



**PERFORMANCE AUDIT REPORT
ON THE PROJECT OF
SPECIAL REPAIR OF
100 DE LOCOMOTIVES
BY PAKISTAN RAILWAYS
AUDIT YEAR 2019-20**

AUDITOR GENERAL OF PAKISTAN

PREFACE

The Auditor General of Pakistan conducts audit 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 and Terms and Conditions of Service) Ordinance 2001. The Performance Audit of the project of Special Repair of 100 DE Locomotives was carried out accordingly.

The Directorate General Audit Railways conducted Performance Audit on the project of Special Repair of 100 DE Locomotives during audit year 2019-20 for the period 2015-16 to 2018-19 with a view to report significant findings to stakeholders. Audit examined the record with due regard to economy, efficiency and effectiveness aspects of the project. Audit also assessed whether the management complied with applicable laws, rules and regulations in managing the project affairs. Audit Report indicates specific actions that, if taken, will help the management realize the objectives of the project. All observations included in this report have been finalized in the light of DAC recommendations.

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

Islamabad
Dated:

(Muhammad Ajmal Gondal)
Auditor General of Pakistan

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Abbreviations

ACOS	Assistant Controller of Stores
ACP	Assistant Controller of Purchase
AGM	Additional General Manager
AME	Assistant Mechanical Engineer
AO	Accounts Officer
AR	Audit Report
BPS	Basic Pay Scale
CCP	Chief Controller of Purchase
CDL	Central Diesel Locomotive
CDLW	Central Diesel Locomotive Workshop
CDWP	Central Development Working Party
CEO	Chief Executive Officer
CFR	Cost and freight
CIA	Chief Internal Auditor
CME	Chief Mechanical Engineer
CPPO	Chief Project and Planning Officer
DAC	Departmental Accounts Committee
DCOS	District Controller of Stores
DE	Diesel Electric
DPU-30	Chines Locomotive Manufactured by Dong Fong Corp.
ECNEC	Executive Committee of National Economic Council
EMD	Electromotive Division
FA	Financial Adviser
FBR	Federal Board of Revenue
FO	Foreman
FOB	Free on Board
FOR	Free on Road
GE	General Electric
GM	General Manager
GMU	General Motor Universal
GoP	Government of Pakistan
HP	Horse Power
HQ	Head Quarters

ISO	International Standards Organization
ISSAI	International Standards for Supreme Audit Institution
JME	Junior Mechanical Engineer
KC	Karachi Cantt.
KM/km	Kilometer
LC	Letter of Credit
LPR	Last Purchase Rate
M & S	Manufacturing and Services
MOR	Ministry of Railways
MTDF	Mid Term Development Framework
OEM	Original Equipment Manufacturer
PAO	Principal Accounting Officer
PC-I	Planning Commission Proforma-I
PCP	Planning Commission of Pakistan
PD	Project Director
PLF	Pakistan Locomotive Factor
PMES	Project Monitoring & Evaluation System
PMU	Project Management Unit
PNSC	Pakistan National Shipping Corporation
PO	Principal Officer
POH	Periodic Overhauling
PPRA	Public Procurement Regularity Authority
PR	Pakistan Railways
PSDP	Public Sector Development Program
PSDP	Public Sector Development Program
SR	Special Repair
TLA	Temporary Labour Application
UDC	Upper Division Clerk
WM	Works Manager
WMD	Works Manager Diesel

EXECUTIVE SUMMARY

The Directorate General Audit Railways conducted performance audit of the project titled “Special Repair of 100 DE Locomotives” during Audit Year 2019-20. Prime objective of the audit was to review the performance of the project against Economy, Efficiency and Effectiveness. The audit was conducted in accordance with ISSAI.

PC-I of the project was approved by ECNEC on 04.12.2014 at the cost of Rs 4,967 million with completion period of 2 years. Due to one reason or the other 03 extensions in execution period of the project were granted up to 30th June, 2020. The project was still ongoing, cost overrun by Rs 58.466 million and time overrun of 36 months occurred till 30th December 2019. Ninety (90) locomotives were put into service after special repair at the cost of Rs 5,025 million. Physical outcome was 90% and financial progress was 101%. The overall performance of the project was unsatisfactory because average reliability of majority of the repaired locomotives was not up to the mark. Frequent failures of repaired locomotives within a short span of time indicate that the quality of material and workmanship used in the special repair of locomotives was substandard. Thus, objectives of the project were not fully achieved due to bad planning and ineffective monitoring.

Audit also observed that the Railway management was not complying with the rules, regulations & guidelines regarding development projects approved by the Planning Commission of Pakistan. Project management not only committed gross violations of PPRA Rules, but also substantially changed the intended scope of work in approved PC-I during execution of the project. Moreover, audit recommendations communicated in Audit Year 2016-17 through performance audit of a similar project titled “Special Repair of 150 DE Locomotives”, were not implemented. Consequently, instances of recurrence of irregularities/non-compliance to rules/regulations and misuse of power were observed.

Key Audit Findings:

- i. Cash releases amounting to Rs 749.615 million were neither utilized nor surrendered during the years 2014-15 and 2015-16. On the other hand, a sum of Rs 88.072 million was utilized in excess of the cash releases during 2016-17 and 2018-19.¹
- ii. PR incurred irregular expenditure of Rs 475.826 million due to splitting of purchases and award of contracts through negotiations with the bidders in violation to PPRA Rules.²
- iii. Despite completion of special repair of locomotives, unutilized material valuing Rs 277.328 million was still lying in shops.³
- iv. Spare parts valuing Rs 1.078 billion purchased from PSDP allocation were mis-utilized against routine repair & maintenance of other than project locomotives.⁴
- v. PR incurred loss of public money valuing Rs 2,618.106 million due to unjustified duplicate/triplicate repair of such locomotives which had been recently repaired under another projects.⁵
- vi. PR was deprived of potential earning of Rs 373.980 million due to deployment of locomotives in shunting operation instead of passenger/freight service.⁶
- vii. Due to delay in completion of the project PR incurred extra expenditure of Rs 343.001 million.⁷

¹ Para 4.2.1

² Para 4.3.2 & 4.3.4

³ Para 4.3.5

⁴ Para 4.4.3

⁵ Para 4.4.4

⁶ Para 4.4.5

⁷ Para 4.4.7

Recommendations

- i. Timely utilization of funds be ensured. Utilization of funds in excess of cash release may be discouraged.
- ii. Procurement should be made according to PPRA-Rules and splitting of purchases and negotiation with the bidders for reduction of rates should be avoided.
- iii. Timely utilization of material should be ensured. Its consumption for other projects/revenue works should be avoided.
- iv. Responsibility be fixed for inclusion of repair of locomotives in this project which had recently been repaired in other projects and disciplinary action be taken against those found at fault.
- v. The project should be executed in the same manner and purpose for which it was approved. Any unauthorized modification in nature of work should be avoided.
- vi. Locomotives should be repaired in accordance with the prescribed time table.

1. INTRODUCTION

The scheme titled “Special Repair of 100 Diesel Electric Locomotives” envisaged special repair of 100 locomotives comprising 3000 HP (42 locos), 2400 HP (13 locos), 2000 HP (38 Locos) and 1500 HP (07 locos) over a period of 02 years. The PC-I of the project was approved by ECNEC on 04.12.2014 at the cost of Rs 4,966.751 million including FEC of Rs 3,517.230 million with 24 months completion period. Administrative Approval for execution of the work was issued on 23rd December, 2014. The project commenced w.e.f. 1st January, 2015.

The objective of the project was to carryout special repair of 100 locomotives which were giving frequent troubles and whose reliability and availability for train operation was unsatisfactory. Present cumulative availability and reliability of the locomotives were 46% and 19,136/km per failure respectively, which was planned to be increased to 56% and 21,136/km per failure after the proposed special repairs. Upon completion of the project, PR would generate additional earning of Rs 1,653.886 million per annum by deploying 50 locomotives each in passenger and freight traffic.

2. AUDIT OBJECTIVES

The major objectives of audit were:

- i) To review implementation of standards/regulations covering safety and quality issues in connection with repair and maintenance of locomotives.
- ii) To review economy in terms of procurement of spares/assemblies.
- iii) To evaluate efficiency issues with regard to the following:
 - a) composition of technical, non-technical and administrative staff
 - b) quality of repair of locomotives
 - c) turn out/delivery of work done for operational purpose
 - d) any complaint issues

- iv) To evaluate effectiveness with regards to following:
 - a) optimal utilization of locomotives
 - b) client satisfaction
 - c) safety and quality issues
- v) To evaluate overall performance of the project with special reference to the following:
 - a) achievement of overall objectives
 - b) internal control mechanism
 - c) Incidence of theft, fraud etc.
 - d) physical verification of assets

3. AUDIT SCOPE AND METHODOLOGY

3.1 Audit Scope

The performance audit of the project of Special Repair of 100 DE Locomotives was conducted during Audit Year 2019-20. The period covered from 1st January, 2015 to 30th June, 2019.

3.2 Audit Methodology

- i. Review of requisite files/documents provided by the management.
- ii. Different locations were visited for the purpose of audit, i.e. PD/CME/Loco/CCP Offices HQ Lahore, WM/CDL Shop, WM/Diesel Karachi Cantt., and DCOS/Shipping, Karachi.
- iii. Discussions with Project management.

4. AUDIT FINDINGS AND RECOMMENDATIONS

4.1 Organization and Management

While conducting the performance audit of the project, Audit found that the management did not adhere to the Guidelines of the Planning Commission. The significant observations are discussed in the following paras:

4.1.1 Irregular appointment/transfer of Project Directors

As per guidelines for appointment of independent Project Director in Public Sector Development Projects (PSDP), notified by the Planning Commission of Pakistan (PCP) vide letter No. 20(3)PIA-I/PC/2012 dated 5th April 2012, the appointment of Project Director shall be made in transparent manner through open merit by advertisement. However, in case of engagement of a retired civilian officers as Project Director, prior permission of the Establishment Division is mandatory. For appointment/selection of the independent Project Director, a recruitment committee headed by the Secretary of respective project sponsoring Ministry/Division including members from Planning Division, Finance Division and Establishment Division has been constituted by the PCP. The Project Director once appointed should not be transferred during currency of the project.

During performance audit, it was observed that PC-I of the project was approved by ECNEC on 04.12.2014 with completion period of 02 years. Administrative approval for execution of work was issued on 23.12.2014. Scrutiny of the record revealed that an officer of Mechanical Department who was going to retire from service within six months, was appointed as Project Director of the project from 26.01.2015 by deviating the approved appointment process. Since commencement of the project, 07 PDs were changed (**Annex-1**) and the project was in progress till audit execution. The above position indicated that the guidelines and policy decisions of the Government of Pakistan were not being complied with in letter and spirit. In absence of permanent PD till completion of the project, responsibility for timely completion of the project could not be fixed. This not only resulted in time/cost overrun but also the scope of work was substantially changed. Consequently, envisioned benefits of the scheme could not be achieved. This occurred due to negligence of Secretary/Chairman, Ministry of Railways being competent authority for posting of Project Director.

The issue was pointed out to project management in February 2020. In reply dated 27.03.2021, the management stated that a permanent Project

Director was posted by Ministry of Railways since the beginning of the project, however, under some unavoidable circumstances, such as retirement, promotion, mandatory professional courses, etc. the Railways' Administration was constrained to transfer/spare the Project Director(s) during the implementation of the project.

DAC in its meeting held on 03.04.2021 pended the para with the following directives to the management:

- i) The appointment of Project Director should be made till the life of project either from in house or outside.
- ii) Whether appointment/recruitment of Project Director was made through recruitment committee notified by the Planning Commission or otherwise.
- iii) Whether approval of the Secretary/Chairman or CEO was obtained before appointing/transferring the Project Director.

DAC also directed that the administrative irregularities must be avoided in future, but no compliance of DAC directives was received till finalization of the report.

Audit recommends that responsibility be fixed for irregular appointment/transfer of PD by deviating from the guidelines of the ECNEC by initiating disciplinary proceedings against the person(s) held responsible.

4.1.2 Irregular appointment of staff on TLA – Rs 11.716 million

According to para 3.30 of Project Management Guidelines, the appointment of project staff under the project should be made through open competition and in transparent manner. Moreover, as per General Manager/ Operations letter No. GM. Misc. 07/2014 dated 07.07.2014 essential staff against work charged posts of projects should be engaged on contract basis.

Contrary to the above, during performance audit of the project titled "Special Repair of 100 DE Locomotives", it was observed that 23 project employees of BPS-01 to BPS-16 were irregularly engaged on TLA (Temporary Labor Application) basis instead of making appointments on contract basis in a transparent manner. This resulted in irregular

appointment of staff and thereby incurrence of irregular expenditure of Rs 11.716 million (**Annex-2**) due to violation of instructions issued by the Railway management. Irregularity of this nature was already pointed out to the Railway management through numerous performance/special audit reports but no action was taken to curb the irregular practice.

The issue was pointed out to project management in February 2020. The management replied on 18.03.2020 that most of the staff engaged on TLA were retired Railway employees who were well experienced. Such experienced persons were not available in the local market as maintenance of locomotives was a typical nature of job. Therefore, in order to meet with the inevitable requirement, engagement of the staff in question was made on TLA basis as stop gap arrangement. Further, engagement of staff on TLA basis caused no loss rather helped in saving of huge amount because TLA staff were paid initial basic pay with admissible allowances whereas, engagement of the Ex. Railway Employees on contract basis, would have cost last pay drawn with all admissible allowances. The reply was not satisfactory because the mode of employment of staff was against the rules and instruction issued by the Railway management and the Planning Commission of Pakistan.

DAC in its meeting held on 03.04.2021 pended the para with the directives to the management that in future:

- i) Contract appointments should be preferred over TLA based appointments.
- ii) Provide detail of retired employees re-appointed on TLA basis along with their qualifications and job they performed.

All such record be provided to Audit within 15 days to examine whether people engaged were required or not, but no compliance of DAC directives was received till finalization of the report.

Audit recommends that responsibility be fixed for making irregular appointments of staff by initiating disciplinary proceedings against the person(s) held responsible.

4.1.3 Non-utilization of sanctioned posts as per approved PC-I of the project

According to para 3.30 of Project Management Guidelines, after the opening of project Account, the next step should be the hiring of office space and appointment of key project staff.

During performance audit, it was observed that for efficient execution of different activities of the project there was a provision of PMU comprising 16 posts of 12 different categories for a period of 2 years. The project commenced w.e.f. 1st January, 2015 with completion period of 24 months. Scrutiny of record revealed that appointments against “key posts” (e.g ACOS/ACP, JME/AME and AO) were made during July-November/2016 (**Annex-3**) after lapse of 18 to 22 months. Moreover, 03 vacancies remained vacant during the whole execution period. This state of affairs depicts inefficiency on the part of project management who failed to utilize the sanctioned establishment as per approved PC-I. This resulted in time/cost overrun because of negligence of the Project Director.

The issue was pointed out to Project Director in February 2020. The management replied on 18.03.2020 that the matter for the appointment of staff was referred to CME/Loco and CCP offices but they showed their inability to post any officer due to acute shortage. However, after hectic efforts one ACP was taken from the regular staff and one JME was engaged on contract basis. These officers were well experienced and had the capacity to manage the affairs. Further additional work of procurement of parts for pilot project for re-commissioning of 5 DPU-30 D.E. Locomotives was also assigned to SR-100 Locos project by the Honorable Federal Minister for Railway and 3rd extension in the completion of the project was granted by the Ministry of Railways. Therefore, those factors led to time overrun which was quite justified. The reply was not satisfactory because non-engagement of project establishment as per approved time line of the project speaks of inefficiency of the management which led to non-achievement of intended

benefits due to delay in completion of the project. This shows that the project was not keenly monitored by the reviewing committees.

DAC in its meeting held on 03.04.2021 directed the PD to furnish comprehensive reply with documentary evidence showing reasons for delayed/non-engagement of project staff as per approved PC-I of the project and its impact on project, but no compliance of DAC directive was received till finalization of the report.

Audit recommends that responsibility be fixed for non-utilization of sanctioned posts as per approved PC-I by initiating disciplinary proceedings against the person(s) held responsible.

4.1.4 Irregular appointments due to non-provision of job description, qualification, experience of staff in PC-I

As per clause 13 (Management Structure and Manpower Requirement) of the PC-I of the project titled “Special Repair of 100 DE Locomotives”, the following information were required to be clearly mentioned therein:

- The manpower requirement by skills during execution operation of the project.
- The job description.
- Qualification, experience, age and salary package of each post.

During performance audit of the project, it was observed that necessary job description, qualification, experience and age of each employee was neither deliberately mentioned in the PC-I nor job description of each and every employee was prepared and handed over to the employees during execution of the project. Consequently, own choice appointments were made in different categories of staff through nepotism without advertising the posts in press and without adopting due selection process (**Annex-4**). This resulted into defective planning and faulty execution. Some instances of non-compliance are given below:

- i) In absence of provision in PC-I, appointments against the posts of UDC (BPS-9), Sub Engineer (BPS-11), FO-I (BPS-14), Computer Operator (BPS-14) and Steno Typist (BPS-16) were irregularly made.
- ii) An employee retired as Mistry was appointed as Sub Engineer (BPS-11).
- iii) An employee initially appointed as UDC (BPS-9) without having any experience was subsequently appointed as Computer Operator (BPS-14). Similarly an employee initially appointed as UDC (BPS-9) was subsequently engaged as FO-I (BPS-14).

The issue was pointed out to project management in February 2020. In reply dated 27.03.2021, the management stated that while preparing the PC-I, usually the posts with scale were mentioned therein, whereas, skill, Job description, qualification experience of each post was mentioned in the advertisement at the time of engaging the staff on contract / TLA basis. However, the audit observations have been conveyed to CME/Loco Office for compliance in future.

DAC in its meeting held on 03.04.2021 pended the para till provision of detailed report from Project Director and CME/Loco justifying the following aspects for hiring of staff:-

- i) Advertisement for staff along with skill requirement for each post as mentioned in PC-I.
- ii) Job description
- iii) Qualification
- iv) Age
- v) Experience
- vi) Salary package

No compliance of DAC directives was received till finalization of the report.

Audit recommends that responsibility be fixed for defective planning of the scheme and faulty execution thereof, besides measures be adopted to avoid such recurrence in future.

4.1.5 Excess salary payment to the retired officer against re-employment on “Last Pay Drawn” in disregard to provision of PC-I – Rs 1.611 million

There was a provision of lump sum salary of Rs 45,000 per month for the post of Junior Mechanical Engineer (BPS-17) in approved PC-I of the project titled “Special repair of 100 Locomotives”.

During performance audit of the project, it was observed that in contravention to the provision of PC-I, a retired Chief Mechanical Draftsman, Headquarters Office Lahore was re-employed as Junior Mechanical Engineer (BPS-17) on last pay drawn with the approval of Secretary/Chairman, Railways through advertisement of the post in press media on contract basis from 02.11.2017. Against provision of lump sum salary of Rs 45,000 per month for the post, his initial salary was fixed @ Rs 105,377 per month which was increased to Rs 121,308 per month in November 2019. This resulted in excess payment of Rs 1.611 million over and above the allocated amount in PC-I (**Annex-5**). This caused because of negligence on the part of project management.

The issue was pointed out to project management in February 2020. The management replied on 18.03.2020 that as per approved schedule of Powers the Project Director was competent enough to engage the officer in BS-17 through the selection committee constituted by Secretary/Chairman, MoR. The reply was not satisfactory because the issue regarding excess salary over and above the provision of PC-I was not addressed.

DAC in its meeting held on 03.04.2021 directed the PD to furnish a detailed report showing justification for payment of excess pay as given in PC-I. The DAC also directed CIA to inquire/check this particular matter whether re-employment of a retired officer was in line with the statutory provisions and the PC-I of the project or otherwise.

As per findings of Inquiry Report carried out by the Chief Internal Auditor and issued vide letter dated 15.06.2021, all set procedures and codal formalities for engagement of Junior Mechanical Engineer have been observed in letter and spirit and the pay of the officer has also been re-fixed as per existing rules. Therefore, the para was recommended for settlement.

Since, there was a provision of lump sum salary of Rs 45,000 per month for the post of Junior Mechanical Engineer (BPS-17) in approved PC-I of the project, therefore, it was also recommended to revise the PC-I. Findings of the Inquiry Report are not acceptable to Audit because appointment of project staff was required to be made in line with the provision of approved PC-I by ECNEC. Since, there was a provision of fixed salary package of Rs 45,000 per month for Junior Mechanical Engineer, thus, appointment against that post on "Last Pay Drawn" was unjustified.

Audit recommends that responsibility be fixed for making appointment of the employee on "Last Pay Drawn" in violation to the provision of PC-I and the amount involved be recovered from person(s) held responsible.

4.2 Financial Management

During the course of performance audit, it was noticed that expenditure was not incurred in accordance with budget allocation. Funds were neither utilized nor surrendered due to negligence of management. Significant observation is discussed in the following para:

4.2.1 Savings as well as excess utilization of funds – Rs 749.615 million and Rs 88.072 million respectively

Para 436 of State Railway General Code provides that it shall also be the duty of the administration to see that the allotments made to them are fully utilized, so far as is consistent with economy and the prevention of large expenditure in the last months of the year for the sole purpose of avoiding lapses. They shall be responsible for ensuring that money which is not likely to be needed during the year is promptly surrendered so as to allow its appropriation for other purposes.

During performance audit, it was noticed that funds to the tune of Rs 1,295.420 million were released from 2014-15 and 2015-16. Out of that only an amount of Rs 545.805 million was utilized and remaining funds amounting to Rs 749.615 million were neither utilized nor surrendered. On the other hand, a sum of Rs 88.072 million was utilized in excess of the cash releases during 2016-17 and 2018-19. Thus, due to negligence of the project

management, funds amounting to Rs 749.615 million were neither utilized nor surrendered and Rs 88.072 million were used in excess of cash releases (**Annex-6**) which indicated poor financial management. This resulted in blockage of public money which could have been utilized in other projects as well as excess utilization of funds irregularly.

The issue was pointed out to project management in February 2020. The management replied on 18.03.2020 that monthly progress meeting of PSDP projects was convened regularly and is chaired by Chairman/ Secretary MOR. During the meeting requirement and saving of funds was decided by the chair and the funds were adjusted as per decision taken in the meeting. Moreover, procurement of material on FOB basis was a lengthy process, therefore, exact date of its receipt could not be ascertained and beyond the control of project management. The reply was not satisfactory because it was the responsibility of the management to timely surrender the unutilized funds.

During DAC meeting held on 03.04.2021, it was informed that LCs were established but the material could not be received in that financial year, due to which the allocated funds could not be utilized.

DAC pended the para for verification whether the amounts not surrendered were pertained to the LCs or otherwise. The DAC also directed the Member Finance to review the record of Project Director concerned in consultation with Audit and submit report. Compliance to the DAC directives was not received till finalization of the report.

Audit recommends that responsibility be fixed for non-surrendering of funds as well as utilization of funds in excess of cash releases and necessary action be taken against the person(s) held responsible.

4.3 Procurement and contract management

During Performance Audit, it was observed that the procurement process in the Project was neither economical nor efficient. Instances of mis-procurement, violation of contractual obligations etc. were noticed. Some significant observations are discussed in the following paras:

4.3.1 Loss due to acceptance of bids at higher rates as a result of injudicious evaluation of tenders – Rs 38.50 million

As per Clause-9(b&c) under “Important Notices” of Diesel Bulletin No. I, the manufacturer/authorized principal shall certify in the bid that offered rates are reasonable and comparable to normal export price of the items worldwide. In case wherein annual increase of the quoted rate exceeds 5% (FOB supply) and 10% (FOR supply) over the LPR, proper reference of the price list (showing page No and year) must be provided by the supplier.

During performance audit of special repair of 100 DE locomotives project, it was observed that project management purchased spare parts worth Rs 4,183.893 million from September 2015 to January 2018 on FOB/FOR basis through 1318 tender inquiries. Out of which, 250 (19%) tender inquiries were randomly selected for detailed examination. Scrutiny revealed that in case of 37 items (**Annex-7**), quoted rates exceeded annually by 5.09% to 65.53% over the LPR. Whereas, no references of price list (showing page No and year) were provided by the bidders. In absence of competitive rates and the currently applicable worldwide price lists of the spares, the reasonability of quoted rates could not be ascertained. This resulted in loss of Rs 38.50 million due to acceptance of bids at higher rates. Audit also observed that across the board 5% annual increase in case of FOB supplies was being accepted as reasonable by the Railway management without establishing proper price evaluation mechanism keeping in view the worldwide inflation/deflation rate.

The issue was pointed out to project management in May 2020. The management stated that the leading locomotive manufacturers developed very limited items/parts itself and majority of the parts were arranged through vendors spread over worldwide, thus they could not provide the price list of parts developed through different vendors. Moreover, the prices of copper items had increased manifold during the last years. Resultantly, the cost of spares had increased. The reply was not satisfactory because as per tender conditions the bidders were instructed to certify in the bid that

offered rates were reasonable and comparable to normal export price of the items worldwide, which was not done.

DAC in its meeting held on 03.04.2021 pended the Para for want of joint reconciliation of percentage increases over LPRs between Audit and Project Management to ascertain rates. In the light of DAC's recommendations, the audit observation has been amended.

Audit recommends that the matter be probed to fix responsibility for the loss due to acceptance of material at higher rates besides, a proper price evaluation mechanism keeping in view the worldwide inflation/deflation rate be established for future procurement.

4.3.2 Irregular expenditure due to splitting of purchases – Rs 125.399 million

Rule-9 of PPRA states that the procuring agencies shall announce in an appropriate manner all proposed procurements for each financial year and shall proceed accordingly without any splitting or regrouping of the procurements so planned. The annual requirements thus determined would be advertised in advance on the Authority's website as well as on the website of the procuring agency in case the procuring agency has its own website.

During performance audit of the project titled "Special Repair of 100 DE Locomotives", it was observed that in violation of the PPRA Rules, the project management neither advertised its proposed annual requirements in advance on the Authority's website nor on the website of Pakistan Railways for advance information of the prospective bidders. Consequently, not only the competition remained unhealthy in majority of the cases but also the purchases valuing Rs 125.399 million were made by splitting up the demand as detailed in **Annex-8**. This resulted in irregular expenditure due to splitting of purchases.

The issue was pointed out to project management in February 2020 and May 2020. The management in its reply dated 27.03.2021 stated that majority of the nominated locomotives in the project were operational before carrying out special repairs. Therefore, it was not possible to

assess/foresee the actual requirement of parts / components for repairs. Due to that very reason the tenders were refloated for similar kinds of items. Moreover, annual procurement plan was prepared in advance and was placed on Authority's website as well as on the website of Pakistan Railways. The reply was not satisfactory because no documentary proof regarding advertisement of proposed procurement in advance was provided. Moreover, splitting of demand was clear violations of PPRA rules.

In DAC meeting held on 03.04.2021, it was informed that the proposed annual procurement plan was sent to the concerned quarters for uploading on the Railway as well as on PPRA websites to comply with the PPRA rules. Moreover, the DAC directed the Project Director to get the record verified from Audit within two weeks. No compliance to the DAC directive was made till finalization of the report.

Audit recommends that responsibility be fixed for splitting of purchases and action be taken against the person(s) held responsible.

4.3.3 Irregular cash payment against local purchases – Rs 7.630 million

Federal Board of Revenue circular No. C. No. 1(42) STM/ 2009/ 99638-R dated 24.07.2013 provides that purchase of taxable goods may only be made from sales tax registered persons against sales tax invoices and payments through banking channel.

During performance audit of the project, it was observed that an expenditure of Rs 7.630 million was incurred on procurement of different types of material through Misc. Advance local purchase and payment was made to suppliers in cash instead of banking channel in violation of FBR instructions as detailed in **Annex-9**. This resulted in irregular payment due to negligence of Railway management.

The issue was pointed out to project management in February 2020. The management in its reply dated 27.03.2021 stated that project management considered it appropriate to procure the items on cash payment for smooth working because almost all the firms/persons were reluctant to supply the material on payment through cheque. The reply was not tenable

because payments were made in cash without obtaining sale tax invoices in violation to the instructions of FBR.

DAC in its meeting held on 03.04.2021 directed the Project Director to check the record and fix responsibility for making cash payment against local purchases instead of following banking channel as it involved tax evasion.

Audit recommends that responsibility be fixed for making payments in cash instead of through banking channel. Action be taken against those held responsible.

4.3.4 Irregular award of contracts due to negotiations with the bidders – Rs 350.427 million

Public Procurement Regulatory Authority (PPRA) Rule-40 states that “there shall be no negotiation with the bidder having submitted the lowest evaluated bid or with any other bidder”.

During performance audit of the project, it was observed that in case of contracts detailed in **Annex-10**, the quoted rates were got reduced through negotiations. This resulted in irregular award of contracts valuing Rs 350.427 million in violation of PPRA Rules.

The issue was pointed out to project management in February 2020. The management vide its reply dated 27.03.2021 stated that no negotiation with the bidders was done and the material was procured strictly as per PPRA Rules. However, the bidders reduced the rates voluntarily. Thus, the Railway did not sustain any kind of loss rather saved huge amount. The reply was not satisfactory because under PPRA Rule-31(1) no bidder should be allowed to alter or modify his bid after the bids have been opened.

During DAC meeting held on 03.04.2021 it was informed that no negotiations were made with the suppliers, actually in some tenders, bidders voluntarily reduced their quoted rates, which were accepted in the interest of Railways. The reply was not tenable as PPRA Rules are clear on the subject matter.

Audit recommends that the matter be referred to the PPRA for necessary advice and recurrence of such violation be avoided in future.

4.3.5 Procurement of spare parts in excess of actual requirements – Rs 277.328 million

As per Clause-I of Joint Procedure Order dated 18.08.2015 for procurement and utilization of spare parts under special repair of 100 DE locomotive project, the demand for procurement of parts would be prepared by CME/Loco Office as per actual requirements.

During performance audit of the project conducted in November 2019, it was observed that all the nominated locomotives had been turned out after special repair but spares worth Rs 277.328 million (**Annex-11**) were still lying unused in CDL workshop and Diesel shops KC. This resulted in un-necessary procurement of material from the PSDP allocation which would have been utilized for normal maintenance of locomotives. This occurred due to negligence of the authorities who willfully prepared undue/unjustified demands.

The issue was pointed out to project management in February 2020. The management vide its reply dated 27.03.2021 stated that none of the items were lying at Diesel Shed/Shop, KC and CDLW, Rawalpindi on account of Special Repair of 100 D.E. Locomotives. The procurement process of each and every item/component was processed on receipt of demand from CME/Loco. The demand was framed on presumptive/estimated basis. Majority of the items had been consumed and utilized on the repair of the nominated locomotives. However, some of the items were received late and some components were received under warranty. The locomotives were called back for fitment of these components. The reply was not satisfactory because the items pointed out by Audit were lying in shops at the time of inspection but all the locomotives had already been turned out after special repair.

DAC in its meeting held on 07.05.2021 pended the para with the direction to the PO that relevant record/utilization report of material be got verified from Audit within fifteen (15) working days. The Project Director vide letter dated 02.06.2021 provided copies of letters from WM/Diesel

Karachi and WM/Diesel Rawalpindi stating that the material procured under SR-100 project has already been utilized. The reply is not satisfactory because proper material utilization report along with copies of shop ledgers showing detail of locomotives on which the material was utilized was not provided to Audit.

Audit recommends that the matter be probed to fix responsibility for preparation of un-necessary excessive demands of material under PSDP project besides making book adjustment of that material against the revenue allocation.

4.3.6 Irregular payment due to opening of LC in favour of the supplier instead of the manufacturer – Rs 10.303 million

While evaluating the offers in case of Tender Enquiry No. SR-IV-148 dated 11.04.2016 and SR-IV-64 dated 10.05.2016, the technical committee declared the offer of M/s Tradeimpex Lahore suitable against item No. 4 subject to confirmation that the letter of credit would be established in favor of the manufacturer instead of foreign principal. This condition was agreed by the supplier.

During performance audit it was observed that the LC against Purchase Order No. 19/0100/SR-100/2-16 dated 25.10.2016 was opened in favour of the supplier (M/s Tradeimpex) instead of the manufacturer (M/s Alco Spring Industries Inc. USA). This resulted in irregular payment of Rs 10.303 million due to negligence of the management.

The issue was pointed out to project management in February 2020. The management vide its reply dated 27.03.2021 stated that as per procedure of CCP Office, LC could be opened in favor of supplier instead of manufacturer in special cases. The reply was not tenable because it was obligation of the CCP Office to act upon the recommendation of the tender committee.

During DAC meeting held on 07.05.2021, it was informed that the firm has furnished the compliance certificate issued by the manufacturer with the shipment documents and all the rules/ regulations have been observed. The DAC directed the PO that the documents i.e. compliance

certificate duly countersigned by the concerned Chamber of Commerce along with refusal by manufacturer regarding opening of LC in his favour be provided to Audit within two working weeks for verification. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that the matter be probed to fix responsibility for irregular payment and action be taken against the person held responsible.

4.3.7 Non-settlement of warranty claims – Rs 20.141 million

As per warranty clauses of agreements if any goods or part thereof fails during warranty period due to seller's reasons after the detection supported by an inspection report, the seller shall repair or replace same free of cost.

During performance audit, it was observed that Warranty claims valuing Rs 20.141 million (**Annex-12**) raised from July 2017 to October 2019 were pending against different suppliers.

The issue was pointed out to project management in February 2020. The management vide its reply dated 27.03.2021 stated that warranty claims of 13 items were pending. The firms had been advised to finally replace the defective material with correct one, failing which their security money would be forfeited.

DAC in its meeting held on 07.05.2021 was informed that all the pending 13 items against warranty claims have been settled either by forfeiture of security money or replacement of material. The DAC directed the PO that stated facts be got verified from Audit within two working weeks. The PD office vide letter dated 15.06.2021 sent photo copies of some papers without necessary working papers and verification proforma. Who has been asked, to get verification by providing all necessary working papers along with verification proforma at the earliest.

Audit recommends that the record of settlement of warranty claims be got verified from Audit at the earliest to settle the issue.

4.3.8 Loss due to acceptance of bids at higher rate due to quoting of incorrect LPR – Rs 2.318 million

Para 1801 of Pakistan Railway General Code provides that every public officer should exercise the same vigilance in respect of public expenditure and public funds generally as a person of ordinary prudence would exercise in respect of the expenditure and the custody of his own money. Means should be devised to ensure that every Railway servant realizes fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part.

During performance audit of special repair of 100 DE locomotives project, scrutiny of Tender Enquiry No. SR-01-01 opened on 27.07.2015 revealed that LPR against the following item was intentionally misquoted as US\$ 414.480 instead of US\$ 161.230. Thus, due to quoting of incorrect LPR, the rate accepted for the item was 4.95% higher instead of 170%. This resulted in loss of Rs 2.318 million due to acceptance of single offer at higher cost due to apparent malafide intention of the project management.

Item No.	Name of the firm	Unit Rate US\$ (FOB)	LPR US\$ (FOB)	Actual LPR US\$ (FOB)	Variation in LPR US\$ (FOB)
1(iv) Cable Assy (Cat.No. 41B538812G2) (T.E No. SR-01-01 opened on 27.07.2015)	M/s GE/USA through local agent M/s Albario Engineering Lahore	435.20	414.480 by M/s GE/USA PO No. 19/0033/01-0/1-2014 Dated 18.10.2014(TE opened on 10.12.13 and rate accepted on 26.02.14 by GM/Ops).	161.230 by M/s GE/USA PO No 19/0068/SR-150/4-2014 Dated 12.06.2014(TE opened on 29.10.13 and rate accepted on 02.04.14 by PD SR-150 DE Loco project).	253.250 (157%)

Similarly, scrutiny of Tender Enquiry No. SR-01-89 opened on 10.08.2015 revealed that LPR against item No. 06 (Power Contactor-Cat No. 17CP2BV3), LPR of US\$ 3271.24 dated 26.12.2013 by GE/USA was recorded in the summary submitted by tender committee for approval of the AGM/M but the LPR quoted against that item in the tabulation statement

was US\$ 2717.94 of GE price list 1996. Thus, there was a difference of US\$ 206.92 in both the LPRs, which needs to be explained.

In addition to the above, it was also observed that in most of the tender cases, LPRs initially recorded on the comparative statements were altered/changed. No proof (e.g. copy of purchase order or price list) of the initial LPR and revised/changed LPR were placed in the case. In absence of which, the authenticity of LPRs could not be verified.

The issue was pointed out to project management in May 2020. The management vide its reply dated 27.03.2021 stated that the subject item was floated under SR-100 D.E. Locos Project vide Tender No. SR-01-01 opened on 27.07.2015 against which the firm quoted the rate of US\$ 435.00 while LPR taken US\$ 414.48 dated 18.10.2014. The rate comparison statement was prepared wherein LPR was quoted as US\$ 161.230. The case was referred to Headquarters office for necessary proceedings and the dealing official consulted his own record and quoted the LPR @ US\$ 414.48 vide P/Order No. 19/0033/01-0/1-2014 dated 18.10.2014, which was correct/fresh one.

DAC in its meeting held on 07.05.2021 was informed that the LPR was altered in CME office due to mis-understanding and there was no involvement of vested interest. The DAC constituted an inquiry committee comprising Dy. F.A & Dy. CME/ Development to probe the matter and submit fact finding report to Audit within two working weeks. The Inquiry Committee in its report dated 12.07.2021 concluded that since the item was non stock and the LPR of such item was rarely available. The dealing official was justified to quote the LPR as US\$ 414.18 against tender No. SPL-13-41 opened on 10.12.2013, as it was in the knowledge of all concerned that this one time price reduction has been made by GE Transportation as a gesture of good will and it cannot be quoted as LPR, hence it is concluded that there is no intentional involvement of any official. But the warning was recommended to be issued to the dealing official to be careful in future. Scrutiny of the report revealed that the report was based on the management reply because the actual last accepted rate of that item was US\$ 161.230 (dated 02.04.2014) instead of US\$ 414.18 (dated

26.02.2014). Both the rates were invariably in knowledge of the dealing official.

Audit does not agree with the findings of the Inquiry Committee and recommends that matter be got probed from an independent agency.

4.3.9 Non-competitive bidding due to participation of non-prequalified bidders in the tenders

Rule-16(3) of PPRA states that only suppliers or contractors who have been pre-qualified shall be entitled to participate further in the procurement proceedings. Moreover, Clause-5 of Diesel Bulletin No. I in connection with procurement of spare parts of Diesel Electric Locomotives under special repair of 100 DE Locomotive project provides that only LP approved local firms and regular approved firms for FOB are allowed to participate against those items for which they are approved by Pakistan Railways.

During performance audit of the project titled” Special Repair of 100 DE Locomotives” scrutiny of tender cases against Diesel Bulletin No. I revealed that in violation to the PPRA Rules as well as eligibility criteria of tenders, the project management unfairly and unlawfully allowed participation of non-prequalified suppliers in all the tenders opened and finalized for procurement of spare parts of Diesel Electric Locomotives. This resulted in non-competitive bidding because after reflecting such financial offers in comparative statements, the offers were rejected during technical evaluation even if those were the lowest ones.

The issue was pointed out to project management in May 2020. The management vide its reply dated 27.03.2021 stated that at initial stage of the project, PPRA Rule 36-a (single stage one envelop) was adopted. Later on, all tenders were floated under PPRA Rule 36-b (one stage two envelop). The reply was not satisfactory because both the rules quoted in reply did not allow participation of non-prequalified suppliers.

DAC in its meeting held on 07.05.2021 kept the Para pending with the directive to get the documents verified as to whether all the firms participating in tendering were qualified / approved companies for any of

the tender items. Compliance to the DAC directive was not made till finalization of the report.

Audit requires that responsibility be fixed for allowing unfair/unlawful participation of non-prequalified suppliers in the tenders in violation of the PPRA Rules as well as tender conditions.

4.3.10 Non-announcement of results of bid evaluation

Rule-35 of PPRA states that procurement agencies shall announce the results of bid evaluation in the form of report giving justification for acceptance or rejection of bids at least 10 days prior to award of procurement contract.

During performance audit of the project titled” Special Repair of 100 DE Locomotives”, scrutiny of tender cases against Diesel Bulletin No. I revealed that in violation of the PPRA Rules, the project management did not announce the results of all bid evaluations to the unsuccessful bidders prior to award of the procurement contracts. This resulted in violation of the above mentioned Rules due to negligence of the project management.

The issue was pointed out to project management in May 2020. The management vide its reply dated 27.03.2021 stated that the offers of those firms who were not prequalified to supply the items, were liable to be ignored straight way. Even unapproved firms have participated in the tender enquiry so it is not necessary to inform the rejection of their bid. Thus, there was no need to inform such bidders about their disqualification. The reply was not tenable because the bids of non-prequalified firms were opened and rates offered by them were reflected in the tabulation statements in violation of PPRA Rules.

DAC in its meeting held on 07.05.2021 kept the Para pending with the directive to get the documents verified as to whether all the firms participating in tendering were qualified / approved companies for any of the tender items. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that responsibility be fixed for non-announcement of results of bid evaluation to the unsuccessful bidders in violation of the PPRA Rules and action be taken against the person(s) held responsible.

4.3.11 Non-finalization of tenders within stipulated validity period – Rs 15.879 million

Rule-26(3) of PPRA states that the procuring agency shall ordinarily be under an obligation to process and evaluate the bid within the stipulated bid validity period. However under exceptional circumstances and for reasons to be recorded in writing, if an extension is considered necessary, all those who have submitted their bids shall be asked to extend their respective bid validity period.

During performance audit of the project titled” Special Repair of 100 DE Locomotives”, it was observed that in violation of the PPRA Rules, the project management neither finalized the tenders valuing Rs 15.879 million (**Annex-13**) within its validity periods of 90 days nor validity period thereof was got extended. Rather, the tendered items were filed by simply stating that their validity period had expired. It not only reflects poor performance of the project management but also there is possibility of malicious attention.

The issue was pointed out to project management in May 2020. The management vide its reply dated 27.03.2021 stated that the items were dropped due to participation of unapproved firms, un-healthy competition, reluctance of the firm to extend the validity and high rates. The reply was not tenable because as evident from the record, the items were filed due to expiry of the validity of the offers.

DAC in its meeting held on 07.05.2021 constituted an inquiry committee comprising Dy. F.A & Dy. CME/Development to probe the matter and submit fact finding report to Audit within two working weeks. The Inquiry Committee in its report dated 03.07.2021 concluded that it appeared difficult to finalize 100% tender cases. Tender Committees finalized 686 items tender cases out of 713 items which was 96.28%. Further, majority of the non-finalized items tenders were refloated and

finalized subsequently. The para was, therefore, recommended for settlement. Scrutiny of the report revealed that the report was based on management reply because no evidence regarding refloating of tenders and copies of correspondence with the supplier were appended with the inquiry report.

Audit recommends that responsibility be fixed for non-finalization of tenders within validity period and action be taken against the person(s) held responsible.

4.3.12 Non-indication of “Country of Origin” in different tenders quoted by M/s GE Transportation, USA.

As per Clause-9(e-ii) under “Important Notices” of Diesel Bulletin No. I, all the bidders shall invariably indicate the “Country of Origin” against each item, failing which their offer shall liable to be ignored.

During performance audit of the project titled” Special Repair of 100 DE Locomotives”, scrutiny of bids revealed that M/s GE Transportation, USA participated in almost all the tenders through his local agent M/s Albario Engineering, Lahore but he did not indicate the “Country of Origin” against any item. In absence of which his offer was liable to be ignored but the project management did not point out that deficiency and the tenders were awarded to him which were irregular. This resulted in irregular award of contract due to negligence of the project management.

The issue was pointed out to project management in May 2020. The management vide its reply dated 27.03.2021 stated that M/s GE/USA was a leading manufacturer of locomotives and its manufacturing setup was spread over worldwide. Each and every item supplied to PR carried guarantee by the GE. The reply was not tenable because as per terms and conditions of the tender all the bidders were required to mention the “Country of Origin” against each item, failing which their offer was liable to be ignored.

DAC in its meeting held on 07.05.2021 directed that post facto sanction from CEO/Senior General Manager for relaxing the tender condition regarding the mentioning of the country of origin be obtained and

communicated to audit within two working weeks. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that responsibility be fixed for irregular awards of contracts and action be taken against the person(s) held responsible.

4.3.13 In-appropriate evaluation of tenders

As per Clause-12(v) under “General Terms and Conditions” of Diesel Bulletin No. I, the offers shall be compared on CFR basis but purchase order shall be placed on FOB basis with restriction to ship material through vessels owned or chartered by PNSC only on “Freight to Pay” basis.

During performance audit of the project titled” Special Repair of 100 DE Locomotives”, scrutiny of different bids revealed that instead of making comparison on CFR basis, the bids were compared on FOB basis. This not only resulted in deviation from the set-forth evaluation criteria but also there is possibility that the rates accepted may not be economical on FOB basis. This occurred due to negligence of the project management.

The issue was pointed out to project management in May 2020. The management in its reply on 08.04.2021 stated that there was no negative impact on its freight charges because PNSC was a state owned organization and it had its own criteria for calculation of freight charges. The reply was not to the point because Audit had objected to the process of evaluation of tenders on FOB instead of CFR basis which was not addressed.

DAC in its meeting held on 07.05.2021 pended the para and directed the PO to submit revised reply duly supported with documentary evidence for Audit verification within two working weeks. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that the matter be probed to fix responsibility for deviation from the evaluation criteria and action be taken against the person(s) held responsible.

4.3.14 Illegal exercise of powers by AGM/M in connection with procurement of diesel spares valuing Rs 379.389 million

In terms of item-5 of Annex-III to Ministry of Railways notification No.41 (1)/2012-E-I dated 10.09.2012, financial powers to accept the tenders

in connection with procurement of diesel spares under special repair of 150 DE locomotives valuing more than 2 million to 50 million were delegated to the General Manager/M&S on recommendations of PO's (BPS-20) tender committee.

During performance audit of special repair of 100 DE locomotives project, it was observed that no formal notification regarding delegation of administrative and financial powers to the PD special repair of 100 DE locomotives project was issued by the Ministry of Railways. All tenders valuing more than Rs 2 million to Rs 50 million were approved by the AGM/M whereas no such powers were delegated to the AGM/M in the special repair of 150 DE locomotives project. Scrutiny of noting of a PD Office file revealed that the administrative and financial powers delegated to PD special repair of 100 DE locomotives project were the same as were granted to the PD/special repair of 150 DE locomotives project. Thus, in absence of original record and notification for the delegation of powers to PD special repair of 100 DE Loco project, the exercise of powers by the AGM/M were illegal. This resulted in irregular purchase of diesel spares valuing Rs 379.389 million (**Annex-14**) detected as a result of test check of 28 tender cases.

The issue was pointed out to project management in May 2020. The management vide its reply dated 08.04.2021 stated that both the officers (i.e. GM/M&S & AGM/M) were of equal status. The administrative and financial powers for procurement of material in SR-100 DE Locos Project were concurred by the Member Finance and approved by the then Secretary/Chairman Railways therefore, it was considered appropriate by the Railway administration to give administrative powers of this project to AGM/M. The reply was not tenable because it was clearly mentioned in the summary submitted for approval to the Secretary/Chairman, MOR, after concurrence from the Member Finance that proposed powers to be delegated in SR 100 Loco Project were same as already delegated in case of special repair of 150 DE locomotives project. Whereas, in SR 150 Loco Project, financial powers to accept the tenders in connection with procurement of diesel spares valuing more than Rs 2 million to 50 million were delegated to the General Manager/M&S, instead of AGM/M.

DAC in its meeting held on 07.05.2021 directed that Audit & PO concerned should jointly relook/ reassess the matter within two working weeks. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that the matter be probed to fix responsibility for unauthorized change in substance of the delegated powers without formal notification from the Ministry of Railways and action be taken against the person(s) held responsible.

4.4 Construction and Works

The construction and works should be done in an efficient and economic manner in accordance with the requirements of PC-I. The issues related to delayed completion, change in scope of works etc. are discussed in the succeeding paras:

4.4.1 Non-preparation of Feasibility Study/PC-II

As per Clause 3.3 of Project Management Guidelines, it is mandatory that in projects of infrastructure and production sector costing Rs 300 million and above, management should undertake proper feasibility studies (PC-II) before the submission of PC-I. For other low cost projects, in-house feasibility is carried out.

Contrary to the above, during performance audit of the Project titled “Special Repair of 100 DE Locomotives”, it was observed that proper feasibility study before commencing the project was not carried out. Similar irregularity was also pointed out through different audit reports but the management did not take any action. This deviation not only led to significant change in scope of work during execution but also resulted in substantial time overrun due to negligence and mismanagement on the part of Railway administration.

The issue was pointed out to project management in February 2020. In reply dated 27.03.2021, the management stated that preparation of PC-I and feasibility study was the responsibility of CME/Loco Office. Accordingly, the matter was referred to the CME/Loco who confirmed vide

letter No. 264-W/0/21/19-SR-100 (M-2) dated 10.08.2020 that the feasibility study of the project was carried out before preparation of PC-I.

DAC in its meeting held on 03.04.2021 pended the para and directed to check whether:

- i) Proper Feasibility Report was formed before PC-I or not.
- ii) The scope of work was changed or otherwise.
- iii) There was cost over-run in the project or not.

DAC further directed the CPPO to ensure compliance of guidelines for preparation of feasibility studies, but no compliance of the DAC directive was made.

Audit recommends that responsibility be fixed for non-preparation of proper feasibility study before submission of PC-I and appropriate action be taken against person(s) held responsible. Compliance of Planning Commission's Guidelines be ensured in true letter and spirit in future.

4.4.2 Substandard repair of locomotives resulted in repeated nominated repairs causing loss of expected earning – Rs 55.146 million

ISO 9001:2008 specifies requirements for a quality management system where an organization needs to demonstrate its ability to consistently provide product that meets customer and applicable statutory and regulatory requirements, and aims to enhance customer satisfaction through effective application of the system, including processes for continual improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

During performance audit of the project conducted during November 2019, it was observed that 90 locomotives were turned out after special repair in CDL shops Rawalpindi and Diesel shops KC from September 2016 to April 2019. Both the shops were neither ISO Certified nor any proper system for the quality assurance existed therein. Consequently, 33 locomotives turned out after special repair were sent back in the shops again and again for different nominated repairs. This resulted

in loss of potential earnings worth Rs 55.146 million (**Annex-15**) due to poor quality of the repair work.

The issue was pointed out to project management in February 2020. The management vide its reply dated 30.04.2021 stated that just to give up with a little betterment minor repairs to the chronic issue were made with the help of limited spares with a view to bring back those locomotives for train services and delivered to the respective base shed/shops for revenue operation.

DAC in its meeting held on 21.06.2021 kept the Para pending with the directive to P.O to intimate the amount of revenue earned after repeated repairs and also explain the reasons for getting repairs in parts/again and again. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that reasons for non-certification of maintenance facilities from ISO be explained besides responsibility be fixed for substandard repair and disciplinary action be taken against the person(s) held responsible.

4.4.3 Mis-utilization of spare parts purchased under PSDP resulted in irregular/unauthorized expenditure – Rs 1.078 billion

As per clause-xiv of Joint Procedure Order dated 18.08.2015 for procurement and utilization of spare parts under special repair of 100 DE locomotive project, the spare parts procured against the PSDP project would be utilized on the nominated locomotives of the project and the Works Managers Diesel Rawalpindi/KC would maintain the proper locomotive wise utilization record.

During performance audit of the project conducted during November 2019, it was observed that the instruction regarding utilization of locomotive wise spare parts were not followed by the concerned quarters in true spirit. Scrutiny of record further revealed that spare parts valuing Rs 3.052 billion (**Annex-11**) were procured against the project. Out of which parts worth Rs 1.078 billion (35% of total spares) were issued to the locomotives which were not nominated for special repair under the project.

This resulted in mis-utilization of PSDP funds due to sheer negligence and casual attitude of the WMD/RWP and KC as well as ineffective monitoring and lack of interest on the part of project management. Irregularity of this nature had also been pointed out to the Railway management in case of Special Repair of 150 locomotives project during 2016-17 but no remedial action was taken.

The issue was pointed out to project management in February 2020. The management vide its reply dated 30.04.2021 stated that the supply of some of the material procured under the project was delayed due to numerous reasons. Therefore, the shop management considered it necessary to utilize the required material procured from revenue allocation. On receipt of the material from the project procurement, the same was utilized on the repair of locomotives other than the project locomotives by the shop management. This was a stop gap arrangement just in the best interest and Railway itself sustained no loss on that account. The reply was not tenable because the procurement schedule laid down in the PC-I was not followed and prior to receipt of material, the locomotives were turned out with deficient parts/assemblies. Subsequently, the new parts/assemblies were used in other than project locomotives by deviating from the scope of PC-I.

DAC in its meeting held on 21.06.2021 directed CME/Loco that the expenditure be got regularized and write to AGM/ Mechanical to issue explanation to Project Director for violation of procedures in this regard. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that responsibility be fixed for mis-utilization of spares and disciplinary action be taken against the person(s) held responsible besides the change in scope of the project be got regularized from ECNEC.

4.4.4 Loss due to unjustified inclusion of locomotives for special repairs in various projects – Rs 2,618.106 million

(a) PR had carried out special repair of 36 GMU-30 locomotives under PSDP from July 2008 to June 2010 at the cost of Rs 1,611.509 million, which had outlived their normal economic life of 20 years. Objective of the

scheme was to economically operate those locomotives for another 10 years tenure of life.

During performance audit, it was observed that out of the fleet of 36 GMU-30 locomotives, 19 locomotives were included within 04 to 05 years for special repair in an another PSDP project titled “Special Repair of 150 Locomotives”. Subsequently, out of the 19 locomotives which were planned to be operated for 12 years, 09 locomotives were again nominated within 04 to 05 years for special repair under another PSDP project titled “Special Repair of 100 Locomotives”. Thus, due to unjustified nomination of same locomotives for special repair again and again while the intended benefits of the earlier schemes were not fully achieved, the GoP had to suffer a loss of Rs 1,222.206 million (**Annex-16**).

(b) Similarly, PR carried out special repair of 150 DE locomotives under PSDP from January 2013 to August 2016 at the cost of Rs 5,681.679 million. Objective of the scheme was to economically operate the locomotives for another 12 years tenure of life.

During performance audit, it was observed that out of the 150 locomotives, 25 locomotives were again included within 04 to 05 years for special repair in another PSDP project titled “Special Repair of 100 Locomotives”. Thus, due to unjustified nomination of same locomotives for special repair again in another project while the intended benefits of the earlier scheme were not fully achieved, the GoP had to suffer a loss of Rs 1,395.9 million (**Annex-17**). This occurred due to initiating unjustified schemes for special repairs of locomotives through various projects based on speculative/misleading facts and figures which was tantamount to criminal negligence.

The issue was pointed out to project management in May 2020. The management vide its reply dated 30.04.2021 stated that the locomotives were running with less compliment and weak power assembly due to less allocation in the revenue grant. Hence, their reliability and availability was reduced to minimum level. Therefore, the Railway management decided to carry out deferred maintenance schedules under the project. The reply was not tenable because neither the locomotives were running under deferred

maintenance schedules nor the projects PC-I was got approved for the deferred maintenance. Moreover, prior to attainment of intended benefits in the previous projects, again and again special repair of the locomotives under subsequent projects was totally unjustified and a loss to Public Exchequer.

DAC in its meeting held on 21.06.2021 constituted an inquiry committee comprising Director General/Technical, Director General/ Planning and Managing Director/ Locomotive Factory to probe the matter and submit report within one month. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that the matter be probed to fix responsibility for the loss due to unjustified inclusion of locomotives for special repair again and again in subsequent projects especially when intended results of the previous schemes were not fully achieved.

4.4.5 Loss of potential earning due to utilization of locomotives in shunting operation instead of passenger/freight operation – Rs 373.980 million

As per PC-I of the project titled special repair of 100 DE locomotives, all the locomotives were required to be deployed in passenger and freight operation.

During performance audit of the project, it was observed that 09 locomotives turned out after special repair had been deployed in shunting operation instead of passenger/freight operation. As a result of non-utilization of the locomotives on passenger/freight train operation, PR was deprived of potential earning of Rs 373.980 million (**Annex-18**).

The issue was pointed out to project management in February 2020. The management vide its reply dated 30.04.2021 stated that the Railway administration has not nominated any specific class of locomotives for shunting/marshaling service. Resultantly, the reliable locomotives were repaired for the aforesaid purpose. The reply was not tenable because none of the locomotive included in the PC-I was specially repaired for the shunting purposes.

DAC in its meeting held on 21.06.2021 was informed that shunting/marshaling of trains was a very important factor to ensure the punctuality of trains either Freight or Passenger. Railway Administration has not nominated any specific class of locomotives for shunting/marshaling service. Resultantly, the reliable locomotives are used for this purpose. Audit emphasized that shunting operation was not included in the scope of PC-I and at present no benchmark for allotment of locomotives for shunting exists in PR. The DAC directed the PO that objectives for utilization of locomotives either for passenger/freight operation or shunting purpose be clearly mentioned in future. DAC further directed that warning notice be issued to the concerned/responsible for violating the procedure in order to avoid recurrence. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that matter be probed to fix responsibility for loss of potential earning due to putting the locomotives in shunting service instead of passenger/freight train operation.

4.4.6 Excess expenditure due to injudicious decision by Railway management – Rs 7.367 million

For assessing the feasibility for rehabilitation/repair of 69 DPU locomotives held up since 2010 for numerous design defects, a high level committee headed by AGM/M was constituted by the CEO/ Sr. GM, PR in 2015. The committee after due deliberation concluded that the said locomotives were beyond economical repair.

During performance audit, it was observed that PC-I of the project titled “Special Repair of 100 DE Locomotives” was approved by ECNEC on 04.12.2014 at the cost of Rs 4,966.751 million which included 10 DPU-30 locomotives at the cost of Rs 194.288 million. However, during PSDP review meeting held on 16.07.2018, the Secretary/Chairman MOR decided to close the project by 30th June, 2019 with the direction that repair of DPU-30 locomotives would not be carried out from the project and the allocated amount would not be utilized. But the Railway Minister while presiding PSDP review meeting held on 27.10.2018 directed to arrange repair of 05 DPU-30 locomotives at PLF/Risalpur within six months at the

cost of Rs 30 million per loco under supervision of GM/M&S. In pursuance to the directive of Railway Minister, the completion period of the project was further extended up to 30th June, 2020. Consequently, loco number 6120 was repaired and put into trial on 23.08.2019. According to assertion by the GM/M&S, the performance of the locomotive was quite satisfactory whereas, according to judgment by the AGM/Mechanical, the performance of locomotive repaired under the project was unsatisfactory. Meanwhile, an expenditure of Rs 2.521 million and Rs 4.846 million was incurred from the project allocation on repair of the DPU locomotives and establishment charges during 2018-19 and 2019-20 (up to 31.01.2020.) respectively.

In view of the position explained above, Audit is of the view that the expenditure of Rs 7.367 million (excluding labour charges/FOH) incurred on special repair of DPU locomotives was unjustified/irregular because the said class of locomotives had already been declared beyond economical repair in 2015 by a high level committee headed by the then AGM/Mechanical. This resulted in unjustified/excess expenditure due to injudicious decision by the Railway management.

The issue was pointed out to project management in February 2020. The management vide its reply dated 08.04.2021 stated that initially 10 DPU-30 Locos were included in SR-100 D.E Locos project. Later on, MOR decided that those locomotives would not be repaired under the project. However, during 1st quarter review meeting F.Y. 2018-19 of PSDP projects, chaired by Federal Ministry Railways, it was decided that 05 Nos. DPU-30 should be repaired at PLF, Risalpur under the SR-100 Locos project as a pilot project and the task was assigned to the then GM/M&S. Accordingly, 03 locomotives repaired in PLF remained operational for hauling of freight load Ex. LHR to KC and back, which were stabled by the administration due to non-availability of needed spares for carrying out maintenance schedule. The reply was not satisfactory because DPU locomotives had already been declared beyond economical repair.

DAC in its meeting held on 21.06.2021 directed the PO that the expenditure be got regularized from Finance Division and Planning

Division through Ministry of Railways. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that the matter be probed to fix responsibility for incurring expenditure on such locomotives which had been declared beyond economical repair and the amount involved be recovered from the person(s) held responsible.

4.4.7 Excess expenditure due to delay in completion of the project – Rs 343.001 million

As per approved PC-I the project titled “Special Repair of 100 DE Locomotives” commenced w.e.f. 01.01.2015 and it was scheduled to be completed up to 31.12.2016.

During performance audit, it was observed that the project which was scheduled to be completed by 31.12.2016 was still in progress. Due to delay in completion of the project PR incurred excess expenditure amounting to Rs 343.001 million (**Annex-19**) as a result of devaluation of Pak rupees as compared to US\$. Had the project management been able to execute the project activities as per approved time frame, PR could have avoided extra expenditure of Rs 343.001 million. This occurred because of inefficiency of the management.

The issue was pointed out to project management in February 2020. The management vide its reply dated 08.04.2021 stated that the appointment of Project Director was delayed by 8 months and the project activities actually started from February, 2015 instead of June, 2014. Procurement of material on FOB basis was too lengthy and cumbersome job. It also involved delicate procedure and warrants extra care. Further additional work of procurement of parts for pilot project for re-commissioning of 5 DPU-30 D.E. Locomotives also assigned to SR-100 Locos Project by the Honorable Federal Minister for Railway and 3rd extension in the completion of the project was recommended in 48th DDWP meeting held on 24.07.2019 by the Ministry. Therefore, these factors led to time overrun which is quite justified. The reply was not satisfactory because timely appointment of the PD was the responsibility of MOR. Re-commissioning of 05 DPU

locomotives under the project was deviation from the approved scope of Project.

DAC in its meeting held on 21.06.2021 directed the CIA to calculate/compare cost for procurement of material on the basis of actual cost with reduced cost and furnish a report within two weeks.

In compliance to directive of the DAC, a fact finding Inquiry Report was issued by the CIA on 02.12.2021. It has been concluded that actual cost overrun on procurement of spare parts was approximately 13% that occurred mainly due to delay in completion of the project as a result of devaluation of Pak currency as compared to US Dollar. Audit observed that cost overrun was calculated by the Inquiry Officer on the basis of estimated cost of PC-I as compared to PC-IV. The detail of spare parts showing quantity, description and estimated cost for each class of locomotive as mentioned in the PC-I as well as detail of actual spare parts purchased under the project and indicated in PC-IV was not provided to the Inquiry Officer. In absence of which, calculation of cost overrun of spare parts is not factual and therefore inquiry report stands unsatisfactory.

Audit recommends responsibility be fixed for delay in execution of the project and excess expenditure incurred be recovered from the person(s) held responsible.

4.4.8 Ineffective monitoring of PSDP funds – Rs 474.855 million

As per approved PC-I the staff/facilities of CDL Shops Rawalpindi and Diesel Shops/ KC were to be utilized for special repair of locomotives.

During performance audit, it was observed that in contradiction to the above, spare parts valuing Rs 474.855 million (**Annex-20**) relating to traction motors were delivered in Rewinding Shop Mughalpura during 2016-17 & 2017-18 which were used for remanufacturing of 258 traction motors. The traction motors were directly dispatched to CDL Shop RWP/Diesel Shed LHR for fitment in the locomotives without taking on board the project management. Moreover, the PD Office was not effectively monitoring the progress of the work in order to ensure that the traction motors delivered from Rewinding Shop were fitted in the locomotives

nominated in the project. In view of the above, Audit apprehends that actually the traction motors would not be utilized for the intended purpose. This may cause misuse of PSDP funds.

The issue was pointed out to project management in February 2020. The management vide its reply dated 08.04.2021 stated that the material supplied to Rewinding Shop, Mughalpura was for the repair of traction motor type GE-761 & GE-752 which were fitted on the project locomotives. The reply was not satisfactory because the detail of locomotives on which the traction motors were fitted was not provided to Audit.

DAC in its meeting held on 21.06.2021 was informed that the traction motors were overhauled with the supplied material. After necessary testing / checking these traction motors were fitted on nominated Locos. The DAC pended the para and directed the PO that the figures be got verified from Audit within three working weeks. Compliance to the DAC directive was not made till finalization of the report.

Audit recommends that the detail of locomotives on which the traction motors were fitted may be provided to Audit for verification.

4.4.9 Provision of unclear facts and figures in PC-I of the project resulted in non-evaluation of performance of locomotives

As per clause 10.1-A(iii) of the Guidelines for the Project Management, the PC-I must contain quantifiable performance indicators showing the visible impact on economy after completion of the project.

During performance audit of the project, it was observed that the scheme involved special repair of 100 DE locomotives of 09 different classes relating to 06 base sheds. Through the special repair PR intended to improve average availability of the locomotives from 44% to 56% and to increase average reliability from 19135 km per failure to 21000 km per failure. Scrutiny of the record revealed that while preparing justification, total number of locomotives showing availability and reliability of each class was mentioned in the PC-I, but serial number of the locomotives proposed to be repaired under the project were not indicated therein. Since availability of each class differed from 13.63% to 66.66% while reliability

from 5569 km per failure to 39518 km per failure. Thus, performance of locomotives cannot be compared unless and until the serial number of locomotives before and after the repair are identified. This resulted in defective planning due to negligence of the Railway administration.

The issue was pointed out to project management in February 2020. The management vide its reply dated 24.05.2021 stated that as per PC-I the target for availability was fixed to enhance from 44% to 56%. On closing of the project the availability of rolled out locomotives has been observed as 83% in average. Similarly, reliability of these locomotives was fixed to enhance from 19135 Km/F to 21000 Km/F. On closing of the project the reliability of the rolled out locomotives has been recorded 66920 Km/F. The reply was irrelevant because the actual issue was not addressed.

DAC in its meeting held on 21.06.2021 was informed that at present no demarcation of locomotives has been made for passenger as well as freight services. It is fact that if a Locomotive booked with passenger train, it earns more kilometers as compared with the Locomotive booked with freight train. As per PC-I, the target for availability was fixed to enhance from 44% to 56%. On closing of the project the availability of rolled out Locomotives has been observed as 83% in average. Similarly, reliability of these Locomotives was fixed to enhance from 19135 KM/F to 21000 KM/F. The DAC directed the PO that all relevant facts and figures be got verified from audit within three working weeks. Compliance to the DAC directive was not received till finalization of the report.

Audit recommends that the matter be probed to fix responsibility for carrying out defective planning and action be taken against the person(s) held responsible.

4.4.10 Wasteful expenditure due to non-finalization of tendering process in accordance with approved work plan/activity chart of PC-I – Rs 1.182 million

As per approved work-plan/activity chart of PC-I of the project, entire tendering process including opening of LCs, was planned to be completed within first six months of the execution period.

During performance audit of the project, it was observed in pursuance of the approval of PC-I by ECNEC on 4th December, 2014, administrative approval for execution of work was issued by the PAO on 23rd December, 2014. First Project Director was appointed w.e.f. 26.01.2015 but he retired from service on 09.05.2015. The post of PD remained vacant from 10.05.2015 to 31.05.2015 and 2nd PD took charge on 01.06.2015. No cash plan & work plan for the year 2014-15 was prepared and got approved from the CEO. Budget allocation of Rs 2,000 million was made for the year 2014-15 whereas an amount of Rs 3 million was released but actual expenditure of Rs 1.182 million was incurred. However, first tender was opened on 27.07.2015 whereas last tender was opened on 16.05.2019 while the procurement process was still ongoing till date of audit execution. Thus, an activity which was planned to be completed within first six months of the execution period of the project was not even commenced within the stipulated period. Thus, expenditure of Rs 1.182 million incurred on pay and allowances of the PMU during 2014-15 was totally wasteful because the planned activity was not performed at all during that period. This resulted in loss of Rs 1.182 million due to bad governance, ineffective monitoring and inefficient execution of the project.

The issue was pointed out to project management in February 2020. The management vide its reply dated 08.04.2021 stated that estimation of the material required for repair of locomotive was very lengthy and cumbersome job. However, 02 Diesel Bulletins were published in the Year 2014-15 for 1900 items approximately. Afterwards, tenders were floated, technical evaluation carried out and purchase orders were placed on successful bidders. The reply was not satisfactory because no work/cash plan was prepared during 2014-15 and the activity which was scheduled to be completed within six months was incomplete even after lapse of a period of more than 52 months.

DAC in its meeting held on 21.06.2021 was informed that in PC-I, year-wise allocation was mentioned for procurement of material. Before placing of purchase order / establishment of Letter of Credit (LC) availability of funds is mandatory as per Store Code Para 923. The procurement of material was very lengthy and cumbersome process and

different agencies were involved, causing delay in receipt of material for the project.

DAC directed the PO that in future the following aspects should be kept in view before appointing Project Director:

- i) Project Director will be hired preferably from outside Railways.
- ii) No Project Director will be appointed on Additional Charge.
- iii) No Project Director should be posted having less than six months service and previous performance of the officer should be evaluated before appointing as Project Director. Compliance to the DAC directive is awaited.

Audit recommends that the matter be probed to fix responsibility for the loss due to non-execution of project activities as per approved action plan and action be taken against the person(s) held responsible.

4.4.11 Non-accountant of used spare parts/released material

Para 1240(4) of Pakistan Government Railway Code for the Mechanical Department states that during verification of estimates it should be seen that in case of renewal, replacement and dismantlement works, credit for sale proceeds of released material has been provided for in the estimate.

During performance audit of the project, it was noticed that no provision for credit of released material was made in the project estimates. Consequently, no released material was accounted for in the project. Audit also observed that new material and spare parts worth Rs 2,774.801 million were issued for special repair of locomotives, but account of released material was not maintained. This resulted in possible misappropriation of spare parts as well as overstatement of project's cost due to negligence of project management.

The issue was pointed out to project management in February 2020. The management vide its reply dated 08.04.2021 stated that the project was executed at two different locations i.e. CDLW, Rawalpindi and Diesel Shed,

Karachi Cantt. All the released material was delivered to General Store on proper documentation. The reply was not tenable because no credit for the returned stores was given to the project.

DAC in its meeting held on 21.06.2021 was informed that the Material Return Note verified copies by the store authorities are available in store section CDLW/RWP and Diesel Shed, KC. Audit can verify these records for their satisfaction. The DAC directed that stated facts be got verified from Audit within three working weeks. In compliance to DAC directive, some copies of Material Return Notes were provided to Audit for verification. Scrutiny of the Material Return Notes disclosed that the credit of released spares was charged to revenue instead of project.

Audit recommends that responsibility be fixed for non-accountal of released material against the project and action be taken against the person(s) held responsible.

4.4.12 Defective repair of locomotives due to negligence of project management – Rs 261.864 million

The scheme envisaged special repair of 100 DE locomotives under PSDP which were either giving frequent troubles during operation on line, or held up owing to non-availability of spares.

During performance audit of the project, it was observed that instead of carrying out special repair of nominated project locomotives under work order for Capital/Replacement works at the cost of Rs 261.864 million, the project management merged-up the project with Revenue repairs (e.g. periodical over hauling such as F-schedule and C-II etc.) which were done after 12 months and 36 months respectively of locomotives as detailed in the **Annex-21**. This resulted in deviation from intended scope of work due to negligence of the project management.

The issue was pointed out to project management in February 2020. The management vide its reply dated 30.04.2021 stated that that C-II schedule was due process which was to be carried out after every 3 years even for those locomotive which were attended for special repair. The reply was not satisfactory because normal maintenance schedules were not

alternative of the special repair. Moreover, the special repair was chargeable to capital whereas normal maintenance schedules were carried out through revenue.

DAC in its meeting held on 21.06.2021 was informed that only 30% to 35% allocation was being made for repair of locomotives against the demand, therefore, Railway administration decided to carry out the C-II schedule is a due process which is to be carried out after every 3 years even for that locomotives which were attended for special repair.

DAC directed that stated facts be got verified from Audit within three working weeks, but compliance to the DAC directive was not made till finalization of the report.

Audit recommends that the matter be probed to fix responsibility for deficient repair of locomotives and disciplinary action be initiated against the person(s) held responsible.

4.4.13 Non-availing of expected benefits due to premature deletion of 02 locomotives repaired at a cost of Rs 44.598 million

The scheme envisaged special repair of 100 DE locomotives which were expected to be used in train operation for further 09 years.

During performance audit of the project, it was observed that 02 locomotives were temporarily/permanently deleted from the books after carrying out special repair at the cost of Rs 44.598 million (**Annex-22**). This resulted in loss of expected benefits due to negligence of the management.

The issue was pointed out to project management in February 2020. The management in its reply dated 30.04.2021 stated that both the locomotives met with serious accidents. Locomotive No. 8067 was not economical, therefore, it had been deleted from the books permanently by CME/Loco Office. The accident took place due to unlawful action on the part of tractor driver who attempted to tress pass the Railway track. Whereas, locomotive No. 4727 has been deleted temporarily from the books by CME/Loco Office. An inquiry has been conducted, as a result thereof, Deputy Driver and Assistant Driver were held responsible.

DAC in its meeting held on 21.06.2021 constituted an inquiry committee comprising of COPS/Safety & CME/Loco and directed to submit fact finding report within four weeks, but compliance to the DAC directive was not made till finalization of the report.

Audit recommends that the matter be probed to fix responsibility for the loss of expected benefits due to holding up of locomotives and action be taken against the person(s) held responsible.

4.4.14 Un-satisfactory performance of locomotives resulted in non-achievement of envisioned objectives

The scheme envisaged special repair of 100 DE locomotives of 09 different classes to improve average availability of the locomotives from 44% to 56% and to increase average reliability from 19136 km per failure to 21136/km per failure.

During performance audit, it was observed that while preparing justification in the PC-I the serial number of each class of locomotives were not mentioned. In absence of the basic information, the average availability (44%) and average reliability (19135/km per failure) of 100 DE locomotives planned to be repaired under the project, could not be matched unless and until, the locomotives actually repaired were the same as planned. This ambiguity led to conclude that the administration did not exercise due diligence while preparing the estimates. This speaks of management inefficiency and clear violation of the instructions of the Planning Commission of Pakistan who urged that the objectives of the scheme should be clear and quantifiable. However, scrutiny of performance reports prepared by different sheds and compiled by the PD Office monthly for onward submission to the Ministry of Railways for the month of December 2019 revealed that average availability of 17 GMU-30 during the month was 80% and average cumulative availability of locomotives was 77%. Whereas, the intended average availability of that class of locomotives after the special repair was required to be at least 84.84%. These locomotives were turned out after special repair from January 2017 to August 2018. Audit apprehends that with the passage of time, the availability of the locomotives would further decline. Moreover, cumulative average

availability/reliability of individual 24 locomotives was below the target as detailed in **Annex-23**. This occurred due to substandard repair of locomotives because of negligence of the management. Furthermore, scrutiny of performance report for the month of December 2019 received from Quetta Division revealed that while working out availability number of ineffective locomotives was not taken into account. Thus, the average availability for the month and average cumulative availability indicated in the performance report was inaccurate.

The issue was pointed out to project management in February 2020. The management in its reply dated 30.04.2021 stated that it was the responsibility of Railways administration to carry out the requisite maintenance schedules in time to ensure the required availability / reliability of the locomotives. The reply was not satisfactory because it was also obligatory on project management to ensure satisfactory performance of specially repaired locomotives during execution period of the project.

DAC in its meeting held on 21.06.2021, was informed that performance of the locomotives of whole fleet is calculated instead of individual locomotives. The DAC directed the P.O that the relevant record be got verified from Audit, but compliance to the DAC directive was not made till finalization of the report.

Audit recommends that up to date performance of individual class of locomotives be provided to Audit for verification as directed by the DAC.

4.4.15 Non supply of record/information in connection with duplicate/premature special repair of locomotives

According to Section 14(2) of the Auditor General's (Functions, Powers and Terms and Conditions of Service) Ordinance, 2001, the officer in-charge of any office or department shall afford all facilities and provide record for audit inspection and comply with requests for information in as complete a form as possible and with all reasonable expedition.

During performance audit of special repair of 100 DE locomotives project, Audit requested the PD/Rehabilitation, Mughalpura, Lahore, WM/Diesel/KC and WM/CDL Workshop, Rawalpindi to provide

information in connection with duplicate/premature special repair of locomotives under different projects vide this office letter No. PAS/Corres/SR-100 DELs/2019 dated 22.04.2020. The requisite information was still awaited despite issuing reminder dated 13.05.2020 as well as personal contacts on phone.

The issue was also pointed out to the project management in May 2020. Management in its reply dated 08.04.2021 stated that the concerned quarters had been advised to provide the relevant record directly to Audit, but the requisite record/information was not provided.

DAC in its meeting held on 21.06.2021 was informed that the concerned quarters had been advised to provide the relevant record for scrutiny direct to Audit authorities. The DAC directed the P.O that the record be provided to Audit within one week. Compliance to DAC directive was not made till finalization of the report.

Audit recommends that the requisite record/information be provided to Audit for verification as directed by the DAC.

4.5 Monitoring and evaluation

During the course of Performance Audit, audit found out that there was no effective mechanism to monitor timely completion of each phase of the project. Significant observation is discussed in the following paragraphs:

4.5.1 Extra expenditure due to ineffective monitoring of the project activities – Rs 29.022 million

For efficient execution and effectively monitoring of different activities of the project titled “Special Repair of 100 DE Locomotives” there was a provision of PMU comprising 16 posts in 12 different categories for a period of 2 years with allocation of Rs 24.067 million.

During performance audit, it was observed that the project commenced from 1st January, 2015. Project Director took charge on 26th January, 2015, but the essential middle management posts were kept initially vacant from 18 to 22 months due to one reason or the other. During

execution of the project, 07 Project Directors were changed (**Annex-1**) while the project was in progress. No mechanism/framework for monitoring and evaluation of different activities of the project was devised. Time overrun of 36 months has been occurred up to December 2019, while the project was in process. An expenditure of Rs 53.089 million has been incurred on the PMU against the provision of Rs 24.067 million in approved PC-I. Despite 10% reduction in original scope of work, 121% increase (Rs 29.022 million) in establishment cost of PMU was unjustified, which caused due to negligence by the project management.

The issue was pointed out to project management in February 2020. The management in its reply dated 08.04.2021 stated that due to revision of pay scales, the salary of the employees increased significantly which led to increase in the expenditure. The reply was not satisfactory because completion period of the project was always anticipated by the project executing Ministries/Divisions keeping in view the past experiences in similar works and addressing all supplementary issues expected to be encountered during execution. The time overrun was the basic case of inflation /increase of cost as well as loss of envisioned benefits.

DAC in its meeting held on 21.06.2021 directed that a “Thought Process” be carried out by all the AGMs and the CPPO jointly for devising a policy regarding maintenance of locos and other infrastructure for next 10 years on rational basis. No compliance to the DAC directive was received till finalization of the report.

Audit recommends that compliance of the DAC recommendations be made at the earliest.

4.6 Overall Assessment

The overall performance of the project was unsatisfactory because performance of 17 GMU-30 locomotives repaired under the project was below the target fixed in the PC-I, whereas, average availability/reliability of 24 individual locomotives was below the benchmark. Moreover, frequent failures of repaired locomotives within a short span of time were the factors which indicated that the quality of material and workmanship used in the special repair of locomotives was substandard. Thus, objectives of the

project were not fully achieved due to bad planning and ineffective monitoring.

i. Relevance:

The project audited was not included in MTFD and was accommodated in the PSDP through sectoral adjustment.

ii. Efficacy:

Financial management of the project was very poor as is evident from the fact of abnormal saving and excess expenditure as compared with annual budget allocations and releases.

iii. Efficiency:

Time overrun of 36 months occurred. Against total allocation of Rs 4,966.751 million for special repair of 100 locomotives, ninety (90 Nos.) locomotives had been repaired at the cost of Rs 5,025.217 million. Therefore, physical progress was 90% as compared to expenditure of 101%. Cost overrun was Rs 58.466 million up to December 2019 while the project was ongoing. However, the project was closed on 30th June, 2020 with reduced scope of work. As per Completion Report (PC-IV) of the project, 90 locomotives out of 100 locomotives were repaired under the project at a total cost of Rs 5,402.255 million.

iv. Economy:

Due to non-establishment of proper price evaluation mechanism by the Railway management keeping in view the worldwide inflation/deflation rate, much higher rates over and above the LPRs were accepted. Moreover, due to over assessment of demand, spare parts worth millions of rupees were unnecessarily procured which were lying in shops. Besides, parts procured from the project were utilized for other than the intended purposes.

v. Effectiveness:

Out of 100 locomotives, 90 locomotives were repaired. Whereas, 09 locomotives planned to be used for passenger/freight service were put on shunting operation after the special repair and performance of 24 locomotives was below the benchmark. 35% parts purchased under the

project were utilized on the locomotives that were not nominated in the project.

vi. Compliance with Rules:

Project Management Guidelines issued by the Planning Commission of Pakistan for developments project were not observed in true spirit. Gross violation of the PPRA Rules were observed. Funds provided by the Planning Commission were utilized on routine repair of other locomotives in violation in PC-I.

vii. Performance rating of the project:

Unsatisfactory

viii. Risk rating of the project:

High

5. CONCLUSION

The main focus of this performance audit was to review economy, efficiency and effectiveness of project of Special Repair of 100 Diesel Electric Locomotives.

While reviewing implementation of standards/regulations covering safety and quality issues, it was observed that Railway workshops where locomotives were repaired were not ISO 9001:2008 certified. Consequently, 33 locomotives were sent back to the workshops again within short spans of time for nominated repairs due to earlier substandard repairs. This resulted in loss of potential earnings due to detention of the locomotives at workshops (Para 4.4.2). Moreover, PR incurred loss of public money due to unjustified/duplicate repair of such locomotives which were recently repaired under two different projects (Para 4.4.4.). Furthermore, Railway administration wasted public money on repair of such locomotives which had already been declared “beyond economical repair” by a high level committee headed by AGM/Mechanical (Para 4.4.6).

While evaluating economy, it was observed that PR incurred loss of millions of Rupees due to acceptance of bids at extraordinary higher rates (Para 4.3.1). Moreover, spare parts valuing millions of Rupees were lying unutilized even after completion of project, which indicates excessive

procurements over the actual requirement (Para 4.3.5). Furthermore, spare parts worth more than one billion Rupees purchased from PSDP allocation were misused on routine maintenance of locomotives which were not nominated for special repair (Para 4.4.3) . Moreover, PR was deprived of potential earnings due to deployment of locomotives on other than intended purpose (Para 4.4.5).

While assessing efficiency, effectiveness and overall achievement of objectives of project, it was observed that PR incurred extra expenditure worth millions of Rupees due to delay in completion of the project (Para 4.4.7 & 4.5.1). Despite 10 % reduction in approved scope of work, time over run of 42 months and cost overrun of Rs 435.504 million occurred due inefficient Project Management. The overall performance of the project was unsatisfactory because actual performance of 17 GMU-30 locomotives was below the benchmark. Similarly, average availability/reliability of 24 others different types locomotives was also below the benchmark (Para 4.4.14).

5.1 Key issues for the future

The project should be started after proper feasibility study, so that preparation of PC-I is based on correct data. Keeping in view the ground realities, project should be completed within stipulated time and estimated cost. There should be a single, dedicated Project Director who should not be transferred during the currency of project. Procurement should be made in accordance with PPRA Rules in order to get maximum value for money. The objectives may be laid down in quantifiable terms so that their achievement could be ensured.

5.2 Lessons Identified

The project should be started with proper planning after ascertaining the ground realities. There should be single dedicated Project Director as required by the “Guidelines of Project Management” circulated by Planning Commission. The financial management should also be exercised in an efficient and economical manner. Management should also avoid modifications after approval of PC-I. The preparation of PC-I on vague terms and figures may lead to substantial change in the scope of work which

may also hamper achieving the progress and expected benefits of the project.

ACKNOWLEDGEMENT

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**Detail of appointments of the Project Directors of the project.
(Para 4.1.1 & 4.5.1)**

Sr. No.	Name of Project Director	Tenure	
		From	To
1	Firdos Khan	26.01.2015	09.05.2015
2	Vacant	10.05.2015	31.05.2015
3	Syed Mir Badshah	01.06.2015	28.07.2016
4	Syed Mir Badshah/CCP <ul style="list-style-type: none"> Additional charge SR-100 Loco Project 	29.07.2016	26.02.2017
5	Jahangir Hussain <ul style="list-style-type: none"> Additional charge of PD/Rehabilitation from 29.03.2017 to 28.07.2017. Additional charge of PD/605 HCW Project Phase-II from 28.04.2018 to date of inspection 	27.02.2017	09.06.2019
6	Jahangir Hussain/PD Reh. <ul style="list-style-type: none"> Additional charge SR-100 Loco Project 	10.06.2019	04.10.2019
7	Ghulam Qasim/DSW <ul style="list-style-type: none"> Additional charge SR-100 Loco Project 	05.10.2019	29.12.2019
8	Mehfooz Ali Khan	30.12.2019	Till date of inspection-

**TLA/ Staff of SR-100 Locos Project
(Para 4.1.2)**

S No.	Employee Name	Designation	BPS	Nature of Appointment	Gross Pay (RS)	Period		No. of days (RS)	Pay per day (RS)	Total amount (RS)
						From	To			
1	Muhammad Gulyar Khan	Computer Operator	14	TLA	25000	15-04-2015	03-10-2015	168	833	139,944
2	Faizan Khan	Naib Qasid	1	TLA	10000	15-04-2015	30-06-2016	288	333	95,904
					14000	01-07-2016	30-06-2017	360	467	168,120
					14932	01-07-2017	30-06-2018	360	498	179,280
					17016	01-07-2018	10-06-2019	339	567	192,213
3	Malik Qazafi	Naib Qasid	1	TLA	10000	15-04-2015	30-06-2016	435	333	144,855
					14000	01-07-2016	03-06-2017	332	467	155,044
					14932	01-07-2017	31-03-2018	270	498	134,460

4	Shah Nawaz Alam	FO-II	14	TLA	25000	17-04-2015	24-02-2016	307	833	255,731
5	Waqar Ahmed	Computer Operator	14	TLA	25000	17-04-2015	31-08-2015	134	833	111,622
6	Abdul Sattar Khan	Head Clerk	16	TLA	25000	27-04-2015	08-10-2015	161	833	134,113
		S.Auditor			25000	09-10-2015	30-06-2017	621	833	517,293
					31616	01-07-2017	30-06-2018	360	1054	379,440
					34871	01-07-2018	30-06-2019	360	1162	418,320
7	Tariq Aziz	UDC	9	TLA	13362	02-05-2015	01-09-2015	120	445	53,400
		Computer Operator	14		25000	02-09-2015	30-06-2017	658	833	548,114
					24499	01-07-2017	30-06-2018	360	817	294,120
					27914	01-07-2018	30-06-2019	360	930	334,800
8	Anam Tariq	Steno Typist	16	TLA	30000	01-09-2015	01-03-2016	180	1000	180,000
		FO-II				02-03-2016	25-02-2017	353	1000	353,000

9	Muhammad Ashiq	Sr.Computer Operator	14	TLA	25000	01-10-2015	28-03-2016	177	833	147,441
		Steno Typist	16		25000	29-03-2016	30-06-2017	451	833	375,683
					31616	01-07-2017	30-06-2018	360	1054	379,440
10	Amjad Ali	Head Clerk	16	TLA	25000	17-10-2015	30-06-2017	613	833	510,629
					31616	01-07-2017	30-06-2018	360	1054	379,440
					34871	01-07-2018	30-06-2019	360	1162	418,320
11	Muhammad Hayat	UDC	09	TLA	25000	17-10-2015	30-06-2017	613	833	510,629
					21536	01-07-2017	30-04-2018	300	718	215,400
		FO-I	14		23749	01-05-2018	30-06-2018	60	792	47,520
					27164	01-07-2018	30-06-2019	360	905	325,800

12	Ali Shehbaz	Computer Operator	14	TLA	25000	05-04-2016	30-06-2017	445	833	370,685
					24499	01-07-2017	30-06-2018	360	817	294,120
					30414	01-07-2018	30-06-2019	360	1014	365,040
13	Ahsan Ullah	FO-I	14	TLA	25000	06-04-2017	30-06-2017	84	833	69,972
					31616	01-07-2017	30-06-2018	360	1054	379,440
14	Mazhar Iqbal	FO-II	16	TLA	30000	06-06-2017	30-06-2017	24	1000	24,000
					31616	01-07-2017	01-11-2017	120	1054	126,480
15	Arfan ul Haq	Stenographer	16	TLA	31616	01-08-2017	30-06-2018	330	1054	347,820
16	Syed Touqeer Abbas	FO-II	16	TLA	31616	12-09-2017	04-01-2018	113	1054	119,102
17	Nadeem	Naib Qasid	01	TLA	14932	02-05-2018	30-06-2018	58	498	28,884
					17011	01-07-2018	30-06-2019	360	567	204,120
18	M.Awis Bhati	UDC	11	TLA	23269	01-07-2018	30-06-2019	360	776	279,360

19	M.Hayat Siddiquee	FO-I	14	TLA	27164	01-07-2018	30-06-2019	360	905	325,800
20	Rana Asghar Hussain	Sub Engineer	11	TLA	23269	01-08-2018	30-06-2019	330	776	256,080
21	Muhammad Rasheed	Driver	07	TLA	19926	01-10-2018	30-06-2019	270	664	179,280
22	Usman Munir	FO-I	14	TLA	26287	01-01-2019	30-06-2019	180	876	157,680
23	Bilal Iqbal	Sub Engineer	11	TLA	23269	07-03-2019	30-06-2019	113	776	87,688
									Total	11,715,626
Rs 11.716 million										

**Detail of sanctioned strength and on roll position of project establishment
(Para 4.1.3)**

S. No.	Name of post	No. of post as per PC-I	Actual appointment	Period		Remarks
				From	To	
1	ACOS/ACP (BPS-17)	2	1	01.11.2016	10.11.2018	One post remained vacant
2	JME/AME (BPS-17)	2	1	02.11.2017	till date	One post remained vacant
3	Accounts Officer (BPS-18)	1	1	01.07.2016	31.10.2017	
4	Stenographer (BPS-16)	1	1	01.08.2017	30.06.2018	
5	Foreman Grade-II (BPS-16)	2	1	17.04.2015	24.02.2016	
			1	02.03.2016	25.02.2016	
			1	06.06.2017	01.11.2017	
			1	12.09.2017	04.01.2018	
			1	05.10.2017	14.02.2018	
6	Sr. Computer Operator (BPS-14)	2	1	01.10.2015	28.03.2016	One post remained vacant
7	Senior Auditor (BPS-14)	1	1	09.10.2015	till date	
8	Head Clerk (BPS-11-14)	1	1	27.04.2015	08.10.2015	
			1	17.10.2015	till date	
9	Naib Qasid (BPS-1)	2	1	15.04.2015	till date	
			1	15.04.2015	31.03.2018	
			1	02.05.2018	30.06.2019	
10	Motor Driver (BPS-7)	1	1	01.10.2018	till date	

**Detail of employees appointed against the post not provided in PC-I
(Para 4.1.4)**

S. No.	Name of employee	Designation/BPS	Period		Rate of pay (Rs)
			From	To	
1	Waqar Ahmed	Computer operator (BPS-14)	17.04.2015	31.08.2015	25,000
2	Tariq Aziz	Computer operator (BPS-14)	02.09.2015	30.06.2017	25,000
			01.07.2015	30.06.2018	24,499
			01.07.2018	30.06.2019	27,914
3	Anam Tariq	Steno typist (BPS-16)	01.09.2015	01.03.2016	30,000
4	Muhammad Ashiq	Steno typist (BPS-16)	29.03.2016	30.06.2017	25,000
			01.07.2017	30.06.2018	36,616
5	Muhammad Hayat	FO-I (BPS-14)	01.05.2018	30.06.2018	23,749
			01.07.2018	30.06.2019	27,164
6	Ali Shahbaz	Computer operator (BPS-14)	05.04.2016	30.06.2017	25,000
			01.07.2017	30.06.2018	24,499
			01.07.2018	30.06.2019	30,414
7	Ahsan Ullah	FO-I (BPS-14)	06.04.2017	30.06.2017	25,000
			01.07.2017	30.06.2018	31,616
8	M Hayat Siddiqui	FO-I (BPS-14)	01.07.2018	30.06.2019	27,164
9	Rana Asghar Hussain	Sub-Engineer (BPS-11)	01.08.2018	30.06.2019	23,269
10	Usman Munir	FO-I (BPS-14)	01.01.2019	30.06.2019	26,287
11	Bilal Iqbal	Sub-Engineer (BPS-11)	07.03.2019	30.06.2019	23,269

Annex-5**Extra expenditure due to re-employment of a retired officer as
JME on last pay drawn in disregard to provision of PC-I –
Rs 1.611 million (Para 4.1.5)**

Period		Salary paid (Rs)	Salary as per PC-I (RS)	Extra expenditure (Rs)
From	To			
02.11.2017	30.11.2019	2,691,072	1,080,000	1,611,072

Annex-6**Statement showing the detail of non-utilization of funds and excess expenditure over cash releases (Para 4.2.1)****(Rupees in million)**

	Year	Phasing as per approved PC-I (Rs)	Budget allotment (Rs)	Amount released (Rs)	Actual expenditure (Rs)	Variation
Year wise financial Phasing as per PC-I and actual expenditure.	2014-15	2,000.000	2,000.000	3.000	1.818	1.182 (39.4%) saving
	2015-16	2,967.000	2,883.000	1,292.420	543.987	748.433 (57.9%) saving
	2016-17	0	2,145.000	2,145.000	2,179.614	34.614 (1.61%) excess
	2017-18	0	1,200.000	1,200.000	1,199.567	0.433 (0.04%) saving
	2018-19	0	1,153.123	1,042.636	1,096.094	+53.458 (5.13%) excess
	Total:	4,967.000				5,021.080

Annex-7

Statement showing the detail of Diesel Spares of Locomotives purchased at higher cost due to injudicious evaluation of tenders Rs. 38.50 million (Para 4.3.1)

S. #	Ref. no. of Evidence (Hard Copy)	Tender Enquiry #	Item No. of T/E	Description	Name of the Bidder	Qty	Rate Offered		Last Purchased Rate			% Increase over LPR in PK Rs.(Total)	% Increase over LPR in PK Rs. (Per Annum)	Total Value in PKR Excess Paid
							US\$	Rs	Rate US\$	Rs.	Date			
1	2	3	4	5	6	7	8	9	10	11=(9/8*10)	12	13=(9-11)/11*100	14=Total No. of days/365 days	15=(9-11)*7
1	235	SR-01-03 dated 27.07.2015	6	Bolt main bearing cap	M/s G E USA	36	57.6	5857.92	35.4	3,600.18	13.06.2007	62.71	7.71	81,278.64
2	232	SR-01-04 dated 27.07.2015	4	Cam shaft section R, side	M/s G E USA	24	868.98	88375.27	788.19	80,158.93	27.11.2013	10.25	6.15	197,192.24
	232		5	Cam shaft section L, side	M/s G E USA	24	1,034.26	105,184.24	938.1	95,404.77	11.10.2013	10.25	5.71	234,707.32
3	222	SR-01-06 dated 27.07.2015	4	Hub gear drive	M/s G E USA	6	740.79	75338.34	675	68,647.50	11.10.2013	9.75	5.43	40,145.06
4	217	SR-01-07 dated 27.07.2015	5	Pipe with flange lub oil	M/s G E USA	8	1,090.49	110,902.83	486.14	49,440.44	21.12.2006	124.32	14.45	491,699.15
5	213	SR-01-08 dated 27.07.2015	1	Cap oil fill	M/s G E USA	30	16.55	1683.14	6.88	699.70	GE price list 1996	140.55	7.36	29,503.26
	213		4	Gasket lub oil pump mounting	M/s ITC	15	13.98	1421.77	5	508.50	GE price list 1996	179.60	9.41	13,699.03
	213		5	Kit water pump insulation	M/s ITC	15	21.84	2221.13	13.26	1,348.54	30.01.2004	64.71	5.63	13,088.80
	213		6	Kit lub oil pump	M/s ITC	15	25.01	2542.52	10	1,016.60	03.11.1992	150.10	6.60	22,888.78

6	208	SR-01-09 dated 27.07.2015	4	Body with thread inserts	M/s G E USA	128	252.23	25651.79	230.3	23,421.51	11.10.2013	9.52	5.31	285,475.96
7	204	SR-01-10 dated 27.07.2015	2	Shaft	M/s G E USA	128	75.81	7709.87	30	3,051.00	GE price list 1996	152.70	8.00	596,335.71
	205		3	Bearing	M/s G E USA	240	16.26	1653.64	9.46	962.08	03.10.2001	71.88	5.20	165,974.20
	204		5	Shaft	M/s G E USA	128	145.75	14822.77	47.5	4,830.75	03.01.1992	206.84	8.77	1,278,978.77
8	198	SR-01-17 dated 28.07.2015	5	Tube manifold	M/s G E USA	126	35	3559.5	19.3	1,962.81	31.3.2003	81.35	6.59	201,182.94
9	191	SR-01-14 dated 28.07.2015	2	Connection with seal	M/s G E USA	100	180.64	18371.09	78	7,932.60	GE price list 1996	131.59	6.89	1,043,848.91
10	175	SR-01-20 dated 28.07.2015	3	Line with fitting	M/s G E USA	15	62.12	6317.6	56.85	5,781.64	27.11.2013	9.27	5.56	8,039.38
	170		5	Hose with fitting	M/s G E USA	15	38.39	3904.26	27.84	2,831.33	18.03.2009	37.90	5.95	16,094.01
11	144	SR-01-26 dated 29.07.15	1	Ring Seal retaining	M/s G E USA	384	6.62	673.25	2.82	286.79	GE price list 1996	134.75	7.06	148,399.76
12	140	SR-01-27 dated 29.07.2015	3	Rocker with bushing	M/s G E USA	72	338	34374.6	176	17,899.20	03.10.2001	92.05	6.66	1,186,228.80
13	117	SR-01-30 dated 29.07.2015	3	Wrench piston pin bolt	M/s G E USA	4	522.98	53187.07	113	11,492.10	GE price list 1977	362.81	9.52	166,779.88
14	297	SR-01-42 dated 03.08.2015	2	Turbine inlet casing	M/s Globe turbo charger, USA	15	10,499.98	1,067,847.96	9,849.29	1,001,672.79	30.06.2015	6.61	6.61	992,627.59
15	306	SR-01-43 dated 03.08.2015	2	Lube oil pump	M/s Roper Pump Co. USA	5	7,125.00	739,104.75	3,404.25	353,136.47	14.12.2005	109.30	11.33	1,929,841.40
16	104	SR-01-60 dated 04.08.2015	1	Drain cock	M/s G E USA	15	151.33	15405.39	70.07	7,133.12	GE price list 1996	115.97	6.07	124,083.99
	104		2	Cut off cock	M/s G E USA	15	190.54	19396.97	100	10,180.00	20.10.2001	90.54	6.56	138,254.57
17	88	SR-01-85 dated 10.08.2015	5	Coupling victalic	M/s G E USA	15	69.19	7036.62	40.01	4,069.02	29.04.2006	72.93	7.85	44,514.07

18	68	SR-01-93 dated 11.08.2015	2	Circuit breaker	M/s Hashmi Electronics	15	25	2542.5	23	2,339.10	12.05.2014	8.70	6.95	3,051.00
19	309	SR-II-02 dated 15.09.2015	7	Stud main bearing	M/s G E USA	84	208.21	21674.66	141.47	14,727.03	13.06.2006	47.18	5.09	583,601.23
20	308	SR-II-08 dated 15.09.2015	6	Pipe with flange lub oil	M/s G E USA	12	754.16	78508.056	486.14	50,607.17	21.12.2006	55.13	6.31	334,810.58
21	63	SR-II-18 dated 16.09.2015	2	pipe with flanges oil drain	M/s G E USA	12	434.46	45227.286	280.06	29,154.25	16.11.2006	55.13	6.24	192,876.48
22	292	SR-II-62 dated 20.10.2015	1	Turbo Charger	M/s Globe Turbo Charger, USA	5	50,098.07	5,225,228.70	47,258.59	4,929,070.94	30.06.2015	6.01	6.01	1,480,788.82
23	325	SR-II-136 dated 09.10.2015	5	Panel	M/s G E USA	8	5,347.36	557,729.65	4,619.25	481,787.78	05.11.2012	15.76	5.38	607,534.98
24	58	SR-II-137 dated 09.10.2015	1	Quick disconnect	M/s G E USA	60	8.95	933.485	5.17	539.23	29.09.2001	73.11	5.21	23,655.24
25	295	SR-VI-24 dated 04.05.2017	2	Turbo Supper Charger	M/s Tradimpex Lahore	5	48,463.00	5,069,229.80	*1988.92	208,041.03	03.03.1980	2,435.69	65.53	24,305,943.84
26	19	SR-VII-43 dated 13.07.2017	1	Holder assy brush	M/s EMD USA	68	68.74	7258.944	38	4,012.80	27.04.2007	80.89	7.91	220,737.79
	19		2	Holder assy brush	M/s EMD USA	68	81.88	8646.528	26.69	2,818.46	GM price list 1993	206.78	8.60	396,308.35
27	13	SR-VII-46 dated 13.07.2017	1	Plunger	M/s EMD USA	14	242.75	25634.4	48	5,068.80	GM price list 1993	405.73	16.87	287,918.40
28	10	SR-VII-48 dated 13.07.2017	4	Reverse complete	M/s EMD USA	18	1,577.00	166,531.20	1,258.00	132,844.80	24.09.2016	25.36	25.36	606,355.20
Total														38,494,444.13
* Last quoted rate of US \$ 48487.15 in TE No. SR-IV-100/I dated 14.05.2016 was mentioned as LPR which was not correct because the last quoted rate in the said TE was not approved by the competent authority, hence actual LPR is US \$ 1988.92 in PO No. PID/8/05-80 dated 03.03.1980 by M/s GE, USA.														

**Statement showing detail of splitting of purchases
(Para 4.3.2)**

S.No.	Purchase order No. and date	Description	Quantity received	Book balance as on 05.11.2019	Quantity issued to project locos	Quantity issued to other than project loco	Unit rate (Rs)	Exchange rate (Rs)	Unit rate (Pak Rs)	Total purchases (Rs)
1	i) 19/0002/ SR 100/1-15 dt. 04.12.2015 (FOB) ii) 19/0010/SR 100/2-16 dt. 14.02.2016 (FOB) iii) 19/0067/SR 100/4-16 dt. 10.06.2016 (FOB)	Wheel disk 43"	516	0	212	304	968.00	104.40	101,059.20	52,146,547.20

2	i) 19/0022/SR 100/3-16 dt. 24.02.2016 (FOB) ii) 19/0048/SR 100/2-16 dt. 09.05.2016 (FOB) iii) 19/0012/SR 100/2-18 dt. 14.02.2018 (FOB)	Wheel disk 40"	856	13	316	527	819.00	104.20	85,339.80	73,050,868.80
3	19/0087/SR- 100/4-2016 dt:27.08.16 (FOB) 19/0108/SR- 100/3-2016 Dt:21.11.16	Washer Rocker Liner (750+512=1262)	1262	0	1134	128	0.07	105.22	7.36	9,288.32
4	19/0087/SR- 100/4-2016 Dt:27.08.16 (FOB) 19/0108/SR- 100/3-2016 Dt:21.11.16 (FOB)	Bolt (Gen:Fly wheel & extension shaft)	26	0	26	0	1.49	105.51	157.20	4,087.20

5	19/0023/SR-100/5-2017 dt:06.05.17 (FOR) 19/0063/SR-100/5-2017 dt:22.12.17	Safety Valve Air Comp (12+11=23)	23	0	18	5	7,950.00	PKR	7,950.00	182,850.00
6	19/0123/SR-100/2-2016 dt:06.01.17 (FOB) 19/0111/SR-100/2-2016 Dt:22.11.16	Washer	2348	1348	1000	0	0.02	104.89	2.09	4,907.32
Total									125,398,548.84	

**Statement showing detail of local purchase cases
(Para 4.3.3)**

S. No.	Case No.	Pay Order No.	Date	Particular of Item	Amount (Rs)
1	LP/04/SR-100	862215	28.09.2015	Lap Top Computer = 02 Nos.	83,070
2	LP/4/12/SR-100			Fax Machine	93,015
3	LP/05/SR-100	862219	13.10.2015	LED & HP Laser = 02 Nos. & Computer = 01 No.	93,600
4	LP/06/SR-100	862221	19.10.2015	Stationery	29,790
5	LP/5/10/SR-100	862003	02.03.2016	Computer & Printer	96,200
6	LP/07/SR-100	862007	16.03.2016	Water Dispenser = 03 Nos.	36,000
7	LP/08/SR-100	862008	16.04.2016	Repair of Road Truck	89,100
8	LP/09/SR-100			Stationery for ACOS/D	20,405
9	LP/11/SR-100	862009	18.05.2016	Air-Conditioner	72,540
10	LP/13/SR-100	862010	18.05.2016	Stationery Items for ACOS	28,817
11	LP/15/SR-100	862013	08.05.2016	Stationery Items for FO/Store	10,600
12	LP/22/SR-100	862258	05.10.2016	Bronze Bar	93,366
13	LP/31/SR-100	862268	09.02.2017	Electrode Material (Stainless Steel)	85,200
14	LP/32/SR-100	862264	09.02.2017	RTV Silicone Tube	66,900
15	LP/33/SR-100	862269	09.02.2017	Cartridge for Photo Stat	18,761
16	LP/35/SR-100	862271	09.02.2017	Deep Freezer = 01 No.	49,900
17	LP/21/SR-100	862275	15.03.2017	Nut & Bolts	85,500
18	LP/40/SR-100	862272	15.03.2017	Stationery	89,000
19	LP/42/SR-100	862277	28.03.2017	Office Item Toner	70,000

20	LP/03/SR-100	862278	04.04.2017	Steel Almirah = 05 Nos.	86,000
21	LP/04/SR-100	862279	04.04.2017	Office Furniture	70,000
22	LP/05/SR-100	862280	04.04.2017	Room Cooler = 03 Nos.	39,000
23	LP/41/SR-100	862284	03.06.2017	Stationery for PD Office	99,850
24	LP/25/SR-100	862290	22.06.2017	Loctite & Mate Magic	97,595
25	LP/28/SR-100	862291	22.06.2017	Enameled Copper Wire	99,400
26	LP/29/SR-100	862292	22.06.2017	Nomax Paper	94,185
27	LP/30/SR-100	862293	22.06.2017	Lugs Terminal 2 Way	83,100
28	LP/31/SR-100	862295	22.06.2017	Lugs Terminal 1 Way	70,500
29	LP/33/SR-100	862289	22.06.2017	Water Dispenser = 02 Nos.	32,400
30	LP/26/SR-100	862014	11.07.2017	Lugs Terminal 30 Angle	88,800
31	LP/53/SR-100	862296	14.07.2017	Cable Cleat	94,770
32	LP/57/SR-100	862297	31.07.2017	Lugs Terminal 1 Way 30 Angle	89,700
33	LP/62/SR-100	862298	03.08.2017	Spring Washer	49,140
34	LP/63/SR-100	862299	03.08.2017	Seal Cylinder Head M-30	60,320
35	LP/65/SR-100	862300	03.08.2017	Seal Cylinder Head 1.3-8	38,025
36	LP/37/SR-100	862016	07.09.2017	Brass Tee Brass Elbow	80,262
37	LP/60/SR-100	862017	07.09.2017	Brass Nut Brass Elbow	77,922
38	LP/64/SR-100	862018	07.09.2017	Bellow Elbow	67,500
39	LP/66/SR-100	862019	07.09.2017	Oil Seal Lip Type	28,000
40	LP/68/SR-100	862020	07.09.2017	Stop Valve 3/4 & 1-3/4	95,642
41	LP/69/SR-100	862021	07.09.2017	Valve Check J1 & Diaphragm Distributer Valve	97,500
42	LP/70/SR-100	862022	07.09.2017	Valve Check & Packing Flow Indicator	81,250

43	LP/71/SR-100	862023	07.09.2017	Check Valve J1 Relay & Check Valve BP	90,000
44	LP/72/SR-100	862024	07.09.2017	LP of Valve Unit Exhaust Valve A- 9 & Seat Valve	79,080
45	LP/73/SR-100	862025	07.09.2017	Dog 26 CB Break & Valve Unit Valve Latok	79,000
46	LP/74/SR-100	862026	07.09.2017	Check Valve D- Unit VL Check RH 4 Relay	95,000
47	LP/67/SR-100	862037	03.10.2017	Hose Pipe 1x½ ID	90,000
48	LP/75/SR-100	862038	03.10.2017	Diaphragm Valve M sending 7 BP Insulator	94,770
49	LP/76/SR-100	862039	03.10.2017	LED Light for Buffer	92,799
50	LP/77/SR-100	862027	03.10.2017	LED Light for No. Plate	92,799
51	LP/79/SR-100	862035	03.10.2017	Hexagon Head Screw	60,606
52	LP/81/SR-100	862036	03.10.2017	Pipe Seamless ¾"	59,473
53	LP/84/SR-100	862040	03.10.2017	Diaphragm J1 Valve	96,525
54	LP/85/SR-100	862041	03.10.2017	Diaphragm Valve	80,437
55	LP/86/SR-100	862042	03.10.2017	Diaphragm Distributer Valve	90,675
56	LP/87/SR-100	862043	03.10.2017	Diaphragm Valve Large	91,260
57	LP/88/SR-100	862044	03.10.2017	Diaphragm Valve Small	93,600
58	LP/90/SR-100	862045	03.10.2017	Plastic Tape	97,000
59	LP/91/SR-100	862046	03.10.2017	Cable Tie etc.	89,250
60	LP/92/SR-100	862047	03.10.2017	Flexible Pipe etc.	94,500
61	LP/93/SR-100	862048	03.10.2017	Acrylic Sheet 4x6x5 mm	91,494
62	LP/96/SR-100	862052	10.10.2017	V Belt & V Bolt	96,100
63	LP/100/SR-100	862051	23.10.2017	L. Key Bolt with Lock Nut	94,243
64	LP/82/SR-100	862050	24.11.2017	Lock Washer	58,537

65	LP/94/SR-100	862049	24.11.2017	Angular Contact Ball Bearing	97,720
66	LP/99/SR-100	862053	24.11.2017	Hose with Fitting 10" L	49,725
67	LP/101/SR-100	862055	24.11.2017	Rubber Hose Packing	97,200
68	LP/103/SR-100	862054	24.11.2017	Hardware Items	95,238
69	LP/83/SR-100	862061	25.11.2017	Wire Rope & U Lamp	74,050
70	LP/95/SR-100	862062	26.11.2017	Hose W/Vent Pipe Large & Small	95,355
71	LP/106/SR-100	862065	15.12.2017	Mica Tape 1"	94,770
72	LP/107/SR-100	862067	15.12.2017	Cloth Fabric	96,250
73	LP/108/SR-100	862068	15.12.2017	Heat Shrink 50x16 mm	98,788
74	LP/109/SR-100	862069	15.12.2017	Heat Shrink 35x12 mm	99,200
75	LP/111/SR-100	862070	15.12.2017	Glass Tape	94,770
76	LP/112/SR-100	862066	15.12.2017	HT Tape 3/4x30	95,472
77	LP/89/SR-100	862080	09.01.2018	Air Brake House Brake Cyl. House	84,240
78	LP/104/SR-100	862078	09.01.2018	Rubber Bushing for HT 395 Tape	80,730
79	LP/105/SR-100	862077	09.01.2018	Grommet D/77 & 29	95,940
80	LP/119/SR-100	862075	09.01.2018	Copper Pipe Inner Dia. ¾ Outer 2"	98,982
81	LP/113/SR-100	Payment Made through Check by A/O Project.		Lug Terminal 1 Way	98,000
82	LP/114/SR-100			Shield Assy:	98,800
83	LP/115/SR-100			Lug Terminal 1 Way (60)	84,000
84	LP/116/SR-100			Lug Terminal 1 Way (90)	98,000
85	LP/120/SR-100			Lug Terminal 1 Way (90 & 25)	98,000
86	LP/123/SR-100	862092	28.03.2018	Enameled Copper Wire	93,015
87	LP/124/SR-100	862093	28.03.2018	Cable Clant Rubber	87,750
88	LP/125/SR-100	862094	28.03.2018	Chosum Welding Electrode	98,280

89	LP/126/SR-100	862087	28.03.2018	Welding & Cutting Torch	97,110
90	LP/127/SR-100	862088	28.03.2018	Valve Flow Indicator	87,750
91	LP/128/SR-100	862089	28.03.2018	Valve Head Knorr-K-Ring	87,750
92	LP/129/SR-100	862090	28.03.2018	Cup Diaphragm Knorr-K-Ring	88,920
93	LP/130/SR-100	862091	28.03.2018	Knorr-K- Ring BC-I & II	90,675
94	LP/131/SR-100	18903	22.08.2018	Air Condition for CDL	99,950
95	LP/121/SR-100	18905	28.08.2018	Roller Bearing for Aux Generator & Exciter	88,452
96	LP/122/SR-100	18904	28.08.2018	Ball Bearing for Clutch Gear Unit	70,551
97	LP/01/ADP	862056	24.11.2017	Registration Fee Official Vehicle XLI 1300CC	38,090
98	LP/02/ADP	862057	24.11.2017	Complete Toner Photo State Machine	93,805
99	LP/3/Misc./ADP	862058	24.11.2017	Complete Heat Roller Upper	11,425
100	LP/04/Loose	862059	25.11.2017	Tracker for XLI Vehicle	240,001
101	LP/05/EVO	862071	19.12.2017	EVO Fee	18,000
102	LP/06/PD Office	862074	04.01.2018	Stationery Items	75,825
103	LP/07/SR-100	862081	19.02.2018	Tonner LP-Lesser Jet	23,517
104	LP/08/SR-100	862085	03.03.2018	Water Dispenser	13,000
105	LP/09/SR-100	862095	05.04.2018	Water Tank with Comp Filling	68,596
106	LP/10/SR-100	862096	11.04.2018	Tyre	24,500
107	LP/11/SR-100	862098	13.04.2018	Curtin Window	15,665
108	LP/12/SR-100	862099	14.05.2018	Alloy Rim	24,800
109	LP/13/SR-100	862100	23.05.2018	Double File Cover	23,400
110	LP/14/SR-100	18906	29.08.2018	Clutch Plate etc.	24,800
111	LP/15/SR-100	18913	08.10.2018	Repair of Photo State Toshiba	11,232
Total Rs					7,630,159

**Detail of Procurement of various material for project of "Special Repair of 100 DE Locomotives" at negotiated rates
(Para 4.3.4)**

S No.	Purchase Order No. and date	Description of Material	Name of Firm	Original Rate Rs	Discounted Rate Rs	Qty	Total Price (Rs)
1	2	3	4	7	8	9	10=8x9
1	19/0072/SR-100/1-2017 dt. 24.11.2017	Spare for GMU/GMUC-15	M/s S & K Industries, Lahore	2,223.00	1,600.00	155	248,000.00
2	19/0009/SR-100/5-2017 dt. 24.05.2019	Axle Generator Power Supply for AGE-30 Locos	M/s AKSA Solution, Islamabad	405,000.00	356,000.00	10	3,560,000.00
3	19/0026/SR-100/1-2017 dt. 31.03.2017	Contractor	M/s GE USA through M/s Albario, Lahore	161,328.145	98m917.61	10	989,176.10
4	-do-	Switch Air Comp: Governor	-do-	77,913.11	74,250.385	15	1,113,755.78
5	-do-	Head Light Switch	-do-	40,076.795	35,843.50	15	537,652.50
6	19/0021/SR-153/3-13 06.11.2019	Wheel Disc 43"	M/s Tradimpex, Lahore	114,153.43	98,542.40	180	17,737,632.00
7	19/0036/SR-100/1-2016 dt. 12.04.2016	Water inlet right side	M/s GE USA through M/s Albario, Lahore	49,069.617	412,64.199	30	1,237,925.97
8	-do-	Header end section water inlet left side	-do-	48,840.597	41,077.86	30	1,232,335.80
9	19/0007/SR-100/2-2016 dt. 28.01.2016	Lube Oil Pump	M/s ROPER PUMP CO. USA through M/s Hashmi Electronic, Lahore	778,005.00	739,104.75	5	3,695,523.75

10	19/0026/SR-100/5-2016 dt. 4/2016	Radiator core	M/s Coil Industry, Lahore	838,950.00	826,365.00	60	49,581,900.00
11	19/0012/SR-100/5-2017 03.03.2017	PCB (FC-5)	M/s AKSA Solution, Islamabad	240,000.00	220,000.00	5	1,100,000.00
12	19/0013/SR-100/2-2016 dt. 17.02.2016	Turbine inlet casing	M/s Globe Turbo charger USA through M/s Tradimpex, Lahore	1,093,272.97	1,067,847.96	15	16,017,719.40
13	19/0001/SR-100/1-2015 dt. 30.09.2015	Crank Shaft 16 cylinder	M/s GE USA through M/s Albario, Lahore	7,326,013.40	664,4910.00	15	99,673,650.00
14	19/0027/01-0/4-14 dt. 09.05.2014	Kit main bearing	M/s Power Enterprises, Lahore	302,427.32	286,563.14	15	4,298,447.10
15	-do-	Kit Con Rod Bearing Shell	-do	193,685.61	182,726.42	15	2,740,896.30
16	19/0077/SR-100/1-2017 dt. 11/2017	Thrust Washer H/P	M/s AGL Canada through M/s Mahamad, Lahore	30,624.00	30,011.00	21	630,231.00
17	-do-	Seal Assembly (Impeller)	-do-	12,144.00	11,658.24	10	116,582.40
18	19/0009/Sr-100/1-20017dt. 13.02.2017	Commutator Seasoned	M/s W.O.D Industrial de Comutadores Ltd through M/s International Traders, Lahore	384,192.00	352,454.40	25	8,811,360.00
19	19/0044/SR-100/5-2017 dt. 06.10.2017	Connector	M/s RD Associated, Lahore	12,000.00	11,100.00	540	5,994,000.00

20	19/0014/SR-100/2-2016 dt. 18.03.2016	Piston Steel Crown	M/s CSRQISHUYAN Institute CO. Ltd China M/s Tradimpex, Lahore	71,993.43	65,220.21	240	15,652,850.40
21	-do-	Kit Con Rod Bearing Shell	M/s Miba, Ausria through M/s Power Enterprises, Lahore	198,256.368	187,038.552	28	5,237,079.46
22	-do-	Piston Ring kit	M/s CSRQISHUYAN Institute CO. Ltd China M/s Tradimpex, Lahore	8,119.80	7,525.389	360	2,709,140.04
23	-do-	Repair Kit U/Assy	M/s Al-Imran Factories, Co Saudi Arabia through M/s SS International, Lahore	7,505.61	7,237.55	360	2,605,518.00
24	T.E-SR-V-58 dated 08.09.2016	Shaft	M/s GE USA through M/s Albario, Lahore	30,977.10	15,201.25	336	5,105,780
25	T.E-SR-01-06 dated 27.7.15	Gear Drive	M/s GE USA through M/s Albario, Lahore	265,908.89	143,482.43	03	430447.28
26	T.E-SR-01-07 dated 27.7.15	Bearing crankshaft cover	M/s GE USA through M/s Albario, Lahore	183,265.43	177,975.00	08	1,423,800.00
27	T.E-SR-01-09 dated 27.7.15	Lever	M/s GE USA through M/s Albario, Lahore	52,342.96	27,134.58	04	1,736,613.12
28	T.E-SR-01-10 dated 27.7.15	Shaft	M/s GE USA through M/s Albario, Lahore	30,204.90	14,822.77	128	1,897,315.20
29	T.E-SR-01-10 dated 27.7.15	Shaft	M/s GE USA through M/s Albario, Lahore	8,699.42	7,709.87	128	986,864.26
30	T.E-SR-01-14 dated 27.7.15	Tube manifold	M/s GE USA through M/s Albario, Lahore	5,266.03	3,559.50	126	448,497.00
31	T.E-SR-01-14 dated 27.7.15	Ring	M/s GE USA through M/s Albario, Lahore	2,963.54	2,034.00	324	659,016.00

32	T.E-SR-01-16 dated 27.7.15	Water discharge header	M/s GE USA through M/s Albario, Lahore	422,026.52	371,914.87	10	3,719,148.66
33	T.E-SR-01-16 dated 27.7.15	Header section water inlet	M/s GE USA through M/s Albario, Lahore	67,334.55	39,968.10	90	3,597,129.00
34	T.E-SR-01-16 dated 27.7.15	Header end section	M/s GE USA through M/s Albario, Lahore	67,485.07	40,130.82	15	601,962.30
35	T.E-SR-01-16 dated 27.7.15	Header end section	M/s GE USA through M/s Albario, Lahore	69,187.53	40,312.86	15	604,692.95
36	T.E-SR-01-24 dated 29.7.15	Con rod master	M/s GE USA through M/s Albario, Lahore	460,243.35	438,327.00	120	52,599,240.00
37	T.E-SR-01-60 dated 4.8.15	Drain cock	M/s GE USA through M/s Albario, Lahore	19,241.22	15,405.39	15	231,080.91
38	-do-	Cut off cock	M/s GE USA through M/s Albario, Lahore	25,542.64	19,396.97	15	290,954.58
39	-do-	Relief volve	M/s GE USA through M/s Albario, Lahore	29,845.72	21,710.87	15	325,663.29
40	-do-	Relief volve	M/s GE USA through M/s Albario, Lahore	75,891.00	72,278.00	15	1,084,170.00
41	T.E-SR-01-67 dated 5.8.15	Washer	M/s MS Engineer Lahore	46.75	45.75	720	33,660.00
42	-d0-	Locking nut	M/s MS Engineer Lahore	85.50	75.75	1140	86,355.00
43	T.E-SR-01-68 dated 5.8.15	Wheel disc	M/s Trade Impex Lahore	114,153.43	98,542.40	180	17,737,632.00
44	T.E-SR-01-87 dated 10.8.15	Load meter	M/s GE USA through M/s Albario, Lahore	92,704.64	86,000.57	7	602,004.00
45	T.E-SR-01-90 dated 10.8.15	BKT breaking switch	M/s GE USA through M/s Albario, Lahore	2,160,271.74	2,140,785.00	5	10,703,925.00
Total							350,427,326.55
Rs 350.427 million							

**Statement showing the detail of total purchases
(Para-4.3.5 & 4.4.3)**

S. No.	Description	Amount (Rs in million)	Percentage
1	Total purchases	3,052.130	100%
2	Book Balance in November 2019	277.328	9%
3	Material issued to project locos	1,696.593	56%
4	Material issued to other than project locos	1,078.208	35%

Annex-12

**Detail of unsettled warranty claims Rs 20.141 million
(Para 4.3.7)**

S.#	Folder No.	Purchase Order No. & Date	Description	Firm's Name	Qty. claimed	Reason of claim	Total amount of claim (Rs)
1	18	19/0076/SR-100/3-2016 dated 25.06.2016	Oil Damper (Vertical) = 92 Nos.	M/s Mahamad Intl.	92	Wrong	Rs 2,260,808 (Euro 20,240.00)
2			Oil Damper (Horizontal) = 92 Nos.		92	Wrong	Rs 2,466,336 (Euro 22,080.00)
3	22	19/0011/SR-100/2-2016 dated 18.02.2016 = 15 Nos.	Spherical Roller Bearing	M/s Shayan	15	Wrong	Rs 192,269
4	36	19/0055/SR-100/2-2016 dated 21.05.2016 = 14 Nos.	Chain Pump	M/s Hashmi Engineers	14	Failed	Rs 48,187 (US\$ 462.00)
5	37	19/0071/SR-100/2-2016 dated 23.06.2016 = 276 Nos.	Piston Steel Cap	M/s Tradimpex	59	Failed	Rs 3,016,505 (US\$ 6,318.00)

6	44	19/0070/SR-100/4-2016 dated 23.06.2016 = 4 Nos.	Cylinder Liner	M/s Mahamad Intl.	12	Failed	Rs 643,824 (US\$ 2,040.00)
7	48	19/0031/SR-100/4-2017 27.04.2017 = 456 Nos.	Gasket Sump Cover	Global Trading Corp.	456	Wrong	Rs 313,298 (US\$ 2,991.36)
8	56	19/0035/SR-100/4-2017 Dated 18.05.2017 = 120 Nos	Coil Spring Inner	M.Q Sons, Lahore	120	Wrong	Rs 1,371,334 (Euro 11,760.00)
9		19/0035/SR-100/4-2017 Dated 18.05.2017 = 240 Nos	Coil Spring outer	M.Q Sons, Lahore	240	Wrong	Rs 3,974,069 (Euro 34,080.00)
10	68	19/0058/SR-100/2-2017 Dated 18.10.2017	Snap on Torque handle o to 600 Ft.Lbs	M/s International Equipment	04	Defective	Rs 429,704 (US \$: 4,112.00)
11	72	19/0008/SR-100/2-2017 Dated 13.02.2017 = 276 Nos	Main Connecting Rod Assy:	M/s M.Q Sons	06	Defective	Rs 1,815,840 (US \$ 17,460.00)
12	77	19/0047/SR-100/3-2017 Dated 10.08.2017	O Ring	M/s GTC, Lahore	50	Wrong	Rs 106,378 (US\$ 1,017.00)

13	84	19/0044/SR-100/2- 2017 Dated 14.06.2017	Gasket Kit Cylinder Head Cover	M/s EMD, USA	14	Short	Rs 181,945 (US\$ 1,741.60)
14	86	19/0044/SR-100/2- 2017 Dated 14.06.2017	Rewinding Kit	M/s EMD, USA	06	Short	Rs 3,321,374 (US\$ 31,572)
Total Rs							20,140,871

**Statement showing detail of tender items filed due to expiry of validity period of the bids
(Para-4.3.11)**

Sr #	Tender Enquiry # & Date	Item # of T/E	Description	Qty	Rate (Rs)	Name of lowest Bidder / (Single Bid)	Amount (Rs)
1	SR-01-05	2	Stud 1/2-13 Thds. 2-3/8" long	640	85.50	MS Engineer	54,720.00
		3	Bolt SOC-Hex Hd, 1/2-13, 2-3/4" long	80	47.80	International Trading Corporation	3,824.00
2	SR-01-06	1	Damper Vibration	10	281,743.58	International Trading Corporation (S)	2,817,435.00
		2	Bolt Hex HD 5/8-3-1/4" long	80	90.51	International Trading Corporation	7,241.04
3	SR-01-09	1	Spring Fuel rack	240	1,081.07	GE Transportation (Albario)	259,457.04
		2	Fulcrum	240	3,369.32	International Trading Corporation	808,637.04
		3	Bushing	240	131.19	GE Transportation (Albario)	31,486.32
		5	Fitting lubricant	720	140.35	GE Transportation (Albario)	101,049.12
		7	Bushing 0.627" inner bronze	720	90.51	International Trading Corporation	65,169.36
4	SR-01-10	1	Bearing	240	4,539.89	GE Transportation (Albario)	1,089,573.12
5	SR-01-17	3	Gasket Exhaust manigoldto Cylinder	240	314.25	SS-International	75,420.00
		6	Shaft Fuel control rt side	5	44,394.00	GE Transportation (Albario)	221,970.42
6	SR-01-23	5	Main bearing hydraulic stretch machine	1	34,054.25	GE Transportation (Albario)	136,216.98

		6	Wrench torque 3/8" -200 ft.lbs	2	39,997.59	International Trading Corporation	79,995.19
7	SR-01-28	1	Rocker	240	5,914.87	GE Transportation (Albario)	1,419,568.80
		3	Tappet rod with pin 5/8-18" thread	192	2,856.75	International Trading Corporation	548,496.00
		4	Umbrella fuel pump tappet rod	192	1,378.04	International Trading Corporation	264,583.68
		6	cross head with bearing roller and pin fuel	48	18,661.95	International Trading Corporation	895,773.60
		7	corss head with bearing roller an pins	96	19,034.17	International Trading Corporation	1,827,280.32
8	SR-01-30	2	Wrench art rod pin bolt 12 pt 1-1/16", 3/4" female	4	50,535.75	GE Transportation (Albario)	202,143.00
9	SR-01-37	2	Fuel fitting (Banjo)	100	10,831.05	International Trading Corporation	1,083,105.00
		3	Oil Ring 2.750" OD	240	6.89	International Trading Corporation	1,653.11
		4	O. Ring 1.369"OD	240	93.82	Global Trading Co	22,516.80
		6	Screw Calebration	240	34.58	International Trading Corporation	8,298.72
10	SR-01-90	2	Axle Generator power supply	10	174,548.73	GE Transportation (Albario)	1,745,487.27
		5	Contactore	10	96,267.19	GE Transportation (Albario)	962,671.90
		6	Switch Air Comp-Governor	15	76,376.70	GE Transportation (Albario) (S)	1,145,650.50
TOTAL							15,879,423.33
Rs 15.879 million							

Annex-14

Statement showing detail of tenders valuing Rs 379.389 million in connection with special repair of 100-DE Locomotives project approved by the AGM/M (Para 4.3.14)

S. No.	Tender Inquiry No.	No. of items	Total value (Rs)
1	SR-01-03(1) 27.07.2015	1	4,298,447
2	SR-01-4(4-5) 27.07.2015	2	4,645,427
3	SR-01-05(4) 27.07.2015	1	3,075,408
4	SR-01-09(4)(6) 27.07.2015	2	5,020,042
5	SR-01-16(3)(4)(5)(6) 27.07.2015	4	8,522,931
6	SR-01-24(3) 29.07.2015	1	15,652,850
7	SR-01-24(2)(4)(6) 29.07.2015	3	51,003,931
8	SR-01-25(6) 29.07.2015	1	2,740,896
9	SR-01-27(3)(5) 29.07.2015	2	4,010,722
10	SR-01-37(i)(v) 29.07.2015	2	6,262,497
11	SR-01-44(1) 03.08.2015	1	2,400,069
12	SR-01-66(1,2,3,4) 05.08.2015	4	18,467,892
13	SR-01-68(3) 05.08.2015	1	17,737,632
14	SR-01-88(1,3,4) 10.08.2015	3	6,327,681
15	SR-01-90(1,3,4) 10.08.2015	3	16,568,419
16	SR-01-62(i) 05.08.2015	1	3,699,594
17	SR-II-75(1,2,4) 28.09.2015	3	46,000,242
18	SR-II-143(4,6) 09.10.2015	2	4,950,000

19	SR-II-145(2,3) 08.10.2015	2	13,991,324
20	SR-III-73(5) 02.12.2015	1	23,779,828
21	SR-IV-192(1) 18.04.2016	1	5,209,273
22	SR-V-173(3) 04.10.2016	1	58,568,400
23	SR-V-210(5) 08.10.2016	1	4,328,875
24	SR-VI-100(4) 15.05.2017	1	3,150,659
25	SR-VII-23(1,6) 11.07.2017	2	3,464,546
26	SR-VII-27(3,4) 11.07.2017	2	4,433,172
27	SR-VII-48(4,6) 13.07.2017	2	6,500,280
28	SR-IX-25(1) 25.10.2017	1	34,578,180
Total Rs			379,389,217

**Detail of locomotives received back in Shop for repeated nominated repair
(Para 4.4.2)**

S. No.	Loco No.	Base Shed	Class of repair	Received in Shop	Date turned out	No. of days held up	Expected earning per day (Rs in million)	Total earning (Rs. in million)
1	8319	RWP	C-I (Spl. Repair)	07.09.2014	04.11.2016	--	0	0.0000
			NR	13.04.2017	13.12.2017	244	0.0396	9.6624
2	8316	RWP	C-I (Spl. Repair)	26.07.2016	01.12.2016	--	0	0.0000
			NR	12.02.2018	19.02.2018	7	0.0396	0.2772
			NR	25.10.2018	30.10.2018	5	0.0396	0.1980
3	8321	RWP	C-I (Spl. Repair)	12.01.2017	31.01.2017	--	0	0.0000
			NR	22.03.2017	06.03.2018	349	0.0396	13.8204
4	8311	RWP	C-I (Spl. Repair)	07.02.2017	15.03.2017	--	0	0.0000
			NR	17.04.2017	18.04.2017	1	0.0396	0.0396
			NR	28.12.2017	29.12.2017	1	0.0396	0.0396
			NR	03.05.2018	09.05.2018	6	0.0396	0.2376
			NR	10.11.2018	24.11.2018	14	0.0396	0.5544
			NR	25.01.2019	02.03.2019	36	0.0396	1.4256
			NR	07.01.2020	Still in shop upto 20.01.2020	13	0.0396	0.5148
5	8312	RWP	C-I (Spl. Repair)	26.04.2017	13.05.2017	--	0	0.0000
			NR	04.11.2017	08.11.2017	4	0.0396	0.1584
			NR	20.12.2017	26.12.2017	6	0.0396	0.2376
			NR	28.05.2018	04.06.2018	7	0.0396	0.2772

6	8305	RWP	C-I (Spl. Repair)	10.10.2011	27.05.2017	--	0	0.0000
7	8305	RWP	NR	10.03.2018	13.03.2018	3	0.0396	0.1188
			NR	11.09.2018	22.09.2018	11	0.0396	0.4356
			NR	22.07.2019	29.07.2019	7	0.0396	0.2772
8	8301	RWP	C-I (Spl. Repair)	18.12.2012	03.07.2017	--	0	0.0000
			NR	09.05.2018	12.05.2018	3	0.0396	0.1188
			NR	19.07.2018	26.07.2018	7	0.0396	0.2772
			NR	18.06.2019	10.07.2019	22	0.0396	0.8712
9	8306	RWP	C-I (Spl. Repair)	25.05.2016	30.12.2017	--	0	0.0000
			NR	24.09.2019	09.10.2019	15	0.0396	0.5940
10	8318	RWP	C-I (Spl. Repair)	21.06.2018	31.07.2018	--	0	0.0000
			NR	16.02.2019	18.02.2019	2	0.0396	0.0792
			NR	26.08.2019	03.09.2019	8	0.0396	0.3168
			NR	16.12.2019	Still in shop upto 20.01.2020	35	0.0396	1.3860
11	8315	RWP	C-I (Spl. Repair)	08.08.2018	18.09.2018	--	0	0.0000
			NR	07.10.2019	09.10.2019	2	0.0396	0.0792
12	8052	KDA	C-I (Spl. Repair)	25.03.2015	24.11.2016	--	0	0.0000
			NR	31.07.2017	02.08.2017	2	0.0396	0.0792
			NR	14.09.2017	20.09.2017	6	0.0396	0.2376
			NR	02.01.2018	08.01.2018	6	0.0396	0.2376
			NR	20.09.2018	03.10.2018	13	0.0396	0.5148
13	8087	RWP	C-I (Spl. Repair)	15.04.2015	11.01.2017	--	0	0.0000
			NR	25.04.2018	03.05.2018	8	0.0396	0.3168
			NR	10.06.2019	17.06.2019	7	0.0396	0.2772
14	8067	KDA	C-I (Spl. Repair)	15.02.2016	17.01.2017	--	0	0.0000

			NR	03.01.2018	21.01.2018	18	0.0396	0.7128
			NR	29.08.2018	Temporary deleted	--	0	0.0000
			NR	18.12.2018	Permanent deleted	--	0	0.0000
15	8056	RWP	C-I (Spl. Repair)	06.02.2017	22.02.2017	--	0	0.0000
			NR	20.04.2017	26.04.2017	6	0.0396	0.2376
			NR	29.08.2017	31.10.2017	63	0.0396	2.4948
16	8064	RWP	C-I (Spl. Repair)	16.04.2016	17.04.2017	--	0	0.0000
			NR	13.01.2018	16.01.2018	3	0.0396	0.1188
			NR	24.09.2018	03.10.2018	9	0.0396	0.3564
			NR	22.10.2018	23.10.2018	1	0.0396	0.0396
			NR	04.09.2019	12.09.2019	8	0.0396	0.3168
17	8084	KDA	C-I (Spl. Repair)	30.06.2017	25.07.2017	--	0	0.0000
			NR	29.01.2018	30.01.2018	1	0.0396	0.0396
			NR	27.04.2018	28.04.2018	1	0.0396	0.0396
			NR	09.10.2018	18.10.2018	9	0.0396	0.3564
			NR	07.03.2019	19.03.2019	12	0.0396	0.4752
18	8041	KDA	C-I (Spl. Repair)	08.07.2017	22.08.2017	--	0	0.0000
			NR	25.09.2017	27.09.2017	2	0.0396	0.0792
			NR	10.01.2018	13.01.2018	3	0.0396	0.1188
			NR	24.11.2018	28.11.2018	4	0.0396	0.1584
			NR	30.05.2019	22.01.2020	237	0.0396	9.3852
19	8082	KDA	C-I (Spl. Repair)	10.07.2017	22.09.2017	--	0	0.0000
			NR	06.02.2018	08.02.2018	2	0.0396	0.0792
			NR	20.10.2018	29.10.2018	9	0.0396	0.3564
			NR	26.12.2018	27.12.2018	1	0.0396	0.0396

20	8076	KDA	C-I (Spl. Repair)	20.08.2015	29.09.2017	--	0	0.0000
			NR	30.05.2019	14.06.2019	15	0.0396	0.5940
			NR	24.06.2019	09.07.2019	15	0.0396	0.5940
21	8051	KDA	C-I (Spl. Repair)	08.03.2018	30.03.2018	--	0	0.0000
			NR	16.07.2018	23.07.2018	7	0.0396	0.2772
			NR	09.11.2019	18.11.2019	9	0.0396	0.3564
22	8075	KDA	C-I (Spl. Repair)	02.04.2018	31.05.2018	--	0	0.0000
			NR	16.07.2019	Still in shop upto 20.01.2020	188	0.0396	7.4448
23	5120	QTA	C-I (Spl. Repair)	30.10.2017	25.10.2017	--	0	0.0000
			NR	11.03.2019	Still in shop upto 20.01.2020	315	0.0396	12.4740
24	5219	ROH	C-I (Spl. Repair)	26.12.2017	21.04.2018	--	0	0.0000
			NR	24.06.2019	10.07.2019	16	0.0396	0.6336
25	5210	ROH	C-I (Spl. Repair)	08.01.2018	29.09.2018	--	0	0.0000
			NR	02.07.2019	12.12.2019	163	0.0396	6.4548
26	8201	ROH	C-I (Spl. Repair)	13.04.2018	19.01.2019	--	0	0.0000
			NR	01.03.2019	15.03.2019	14	0.0396	0.5544
27	5204	ROH	C-I (Spl. Repair)	01.02.2019	19.04.2019	--	0	0.0000
			NR	15.07.2019	03.01.2020	172	0.0396	6.8112
28	6023	LHR	C-I (Spl. Repair)	29.11.2010	20.01.2017	--	0	0.0000
			NR	02.01.2018	17.01.2018	15	0.0396	0.5940
			NR	29.06.2019	Still in shop upto 20.01.2020	205	0.0575	11.7875
29	6017	LHR	C-I (Spl. Repair)	08.03.2010	28.02.2018	--	0	0.0000

			NR	22.03.2018	03.05.2018	42	0.0575	2.4150
			NR	04.02.2019	21.02.2019	17	0.0575	0.9775
30	6026	LHR	C-I (Spl. Repair)	30.11.2016	31.03.2018	--	0	0.0000
			NR	27.09.2019	10.10.2019	13	0.0575	0.7475
31	6019	LHR	C-I (Spl. Repair)	02.12.2009	12.05.2018	--	0	0.0000
			NR	13.09.2019	02.10.2019	19	0.0575	1.0925
32	6029	LHR	C-I (Spl. Repair)	21.01.2011	30.06.2018	--	0	0.0000
			NR	19.08.2019	22.08.2019	3	0.0575	0.1725
33	6013	LHR	C-I (Spl. Repair)	17.02.2018	30.11.2018	--	0	0.0000
			NR	21.10.2019	02.11.2019	12	0.0575	0.6900
Total								Rs 55.1461 million
								55.1461

Annex-16

**Statement showing detail of duplicate Special Repair of GMU-30 Locos under different projects.
(Para 4.4.4)**

S No	Locomotive No.	Date turned out after special repair under 36 Locomotives project	Date turned out after special repair under SR-150 Locomotives Project	Date turned out after special repair under SR-100 DE Locomotives Project
1	4701	26.01.2009		-
2	4702	02.04.2010	03.06.2013	-
3	4703	22.08.2009	-	-
4	4704	11.03.2009	01.08.2013	-
5	4705	18.07.2009	18.07.2013	30.05.2017
6	4706	30.09.2009	03.06.2013	-
7	4707	10.06.2010	23.10.2013	06.04.2017
8	4708	12.12.2009	28.10.2013	28.01.2017
9	4709	17.11.2008	08.06.2013	29.07.2017
10	4710	08.08.2009	-	-
11	4711	13.12.2008	30.05.2013	-
12	4712	01.11.2008	07.06.2013	-
13	4713	07.08.2010	-	-
14	4714	27.05.2009	18.05.2013	-
15	4715	13.09.2008	-	-
16	4716	27.10.2008	-	-
17	4717	24.02.2009	-	-
18	4718	30.01.2010	-	-
19	4719	01.01.2010	01.10.2013	-
20	4720	29.09.2008	02.08.2013	27.08.2017

21	4721	25.11.2008	26.12.2013	-
22	4722	19.03.2009	23.09.2013	-
23	4723	30.07.2008	-	-
24	4724	26.06.2009	-	-
25	4725	14.02.2009	-	-
26	4726	24.02.2010	-	-
27	4727	30.06.2009	-	-
28	4728	23.04.2009	04.07.2013	30.06.2017
29	4729	07.04.2009	15.09.2013	-
30	4730	23.11.2009	-	-
31	4731	25.09.2009	-	-
32	4732	22.08.2008	01.11.2013	27.08.2017
33	4733	20.10.2009	-	-
34	4734	24.12.2008	22.08.2013	13.04.2018
35	4735	20.01.2009	08.05.2013	28.05.2018
36	4736	30.05.2009	-	-

Total Cost of Project =Rs 1,611.509 million =Rs 5,681.679 million =Rs 5,025.217 million
Cost per Loco =Rs 44.764 million =Rs 37.878 million =Rs 55.836 million
Repair cost of 19 locos =Rs 719.682 million Repair cost of 9 locos
=Rs 502.524 million

Total cost = Rs 1,222.206 million

**Statement showing detail of double special repair of locomotives
(Para-4.4.4)**

S. No.	Loco No.	Date of turning out after first repair (under SR-150 Project)	Date turned out after second repair (under SR-100 Project)
1	2	3	4
1	8306	21.07.2014	30.12.2017
2	8318	30.09.2015	04.08.2018
3	8319	25.09.2013	04.11.2016
4	8321	13.12.2013	31.01.2017
5	8323	15.06.2014	31.08.2017
6	8315	30.09.2015	26.09.2018
7	8051	30.09.2015	30.05.2018
8	8056	28.02.2014	22.02.2017
9	8075	26.06.2015	30.06.2018
10	8076	20.09.2014	29.09.2017
11	8087	26.08.2016	11.01.2017
12	5110	12.06.2014	19.08.2017
13	5115	25.06.2014	29.07.2017
14	5120	31.10.2014	25.11.2017
15	5123	30.11.2014	22.01.2018
16	6027	23.01.2015	25.10.2018
17	5201	31.03.2015	19.01.2019
18	5202	29.04.2014	28.03.2018
19	5204	16.03.2016	19.04.2019
20	5205	23.07.2014	30.04.2018
21	5208	31.01.2016	28.02.2019
22	5210	31.12.2014	29.09.2018
23	5213	12.09.2014	27.01.2018
24	5217	29.10.2014	21.02.2018
25	5219	18.12.2014	21.04.2018

Total Cost of SR-100 project =Rs 5025.217 million

Cost per Loco =Rs 55.836 million

Repair cost of 25 locos =Rs 1,395.9 million

**Statement showing detail of locomotives put in to shunting services after special repair under SR-100 loco project
(Para 4.4.5)**

Rs in million

S. No.	Loco No.	Date turned out after special repair	Date put into shunting service	No. of months up to 31.12.2019	Earning per month (Rs)	Total earning (Rs)
1	4701 GMU-30	21.03.2018	01.06.2017	31	1.726	53.506
2	4710 GMU-30	18.02.2017	01.05.2017	32	1.726	55.232
3	4716 GMU-30	29.03.2017	01.04.2017	33	1.726	56.958
4	4720 GMU-30	27.08.2017	01.12.2017	25	1.726	43.150
5	4727 GMU-30	29.08.2018	21.02.2019	6	1.726	10.356
6	4732 GMU-30	27.08.2017	01.12.2017	25	1.726	43.150
7	4734 GMU-30	13.04.2018	13.04.2018	21	1.726	36.246
8	4728 GMU-30	30.06.2017	16.11.2019	1	1.726	1.726
9	4827 GMU-15	28.02.2018	28.02.2018	22	1.188	26.136
10	4832 GMU-15	30.12.2017	30.12.2017	24	1.188	28.512
11	8321 PHA-20	31.01.2017	16.08.2018	16	1.188	19.008
Total						373.980

Statement showing the detail excess expenditure on procurement of parts due to delay in completion of the project – Rs 343.001 million (Para 4.4.7)

S. No.	T.C No.	Date	Amount			Amount Excess charged (Rs)
			US\$ Rate	Amount Charged to the project (Rs)	Amount to be charged to the project (Rs)	
1	SA/37	07.01.2017	104.4	81,988,906	78,533,434	3,455,472
2	SA/46	28.01.2017	104.6	4,190,868	4,006,565	184,303
3	SA/47	28.01.2017	104.6	11,412,959	10,911,050	501,909
4	SA/48	28.01.2017	104.6	56,570,916	54,083,093	2,487,823
5	SA/50	21.01.2017	104.7	132,739,971	126,781,252	5,958,719
6	SA/52	06.02.2017	104.4	30,076,536	28,808,942	1,267,594
7	SA/54	17.02.2017	104.4	10,000	9,578	422
8	SA/55	21.02.2017	104.4	51,952,964	49,763,375	2,189,589
9	SA/57	28.02.2017	104.4	76,968,049	76,597,748	370,301
10	SA/59	27.03.2017	104.5	52,690,706	50,421,728	2,268,978
11	SA/62	06.04.2017	104.4	41,417,614	39,672,044	1,745,570
12	SA/63	11.04.2017	104.4	5065545	4852054	213,491
13	SA/64	19.04.2017	104.7	24566588	23463789	1,102,799
14	SA/66	12.05.2017	104.4	62003374	59390204	2,613,170
15	SA/68	16.05.2017	104.4	19378486	18561768	816,718
16	SA/69	24.05.2017	104.5	18813	18002	811
17	SA/72	31.05.2017	104.7	72777922	69510909	3,267,013

18	SA/76	30.06.2017	104.8	47221898	45059062	2,162,836
19	SA/78	30.06.3017	104.8	12321705	11757352	564,353
20	SA/01	10.082017	105.3	53506196	50813101	2,693,095
21	SA/02	10.08.2017	105.3	13365412	12688698	676,714
22	SA/04	23.08.2017	105.3	61013146	57942209	3,070,937
23	SA/05	23.08.2017	105.3	476143	452178	23,965
24	SA/06	08.09.2017	105.3	40739523	38689006	2,050,517
25	SA/08	19.09.2017	105.3	15185187	14420880	764,307
26	SA/09	28.09.2017	105.3	18120250	17216390	903,860
27	SA/10	093.10.2017	105.4	2155658	2046187	109,471
28	SA/11	09.10.2017	105.4	75889	72035	3,854
29	SA/12	09.10.2017	105.4	299502	284292	15,210
30	SA/13	09.10.2017	105.4	689752	654724	35,028
31	SA/14	24.10.2017	105.4	13331757	12654729	677,028
32	SA/09-A	03.10.2017	105.4	38447763	36477954	1,969,809
33	SA/19	30.11.2017	105.4	24592424	23332471	1,259,953
34	SA/20	30.11.2017	105.4	2582328	2450027	132,301
35	SA/21	30.11.2017	105.4	81882823	81786360	96,463
36	SA/26	29.12.2017	110.3	35359568	32057632	3,301,936
37	SA/27	29.12.2017	110.3	22483801	20384226	2,099,575
38	SA/28	29.12.2017	110.3	4847268	4394622	452,646
39	SA/23	22.12.2017	109.8	20117	18238	1,879
40	SA/32	31.01.2018	109.8	6852798	6241164	611,634

41	SA/33	31.01.2018	110.4	146178644	132408192	13,770,452
42	SA/36	28.02.2018	110.4	12280367	11123521	1,156,846
43	SA/37	03.03.2018	110.3	13137126	11910359	1,226,767
44	SA/41	31.03.2018	115.2	709954	616280	93,674
45	SA/39	29.03.2018	115.2	42679526	37048200	5,631,326
46	SA/40	29.03.2018	115.2	29019168	25190250	3,828,918
47	SA/43	26.04.2018	115.5	20152	17448	2,704
48	SA/44	28.04.2018	115.4	18,815,935	16,302,144	2,513,791
49	SA/48	31.05.2018	115.5	9,180,510	7,948,494	1,232,016
50	SA/49	31.05.2018	115.5	22,218	19,236	2,982
51	SA/50	31.05.2018	115.5	5,133,042	4,444,192	688,850
52	SA/51	31.05.2018	115.5	9,257,657	9,015,287	242,370
53	SA/52	25.06.2018	121.4	38,724,567	31,895,152	6,829,415
54	SA/53	28.06.2018	121.4	3,268,160	2,692,059	576,101
55	SA/54	28.06.2018	121.4	179,329,907	147,718,210	31,611,697
56	SA/55	28.06.2018	121.4	5,713,120	4,706,030	1,007,090
57	SA/529	18.01.2018	110.3	1,419,520	1,286,963	132,557
58	SA/30	18.01.2018	110.3	79,380,193	71,967,537	7,412,656
59	SA/31	20.01.2018	110.3	4,279	3,879	400
60	SA/01	31.08.2018	124.1	5,823,997	4,692,987	1,131,010
61	SA/02	31.08.2018	124.1	5,641	4,546	1,095
62	SA/04	31.08.2018	124.1	40,240,807	32,426,114	7,814,693
63	SA/06	31.08.2018	124.1	17,330,319	13,964,802	3,365,517

64	SA/07	27.09.2018	124.1	18,029,304	14,528,045	3,501,259
65	SA/08	27.09.2018	124.1	103,391,473	83,313,032	20,078,441
66	SA/11	29.10.2018	132	10,860,923	8,227,972	2,632,951
67	SA/12	29.10.2018	132	25,166,035	19,065,178	6,100,857
68	SA/13	29.10.2018	132	40,636,800	30,785,455	9,851,345
69	SA/12	29.11.2018	133.7	23,259,878	17,397,067	5,862,811
70	SA/15	31.12.2018	138.6	115,837,482	83,576,827	32,260,655
71	SA/18	12.2018	138.6	14,148,180	10,207,922	3,940,258
72	SA/14	31.01.2019	138.5	13,480,050	9,732,888	3,747,162
73	SA/17	28.02.2018	138.9	3,009,936	2,166,981	842,955
74	SA/18	28.02.2018	138.9	30,053,331	21,636,667	8,416,664
75	SA/19	30.03.2019	140.2	19,776,331	14,105,800	5,670,531
76	SA/21	30.04.2019	141.2	40,368,328	28,589,467	11,778,861
77	SA/22	30.04.2019	141.2	92,230,041	65,318,726	26,911,315
78	SA/23	30.04.2019	141.2	11,167,080	7,908,697	3,258,383
79	SA/24	30.05.2019	149.7	14,248,734	9,518,192	4,730,542
80	SA/01/AO-P	02.08.2019	159.5	69,459	43,548	25,911
81	SA/04/AO-P	30.09.2019	156.2	107,463,321	68,798,541	38,664,780
82	SA/05/AO-P	26.11.2019	155.3	34,627,000	22,296,845	12,330,155
Total						343,000,816

Annex-20

Statement showing detail of spares delivered to Rewinding Shop Mughalpura (Para 4.4.8)

S. No.	Purchase order No. and date	Description	Quantity received	Unit rate	Exchange rate	Unit rate Pak (Rs)	Total price (Rs)
1	19/0066/SR-100/4-16 Dt:10.06.16	Armature Assy:D-29	42	61,000.00	16.09	981,490.00	41,222,580.00
2	19/0121/SR-100/4-2016 Dt:31.12.16	Armature	30	52,100.00	15.64	814,844.00	24,445,320.00
3	19/0089/SR-100/4-2016 Dt:20.09.16	Ball Bearing (6318 C4)	90	50.00	116.90	5,845.00	526,050.00
4	19/0074/SR-100/4-2016 Dt:25.06.16	Coil with Pole Piece Exciting	120	3,965.00	16.09	63,796.85	7,655,622.00
5	19/0074/SR-100/4-2016 Dt:25.06.16	Coil with Pole Piece Exciting	120	3,990.00	16.09	64,199.10	7,703,892.00
6	19/0018/SR-100/5-17 Dt:13.04.17	Pinion 19 Teeth	30	36,270.00	PKR	36,270.00	1,088,100.00
7	19/0081/SR-100/4-2016 Dt:12.08.16	Roller Bearing NU-326-C4	90	265.00	104.13	27,594.45	2,483,500.50
8	19/0012/SR-100/4-2015 Dt:30.12.15	Armature Assy:T/M 752 AH-24/30	60	22,000.00	102.90	2,263,800.00	135,828,000.00
9	19/0049/SR-100/3-2016 Dt:07.05.16	Armature Assy:T/M 752 AH-24/30	30	22,000.00	104.30	2,294,600.00	68,838,000.00
10	19/0019/SR-100/3-2016 Dt:24.02.16	Armature Rewinding kit	30	13,754.00	107.78	1,482,406.12	44,472,183.60
11	19/0018/SR-100/3-2016 Dt:18.02.16	Commutator Assy:	30	4,539.00	101.70	461,616.30	13,848,489.00

12	19/0013/SR-100/4-2015 Dt:14.01.16	Exciting Coil with Pole Piece	120	1,961.28	101.75	199,560.24	23,947,228.80
13	19/0013/SR-100/4-2015 Dt:14.01.16	Exciting Coil with Pole Piece	120	1,961.28	101.75	199,560.24	23,947,228.80
14	19/0013/SR-100/4-2015 Dt:14.01.16	Commutating Coil with Pole Piece	240	1,846.08	101.75	187,838.64	45,081,273.60
15	19/0034/SR-100/1-2016 Dt:30.03.16	Pinion 24 Teeth	24	425.00	101.70	43,222.50	1,037,340.00
16	19/0016/SR-100/3-2016 Dt:19.02.16	Carbon Brush T/M 752 AH-24	1560	8.43	104.10	877.56	1,368,998.28
17	19/0058/SR-100/4-2016 Dt:07.06.16	Roller Bearing P/E	30	305.00	111.66	34,056.30	1,021,689.00
18	19/0011/SR-100/2-2016 Dt:18.02.16	Roller Bearing P/E	60	379.00	101.70	38,544.30	2,312,658.00
19	19/0058/SR-100/4-2016 Dt:07.06.16	Ball Bearing C/E	30	108.25	111.66	12,087.20	362,615.85
20	19/0009/SR-100/2-2016 Dt:04.02.16	Ball Bearing C/E	60	100.00	111.94	11,194.00	671,640.00
21	19/0006/SR-100/5-2016 Dt:26.02.16	Frame Head	24	32,000.00	PKR	32,000.00	768,000.00
22	19/0025/SR-100/5-17 Dt 12.05.17	Frame Head	30	24,965.00	PKR	24,965.00	748,950.00
23	19/0001/SR-100/5-2015 Dt:04.01.16	Bearing Cap Inner	90	8,900.00	PKR	8,900.00	801,000.00
24	19/0001/SR-100/5-2015 Dt:04.01.16	Bearing Cap Insert	90	2,365.00	PKR	2,365.00	212,850.00

25	19/0010/SR-100/5-2015 Dt:23.01.16	Bearing Housing	30	6,900.00	PKR	6,900.00	207,000.00
26	19/0025/SR-100/5-17 Dt 12.05.17	Bearing Housing	30	6,900.00	PKR	6,900.00	207,000.00
27	19/0001/SR-100/5-2016 Dt:06.02.16	Pinion Gutter	90	14,500.00	PKR	14,500.00	1,305,000.00
28	19/0024/SR-100/5-17 Dt 02.05.17	Bearing Cap	30	10,500.00	PKR	10,500.00	315,000.00
29	19/0001/SR-100/5-2015 Dt:04.01.16	Flinger	90	4,960.00	PKR	4,960.00	446,400.00
30	19/0004/SR-100/1-2015 Dt:23.12.15	Cable assy.	90	115.50	101.71	11,747.51	1,057,275.45
31	19/0004/SR-100/1-2015 Dt:23.12.15	Cable Assy:	90	70.98	101.71	7,219.38	649,743.82
32	19/0004/SR-100/1-2015 Dt:23.12.15	Cable Assy	90	70.08	101.71	7,127.84	641,505.31
33	19/0004/SR-100/1-2015 Dt:23.12.15	Cable Assy "F"	90	435.20	101.71	44,264.19	3,983,777.28
34	19/0004/SR-100/1-2015 Dt:23.12.15	Cable Assy	90	169.29	101.71	17,218.49	1,549,663.73
35	19/0004/SR-100/1-2015 Dt:23.12.15	Cable Assy	90	302.18	101.71	30,734.73	2,766,125.50
36	19/0004/SR-100/1-2015 Dt:23.12.15	Cable Assy	90	459.44	101.71	46,729.64	4,205,667.82
37	19/0019/SR-100/3-2016 Dt:24.02.16	Armature shaft	30	2,204.26	107.78	237,575.14	7,127,254.28
Total Rs							474,854,622.63

**Statement showing detail of defective repair of locomotives at the cost of
Rs 261.864 million.
(Para 4.4.12)**

S. No.	Loco No.	Base Shed	Date put in service after SR	Nature of repair carried out
GMU-30				
1	4723	KC	31.05.17	C-II
2	4703	KC	08.06.17	C-II
3	4709	KC	29.07.17	C-II
4	4732	KC	27.08.17	C-II
5	4720	KC	27.08.17	C-II
6	4701	KC	21.03.18	C-II
7	4734	KC	13.04.18	C-II
8	4735	KC	28.05.18	C-II
9	4727	KC	29.08.18	F-Schedule

Note: Estimated per unit cost as per PC-I for special repair of locomotive = 29.096 million.
Estimated cost for special repair of 09-locomotives = 261.864 million

Detail of locomotives deleted from books

(Para 4.4.13)

S.No	Loco No.	Date turned out after SR	Date deleted from Books	Estimated expenditure (Rs in million)	Remarks
1	8067	17.01.2017	29.08.2018	29.096	The locomotive was reported to be coiled with a loaded rack but no inquiry into the case was conducted.
2	4727	29.08.2018	3/2019	15.502	Reported to be accidental but no inquiry was held.
Total				44.598	

Statement showing detail of performance of GMU-30 locomotives

(Para-4.4.14)

Type of locos	No. of Locos	Existing average availability	Target average availability as per PC-I	Actual average reliability for the month of December 2019	Cumulative average availability since repaired
GMU-30	17	66.66%	84.84	80%	77%

Statement showing detail of (individual performance) availability

S. No.	Type of locos	Loco No.	Existing average availability	Target average availability as per PC-I	Cumulative average availability since repaired up to 31.05.2019
1	GMU-30	4708	66.66%	84.84%	84%
2	-do-	4710	66.66%	84.84%	83%
3	-do-	4730	66.66%	84.84%	78%
4	-do-	4705	66.66%	84.84%	27%
5	-do-	4720	66.66%	84.84%	60%
6	-do-	4701	66.66%	84.84%	72%
7	-do-	4734	66.66%	84.84%	70%
8	PHA-20	8319	65.21%	83%	71%
9	-do-	8316	65.21%	83%	73%
10	-do-	8321	65.21%	83%	54%
11	HBU-20	8067	38.35%	48.79%	45%
12	-do-	8075	38.35%	48.79%	45%

Annex Contd. Next page

Statement showing detail of (individual performance) reliability

S. No.	Type of locos	Loco No.	Existing average reliability/km per failure	Target average reliability/km per failure as per PC-I	Cumulative average reliability since repaired up to 31.05.2019
1	GMU-30	4705	17617	19458	6556
2	AGE-30	6030	39518	43648	39593
3	-do-	6025	39518	43648	25531
4	RGE-20	5126	34431	38029	35231
5	-do-	5125	34431	38029	35441
6	-do-	5112	34431	38029	11298
7	PHA-20	8318	35808	39550	33816
8	-do-	8315	35808	39550	26935
9	HBU-20	8082	34232	37809	24663
10	-do-	8076	34232	37809	31518
11	-do-	8051	34232	37809	24048
12	-do-	8075	34232	37809	16708