PERFORMANCE AUDIT REPORT

ON

KACHHI CANAL PROJECT WAPDA DERA GHAZI KHAN

AUDIT YEAR 2017-18

AUDITOR GENERAL OF PAKISTAN

PREFACE

Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan, 1973 read with Sections 8 and 12 of the Auditor General's (Functions, Powers, Terms and Conditions of Service) Ordinance, 2001 require the Auditor General of Pakistan to conduct audit of Expenditure and Receipts of Government of Pakistan.

This Report is based on performance audit of Kachhi Canal Project, Dera Ghazi Khan for the period from October, 2002 to June, 2017. The Directorate General Audit Water Resources (the then Directorate General Audit WAPDA) conducted the performance audit of the Kachhi Canal Project, Dera Ghazi Khan during August 2017 with a view to reporting significant findings to the relevant stakeholders. In addition, audit also assessed, on the test check basis whether the management complied with applicable laws, rules and regulations in managing the Kachhi Canal Project, Dera Ghazi Khan.

Audit findings indicate the need for taking specific actions to realize the objectives of the Kachhi Canal Project, Dera Ghazi Khan besides instituting and strengthening internal controls to avoid recurrence of violations and irregularities.

Audit observations have been finalized in the light of discussion in the Departmental Accounts Committee (DAC) meeting.

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

Sd/-

Dated: 16 OCT 2019 **Javaid Jehangir**
Islamabad Auditor General of Pakistan

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Abbreviations and Acronyms

B/C Ratio	Benefit-Cost Ratio
BoQ	Bill of Quantities
CCA	Culturable Command Area
CE	Chief Engineer
CoC	Conditions of Contract
CPA	Contract Price Adjustment
C.V	Cash Voucher
DAC	Departmental Accounts Committee
DG Khan	Dera Ghazi Khan
ECNEC	Executive Committee of the National Economic Council
EIRR	Economic Internal Rate of Return
EoT	Extension of Time
FIDIC	Federation International Des Ingenieurs-Conseils
FIRR	Financial Internal Rate of Return
FWO	Frontier Works Organization
GCoC	General Conditions of Contract
GoB	Government of Balochistan
GoP	Government of Pakistan
IPC	Interim Payment Certificate
I&P	Irrigation and Powers
JV	Joint Venture
KC	Kachhi Canal
KCP	Kachhi Canal Project
KM	Kilo Meter
LAC	Land Acquisition Collector
LD	Liquidated Damages
LoA	Letter of Acceptance
MoU	Memorandum of Understanding
MoWP	Ministry of Water & Power
MoWR	Ministry of Water Resources
NESPAK	National Engineering Services of Pakistan
O&M	Operation and Maintenance
PAC	Public Accounts Committee
PC-I	Planning Commission Proforma-I
PD	Project Director
PEC	Pakistan Engineering Council
PPRA	Public Procurement Regulatory Authority
PSDP	Public Sector Development Programme
RD	Reduced Distance (a reach of 1,000 feet)
RSL	Ramzan & Sons Limited
SMADB	Sardar Muhammad Ashraf D-Bloch

ToR	Terms of Reference
VO	Variation Order
WAPDA	Water and Power Development Authority
WCSR	WAPDA Composite Schedule of Rates

EXECUTIVE SUMMARY

The Directorate General Audit Water Resources (the then Directorate General Audit WAPDA) conducted the performance audit of KCP WAPDA, Dera Ghazi Khan during July & August, 2017. The main objectives of the audit were to evaluate the economy, efficiency and effectiveness of the project. The audit was conducted in accordance with the prevailing rules and regulations.

Kachhi Canal is an agricultural project envisaged for development of water and land resources in comparatively less developed area of Balochistan province. The project aims at developing about 713,000 acres of Culturable Command Area (CCA) of Kachhi plain in Balochistan. Due to constraints of gravity supply (in which the water flows under gravity from the source to the field) from Guddu Barrage, Kachhi Canal (KC) off-takes from Taunsa Barrage. Total length of main canal is 500 Kilo Meter (KM), out of which head reach of 306 KM is within the Punjab province while remaining 194 KM reach is in Balochistan. Total command area of the project is within Balochistan. The peak discharge at the head of KC is 6,000 cusecs. Original PC-I for Kachhi Canal Project (KCP) (phase-I, II & III) from Reduced Distance (RD) 0 to 1,645 was approved by Executive Committee of National Economic Council (ECNEC) at a capital cost of Rs.31,204 million in September, 2003. 1st revised PC-I (phase-I) from RD 0 to 1,322 of KCP was approved by ECNEC for Rs.57,562 million on December 31, 2013, including additional lining of 97 KM from RD1,005 to RD1,322. To operationalize the main canal in Balochistan area under phase-I (part-A) and to irrigate 72,000 acres land up to September, 2017, 2nd revised PC-I for phase-I amounting to Rs.80,352 million was approved but the work was still under progress up to August, 2017.

AUDIT FINDINGS AND RECOMMENDATIONS

a. Key Audit Findings

- Frequent changes in scope of work through variation orders resulted in cost and time overruns.
- Inordinate delay was observed in preparation of site feasibility study, engineering drawings, bidding documents, award of contracts and construction activities.

- Poor technical supervision and monitoring was evident throughout the project as works were not completed within the stipulated given time or even within granted EoTs.
- It was observed that additional scope of work was awarded in BoQ and non-BoQ items through variation orders in disregard to transparent and fair competition as required under the rules.
- The approved feasibility / PC-II is a prerequisite of approval of PC-I / administrative approval which was not adhered to in the project resulting in material deviation in design and quantum of works.
- The intended objective of cultivation could not be achieved as phase II and III component of the project are yet to be initiated because of inordinate delay in construction / completion of phase I of the project.

b. Recommendations

- Comprehensive project planning of scope in advance and risk assessment at the very outset help to reduce subsequent changes in design and specifications. Once scope and design specifications have been finalized, further changes may be avoided except those inevitable and that too with the approval of competent authority. The management needs to maintain proper documentation for variation orders.
- Better documentation is the key to effective oversight. Management needs to prepare feasible and realistic projects plans and schedules along with accurate cost estimates. Timely completion of detailed design and specifications documents will reduce delays and subsequent cost overruns.
- Project supervision and monitoring with effective progress tracking tools and reporting documentation can reduce controllable cost overruns & provide underlying reasons as to why a particular variation order occurred.
- Management needs to strengthen internal controls to ensure transparency by strict compliance to PPRA rules. Contracts be awarded to reliable contractors with good reputation having registration with Pakistan Engineering Counsel in the relevant

category of engineering works. Excess and irregular payments to contractors in violation to contract provisions be recovered.

- Management needs to conduct inquiry at an appropriate level to fix responsibility in cases of delayed execution and irregular payments.
- Water availability of 6000 cusecs perennial flow be assured from Indus River System Authority to realize envisaged benefits of irrigating 713,000 acres of land.
- Command area development and completion of phase II and III of the project be ensured at the earliest. Water allowance for Kachhi Canal may be revised on the basis of Pat Feeder Canal (main irrigation canal) as per water consumption for irrigation.
- Water availability should be ensured and got institutional clearance (from IRSA in the light of accepted water distribution principles) before venturing in future water distribution project.

1. INTRODUCTION

Kachhi Canal Project (KCP) aims to develop about 713,000 acres CCA of Kachhi plain in Balochistan. KCP is located in typical arid zone climate, characterized by high temperature and low rainfall, where economically sound agriculture is only possible under irrigated conditions. Presently, major part of the plain is lying barren. Dry and flood cultivation is being practiced with very low yields as existing annual cropping intensity is about 4.68% in the project area and after completion of the project proposed cropping intensity would reach up to 88.50% approximately with annual benefit of Rs.19.66 billion (Rs.3.82 billion for phase-I) to the national economy. Sorghum, oilseeds, pulses and wheat are the main crops of the plain. The project's command area comprises districts Dera Bugti, Naseerabad, Kachhi (Bolan) and Jhal Magsi.

The project was under ten years Perspective Development Plan 2001-2011 and implementation of the project started on October 04, 2002. Original PC-I for KCP was approved by ECNEC at capital cost of Rs.31,204 million on September 27, 2003 with scheduled completion date of June, 2007. However, the work could not be completed as per original schedule. Consequently, 1st revised PC-I (phase-I) of KCP was approved by ECNEC for Rs.57,562 million on December 31, 2013, including additional lining of 97 KM and divided the project into three phases (phase-I, II & III) with expected completion date of phase-I as December 31, 2013. However, the project completion was again delayed. Subsequently, 2nd revised PC-I was approved by ECNEC for Rs.80,352 million on March 07, 2017 with completion date of (phase-I) part-A as August 31, 2017 and partially completed part-B as December 31, 2017 and to be completed in all respects up to December, 2018. Detail of year wise summary of funds demanded, PSDP allocation and actual expenditure is attached in **Annex-A**.

The project was being financed by the GoP through its PSDP without any foreign support. Work of the project was being executed by WAPDA with collaboration of Kachhi Canal Consultants. An expenditure of Rs.80,352 million had been incurred on the project but no phase of the project was completed. Therefore, envisaged benefits could not be accrued due to defective planning and execution of the project. Overall physical progress of the project (phase-I) as reported by the management was 97.51 % up to June, 2017. However, execution of phase-II & III of the project was not taken up till the execution of Audit. Without concurrent execution of these two remaining phases of the project, the envisaged benefit of 713,000 acres CCA could not be achieved.

2. AUDIT OBJECTIVES

The main objectives of this performance audit were to evaluate:

- Whether the project was managed with due regard to economy efficiency and effectiveness.
- Whether the contracts were awarded in competitive and economical mode of acquirement.
- Factors causing significant delay in completion of project.
- Time and cost overruns.
- Whether the project internal controls were in place and operative and functioning effectively.
- Effectiveness to the extent of ensuring required water availability to materialize envisaged benefits of cultivation.

3. AUDIT SCOPE AND METHODOLOGY

Audit period to be covered in this performance audit was from October, 2002 to June, 2017. Audit activity was started with the preparation of Preliminary Survey Report.

Following audit methodology was adopted during the course of execution of performance audit:

- Discussion with the project management;
- Review of Original PC-I of the project and up to 2nd Revised PC-I;
- Review of Contract Agreements;
- Review of Consultancy Agreements;
- Review of Bid Evaluation Reports;
- Examination of Progress Reports of the project;
- Site visits, and
- Examination of selected project record and necessary auditable documents.

4. AUDIT FINDINGS AND RECOMMENDATIONS

4.1 Organization and Management

The organizational structure of the project was provided in the original PC-I of the project. The project is being administered by the CEs and PDs. The incumbency period of the CEs and PDs is as under:

Sr. No	Name (M/s)	Designation	BPS	Incumbency Period
1	Dr. Muhammad Siddique	PD	19	13.09.2002 to 20.11.2002
2	Muhammad Ali Shah	PD	19	21.11.2002 to 29.04.2005
3	Muhammad Ali Shah	CE / PD	20	30.04.2005 to 06.02.2008
4	Mehr Ghani	CE / PD	20	07.02.2008 to 31.07.2008
5	Shamus-ud-Din Abbasi	CE / PD	20	01.08.2008 to 28.02.2010
6	Moula Bux Jamro	CE / PD	20	01.03.2010 to 31.03.2012
7	Tahir Hussain Khosa	CE / PD	20	03.04.2012 to 31.07.2015
8	Muhammad Hassan Maher	CE / PD	20	01.08.2015 to 10.11.2016
9	Sultan Fayyaz Ahmad Qureshi	CE / PD	20	10.11.2016 to date

The actual working strength at the project is not in accordance with the provisions of PC-I. The qualification and experience of staff required at the project is not mentioned in PC-I. However, recruitment and posting transfer procedure of WAPDA has been adopted by the project management as per project requirement.

The staff posted at the project is working according to the job description prescribed by the Authority. Trainings to staff are being arranged in WAPDA Training Centers from time to time, however, no foreign training has been given to the staff. The organization & management of the project is consistently monitored and reviewed at different intervals in order to improve efficiency and performance of the staff. Evaluation of the staff is carried out through annual performance evaluation reports. The internal auditors are also conducting the annual audit of project accounts. Post audit of project accounts is being carried out by Government Auditors on quarterly basis and audit observations are issued in the form of Audit Inspection Reports (AIRs) and Proposed Draft Paras (PDPs).

4.2 Financial Management

4.2.1 Loss due to non-achievement of benefit-cost ratio as per PC-I – Rs.54,649 million

As per original approved PC-I of the project, benefit-cost ratio was fixed to "**1.82:1**".

During performance audit of KCP, WAPDA, DG Khan, it was noticed that an expenditure of Rs.80,352 million was incurred for construction of KCP. Further scrutiny of record revealed that in 2nd revised PC-I of the project, B/C ratio of the project was decreased from **1.82:1** to **0.94:1**. As per revised B/C ratio, the project could not be economically viable as project would not return its cost after 30 years resulting in a net loss of Rs.54,649 million.

Implication

Non-adherence to the provision of original PC-I resulted in loss of Rs.54,649 million due to non-achievement of benefit-cost ratio up to the Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the Cost Benefit Analysis of KCP was as follows:

Original PC-1 Phase I, II and III	1.82:1
For 2nd revised PC-1 Phase-I	1.09:1

It was evident from the above facts that B/C ratio of original PC-I was worked out for phase I, II and III of the project, whereas, in 2nd revised PC-I, the B/C ratio of the project was based on phase-I only. Therefore, the variation was justified and not negative as the benefit was more than cost of the project.

The reply was not tenable because no documentary evidence to substantiate the stance was provided.

The DAC in its meeting held on November 22, 2018 directed the management to submit a revised reply with full justification by segregating both phases for verification to Audit, and recommended the para for settlement subject to verification. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to submit a revised reply with full justification by segregating both phases for verification.

4.2.2 Annual loss due to non-execution of Phase-II & III of Kachhi Canal Project – Rs.15,840 million

As per original approved PC-I of KCP, the project (Phase-I, II & III) was required to be completed up to June, 2007 with a total cost of Rs.31,204 million and annual project benefits were estimated to be Rs.19,660 million.

During performance audit of KCP, WAPDA, DG Khan, it was noticed that 2nd revised PC-I of KCP phase-I was approved by ECNEC at a cost of Rs.80,352 million with an annual project benefit of Rs.3,820 million. It was noticed that phase-I of the project was near to completion but still PC-I for phase-II and phase-III as well as remaining portion of phase-I were unprepared / unapproved nor these were included in 2nd revised PC-I. Furthermore, it was also observed that for 72,000 acres (phase-I part-A), a small discharge of 605 cusecs flowing through a wider cross section (designed for 6,000 cusecs) would face increased seepage and evaporation losses over a long route. Non-execution of project phase-II & III would result in a loss of Rs.15,840 million (Rs.19,660 million – Rs.3,820 million) annually due to decreased project benefits.

Implication

Non-adherence to the provision of PC-I resulted in annual loss of Rs.15,840 million on account of non-execution of phase-II & III of KCP up to the Financial Year 2016-17 depriving the stakeholders with envisaged benefits.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that due to increase of scope of phase-I and financial constraints, MoWR and Planning Commission had decided to complete phase-I of KCP for early benefits of the canal. Phase-I of the project would be completed in December 2018, and PC-II of phase-II & III had been prepared and being submitted to MoWR. On completion of phase-I, the remaining phases of the project would be started.

The reply was not tenable because no documentary evidence to substantiate the stance was provided.

The DAC in its meeting held on November 22, 2018 settled the para subject to provision of detailed design and justification for non-execution of phase-II & III given and upon satisfaction of Audit. Further progress was not reported till finalization of report.

Audit Recommendations

Audit recommends the management to investigate the matter for fixing responsibility of non-execution of phase-II & III of KCP up till June, 2017 besides implementing the directives of DAC.

4.2.3 Non-adjustment of advance on account of land acquisition – Rs.559.74 million

According to clause 9.2.6 of WAPDA Accounting and Financial Reporting Manual, "Advances may be requested to cover anticipated cash expenditure to be incurred on behalf of WAPDA for a sponsored event, prior to the event taking place. And when the need for the advance is complete, the department shall return the unused cash to the accounts and finance department. All receipts shall be verified on advance being cleared".

During performance audit of KCP, WAPDA, DG Khan, it was noticed that an amount of Rs.1,213.33 million was transferred to LAC of different districts i.e. Muzaffargarh, DG Khan, Rajanpur, Dera Bugti and Naseerabad for the purpose of land acquisition. The process of transferring of amount remained under way from 2002-03 to 2012-13. Out of total amount of Rs.1,213.33 million, an adjustment account of Rs.653.59 million was received leaving balance amount of Rs.559.74 million as unadjusted. Considerable period elapsed, but adjustments of outstanding amounts with different LACs were still awaited due to delay in acquisition process of land.

Implication

Delay in acquisition process of land resulted in non-submission of adjustment accounts of advances amounting to Rs.559.74 million on account of land acquisition up to the Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and

reported to MoWR in February, 2018. The management explained that out of Rs.559.74 million, an amount of Rs.258.81 million was adjusted in September, 2018. The management further explained that local farmers working abroad did not receive their payments of compensation. Due to deaths of forefathers, some people had not transferred land in their names. Due to law & order situation in District Dera Bugti, the process of acquisition affected and delayed in announcing awards. However, for adjustment of remaining amount of Rs.300.93 million, the management was vigorously pursuing with the concerned quarters.

The DAC in its meeting held on November 22, 2018 directed the management to get the record of adjusted amount verified from Audit and vigorously pursue the adjustment of remaining amount. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to produce and get the record of adjusted amount of Rs.258.81 million duly reconciled with certified record of LACs for transferring the amounts to land owners as per approval of District Price Assessment Committees. The said record needs to be verified from Audit and also pursue the adjustment of balance amount of Rs.300.93 million vigorously.

4.2.4 Non-adjustment of advances afforded to Pakistan Railways and Sui Gas authorities – Rs.185.47 million

According to clause 9.2.6 of WAPDA Accounting and Financial Reporting Manual, "Advances may be requested to cover anticipated cash expenditure to be incurred on behalf of WAPDA for a sponsored event, prior to the event taking place. And when the need for the advance is complete, the department shall return the unused cash to the accounts and finance department. All receipts shall be verified on advance being cleared".

During performance audit of KCP, WAPDA, DG Khan, it was noticed that an amount of Rs.556.37 million was transferred to Pakistan Railways for construction of a railway bridge and to Sui Gas authorities for laying a gas pipeline crossing. An amount of Rs.370.90 million was adjusted against the total amount of Rs.556.37 million. Whereas, an amount of Rs.185.47 million was required to be adjusted which could not be adjusted due to delay in completion of works.

Implication

Non-adherence to WAPDA Accounting and Financial Reporting Manual resulted in non-adjustment of advances amounting to Rs.185.47 million afforded to Pakistan Railways and Sui Gas authorities up to the Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the project authorities had been pursuing for the remaining amount of Rs.185.47 million with the department for early completion of remaining work and adjustment account.

The DAC in its meeting held on November 22, 2018 directed the management to vigorously pursue the adjustment of remaining amount. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to pursue relevant adjustment account of advances amounting to Rs.185.47 million without further delay.

4.3 Procurement and Contract Management

4.3.1 Loss due to non-award of contract at risk & cost of original Contractor – Rs.2,726.12 million

Clause 39.3 of GCoC stipulates that, “in case of default on the part of the Contractor in carrying out such instruction within the time specified therein or, if none, within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any money due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

During performance audit of KCP, WAPDA, DG Khan, it was noticed that a Contract KC-06B for construction of main canal and distribution system from RD 1,166+000 to RD 1,322+000 (157 RDs) was awarded to M/s FWO on November 01, 2007 with total contract cost Rs.6,656.76 million. The stipulated date of completion was December 31, 2008 and average per RD cost of contract KC-06B was Rs.42.40 million (contract cost Rs.6,656.76million/157 RDs). The Contractor M/S FWO did not complete the work and left the project. Subsequently, this work was categorized into four lots {KC-6B (1R), (2R), (3R) & (4R)} and contract KC-6B (1R) for 68 RDs was awarded to another contractor i.e. M/s CGC-RSL-SFETIC (JV), Karachi (in disregard to the clause involving risk & cost of the original contractor) at a cost of Rs.5,609.19 million with per RD cost @ Rs.82.49 million. This resulted in increase in loss by Rs.2,726.12 {(68 RDs x (82.49 million – 42.40 million)} to the national exchequer.

Implication

Non-adherence to contract provision resulted in loss of Rs.2,726.12 million on account of non-award of contract at risk & cost of original Contractor up to the Financial Year 2016-17. This resulted in cost overrun.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that keeping in view the security situation in project area of KCP falling in Balochistan, especially in District Dera Bugti, M/s FWO was released from further performance of Contract in terms of CoC clause 65.2 and CoC clause 66.1 GCoC without prejudice to the rights of either parties under clause 67.1. This decision was taken by the Authority to avoid payment of huge idle claim of M/s FWO. The release of the Contractor from the further performance of work was in the best interest of country and Authority.

The reply was not tenable because no documentary evidence to substantiate the stance was provided.

The DAC in its meeting held on November 22, 2018, was not satisfied with management’s reply and directed to submit a revised reply along with documentary evidence i.e. letter of FWO regarding cancellation of contract. DAC further directed the management to provide record to Audit for verification and settled the Para subject to satisfaction of Audit. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to provide a comprehensive reply along with relevant documentary evidence as directed in DAC meeting.

4.3.2 Loss due to irregular payment to the Contractor – Rs.2,067 million

"Provision of Rs.30 million (Lump sum) was made in BoQ item No.1.6 in the general items of contract KC-04 for care and handling of water including dewatering" and Rs.15 million (Lump sum) was made in BoQ item No.18.9 (a) in the drainage under concrete lining". Furthermore, as per technical provision of the contract KC-04 clause 2.2 (d), the Contractor was responsible for "removal and care of surface water and dewatering the sub-soil water for foundations such as to maintain all foundations, excavations and surface dry and free of water as required for proper construction of the works". Likewise, as per clause 2.5(c) "Contractor will ensure proper compaction and bonding of earth fill material".

During performance audit of KCP, WAPDA, DG Khan, it was observed that WAPDA in its meeting held on April 08, 2009 approved a Variation Order (VO) No. KC-04/04 amounting to Rs.2,067 million for providing and laying free drainage granular material for 155 Reduced Distances with 1.5 feet depth and for 35 RDs width 2.0 feet depth. Payment of Rs.2,067 million was irregular and unjustified as neither the exact locations of RDs were mentioned in the cited VO nor these were validated by Consultants. Audit observed that approval of VO No. KC-04/4 was against the contract provisions. Resultantly, project cost was increased which caused loss of Rs.2,067 million to the national exchequer.

Implication

Non-adherence to contract provisions resulted in loss of Rs.2,067 million on account of irregular payment to the contractor up to the Financial Year 2016-17. Violation of the above provisions resulted in unjustified cost overrun.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that before the initiation of VO-4, all site investigations were carried out showing that the requirement of the VO-4 was essential for the execution of lining work of canal. Since, VO-04/04 was essentially required as per site conditions and approved by the Authority, therefore, no extra contractual benefit was given to the Contractor. Based on the findings of investigation and review of independent Design Expert, the Consultants recommended the VO No. KC-04/04 and got it approved by the competent authority. The same VO KC-04/04 was also included in 1st revised PC-1 and became a part of Contract KC-04 as it had been approved by Central Development Working Party and ECNEC (Reference Planning Commission letter dated January 09, 2014).

The reply was not tenable as neither exact location of RDs was mentioned in the VO nor these were verified by Consultants.

The DAC in its meeting held on November 22, 2018 directed the management to submit a revised reply along with justification for irregular payment to the Contractor. The DAC further directed that the reply be submitted to Joint Secretary (Water) for his comments after linking this issue with the inquiry conducted by Ex-Chief Justice. The comments / minutes be shared with Audit, Ministry and WAPDA. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to conduct an inquiry in the matter at an appropriate level for fixing the responsibility against the person(s) at fault.

4.3.3 Loss due to irregular payment to the Contractor of KC-04 – Rs.1,836 million

As per technical provision of the Contract KC-04 clause 2.2(d) under care and handling of water, including dewatering, the Contractor was made responsible for "Removal and care of surface water and dewatering the sub-soil water for foundations such as to maintain all foundations, excavations and surfaces dry and free of water as required for proper construction of the works". "Provision of Rs.30 million (Lump Sum) was made in BoQ Item No.1.6 in the general items of contract KC-04 for Care and Handling of Water including de-watering and Rs.15 million (Lump sum) was made in BoQ item No.18.9 (a) in the drainage under concrete lining".

During performance audit of KCP, WAPDA, DG Khan, it was observed that WAPDA in a meeting held on December 28, 2011 approved the claims for under water excavation part-A&B amounting to Rs.1,836 million (part-A Rs.1,286 million + part-B Rs.550 million) for KC-04. Audit held that under water excavation was the responsibility of the Contractor according to the technical provision of the contract. Hence, additional payment of Rs.1,836 million for under water excavation was irregular and caused increase in the cost of project which was loss to the national exchequer.

Implication

Contract mismanagement resulted in avoidable cost overrun of Rs.1,836 million on account of irregular payment to contractors up to Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that a Dispute Settlement Committee (DSC) was constituted to resolve the issues of the Contractor who recommended part-A payment under water excavation amounting to Rs.1,286 million as justified as per site conditions, whereas, the Contractor’s claim for part-B not exceeding Rs.550 million was subject to field verification by the project authorities. As a result, the following claims had been withdrawn by the Contractor:

- Dewatering by pumping of areas in slushy reaches Rs.864 million
- Enhancement of fuel coefficient Rs.1,003.35 million approximate

The reply was not tenable as it was the responsibility of the Contractor to execute work according to technical provisions of contract. Hence, the additional payment of Rs.1,836 million for under water excavation was unjustified.

The DAC in its meeting held on November 22, 2018 directed the management to submit a revised reply to Joint Secretary (Water) for his comments. The comments / minutes be shared with Audit accordingly. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to get the matter investigated from Pakistan Engineering Council for fixing responsibility of irregular payment besides affecting recovery under intimation to Audit.

4.3.4 Loss due to award of contract at higher rates – Rs.1,696 million

Rule-18 of Public Procurement Rules, 2004 of PPRA provides that, "The procuring agency shall disqualify a supplier or contractor if it finds, at any time, that the information submitted by him concerning his qualification as supplier or contractor was false and materially inaccurate or incomplete". As per tender evaluation report for KC-04 under clause 5.4 sub clause 3&4, "The tenderer's quoted price of Rs.8,141.02 million was recommended for award of contract after adjustment of prices for some individual items. In case, the tenderer does not agree with above recommendations, the tender may be re-invited to arrive at un-ambiguous and competitive offer for the contract KC-04".

During performance audit of KCP, WAPDA, DG Khan, it was observed that initially three (03) firms met the pre-qualification criteria for contract (KC-04). The prequalification committee decided to relax the criteria in order to ensure maximum competition in the bidding process. Six (06) firms participated in the bidding process. Prequalification evaluation committee in its evaluation reports declared the bid of M/s SMADB-Lilley Shahrukh (JV) as ambiguous owing to several discrepancies in its quoted rates. Despite the above evaluation, the above mentioned contractor was allowed to participate in further bidding process. It was further noticed that the said bidder qualified as the 1st lowest with Rs.8,141 million as quoted price according to the financial evaluation of the committee. Audit's further scrutiny revealed that the correct arithmetic total of this contractor's individual bid items was Rs.9,837 million (i.e. 43.19% above the Engineer estimate based on WAPDA composite schedule of rates WCSR-1998). Despite the fact that these serious shortcomings were in notice of bid evaluation committee, M/s SMADB-Lilley Shahrukh (JV) was awarded the contract at a cost of Rs.9,837 million. Due to award of contract at higher rates cost of the project was increased by Rs.1,696 million which was a loss to the national exchequer.

Implication

Violation of Public Procurement Rules resulted in award of contract at higher rates due to controllable cost overrun up to Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the Authority decided to award Contract No. KC-04 for construction of main canal, lining and related structures from RD 106+000 to RD 530+400 and structures from RD 40+000 to RD 106+000 to M/s SMADB-Lilley-Shah Rukh (JV) at reduced contract price of Rs.9,737.01 million after rebate of Rs.100 million. Moreover, Rule 38 "Acceptance of Bids" of Public Procurement Rules, 2004 of PPRA stipulates that "The Bidder with the lowest evaluated bid, if not in conflict with any other law, rules, regulations or policy of the Federal Government shall be awarded the procurement contract within the original or extended period of bid validity". Moreover, this contract was regularized in 2nd revised PC-I approved by ECNEC. Therefore, the award of tender was under rules and regulations.

The DAC in its meeting held on November 22, 2018 directed the management to submit a revised reply along with relevant record in support of reply to Audit for verification. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to hold an inquiry in the matter through a high-level committee for fixing responsibility for award of contract at higher rates against the recommendations of bid evaluation committee.

4.3.5 Loss due to inadmissible payment to the Contractor on account of lump sum items –- Rs.22.85 million

Technical provision of contract clause 2.6 (b) for the measurement and payment of care and handling of water including dewatering stipulates, "No quantity will be made of work for care and handling of water, including dewatering and the payment, therefore, will be based on the payment schedule" and further clause 2.6(c) states, "Payment for care and handling of water including dewatering will be made up of the lump sum amount tendered in the BoQ item titled "care and handling of water".

During performance audit of KCP, WAPDA, DG Khan, it was observed that a payment of Rs.22.85 million was made to the Contractor on account of fuel & labour price escalation against lump sum amount of General Item No.1.6 pertaining to "care and handling of water including dewatering up to IPC No.96 of Contract KC-04". Audit held that no adjustment was to be allowed on the lump sum items of the contract as the lump sum items were not adjustable portion of the contract. Inadmissible payment of Rs.22.85 million **(as detailed in Annex-B)** was made to the Contractor in violation of contract's technical clause 2.6 which was loss to the national exchequer.

Implication

Non-adherence to the contract provisions resulted in controllable cost overrun due to inadmissible payment of Rs.22.85 million on account of lump sum items up to the Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that in accordance with contract provisions, the escalation of fuel and labour was allowed on the contract price and "Contract Amount" was the price mentioned in the LoA. As the Contract Price mentioned in the LoA contained the lump sum item No.1.6 of BoQ, therefore, the escalation had been paid to the Contractor as per contract provisions and there was no violation of Contract Technical clause 2.6. However, some disputes of contract KC-04 were in Court of Law after arbitration award. During this process, the arbitrator and umpire had also accorded the decision in favour of price adjustment on all lump sum items of BoQ including item 1.6.

The reply was not acceptable because no adjustment was to be allowed on the lump sum items of the contract as the lump sum items were not adjustable portion of the contract.

The DAC in its meeting held on November 22, 2018 directed the management to submit a revised reply along with relevant record in support of reply to Audit for verification. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to get the relevant record in support of reply verified.

4.3.6 Loss due to shifting contract BoQ item in the variation orders – Rs.18.93 million

As per Memorandum of Understanding of KCP for the Contract KC-04 signed on May 28, 2005 between WAPDA and the Contractor (M/s SMADB-Lilley-Shahrukh JV), a rebate of Rs.100 million (1.2% of the contract price) was provided.

During performance audit of KCP, WAPDA, DG Khan, it was noticed that Contract KC-04 for the earth work, construction of lining and structure of the canal from RD 106+000 to RD 530+400 was awarded to Contractor M/s SMADB-Lilley-Shahrukh (JV) in July, 2005. It was observed that during execution of the said contract, several contractual BoQ items were either deleted or shifted to various VOs of KC-04. It was further transpired that many VOs were approved on market-based rate instead of BoQ based pricing without mentioning reasons, although all items in VOs were included in the contract. Audit observed that due to deletion of contractual BoQ items, an amount of Rs.18.93 million was granted as rebate by the project authorities.

It was also pertinent to mention here that cost of contract was increased from Rs.9,737 million to Rs.17,762 million as per 2nd revised PC-I of the project but the amount of rebate was not revised @ 1.2% of the revised contract price. Resultantly, national exchequer sustained a loss of Rs.18.93 million.

(Rs.in million)

Sr. No.	Variation Order No.	Amount of Variation Orders	Amount of Item Deleted from BoQ	Amount of Rebate @1.2% as per MOU
1	KC-04/01	749.721	324.114	3.889
2	KC-04/03	369.114	337.661	4.052
3	KC-04/08	1,088.936	616.000	7.392
4	KC-04/09	1,160.516	272.852	3.274
5	KC-04/10	31.332	26.717	0.321
TOTAL				**18.928**

Implication

Non-adherence to contract provisions indicates towards inefficient contract management resulting in cost overrun of Rs.18.93 million on account of rebate up to the Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that out of Rs.100 million of rebates, an amount of Rs.83.55 million had been recovered up to IPC No.110. The work was in progress and the remaining rebate would be recovered in due course of time through IPCs.

The DAC in its meeting held on November 22, 2018 directed the management to keep the para pending till the recovery of complete amount and its verification by Audit. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to effect recovery from the Contractor's upcoming IPCs and get it verified besides fixing responsibility upon the person(s) at fault.

4.3.7 Irregular payment to contractor in violation of technical provisions of the Contract KC-04 – Rs.18 million

As per technical provisions of the Contract KC-04 clause 2.2 (c) under care and handling of water, including dewatering, the Contractor was responsible for "maintaining regular irrigation supplies of watercourses and other channels carrying irrigation water during the period of construction of the works under the contract".

During performance audit of KCP, WAPDA, DG Khan, it was observed that an amount of Rs.18 million was paid to the Contractor of KC-04 under the head additional claims for temporary arrangement of watercourse crossing. Audit held that as per technical specification clause 2.2 (c), it was the responsibility of the Contractor to maintain the watercourses. Therefore, payment of Rs.18 million made to the Contractor in violation of above-mentioned contract provisions was irregular which caused loss to the national exchequer.

Implication

Non-adherence to contract provisions resulted in loss of Rs.18 million on account of irregular payment to Contractor up to the Financial Year 2016-17. The cost overrun indicated towards inefficient contract administration.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the local farmers were not allowing any construction activity unless they were first provided watercourse pipe arrangement crossing over the Kachhi Canal. There was no other option except to provide temporary watercourse crossing in order to proceed with the continuous work of excavation and concrete canal lining with machines. Resultantly, an amount of Rs.18 million would be payable to the Contractor against his claim of Rs.64.57 million.

The reply was not tenable as it was the responsibility of the Contractor to execute work according to technical provisions of contract.

The DAC in its meeting held on November 22, 2018 was not satisfied with the management's reply. The DAC directed the management that as per technical specification clause 2.2 (c), it was the responsibility of the Contractor to maintain the watercourses, hence, recovery may be made from the Contractor under intimation to Audit. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to fix responsibility against person(s) at fault besides ensuring recovery from Contractor.

4.3.8 Loss due to excess payment made to the Contractor on account of BoQ item - Rs.14.81 million

As per approved contract agreement of KC-02, a provisional sum of Rs.200,000 was provided against BoQ item No.5.4 "concrete admixtures".

During performance audit of KCP, WAPDA, DG Khan, it was noticed that an amount of Rs.14.81 million was excess paid up to final IPC for contract KC-02 due to execution of exceptionally excess quantity (7,405%) than that provided in the contract. Subsequently, excess quantity was neither got regularized as per revised drawing nor approval of the competent authority was obtained by giving proper justification. This resulted in excess payment of Rs.14.81 million to the Contractor than the approved cost provided in contract agreement which was a loss to the national exchequer.

Implication

Non-adherence to the contract provision resulted in excess payment of Rs.14.81 million to the contractor above BoQ up to the Financial Year 2016-17. The cost overrun indicated towards inefficiency of the management regarding contract administration.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that Contract KC-02 had been completed in all respects in accordance with actual quantities executed at site certified by the Engineer in accordance with design, drawings and specifications.

The reply was not tenable because increase in the approved cost at the rate 7,405% due to preparation of unrealistic estimates without due vigilance needed justification. Management needed to provide complete record with reference to actual quantities executed at site certified by the Engineer in accordance with design.

The DAC in its meeting held on November 22, 2018 settled the Para subject to providing reasons for excess payment to Contractor. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to provide reasons for excess payment to the Contractor for verification.

4.3.9 Loss due to excess payment on account of inaccurate measurement of material – Rs.5.46 million

Measurement and payment clause 9.5 of the Contract KC-05D stipulates that "the payment shall be made according to the quantity certified and measured by the Engineer".

During performance audit of KCP, WAPDA, DG Khan, it was observed that excess payment was made to the Contractor of KC-05D vide cash voucher No.31 dated April 30, 2015 in the IPC No. D-25 against BoQ item No.3.20 "Reinforcement steel bars in deck slab, pile caps, piers e.t.c". It was observed during scrutiny of measurement sheet that quantity paid was shown as 963.75 tons instead of actual quantity of 868.3747 tons. This error resulted in excess payment of Rs.5.46 million (91.0353 tons x Rs.60,000).

IPC No. & Month	C.V. No. & Date	Description	BoQ item No.	Unit	Rate Rs.	Actual quantity	Paid quantity	Excess quantity	Amount (Rs.)
D-25 03/2015	31 30.04.2015	Reinforced steel bars in deck slab	3.20	Ton	60,000	868.3747	959.41	91.353	5,462,118

Implication

Non-adherence to contract provisions resulted in excess payment of Rs.5.46 million on account of inaccurate measurement of quantity of material up to the Financial Year 2016-17. The violation was yet another controllable cost overrun which indicated poor contract administration.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the quantity verified in the IPC No.D-25 was correct and in accordance with the contract sub-clause 9.5 of Contract KC-05-D. Further the figure mentioned by Audit i.e. 868.3747 tons was not correct. The actual up-to-date quantity verified by the Engineer was 959.41 tons and was according to the drawing, design and actually executed at site. The chair directed the management to explain to Joint Secretary (Water) the reasons for excess use of admixtures and payment thereupon to Contractor.

The DAC in its meeting held on November 22, 2018 settled the para subject to providing justification for excess payment to the Contractor. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to provide justification for excess payment to the Contractor with documentary evidence.

4.3.10 Unjustified abnormal time overrun

According to clause 4.26 of the 'Manual for Development Project' regarding cost and time overrun, issued by the Planning Commission of Pakistan "preparation of the project on the PC-I proforma is the pivotal phase of the project cycle**.** The maxim "well begun is half done" is most appropriate for completing this phase. The Sponsoring Agency should be given or give itself adequate time to prepare a project. The time taken in the examination of a project would be in inverse proportion to the time taken in its preparation. Thanks to the effort, the project would in fact lend itself to smoother and speedier implementation. A hurriedly prepared project, on the contrary, would run a difficult course throughout the project period and be afflicted with time and cost overrun and may ultimately prove to be counter-productive".

As per original approved PC-I of KCP, the project was required to be completed within five (5) years commencing from October, 2002.

During performance audit of KCP, WAPDA, DG Khan, it was noticed that the project could not be completed by WAPDA within scheduled time period. Physical progress of project phase-I, part-A was 97% and part-B was 91%, whereas, phase-II & III of the project had not been started up till June, 2017. 2^{nd} revised PC-I of the project disclosed that the completion period of the project, phase-I, had been extended up to December, 2017. It indicated that phase-I of the project would be completed with a time overrun of more than ten (10) years. Despite incurring heavy expenditure of Rs.64,699.89 million up to June, 2017, non-completion of KCP within scheduled time frame indicated poor performance on behalf of project authorities and Consultants.

Implication

Non-adherence to the instructions of Planning Commission of Pakistan resulted in unjustified abnormal time overrun of 10 years.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that reasons of time overrun were beyond the control of the Contractor and Employer, also, brought into the knowledge of MoWP and Planning Commission of Pakistan, who agreed and accorded approval of 2nd revised PC-I by the ECNEC.

The reply was not tenable because project was delayed for more than 10 years due to poor performance on behalf of project authorities and the Consultants.

The DAC in its meeting held on November 22, 2018 directed the management to retain the para and to be placed before the PAC for discussion and decision.

Audit Recommendations

Audit recommends that the management needs to investigate the matter for fixing responsibility upon the person(s) at fault for abnormal time overrun besides implementing DAC's directives.

4.4 Construction and Works

4.4.1 Loss due to reduction in life of Kachhi Canal Project against planned economic life as per original PC-I – Rs.393,200 million

As per original approved PC-I of KCP, the economic life of project was 50 years and project benefits were estimated to be Rs.19.66 billion per year.

During performance audit of KCP, WAPDA, DG Khan, it was noticed that economic life of KCP was reduced from 50 years to 30 years in 2nd revised PC-I. Thus, economic life of the project was reduced by 20 years.

Audit held that reduction in the project life was caused due to substandard work executed by the contractors. Due to decrease in project life, the economic viability of KCP was materially undermined. Resultantly, national exchequer sustained a loss of Rs.393,200 million (Rs.19.66 billion x 20 years).

Implication

Non-adherence to the provision of original approved PC-I resulted in loss amounting to Rs.393,200 million on account of reduction in life of KCP up to the Financial Year 2016-17. Project's life has been reduced by 20 years, undermining both its sustainability and financial viability.

Management Response

The matter was taken up with the management in January, 2018 and

reported to MoWR in February, 2018. The management explained that an analysis on the assumption of project life as 50 years was conducted but Economic Internal Rate of Return (EIRR) and Benefit Cost (B/C) ratio were almost same as compared to assumption of Project life of 30 years. However, the 2nd revised PC-I had also been approved by the ECNEC.

The reply was not tenable because no reason for reduction in the scope of work i.e. 713,000 acres as per original PC-I to 72,000 acres as per revised PC-I and for reduction of project life was forthcoming from the record.

The DAC in its meeting held on November 22, 2018 settled the para. However, the committee directed that detailed comments of Joint Secretary (Water) on the issue may be recorded. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to provide detailed comments of Joint Secretary (Water) on the issue.

4.4.2 Cost overrun against the provision of PC-I - Rs.60,586 million

As per original approved PC-I of KCP, the project cost for Phase-I was approved as Rs.19,766 million.

During performance audit of KCP, WAPDA, DG Khan, it was noticed that cost of KCP Phase-I was increased from Rs.19,766 million to Rs.80,352 million, resulting in a cost overrun of Rs.60,586 million (Rs.80,352 million – Rs.19,766 million). Moreover, the scope of work (length of Phase-I) was also reduced from RD 1,322 to RD 1,193. Furthermore, a cost overrun from the original approved cost of the project (Phase-I) resulted a loss of Rs.60,586 million. The shortcomings mentioned above indicated extremely poor project management and performance.

Implication

Non-adherence to the provision of PC-I resulted in cost overrun of Rs.60,586 million against the provision of PC-I up to the Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and

reported to MoWR in February, 2018. The management explained that the reasons for cost overrun were as follows:

1. Additional work in the shape of variation orders;
2. High inflation rates within the country;
3. Higher bid cost than provision in PC-1;
4. Addition of new contract for lining from RD1,005 to RD1,322;
5. Inadequate funding for project from GoP, and
6. Adverse Law and Order situation.

The reply was not tenable because the project cost overrun of Rs.60,586 million (306 % above the original cost) was due to lack of planning by Authority and poor performance on behalf of Contractors and Consultants.

The DAC in its meeting held on November 22, 2018 directed the management to submit a one page break-up of increased expenditure and kept the para pending to be reported to the PAC. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to investigate the matter for fixing responsibility upon person(s) at fault for abnormal cost overrun.

4.4.3 Loss due to incur of wasteful expenditure on irrational site selection of Kachhi Canal Project – Rs.54,540 million

As per WAPDA comments stated in Technical & Financial Audit report on KCP WAPDA, DG Khan issued during 2015, "if canal is diverted from Guddu Barrage, only 400,000 acres could be irrigated by gravity supply".

During performance audit of KCP, WAPDA, DG Khan, it was observed that as per WAPDA comments, if a canal was diverted from Guddu Barrage, the gravitational supply for 400,000 acres was sufficient for KCP. It was further noticed that as per the analogy of Pat Feeder Canal water quota, water availability was sufficient for 410,000 acres as per water allowance **(as detailed in Annex-C)**. Audit held that without sufficient availability of water, any water related venture would bear nothing except wastage of resources. Therefore, selection of site for construction of KCP should have been considered for irrigating 410,000 acres through water intake from Guddu Barrage as per water availability. Hence, site selection of Taunsa barrage as diversion source point was not rational. Consequently, a 306 KM lined canal and structures had to be constructed additionally due to poor planning at feasibility stage. Resultantly, a loss of Rs.54,540 million (Rs.64,700 million/363x306 KM) was sustained due to faulty design and irrational site selection of KCP.

Implication

Poor project management resulted in wasteful expenditure amounting to Rs.54,540 million on account of irrational site selection for KCP up to the Financial Year 2016-17. Improper site selection for the project was a matter of serious concern as it directly questioned the effectiveness of the project. Non-availability of required water quantity would certainly cut the number of acres to be irrigated.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the same nature of observations was made and satisfactory reported under Technical & Financial Audit of KCP. The auditors were engaged by the Ministry of Planning, Development & Reforms, GoP.

The reply was not tenable because site selection of Taunsa Barrage as diversion source point was not rational. Consequently, a 306 KM linked canal and structures had to be constructed additionally due to poor planning.

The DAC in its meeting held on November 22, 2018 settled the para subject to linking it with the inquiry by the Ex-Chief Justice and recording comments of Joint Secretary (Water) on the issue. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to furnish a detailed reply after linking it with the inquiry by the Ex-Chief Justice besides fixing the responsibility.

4.4.4 Non-recovery of liquidated damages charges–Rs.3,365.63 million

As per clause 47.1 and Appendix-A to tender of contract agreement, the recovery of liquidated damages charges was required to be made good from the Contractors @ Rs.0.05% of the contract price for each day of delay in completion of the works subject to a maximum of the 10% of the contract price stated in the LoA.

During performance audit of KCP, WAPDA, DG Khan, it was noticed that the Contractors could not complete the works within a stipulated completion period. The project authorities were required to recover LD charges amounting to Rs.3,365.63 million **(as detailed in Annex-D)** in the light of above referred contractual obligation but the same were not recovered from the Contractors. Non-recovery of LD charges under clause 47.1 of contract agreement was tantamount to undue financial favour to defaulted Contractors and loss to the national exchequer.

Implication

Non-adherence to provisions of contract resulted in non-recovery of LD charges amounting to Rs.3,365.63 million from contractors of KCP up to the Financial Year 2016-17. This reduced efficiency and increased controllable cost overrun.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that extension of times (EoTs) were granted by Authority to contractors of KCP on merit and factual ground realties were beyond the control of Contractors and Employer. Moreover, these EoTs were also regularized in 2nd revised PC-I approved by ECNEC.

The reply was not tenable because contract was not executed within stipulated time and undue favour was given to contractor in the shape of granting EoT.

The DAC in its meeting held on November 22, 2018 deferred the para for want of additional information regarding project wise completion of contracts in order to determine the exact amount of LD charges. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to recover the LD charges from defaulted Contractors under clause 47.1 of contract agreement.

4.4.5 Loss due to irregular payment of overhead, profit and income tax – Rs. 1,550.58 million

Appendix-D to tender of KC-04, stipulates "the rates and prices tendered in the priced BoQ shall, except insofar as it is otherwise provided under the contract include all costs of the Contractor's plant, labour, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the contract". As per preface para-7 to WCSR-2013, "twenty percent (20%) profit and overhead charges have been included in rate analysis of composite rates".

During performance audit of KCP, WAPDA, DG Khan, it was observed that an amount of Rs.1,550.58 million on account of overhead & profit and income tax was paid to Contractor of contract KC-04 against VO No.03, 08 and 09. Whereas as per, appendix-D to tender of contract and preface para-7 of WCSR-2013, overhead, profit and income tax were already included in BoQ items. Therefore, provision of overhead and profit @ 70% in VO Nos.08 & 09 and of income tax @ 6% in VO No.03 of contract KC-04 made to Contractor was in violation of appendix-D to tender of contract and preface WCSR-2013. Resultantly, irregular payment of Rs.1,550.58 million was made to Contractor of Contract KC-04.

Implication

Violation of tender documents and WCSR-2013 resulted in irregular payment of Rs.1,550.58 million on account of overhead, profit and income tax adding to cost overrun of the project up to Financial Year 2016-17.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that WCSR-2008 was followed instead of WCSR-2013. The Rate Analysis was based on WCSR 2008+70% Contractor's premium as mutually agreed on the basis of Consumer Price Index from 2008 to 2012. The rates were fixed by the Engineer in accordance with sub-clause 52.2 "Power of Engineer to Fix Rates" as per CoC. The Authority approved the mentioned VO with premium of 70%, therefore, no profit was paid to the Contractor. The Central Contract Cell in joint note dated August 02, 2012 also agreed with the premium 70% on WCSR-2008 items along with escalation & de-escalation as per CoC sub-clause 70.1 with base price of August, 2012. These VOs were also regularized in 2nd revised PC-I approved by ECNEC.

The reply was not tenable because no documentary evidence was provided to substantiate the stance.

The DAC in its meeting held on November 22, 2018 was not satisfied with the management's reply as did not mention as to which contract provision supported their stance and under what rule additional work (80%) was given to the same contractor. Hence, the committee directed the management to submit a revised comprehensive reply supported with documentary evidence to Audit for verification. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to investigate the matter for fixing responsibility against person(s) at fault for irregular payment to Contractor besides effecting recovery.

4.4.6 Irregular and un-justified payment on Extension of Time cost – Rs.1,445 million

According to the instructions issued by WAPDA dated July 17, 1982, "All losses, whether of public money or of stores, shall be subjected to a preliminary investigation by the officer in whose charge they were, to fix the cause of the loss and the amount involved".

During performance audit of KCP,WAPDA, DG Khan, it was observed that the Authority accorded approvals for the grant of EoT in contract KC-04, KC-05(C) and KC-06(A&C) with admissibility of price adjustment (escalation only) as per clause 70.1 of the GCoC. It was further noticed that an amount of Rs.1,445 million **(as detailed in Annex-E)** was paid to Contractors on account of EoT cost claims.

The payment of EoT cost claims amounting Rs.1,445 million was not admissible to Contractor as the Authority while deciding EoT case had allowed price adjustment only to Contractor. The subsequent approval of EoT cost was not in line with the provisions of contract agreement as issue of EoT cost did not exist at the time of approval of EoT. Therefore, payment of Rs.1,445 million on account of EoT cost to the Contractor was irregular and unjustified. Resultantly, national exchequer sustained a loss of Rs.1,445 million due to mis-management of project authorities.

Implication

Non-adherence to WAPDA instructions resulted in irregular payment of Rs.1,445 million on account of EoT cost up to Financial Year 2016-17. Failure to control time & cost overruns indicated poor efficiency of the management.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the escalation was paid to the contractor as per clause 70.1 of CoC for specified material in accordance with Appendix-C to tender, whereas EoT claim was a separate issue to compensate the Contractor against loss due to idling of manpower and machinery under clause 53 of CoC. Moreover, these EoT costs were regularized in 2^{nd} revised PC-I approved by ECNEC.

The reply was not tenable because approval of EoT cost was not in line with contract agreement as issue of EoT cost did not exist at the time of approval of EoT.

The DAC in its meeting held on November 22, 2018 directed the management to get their stance supported with documentary evidence verified from Audit. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to provide record in support of reply besides fixing responsibility.

4.4.7 Loss due to delay in construction of residential and non-residential buildings – Rs.597.25 million

As per Table B-13 of original PC-1, "a provision of Rs.97.75 million was made for construction of residential and non-residential building at the project".

During performance audit of KCP, WAPDA, DG Khan, it was observed that a provision of Rs.97.75 million was made in original PC-I for construction of residential and non-residential buildings at the project. The project execution commenced from October, 2002 and as per annual phasing, construction activities for residential and non-residential buildings were to be started in the first year from the execution of the project. Contrary to the above, construction activities were started in December, 2014, which enhanced the cost of construction to Rs.695 million. Audit is of the view that if construction were started as per annual phasing, an amount of Rs.597.25 million could be saved.

Implication

Non-adherence to the provision of PC-I resulted in loss of Rs.597.25 million due to delay in construction of residential and non-residential buildings up to the Financial Year 2016-17 which would further retard the operation of the project.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the cost of O&M colonies in revised PC-I was increased due to increase in the number of residential & non-residential buildings and design demanded by the I&P Department, GoB**.** The process of construction of colonies was undertaken since 2003 but, due to various issues such as land acquisition, rate and change of site of colonies the process remained delayed. The residential and non-residential buildings of DG Khan had been constructed recently and would be handed over to the GoB as and when desired by them. Moreover, the cost of colonies was approved under 2nd revised PC-I of the project by ECNEC.

The reply was not tenable because no documentary evidence to substantiate the stance was provided.

The DAC in its meeting held on November 22, 2018 directed the management to provide reasons for delay supported with documentary evidence to Audit for verification. Further progress was not reported till finalization of report.

Audit Recommendations

Audit recommends the management to investigate the matter for fixing responsibility upon person(s) at fault, for abnormal delay in construction of residential and non-residential buildings besides implementing the directives of DAC.

4.4.8 Loss due to over-payment to Contractor on account of fuel & labour price escalation – Rs.54.95 million

According to sub-clause 70.1(c) of Federation International Des Ingenieurs-Conseils (FIDIC) CoC regarding overhead and profit stipulates, “in determining the amount of any adjustment to the contract price pursuant to this clause, no account shall be taken of any overheads or profit”.

During performance audit of KCP, WAPDA, DG Khan, it was observed that payment of Rs.54.95 million was made to Contractor on account of fuel & labour price escalation on overhead and profit @ 70% against VO No.08 & 09 and on income tax @ 6% against VO No.03 of Contract KC-04. Audit held that under clause 70.1, no fuel and labour adjustment was to be allowed to Contractor on overhead, profit and income tax paid against VO No.03, 08 and 09, respectively. Hence, payment of Rs.54.95 million made to Contractor was unjustified and irregular. The violation of FIDIC contract clause 70.1 resulted in loss of Rs.54.95 million **(as detailed in Annex-F)** due to poor financial management.

Implication

Poor financial management resulted in unjustified payment of Rs.54.95 million on fuel and labour price escalation to contractor up to the Financial Year 2016-17. Unjustified payments to contractors indicate weak internal controls leading to management’s failure to control unnecessary cost overruns.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that the inclusion of profit in BoQ rates were allowed under paragraph of appendix-D to tender. The WCSR-2008 was followed. The Rate Analysis was based on WCSR-2008 + 70% contractor’s premium as mutually agreed on the basis of Consumer Price Index from 2008 to 2012. The rates were fixed by the Engineer in accordance with sub-clause 52.2 “Power of Engineer to Fix Rates” as per Conditions of Contract. The Authority approved this variation order with premium of 70%, therefore, no profit was paid to the Contractor. The escalation was admissible to the Contractor under the contract clause 70.1 (c) of CPA-IIA. “Adjustment shall be allowed only for the quantities of material specified in appendix-C to tender which had been actually incorporated in the permanent works". Moreover, escalation on these VOs had been regularized in 2nd revised PC-I approved by ECNEC.

The reply was not tenable because under clause 70.1, no fuel and labour adjustment was to be allowed to the contractor on overhead, profit and income tax paid against VO No.03, 08 and 09. Furthermore, no documentary evidence to substantiate the stance was provided by the management.

The DAC in its meeting held on November 22, 2018 was not satisfied with the management's reply as it did not mention as to which contract provision supported their stance. Hence, the committee directed the management to submit a revised comprehensive reply supported with documentary evidence for verification to Audit. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends the management to investigate the matter for fixing responsibility regarding unjustified payment on fuel and labour price escalation besides ensuring its recovery from Contractor.

4.5 Environmental Impact

4.5.1 Non-implementation of Pakistan Environmental Protection Agency directives of afforestation on both sides of Kachhi Canal Project

As per conditions laid down by Pakistan Environmental Protection Agency, Islamabad vide letter No. F No. 2(1)/2004-W/KCP-DD(EIA) dated February 03, 2007, "the Proponent/Contractor should ensure a proper plantation plan and maintenance mechanism which should be approved from WAPDA-Environment Cell and be shared with provincial Forest Departments. There should be a clear cut program/plan whereby identifying types of plants and species to be planted along the Kachhi Canal. Concerted efforts should be taken to ensure maximum survival of new plantation. M/s WAPDA may develop an institutional mechanism for plantation on both sides of KCP on sustainable basis".

During performance audit of KCP, WAPDA, DG Khan, it was observed by conducting a site visit of the Project on July 21, 2017 that contrary to the above provision, no proper plantation was carried out by Contractor. As per letter referred above, the proponent of the project was to submit an undertaking regarding acceptance of the condition laid down in the approved documents.

Implication

No proper tree plantation plan was in place up to Financial Year 2016-17. The green and clean environment could not be made available to the project site which is vital to control soil erosion.

Management Response

The matter was taken up with the management in January, 2018 and reported to MoWR in February, 2018. The management explained that plantation work was completed from RD 0 to RD 40, in remaining RDs work of plantation would be started soon. As the site of the work was under the control of contractors up to the Defects Liability Period, the remaining plantation work would be done later upon completion of Defects Liability Period under intimation to Audit.

The DAC in its meeting held on November 22, 2018 directed the management to get verified the record pertaining to plantation from RD0 to RD40. The committee further directed to provide a timeline for completion of the project to Audit. Further progress was not reported till finalization of the report.

Audit Recommendations

Audit recommends that the management needs to get the plantation from RD0 to RD40 verified.

4.6 Sustainability of the project

4.6.1 Loss due to poor planning on account of wrong sequencing of work plan of Kachhi Canal Project – Rs. 5,201 million

As per clause 3.1.1 of the consultancy agreement, "the Consultant shall perform the service and carry out their obligations with all due diligence, efficiency and economy in accordance with generally accepted professional techniques and practices and shall observe sound management practices and employ appropriate advanced technology and safe methods. The Consultant shall always act in respect of any matter relating to this contract or to the services as a faithful advisor to the Client and shall at all time support and safeguard, the Client's legitimate Interest in any dealings with sub-consultants or other parties". Clause 3.3 of the 'Manual for Development Project' regarding PC-II, issued by the Planning Commission of Pakistan provides that "A PC-II is prepared for undertaking a feasibility study in respect of a major project estimated to cost Rs.50 million or more which is mandatory". As per clause 7.16 iii (g) of the 'Manual for Development Project' regarding PC-II, issued by the Planning Commission of Pakistan "Changes in design and specifications should be avoided after these have been finalized except where such changes are of critical importance.

During performance audit of KCP, WAPDA, DG Khan, it was observed that the Authority approved original PC-I on September 27, 2003 after a ceremony on October 04, 2002 while feasibility study was conducted in 2006 by a JV of four consultants i.e. M/s NESPAK, NDE, ACE and BARQAAB at a cost of Rs.99.99 million in 700 man-months. This cost was increased to Rs.2,693 million vide amendment No.6. This fact showed that Consultants failed to carry out a comprehensive review of the project due to which major changes in design and drawing were necessitated which ultimately caused time overrun and cost overrun of Rs.5,201 million **(as detailed in Annex-G)**.

Implication

Poor planning on account of wrong sequencing of work plan reduced effectiveness of project and resulted in loss of Rs.5,201 million to the Authority up to the Financial Year 2016-17.

Management Response

The matter was taken up with management in January, 2018 and reported to MoWR in February, 2018. The management replied that reason of delay and cost overrun was beyond the control of the Consultants and project authorities. KCP implementation cycle was totally in reverse order, which was basic cause of all problems encountered at a later stage i.e. normal engineering practice for any project implementation as per project development manual.

The reply was not tenable because purpose of Consultants' JV was to study all aspects of project and to prepare a comprehensive plan to encounter each bottleneck prior to start of the project. Hence, the Consultants failed to foresee the technical aspects of the project which caused 57 VOs. Resultantly, extra cost of Rs.5,201 million was paid to Consultants due to time overrun. The Audit desired penalization besides action against the person(s) at fault.

The para was discussed in the DAC meeting where Audit view point was accepted by the committee.

Audit Recommendations

Audit recommends the management to investigate the matter for fixing responsibility upon those responsibles besides making good the loss due to poor planning and mismanagement.

4.7 Overall Assessment

Overall assessment of the KCP with reference to economy, efficiency and effectiveness is as under:

Economy:

The project has not been carried out in an economical manner as all the contracts were awarded on higher rates against the provisions of PC-I.

Efficiency:

Phase-I of the project was to be completed in June, 2007, whereas it was completed after a time overrun of more than 10 years. Moreover, Phase-II & Phase-III have still not been taken up for execution until August, 2017. Due to delay in completion of the project, envisaged benefits of Rs.19,666 million per year could not be achieved. Due to inefficient execution of the project, the cost of Phase-I increased from Rs.19,766 million to Rs.80,352 million.

Effectiveness:

In terms of achievement of desired objectives, the project remained ineffective because a major component of command area development and Phase-II & III of the project were not executed by August, 2017. Due to incomplete development, the envisaged benefits could not be achieved.

5. CONCLUSION

Audit concluded that poor project management was evident from the very outset as all milestones were unduly delayed giving the project a difficult start. These long delays were invariably followed by cost overruns. Completion of KCP was expected to uplift lives of at least 70,000 people. Despite this envisaged benefit, the project could not be completed and serious setbacks were observed by the end of phase I. These include unjustified and abnormal delays at all stages, poor contract administration, frequent design changes and inadequate and weak internal controls leading to an overall poor performance.

ACKNOWLEDGEMENT

We wish to express our appreciation to the management and staff of KCP WAPDA, DG Khan for the assistance and cooperation extended to the auditors during this assignment.

Project Digest
Kachhi Canal Project
Phase - I (2^{nd} revision)

1.	**Name of Project**	Kachhi Canal Project	
2.	**Source Point**	River Indus at Taunsa Barrage	
3.	**Location**	Districts of Muzaffargarh, D.G Khan & Rajanpur in Punjab and Districts of Dera Bugti (Phase-I), Naseerabad, Bolan, Kachhi & Jhal Magsi in Balochistan (Phase-II & III)	
4.	**Length of Canal**		
	• Total Length of Canal (Phase-I, II and III)		500 KM
	– Length of Canal Phase-I		363KM
	– Length of Canal in Punjab		306 KM (12 KM unlined, 294 KM lined)
	– Length of Canal in Balochistan		57 KM (Lined)
5.	**Length of Distributaries /Minors Phase-I**		81 KM
6.	**Discharge/Capacity of Canal**		6,000 Cusecs
7.	**Command Area:**		
	• Gross Area (Phase-I, II & III)		1,040,000 Acres (420,874 ha)
	• Gross Area (Phase-I)		105,034 Acres (42,506 ha)
	• Culturable Command Area (CCA) (Phase-I, II, III)		713,000 Acres (288,514 ha)
	Bifurcation:		
	– CCA (Phase-I)		72,000 Acres (28,800 ha)
	– CCA (Phase-II)		296,999 Acres (120,529 ha)
	– CCA (Phase-III)		344,000 Acres (139,212 ha)
8.	**Date of Commencement**		
	• As per Original PC-I (Phase-I, II & III)		October 04, 2002
9.	**Date of Completion**		
	• As per Original PC-I (Phase-I, II & III)		June, 2007
	• As per 1strevision PC-I (Phase-I)		June 30, 2015
	• As per 2^{nd} revision PC-I Phase-I (Part-A) RD 0 to RD 1,126 and partially Part-B from RD 1126 to RD 1,193 (55,000 + 17,000) to irrigate 72,000 Acre land.		December 31, 2018
	• Date of completion of Phase-I from RD 0 to RD 1126 to irrigate 55,000 Acre land and to make the Kachhi Canal operational subject to the releases of required funds		June 30, 2017
	• Date of completion of Phase-I from RD 0 to RD 1,193 to irrigate 72,000 acre land subject to the releases of required funds		October 31, 2017

10.	**Capital Cost of the Project**	
	• Original PC-I (Phase-I, II & III) – (Approved by ECNEC September 27,2003)	Rs.31,204 million
	• 1st Revised PC-I (Phase-I) – (Approved by ECNEC on December 31, 2013)	Rs.57,562 million
	• 2nd Revised PC-I Phase-I (rationalized) – Submitted for approval	Rs.80,352 million
11.	**Economic Evaluation**	
	• Original **PC-I (Phase I, II & III)**	
	– EIRR for Base Case	19.43%
	– EIRR for Sensitivity Analysis	16.35%
	– B/C Ratio	1.82 **:** 1
	• **1st Revised PC-I (Phase-I)**	
	– EIRR for Base Case	11.52%
	– EIRR for Sensitivity Analysis	10.27%
	– B/C Ratio	0.98 **:** 1
	• **2nd Revised PC-I (Phase-I)**	
	– EIRR for Base Case	12.60%
	– EIRR for Sensitivity Analysis	11.15%
	– B/C Ratio	1.09**:** 1
12.	**Financial Evaluation**	
	• **1st Revised PC-I (Phase-I)**	
	– Unit Cost	Rs.27,153/Acre
13.	• **2nd Revised PC-I (Phase-I)**	
	– FIRR for Base Case	11.16%
	– FIRR for Sensitivity Analysis	9.83%
	– B/C Ratio	0.88:1
	– Unit Cost	Rs.24,538/ Acre
	Life of the Project	30 years (Economic)
14.	**Annual Recurring Cost (O&M Cost)**	
	• **As** per Original PC-I (Phase-I, II & III)	Rs.318 million
	• As per 1st Revised PC-I (Phase-I)	Rs.373.42 million
	• As per 2nd Revised PC-I (Phase-I)	Rs.437.71 million
15.	**Project Benefits (at economic prices)**	
	• As per Original PC-I (Phase-I, II & III)	Rs.19.66 Billion / Annual
	• As per 1st Revised PC-I (Phase-I)	Rs.2.33 Billion / Annual
	• As per 2nd Revised PC-I (Phase-I)	Rs.3.82 Billion / Annual

(Annex-A)

(Rs. in million)

Year	All amounts in local currency/PSDP Allocation		
	PSDP Allocation	**Actual Releases**	**Actual Expenditure**
2002-03	300.000	348.965	348.965
2003-04	900.000	842.987	842.987
2004-05	1,260.000	1,240.307	1,240.307
2005-06	2,588.354	2,545.531	2,545.531
2006-07	6,270.000	6,040.041	6,040.041
2007-08	7,375.000	7,611.162	7,611.162
2008-09	3,112.500	3,460.388	3,460.388
2009-10	960.000	2,172.094	2,172.094
2010-11	700.000	1,380.174	1,380.174
2011-12	2,250.000	2,616.425	2,616.425
2012-13	6,400.000	7,617.146	8,001.815
2013-14	5,235.000	4,310.959	3,926.291
2014-15	12,000.000	9,139.702	8,766.946
2015-16	7,131.343	6,056.681	6,248.306
2016-17	9,115.000	9,498.462	9,498.462
Total	**65,597.197**	**64,881.024**	**64,699.894**

(Annex-B)

Detail of Fuel and Labour Escalation (Skilled & Un-Skilled) against lump sum BoQ Item No.1.6 (care and handling of water including dewatering of contract KC-04.

A- Fuel Escalation

IPC No. & Month	CV No. & Month	Value of General Item included	Fuel component @ 10%	Base Rate (Rs.)	Current Rate (Rs.)	% age of increase or decrease	Amount paid (Rs.)
96 Feb-2017	36/24.04.17	28,920,799	2,892,080	24.37	94.09	286.09	8,271,349

B- Skilled Labour Escalation

IPC No. & Month	CV No. & Month	Value of General Item included	Labour component @ 20%	Skilled labour component @ 60%	Base Rate (Rs.)	Current Rate (Rs.)	% age of increase or decrease	Amount paid (Rs.)
96 Feb-2017	36/24.04.17	28,920,799	5,784,160	3,470,496	250	800	220	7,635,091

C- Unskilled Labor Escalation

IPC No. & Month	CV No. & Month	Value of General Item included	Labour component @ 20%	Un-Skilled labour component @ 40%	Base Rate (Rs.)	Current Rate (Rs.)	% age of increase or decrease	Amount paid (Rs.)
96 Feb-2017	36/24.04.17	28,920,799	5,784,160	2,313,664	100	400	300	6,940,992

Grand Total Fuel and Labour (A+B+C) = Rs. 22,847,432

Say, Rs.22.85 million

(Annex-C)

Water availability for Kachhi Canal Project as per Water Allowance Pat Feeder Canal

Description	Pat Feeder canal	Kachhi Canal
Discharge Capacity	6,700 cusecs	6,000 cusecs
Command Area	458,000 acres	713,000 acres
Water Allowance	14.63 cusec/1000 acres as per Handbook on Water Statistics of Pakistan	5.8 cusec/1000 acres as Per 2nd Revised PC-I
Water availability as per discharged capacity of Canal on the basis of 14.63 cusec/1,000 acres.	458,000 Ares	**410,000 Acres** = (458,000/6,700X6,000)

DETAIL OF LIQUIDATED DAMAGES (LD) CHARGES

(Annex-D)

(Rs. in million)

S#	Contract No.	Name of contractor	Contract Cost / Award Price.	Commencement	Period (months)	Completion Date	Revised Completion / target	L.D. Charges @ 10%.
1	KC-01	M/s Malik sons Lahore	15.470	06.01.2003	08	02.09.2003	30.06.2004	1.547
2	KC-02	M/s Ghulam Rasool & Co.	654.736	15.11.2003	37	17.05.2005	31.12.2007	65.473
3	KC-03	M/s Descon Engineering Ltd.	3,274.318	Letter Issued 03.08.2007/ 22.08.2007	18 550 days	31.12.2008/ 21.02.2009	31.12.2009	327.431
4	KC-04	M/s SMADB-Lilly-Shahrukh JV	9,737.021	13.07.2005	42	06.01.2009	31.12.2014	973.702
5	KC-04A	M/s Ghulam Rasool & Co.	635.953	31.10.2009	12	30.10.2010	30.06.2011	63.595
6	KC-05	M/s Central China Power Group (CCPG)	12,451.78	09.09.2006	28	31.12.2008	31.12.2014	1,245.178
7	KC-05(R)	M/s RSL-CGC (JV) Karachi	2,298.400	04.08.2016	-	03.02.2017	31.01.2017 03.02.2017	229.840
8	KC-06A	M/s SMADB-Lilly-Shahrukh JV	1,821.714	28.03.2006	24	24.03.2008	31.12.2010 23.11.2014	182.171
9	KC-06C	M/s SMADB-Lilly-Shahrukh JV	2,766.956	Letter issued 15.08.2007 / 30.08.2007	18	03.03.2009 01.03.2009	31.12.2010 26.11.2014	276.695
Total								**3,365.632**

DETAIL OF EXTENSION OF TIME (EOT) COST CLAIMS

(Annex-E)

(Rs. in million)

Sr. No.	Name of Contract	Date of Extension	EoT cost	IPC No.	Work suspension period	Date of Authority Approval
1	KC-6 (C)	01.01.2009 to 30.06.2013	311	Final IPC	07.2010 to 02.2014	08.03.2013
2	KC-6 (A)	21.03.2008 to 30.06.2013	279	Final IPC	07.2010 to 12.2014	25.03.2013
3	KC-04	07.01.2009 to 31.12.2010	202	86 A	07.2010 to 01.2013	09.03.2010
4	KC-04	01.01.2011 to 31.12.2013	274	93	07.2010 to 01.2013	03.08.2012
5	KC-04	01.01.2013 to 31.12.2014	142	Nil	07.2010 to 01.2013	07.02.2014
6	KC-05 (C)	01.07.2011 to 31.12.2011	237	Nil	05.2008 to 11.2012	19.12.2012
		Total	**1,445**			

(Annex-F)

Detail of Fuel and Labour Escalation (Skilled & Un-Skilled) against Variation Order No.03 of contract KC-04

A- Fuel Escalation

(Rs.in million)

IPC No & Month	CV No. & Date	Value of Income tax &Profit	Fuel component @ 10%	Base Rate (Rs.)	Current Rate (Rs.)	% age of increase or decrease	Amount paid (Rs.)
96 Feb-2017	36/ 24.04.17	34.81 (13.84+20.97)	3.48	24.37	94.09	286.09	9.96

B- Skilled Labour Escalation

(Rs.in million)

IPC No. & Month	CV No. & Date	Value of Income tax &Profit	Labour component @ 20%	Skilled labour component @ 60%	Base Rate (Rs.)	Current Rate (Rs.)	%age of increase or decrease	Amount paid (Rs.)
96 Feb-2017	36/ 24.04.17	34.81 (13.84+20.97)	6.96	4.18	250	800	220	9.20

C- Unskilled Labor Escalation

(Rs.in million)

IPC No. & Month	CV No. & Date	Value of Income tax &Profit	Labour component @ 20%	Un-Skilled labour component @ 40%	Base Rate (Rs.)	Current Rate (Rs.)	%age of increase or decrease	Amount paid (Rs.)
96 Feb-2017	36/ 24.04.17	34.81 (13.84+20.97)	6.96	2.78	100	400	300	8.35

Total Fuel and Labor Escalationin VO KC-04/03(A+B+C) = Rs.27.51 million

Escalation on fuel and labour in VO KC-04/08&09
=Rs.4.24+62.39= Rs.66.63 (M)70%
Profit on Escalation 66.63x70/170 = Rs.27.44 million

Grand Total **=Rs.54.95 million**

DETAIL OF TIME & COST OVERRUN

(Annex-G)

(Rs. in million)

Sr. No	Name of Contract	Extension Granted by the Authority	EoT cost claim	IPC No.	Work Suspension Period	Escalation Payments upto June-2017	Total
A	**B**	**C**	**D**	**E**	**F**	**G**	**H= (D+G)**
1	KC-6 (C)	01.01.2009 to 30.06.2013	311	Final IPC	07.2010 to 12.2014	129	**440**
2	KC-6 (A)	21.03.2008 to 30.06.2013	279	Final IPC	07.2010 to 12.2014	89	**368**
3	KC-04	07.01.2009 to 31.12.2010	202	86 A	07.2010 to 01.2013	3,288	**3,490**
4	KC-04	01.01.2011 to 31.12.2013	274	93	07.2010 to 01.2013	-	**274**
5	KC-04	01.01.2013 to 31.12.2014	142	Nil	07.2010 to 01.2013	-	**142**
6	KC-05 (C)	01.07.2011 to 31.12.2011	237	Nil	05.2008 to 11.2012	250	**487**
Total			**1,445**			**3,756**	**5,201**