in accordance with the drawings and from reference point to be provided by the engineer, establishing the investigation boreholes and pile locations accurately in the field shall be the sole responsibility of the contractor.

b (ii) the Contractor will provide the levels, survey and ground elevations for each investigation's boreholes and pile location. The elevations will be given with respect to permanent benchmarks in the vicinity of the site.

During Performance audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that a contract amounting to Rs.412.271 million was awarded to M/s Al-Hussain Traders. Tender documents/BOQ was prepared on the basis of estimation than actual parameters. The Contract was awarded in absence of geotechnical information and finalization of survey report. The work of pile foundation increased from 23 to 82 due to change in design after completion of survey report and contract price increased by Rs.183.794 million which was unjustified.

Non-adherence of the rules resulted in abnormal cost escalation in the project amounting to Rs.183.794 million.

The matter was taken up with the management in August, 2020 and reported to the Ministry in September, 2020.

In DAC meeting held on 24th February, 2022, the management informed that the Contract executed by NTDC was based on “Re-measurement/Unit Rate” approach instead of fixed Lump sum which is as per Pakistan Engineering Council (PEC)’s documents which have also been adopted by PPRA. It may be noted that these measurements are the changes from the tentative tender’s quantity that have occurred due to site conditions and have been duly approved by the Engineer in accordance with actual site requirements.

DAC directed the management to produce the BOD’s approval to audit and get the record verified but no record was produced up till the finalization of the report.

Audit desires that BoD approval along with relevant record may be shared with Audit for verification.

4.3.3 Non-preparation of transient stability study to ensure power stability co-ordination

According to clause 4.10 NEPRA Grid Operation Code, the system operator shall prepare transient stability studies for expected system event scenarios that could lead to unsatisfactory system dynamic performance and loss of power angle stability (transient instability). The system operator shall maintain and be able and ready to implement, when required, emergency operating procedures designed to mitigate the extent of disturbance resulting from system event.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that NTDC did not prepare transient stability study to ensure power stability co-ordination for efficiently evacuation of renewable and environmentally friendly energy from Wind Power Producers (WPPs). Total 156 event of grid failure and transmission lines occurred in just one year beyond its permissible limits i.e., 20 times per year. No emergency or contingency plans prepared to divert power flow rout to another location in case of complete failure or Black-Out.

Nonadherence to grid code resulted in non-preparation of transient stability study for power evacuation from wind projects.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

In DAC held on 24th February, 2022, the management informed that the detailed revised reply would be furnished to audit.

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

4.3.4 Grid tripping beyond technical limits

According to section 11.3 (ii) of Schedule 5 of Energy Purchase Agreement (EPA) that the complex can withstand a full load rejection and remain in a safe condition (maximum 20 times per year). Following Grid availability, the Complex will be subject to a full start up sequence. Resort time will be wind speed dependent.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that an Energy Purchase Agreement was signed between Central Power Purchase Agency Guarantee Limited (CPPA-G) and FFC Energy Limited on April 05, 2011 to evacuate 49.5 MW power through 220 KV Jhimpir Grid Station. Jhimpir 220 KV Grid Station tripped 37 times from May 2018 to May 2019 which was beyond its permissible limit which resulted in continuous hazard for M/s FFC Wind Power Plant for plant reliability. Frequent grid tripping and extreme stresses on Wind Power Producer's structure, drive train and controls due to sudden load rejection. Furthermore, these grid failures have resulted in increase in damage/failure of WTG equipment, power converter modules, pitch batteries & controllers since its COD, M/s FFC wind Power Plant faced 260 times grid tripping which is significantly high. Grid station and allied transmission lines were not as effective as these were required as per PC-I of the project.

Nonadherence to EPA resulted in Grid tripping beyond technical limits.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

In DAC held on 24th February, 2022, the management replied that para does not pertain to NTDC as subject Wind Power Plant is directly connected with HESCO network on 132 KV Grid Station Nooriabad and 132KV Grid Station Old Jhampir via Zorlu wind power plant.

DAC directed the Management to furnish revised reply in consideration with NPCC and GSO (Grid System Operator) HESCO and submit to audit within 15 days but no reply was received till the finalization of the report.

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

4.3.5 Loss of Non-Project Missed Volume (NPMV) due to Poor Performance of Grid Station and its allied transmission line - Rs.8,648.601 million

As per NEPRA Grid Code CC 4.2(b), the preliminary estimate for connection fee and registration fee, shall be determined and shall be payable on submission of application for connection, and shall cover the reasonable costs of all works anticipate to arise from investigation the application to connect. This should include additional capital cost related to the new connection, and to make the connecting transmission system at par with the system before the connection.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that an amount of Rs.8,648.601 million was paid to Wind Power Producers (**Annex A&B**) on account of Non-Project Missed Volume (NPMV). The said projects were ready to dispatch the energy but the 220 KV Jhimpir Grid Station was not capable enough to sustain full load of the project due to frequent tripping and instability. Resultantly, due to poor performance of Grid Station and Allied Transmission Line, energy units 536,401.334 million KWh worth Rs.8,648.601 million (Annexure A&B) were lost and claimed by Wind Power Producers and admitted by Central Power Purchase Agency Limited (CPPAG). Analysis based on NPMV data showed that 10 of Wind Power Producers achieved Commercial Operation Date after energisation of 220 KV and 132 KV Transmission Line but due to continued frequent tripping and instability of Grid Station even after investing huge funds from USAID, these Wind Power Producers submitted NPMV claims worth millions of rupees to CPPAG which showed poor performance of Grid and Allied Transmission Lines.

Nonadherence to NEPRA's grid code resulted in loss of Rs.8,648.601 million due to poor performance of Grid & Transmission lines.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

In DAC held on 24th February, 2022, the management informed that Double Circuit Transmission line exist for the evacuation of power from Wind Power Plants and there was no failure on evacuation power.

DAC directed the management to provide revised reply and to conduct inquiry at PPMC level. The TORs of inquiry committee would be mutually decided by Audit and PPMC. The committee would finalize its report within one month. TORs were eventually decided by audit and PPMCL but no further progress was received from PPMCL up till finalization of the report.

Audit desires updated status of inquiry and action taken thereof.

4.3.6 Non-execution of Technical Audit of 220 KV & 132 KV Transmission Lines

As per section 6.02 of Activity Agreement the “Parties will undertake rigorous monitoring and evaluation of the Project. The Grantee (the recipient of grant) will be responsible for monitoring and evaluation actions according to its "PC-III" form (Planning Commission standard format for "Annual Targets and Performance Reporting"), as well as quarterly reports and other processes and procedures agreed upon by both Parties. If available, copies of the annually prepared PC-III shall be given to USAID. To the extent that additional staff and resources are required to implement thorough monitoring and evaluation efforts, USAID or its designee may also undertake monitoring and evaluation of the Project directly. The Grantee shall ensure reasonable access by USAID or its designee to all necessary sites, documentation, individuals and information to monitor, evaluate and verify the Project and the use of USAID funding under this Activity Agreement, and will require a provision to this effect in all sub-awards or contracts financed by funds reserved under this Activity Agreement.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that technical audit of 220 KV Grid and its allied transmission lines was not conducted by system operator in order to assess the power dispersal issues and taking corrective measures thereon in compliance with the activity agreement. Moreover, PC-III of the project was not prepared to evaluate the progress of the project with agreed targets/timelines of the project.

Non-adherence to guidelines resulted in non-conduct of technical audit of grid station transmission lines.

The matter was taken up with the management in August, 2020 and reported to Ministry in September, 2020.

The management informed the DAC held on 24th February, 2022 that Technical Review was conducted by USAID's designated partner firm M/s. AA Associates/MIMDR which has conducted audit of almost entire works to date.

Audit desires that copy of the technical audit, conducted by AA Associates may be share with the Audit.

4.4 Sustainability

4.4 Sustainability

4.4.1 Non-achievement of envisaged benefits due to delay in completion of project -Rs.2,006.51 million

According to PC-I Project capital cost is Rs.10,752.62 million including foreign exchange component of Rs.4,705 million. Economic & Financial Rate of return of the project is 19.3 % & 17.8 % respectively”. Moreover, NTDC Use of System Charge to the tune of Rs 130 per kW per month has been worked out for NTDC revenue/benefit purposes.

During Performance Audit of Power Transmission System for Wind Projects in Sindh Wind Corridor, it was noticed that completion date of the project was December 31, 2017 but the project was completed and handed over to Grid System Operator (GSO) NTDC on July, 2018 with a delay of 7 months. Soon after it’s handing over to GSO, project badly failed due to its grid failure and frequent tripping on its allied transmission lines. Later on, 47,000 defective Disc Insulators were replaced in 2019 which further delayed the project for 6 months. Hence, the envisaged benefits of generating revenue as Use of System Charges (UOSC) of Rs.2006.51 million (average benefits pa. Rs.1,852.16 million/12*13= Rs.2,006.51 million) could not be achieved.

Non-adherence to PC-I resulted in non-achievement of envisaged benefits amounting to Rs.2,006.51 million due to delay in completion of project.

The matter was taken up with the management in August, 2020 and reported to the Ministry in September, 2020.

In DAC meeting held on 24th February, 2022 the management informed that only the 3rd Transformer of Jhampir Grid was commissioned in July, 2018. All of the other key components were completed in Year 2016 and 2017. The capacity of installed 02 power transformers was enough to cater for the load requirements of available wind power plants. Only one Transformer installation was pending which was delayed due to non-availability of IPP which were allowed to use that transformer at other priority location. Moreover, no penalty/LD was imposed by any power plant.

DAC directed the management to inquire the matter with respect to any delay in evacuation of power from wind corridor power plants due to delay in installation of power transformers and any capacity charges paid in this regard be

specifically referred in the said inquiry report. No progress was furnished till the finalization of report.

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

4.5 Overall assessment

Overall assessment of Power Transmission System for Wind Projects in Sindh Wind Corridor.

i. Economy

It includes procurement of goods services at competitive rates. The economy aspect of the project was not properly carried out as consultancy contract of the project was awarded without complete bidding.

ii. Efficiency

The project was not executed according to the parameters of PC-I as available resources were not managed to complete the work within time framework provided in the PC-I. This reflected gross negligence on the part of project management.

iii. Effectiveness

The project did not remain effective fully in reaping of envisaged benefits as required. Frequent grid failures and tripping of transmission lines, project faced severe power dispersal issues to evacuate power from Wind Power Producers.

5. CONCLUSION

Despite the significant efforts invested in the Power Transmission System for Wind Projects in the Sindh Wind Corridor, as outlined in the Activity Agreement between NTDC and USAID, the project faced substantial challenges that hindered its optimal execution. The issues, including the installation of faulty disc insulators, power dispersal problems, frequent grid failures, and the tripping of transmission lines, collectively contributed to the project's suboptimal performance. These challenges not only posed technical hurdles but also had operational implications, impacting the reliability and efficiency of the power transmission system.

It is imperative for stakeholders to undertake a comprehensive post-project analysis. This analysis should focus on identifying the root causes of the issues encountered, implementing corrective measures to address technical and operational shortcomings, and establishing robust maintenance protocols to prevent similar issues in the future.

Moving forward, addressing and mitigating the identified issues will be crucial to ensuring the sustained success and effectiveness of power transmission initiatives in the region, aligning with broader goals of promoting renewable energy and enhancing the power infrastructure in the Sindh Wind Corridor.

ACKNOWLEDGEMENT

We wish to express our appreciation to the management and staff of CE EHV-II and GSO NTDC Hyderabad for the assistance and cooperation extended to the auditors during this assignment.

Annexes

ANNEX (A)
(Para No.4.3.5)

Analysis on Non-Project Missed Volume

	Wind Power Producers	Unit lost due to tripping/grid failures in KWh	CoD achieved on	CoD year	Av.rate per unit	NPMV allowed by CPPA-G in Rupees	
CoD year:						Subtotal:	
2013						855,810,000	
	Zorlu Energy Power	26,957,470.2	25.07.2013	2013	15.95	430,000,000	
	FFC Energy Limited	27,997,669	16.05.2013	2013	15.21	425,810,000	
2014						1,036,900,000	
	Foundation Wind Energy-II	58,756,116	10.12.2014	2014	12.64	742,900,000	
	Three gorges first wind	27,970,217	25.11.2014	2014	10.51	294,000,000	
2015						1,517,056,631.78	
	Sapphire Wind Power	33,371,185.93	21.11.2015	2015	21.46	716,183,631.78	
	Foundation Wind Energy-I	53,614,265	11.04.2015	2015	14.94	800,873,000	
2016						2,288,946,499	
	Act Wind Energy Pvt. Listed	11,539,007	08.10.2016	2016	15.34	177,000,000	
	Master Wind Energy	30,647,868	14.10.2016	2016	17.75	544,000,000	
	Gul Ahmed Wind Power	25,764,707	18.10.2016	2016	17.93	462,000,000	
	Younus Energy Limited	28,436,514.33	16.09.2016	2016	20.50	582,930,000	
	TenagaGenerasi Limited	28,415,256	11.10.2016	2016	18.41	523,016,499	
2017						1,005,985,000	
	Sachal Energy Development	7,581,045	11.04.2017	2017	19.04	144,310,000	
	Hydrochina Dagwood Power	21,438,473	04.04.2017	2017	17.94	384,675,000	
	UEP Wind Power	2,554,505	16.06.2017	2017	186.73	477,000,000	
2018						1,939,549,050.96	
	Tricon Boston-Project A	15,392,928.57	16.08.2018	2018	19.00	292,420,000	
	Tricon Boston-Project B	13,865,116.6	14.09.2018	2018	18.80	260,730,000	
	Tricon Boston-Project C	14,594,160.5	11.09.2018	2018	18.87	275,390,000	
	Three Gorges Second Wind	24,873,685.9	20.06.2018	2018	11.22	279,006,622.14	
	Three Gorges Third Wind	25,074,595.14	09.06.2018	2018	11.29	283,098,850	1,943,903,293.96
	Metro Power Company	40,544,992	16.09.2016	2018	8.15	330,366,058	

	Limited						
	Artistic Energy Pvt. Limited	10,642,901	16.03.2018	2018	13.55	144,259,271	
	HAWA Energy Pvt. Limited	2,890,585.56	15.03.2018	2018	12.90	37,278,249.82	
	Jhampir Power Pvt. Limited	2,853,251	16.03.2018	2018	12.97	37,000,000	
2019						4,354,243	
	Zepyr Power Pvt. Limited	624,820	28.03.2019	2019	6.97	4,354,243	

ANNEX (B)
(Para No. 4.3.5)

Non-Project Missed Volume

Wind Power Producers	Unit lost due to tripping/grid failures in KWh	CoD achieved on	Av.rate per unit	NPMV allowed by CPPA-G in Rupees
Sapphire Wind Power	33,371,185.93	21.11.2015	21.46	716,183,631.78
Zorlu Energy Power	26,957,470.2	25.07.2013	15.95	430,000,000
Foundation Wind Energy-I	53,614,265	11.04.2015	14.94	800,873,000
FFC Energy Limited	27,997,669	16.05.2013	15.21	425,810,000
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TenagaGenerasi Limited	28,415,256	11.10.2016	18.41	523,016,499
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Metro Power Company Limited	40,544,992	16.09.2016	8.15	330,366,058
Artistic Energy Pvt. Limited	10,642,901	16.03.2018	13.55	144,259,271
HAWA Energy Pvt. Limited	2,890,585.56	15.03.2018	12.90	37,278,249.82
Jhimpir Power Pvt. Limited	2,853,251	16.03.2018	12.97	37,000,000
Zepyr Power Pvt. Limited	624,820	28.03.2019	6.97	4,354,243
Total	536,401,334.73		16.12	8,648,601,424.74

List of MFDAC Paras

Sr. No.	Para Number AIR	Subject	Amount
1	4.1.5	Un-authorized issuance of procurement order without approval of Board of Directors	-
2	4.1.6	Undue favour to the contractors due to non-renewal of Performance Guarantees Rs. 23.334 million	23.334
3	4.2.3	Non-removal of punch list items during Defect Liability Period	-
4	4.3.1	Vulnerability of Indus Builder Crusher Plant to Jhimpir Grid System equipment and Human Resource	-
5	4.5.1	Misappropriation of left-over AAA Greely conductor amounting to US\$ 210,571 (Rs.33.691 million)	33.691
6	4.5.3	Non-return of surplus material	-
7	4.2.3	Loss due to award of contract to 2 nd lowest bidder-Rs.166.253 million	Rs.166.253
8	4.5.2	Non-recognition of grant of US\$ 25 million in Financial Statement	