



Facility Administration Manual

Project Number: 38456
9 February 2009

**Islamic Republic of Pakistan: Power Distribution
Enhancement Investment Program
(Multitranche Financing Facility)**

**Loan 2438-PAK: Tranche-1, Investment Project
Loan 2439-PAK(SF): Support Project**

Important Note: This Facility Administration Memorandum is an active document. It will be updated and revised progressively as and when necessary during each review mission and following any changes in project investment costs, scope, or implementation arrangements. The contents herein are intended to assist and facilitate project management and implementation. If there is any conflict with any other legal agreement(s) related to this Investment program, the provision(s) in the legal agreement(s) will prevail.

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Main Text

I. Introduction

1. The Government of Pakistan (the Government) has entered into a Framework Financing Agreement (FFA) with the Asian Development Bank (ADB) for up to \$810 million to finance the Power Distribution Enhancement Investment Program in July 2008. ADB approved a multitranche financing facility (MFF) for \$810 million in September 2008 to finance this Investment Program. Subsequently ADB approved the Loan 2438-PAK to finance the Tranche-1 Investment Project (Tranche-1) for \$242 million from its ordinary capital resources (OCR) and the Loan 2439-PAK to finance the Support Project for \$10 million from its Special Fund (Asian Development Fund [ADF]) resources.

2. On 29 November 2008, the Government, Pakistan Electric Power Company (PEPCO), Faisalabad Electric Supply Company (FESCO), Gujranwala Electric Power Company (GEPCO), Hyderabad Electric Supply Company (HESCO), Islamabad Electric Supply Company (IESCO), Lahore Electric Supply Company (LESCO), Multan Electric Power Company (MEPCO), Peshawar Electric Supply Company (PESCO), Quetta Electric Supply Company (QESCO) signed Loan and Project Agreements with ADB for financing and implementing of activities under Tranche-1 and the Support Project. The Loans 2438-PAK and 2439-PAK have been declared effective on 13 January 2009. The Tranche-1 is expected to be completed by 31 December 2011 and the Support Project is expected to be completed by 30 June 2018.

3. The FFA provides a maximum utilization period of 10 years for the MFF, and provides for drawing down in tranches through periodic financing requests (PFRs) for no less than \$150 million each tranche.

II. Purpose

4. The Investment Program is designed to provide grid-connected customers with adequate and reliable supply of electricity. The rehabilitation, augmentation, and expansion of power distribution infrastructure in eight power distribution companies (DISCOs) will increase the reliability of supply to residential, agricultural, commercial, and industrial customers across Pakistan. A reliable electricity supply will lead to social and economic benefits and improved conditions for schools, hospitals, and social services, among others.

III. Overview

5. This Investment Program will (i) improve power distribution infrastructure through system rehabilitation, augmentation, and expansion; and relieve the power system from distribution bottlenecks and constraints; (ii) enable continued operation and maintenance in accordance with best international practices; and (iii) commercialize DISCO operations. Specifically, (i) DISCOs will adhere to regulatory requirements and comply with the security standards; (ii) about 12,000 gigawatt-hours (GWh) of additional energy will be supplied through the national grid annually; (iii) the system will be capable of meeting peak demand, with electricity outages

significantly reduced; and (iv) 30 million additional people will have access to electricity from the national grid.

IV. Key Persons Involved in the Project

A. ADB Staff

- (i) Director, Central and West Asia Department (CWRD), Energy and Natural Resources Division (CWEN)
- (ii) B. Byambasaikhan, Energy Specialist and Mission Leader, CWEN
- (iii) B. Tambunan, Head, Project Administration Unit, CWEN
- (iv) E. De Castro, Associate Project Analyst, CWEN
- (v) R. Stroem, Country Director, Pakistan Resident Mission (PRM)
- (vi) A. Aleem, Project Implementation Officer (Energy), PRM
- (vii) A. Tareen, Procurement Officer, PRM

B. Executing Agency (Pakistan Electric Power Company)

- (i) Mr. Fazal Ahmad Khan, Managing Director, PEPCO
- (ii) Mr. Muhammad Saleem Arif, Advisor PEPCO

C. Implementing Agencies (Distribution Companies)

- (ii) Ch Ahmed Saeed Akhtar, Chief Executive Officer, Faisalabad Electric Supply Company (FESCO)
- (iii) Niaz Hussain Naqvi, Chief Engineer (Development) FESCO
- (iv) Rana Muhammad Ashraf Zahid, Chief Executive Officer, Gujranwala Electric Power Company (GEPCO)
- (v) Nasir Mahmood, Chief Engineer (Development), GEPCO
- (vi) Ch Guftar Ahmed Anjum, Chief Executive Officer, Hyderabad Electric Supply Company (HESCO)
- (vii) Habibullan Khilji, Chief Engineer (Development), HESCO
- (viii) Raja Abdul Ghafoor, Chief Executive Officer, Islamabad Electric Supply Company (IESCO)
- (ix) Malik Yousaf Awan, Chief Engineer (Development), IESCO
- (x) Mohammad Akram Arain, Chief Executive Officer, Lahore Electric Supply Company (LESCO)
- (xi) Shoukat Ali Bajwa, Chief Engineer (Development), LESCO
- (xii) Muhammad Amin Sahi, Chief Executive Officer, Multan Electric Power Company (MEPCO)
- (xiii) Jalal-ud Din Malik, Chief Engineer (Development), MEPCO
- (xiv) Muhammad Qasim Khan, Chief Executive Officer, Peshawar Electric Supply Company (PESCO)
- (xv) Nawaz Ali Khan, Chief Engineer (Development), PESCO
- (xvi) Muhammad Shafiq, Chief Executive Officer, Quetta Electric Supply Company (QESCO)
- (xvii) Muhammad Arshad, Chief Engineer (Development), QESCO

V. Loan Processing History

a.	Approval of project preparatory technical assistance	27-Nov-2006
b.	Fact-finding	5 to 21-Jun-2007
c.	Management review	1-Aug-2007
d.	Appraisal mission	28-Jan to 8-Feb-2007
e.	Staff review committee	14-Mar-2008
f.	Loan negotiations	7 to 9-Jul-2008
g.	Board circulation	13-Aug-2008
h.	Board consideration and approval	12-Sep-2008
i.	Loan agreement signing (Tranche-1 and Support Project)	29-Nov-2008
j.	Loans effectiveness, including conditions	13-Jan-2009
k.	Inception Mission	29 Jan-12 Feb 2009

Annex 1: Project Definition

1.1 Sponsors, Stakeholders and External Agencies

(i) Sponsors:

- a. Government of Pakistan - Economic Affairs Division, Ministry of Finance (the Borrower)
- b. Asian Development Bank

(ii) Stakeholders:

- a. Pakistan Electric Power Company (PEPCO)
- b. Faisalabad Electric Supply Company (FESCO)
- c. Gujranwala Electric Power Company (GEPCO)
- d. Hyderabad Electric Supply Company (HESCO)
- e. Islamabad Electric Supply Company (IESCO)
- f. Lahore Electric Supply Company (LESCO)
- g. Multan Electric Power Company (MEPCO)
- h. Peshawar Electric Supply Company (PESCO)
- i. Quetta Electric Supply Company (QESCO)
- j. Project land acquisition collectors (LAC)
- k. Affected People (AP) identified under Land Acquisition and Resettlement Plan

(iii) External Agencies

- a. Provincial Board of Revenue (for approval of compensation rates for land)
 - b. Provincial Environment Protection Agencies (EPAs)
 - c. District Revenue Office (for compensation rates and affected assets survey)
 - d. District Government Office/Tehsil (for establishment of LAR and grievance and redress committees)
 - e. Subdistrict Nazim/Union Council (for establishment of LAR and grievance and redress committees)
-

1.2 Impact and Outcomes

1. Impact:

6. The Investment Program will contribute to economic growth and social development through enhancing efficiency of the overall power distribution system and provision of an adequate and reliable power supply to a greater number of industrial, commercial and residential customers in the territory of the Borrower. The expected impact of the Investment Program is increased reliability and quality of power supply and expended service coverage in the Project Area.

2. Outcomes:

7. The expected outcome of the Investment Program is rehabilitated, augmented and expanded power distribution systems through improvements of the secondary transmission grid (STG), distribution of power (DOP), and capacitors, energy loss reduction (ELR), and miscellaneous investments to the distribution system.

1.3 Outputs

Specific Activities for Tranche-1 and Support Project

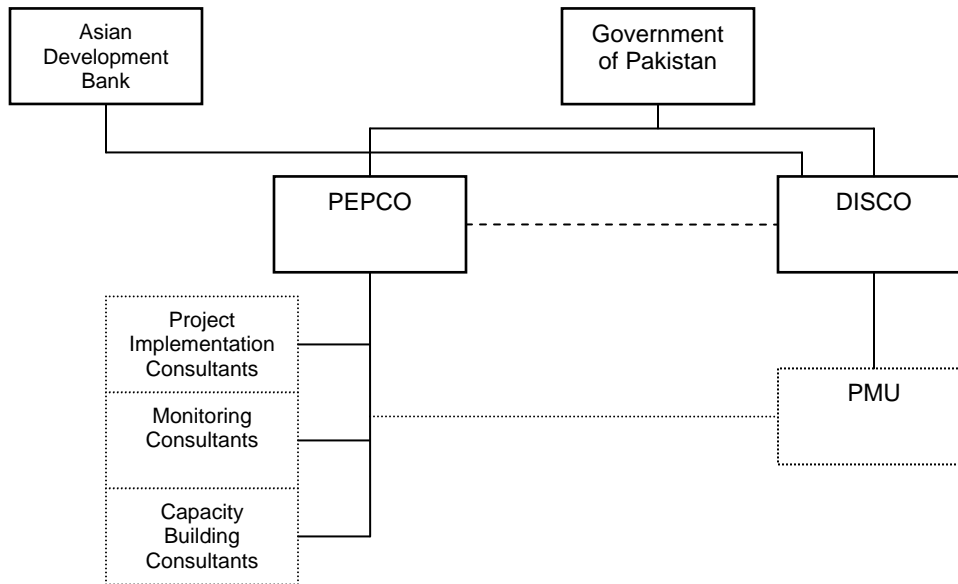
	Tranche-1	Remarks
1. PEPCO	<ul style="list-style-type: none"> I. Processing support: <ul style="list-style-type: none"> A. Tranche processing B. Relending agreements C. Loan negotiations/approvals II. Coordination <ul style="list-style-type: none"> A. PC-I consolidation B. Interaction with federal ministries and provincial departments C. Progress reporting and conduct semi-annual review and meetings III. Monitoring support <ul style="list-style-type: none"> A. Safeguards monitoring IV. Project management support <ul style="list-style-type: none"> A. PPMS B. Performance monitoring and evaluation 	
2. FESCO	<ul style="list-style-type: none"> I. Secondary Transmission Grid (STG): <ul style="list-style-type: none"> A. 06 Extensions B. 06 Augmentation C. 01 Additional transformer bay II. Energy Loss Reduction (ELR): None III. Distribution of Power (DOP): None IV. Capacitors: install 132kV & 11 kV V. Modernization: <ul style="list-style-type: none"> A. construction equipment B. automated meter reading C. computerized accounting system VI. Rehabilitation: replace time expired/technically inadequate substation equipment 	See Annex 8.1 for subprojects detail.
3. GEPCO	<ul style="list-style-type: none"> I. Secondary Transmission Grid (STG): <ul style="list-style-type: none"> A. Fatehpur conversion 66kV to 132 kv (see note below) II. Energy Loss Reduction (ELR): <ul style="list-style-type: none"> A. 17 11kv feeders and B. 184 LT works III. Distribution of Power (DOP): <ul style="list-style-type: none"> A. 4 11kv feeders and B. 325 LT works (meaning augmentation/addition of new transformers). 	See Annex 8.1 for subprojects detail.
4. HESCO	<ul style="list-style-type: none"> I. Secondary Transmission Grid (STG): <ul style="list-style-type: none"> A. 07 augmentation 	See Annex 8.1 for subprojects

	<ul style="list-style-type: none"> B. 03 extension 	detail.
	<ul style="list-style-type: none"> II. Energy Loss Reduction (ELR): re-conductoring, reconfiguring networks 	
	<ul style="list-style-type: none"> III. Distribution of Power (DOP): None 	
	<ul style="list-style-type: none"> IV. Capacitors: install 132 kV & 11 kV 	
	<ul style="list-style-type: none"> V. Rehabilitation: replace time expired/technically inadequate substation equipment. 	
2. IESCO	<ul style="list-style-type: none"> I. Secondary Transmission Grid (STG): <ul style="list-style-type: none"> A. 20 augmentations B. 5 extensions II. Energy Loss Reduction (ELR): None III. Distribution of Power (DOP): None 	See Annex 8.1 for subprojects detail.
4. LESCO	<ul style="list-style-type: none"> I. Secondary Transmission Grid (STG): <ul style="list-style-type: none"> A. 01 Substation B. 05 Extensions C. 23 Augmentations II. Energy Loss Reduction (ELR): None III. Distribution of Power (DOP): None IV. Capacitors: <ul style="list-style-type: none"> A. \$4m component – grid capacitors. V. Distribution system modernization: <ul style="list-style-type: none"> A. \$4.6m multiple components. 	See Annex 8.1 for subproject details.
7. MEPCO	<ul style="list-style-type: none"> I. Secondary Transmission Grid (STG): <ul style="list-style-type: none"> A. 01 new site B. 02 additional line bay C. 01 two additional line bay D. 01 additional transformer & line bay E. 02 extension F. 02 kV to 132 kV conversion G. 04 augmentation H. 01 transformer bay extension II. Energy Loss Reduction (ELR): re-conductoring, reconfiguring networks III. Distribution of Power (DOP): none IV. Capacitors: install 132 kV & 11 kV 	See Annex 8.1 for subprojects detail.
8. PESCO	<ul style="list-style-type: none"> I. Secondary Transmission Grid (STG): <ul style="list-style-type: none"> A. 10 extension B. 05 augmentation C. 01 transmission line & line bay II. Energy Loss Reduction (ELR): none III. Distribution of Power (DOP): install 11 kV/LV extensions, distribution substations IV. Capacitors: install 132 kV & 11kV V. Modernization: install reclosers & sectionalisers to improve system performance VI. Rehabilitation: replace time expired/technically inadequate substation equipment 	See Annex 8.1 for subprojects details.
9. QESCO	<ul style="list-style-type: none"> I. Secondary Transmission Grid (STG): <ul style="list-style-type: none"> A. 01 augmentation & extension B. 05 extension C. 01 augmentation D. 02 conversion II. Energy Loss Reduction (ELR): reconditioning, reconfiguring networks III. Distribution of Power (DOP): 11kV/LV extensions, distribution substations 	See Annex 8.1 for subprojects details.

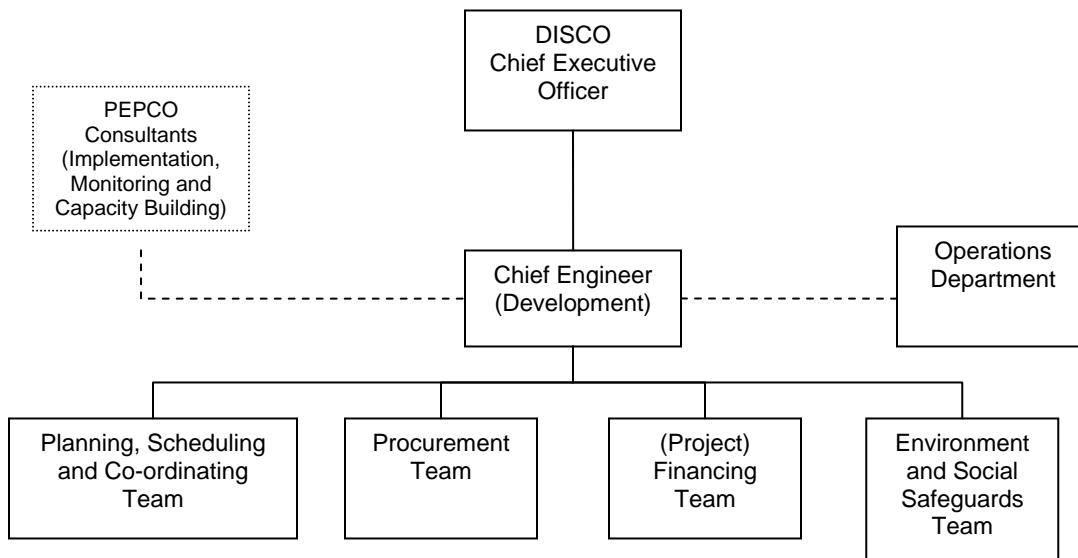
Annex 2: Project Management

2.1 Project Organization Structure

1. Project Organization Structure

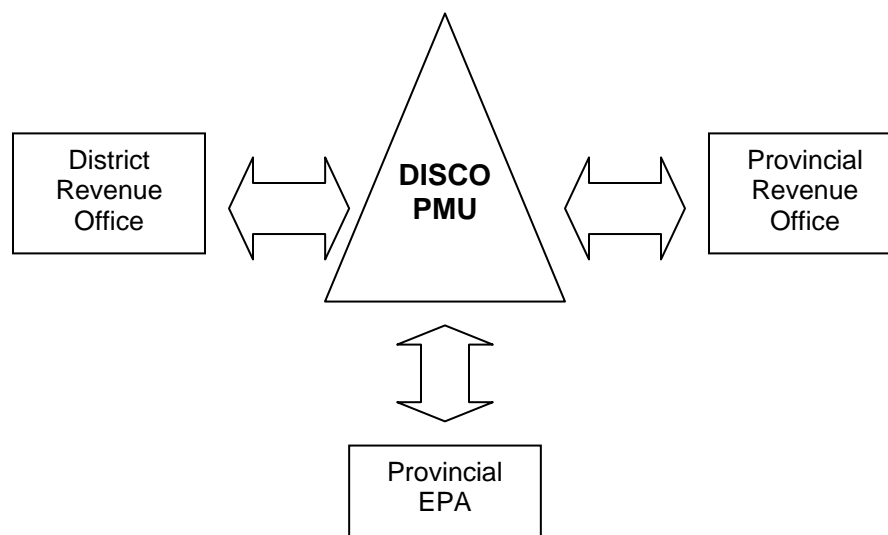


2. DISCO Project Management Unit – Organization Chart



3. Tranche-1 [Safeguards] – Organization Chart

The chart below broadly captures the primary external agencies with whom the DISCO PMU will interact for actions under Environmental Assessment and Review Plan (EARP), Land Acquisition Resettlement Plan (LARP) and Indigenous People Development Framework (IPAF).



2.2 Roles and Responsibilities

8. Strategic and Management Level

- (i) Sponsors – will provide strategic direction, commit resources and financing as agreed, and review progress. Furthermore, will ensure that the program complies with the relevant statutory requirements, Government and ADB's policies and procedures, including ADB's anticorruption policy, as appropriate; and
- (ii) Performance Evaluation and Monitoring (this will be under PEPCO) – will monitor the progress of the performance and the program deliverables, and report to the sponsors.

9. Operational Level

- (i) Chief Engineer (Development)
 - i. To manage the PMU team and ensure they are staffed appropriately;
 - ii. Supervise and manage the day-to-day implementation of the subprojects (planning, procurement, safeguards, finance and operations related);
 - iii. Liaise with PEPCO through the CEO as necessary;
 - iv. Report on all procurement related matters and seek approval from CEO. In addition, the Board of Directors if required.
 - v. Report on all safeguards related matters and obtain approval from CEO.

- vi. Report on finance and disbursement related matters, will co-sign all withdrawal applications and payments. In the absence, the duly appointed alternate will co-sign.
 - vii. In the temporary absence of Chief Engineer an alternate or an Officer-in-charge will be nominated by the CEO.
- (ii) Environmental and Safeguards Team – To take care of all responsibilities and tasks related to environment, land, and social (including involuntary resettlement and indigenous people). It will comprise of one deputy manager and two assistant managers.
 - (iii) Planning, Scheduling and Co-ordinating Team – The team will be responsible for (i) identifying and proposing the subprojects to PEPCO and subsequent approval for financing, (ii) scheduling and monitoring the approved subproject activities, (iii) preparing the necessary documentation in line with the statutory, corporate and ADB policies; (iv) provide oversight on occupational health, safety and environment safeguards in the working environment, and (iv) implementation scheduling.
 - (iv) Procurement Team – To take care of all responsibilities and tasks related to procurement (goods and works) and consultant recruitment.
 - (v) Project Financing Team – Responsible for taking care of counterpart financing, funds flow arrangements, payments, recording and monitoring of both ADB and DISCO funds. Also, will establish, monitor and manage the imprest account and Statement of Expenditure (SOE) procedures. Furthermore, ensure timely preparation of the annual audited project accounts and submission to ADB within 6 months of financial year end.
 - (vi) Project Implementation Consultant – To support DISCOs in the implementation of Tranche-1, a project implementation consultant (PIC) will be recruited by PEPCO. The PIC would be responsible for supporting DISCOs in the (i) general power distribution business management including project implementation and management; (ii) project finance and management, and financial reporting; (iii) contracting, procurement, and inventory management; (iv) project performance monitoring system design and application; and (v) relevant on-the-job training of DISCO personnel.
 - (vii) Monitoring Consultant – The monitoring consultant will ensure that the environmental and social safeguard measures are implemented in accordance with the approved plans.
 - (viii) Capacity Building Consultant – DISCO capacity will be developed by training programs in modern distribution system planning, utility management, and information communications and technology as needed. PEPCO will recruit international consultants that will design and deliver activities to strengthen DISCOs' (i) planning, (ii) design, (iii) project management, (iv) operations, and (iv) maintenance capabilities. Bilateral exchange programs will be developed with foreign power companies to develop role models among current and potential managers. An institutional capacity building support project will be developed for each DISCO based on its individual needs.

10. Responsibilities of PEPCO:

- (i) Responsible for (a) carrying out the Support Project, and (b) monitoring and coordinating activities under the Tranche-1 and the entire Investment Program with the DISCOs, and communicating with ADB.
- (ii) Ensure that the implementation consultants are recruited and mobilized to assist each DISCO in the implementation of subprojects.
- (iii) Keep ADB informed of any development in the Borrower's policies, programs and investment plans related to the power generation, transmission and power distribution that may materially affect the financial viability of PEPCO, the DISCO, and the Investment Program.
- (iv) Establish **within two (2) months of the Effective Date**, a clear and transparent mechanism for setting and collecting the management fee to ensure its financial viability.
- (v) Ensure that *ADB's Anticorruption Policy* is followed throughout the implementation of the Investment Program.
- (vi) Shall participate in semi-annual meetings between the Borrower, the DISCO, and ADB to review and discuss the implementation progress under the Investment Program.
- (vii) Shall establish **within three (3) months of the Effective Date**, a PPMS in a form and substance acceptable to ADB, in accordance with the Project Performance indicators and targets stipulated in the design and monitoring framework.
- (viii) Consolidate for submission to ADB quarterly progress reports prepared by the DISCO.
- (ix) Maintain its internal controls in accordance with the national accounting standards of the Borrower and set up **within four (4) months of the Effective Date** its independent internal audit department.

11. Responsibilities of PMU:

DISCO related specific responsibilities are discussed in detail in the Loan and Project Agreements. The roles and responsibilities described below are specifically related to the PMU, and therefore should be read in conjunction with the relevant agreements:

- (i) **With in one (1) month of the Effective Date**, a PMU adequately staffed and headed by a suitably qualified Director to the Satisfaction of ADB.
- (ii) Ensure that all land acquisition and resettlement activities under the Investment Program are duly carried out and completed.
- (iii) Ensure that the Tranche-1 subprojects are carried out in accordance with the Borrower's environmental laws and regulations, the ADB; Environment Policy (2002), the Environmental Assessment and Review Framework (EARF), including updates thereto agreed with ADB, and respective Initial Environmental Examinations (IEEs), Summary Initial Environmental Examinations (SIEEs) and Environmental Management Plans (EMPs) included in IEEs; all mitigation and monitoring measures identified in the respective EMP are incorporated into detailed design of the Subproject and implemented during the construction and operation of the Project facilities, all contracts under the Subprojects contain provisions on compliance with these requirements, the implementation of the

- EMPs is monitored and evaluated internally and externally, and results of such monitoring and evaluation are reported to ADB.
- (iv) Ensure that all subprojects affecting indigenous people are constructed and operated in accordance with the requirements of the Borrower's applicable laws and regulations, ADB's Policy on Indigenous Peoples (1998) as specified in the Indigenous People Development Framework (IPDF), and detailed in the respective IPDP's (or LARPs), the implementation of the IPDP's is monitored and evaluated internally and externally, and results of such external monitoring and evaluation are reported to ADB.
 - (v) Ensure that **within six months of the Effective Date**, an environmental officer and a social officer are appointed in the DISCO's environmental and social cell to conduct an internal monitoring and evaluation of the implementation of the LARPs, IPDPs, and EMPs, results of such monitoring are included in quarterly progress reports to be submitted to ADB, **within four months of the Effective Date** an external agency or an NGO acceptable to ADB is engaged to conduct external monitoring and evaluation of the implementation of the LARPs, IPDPs, EMPs and their impacts, and external monitoring and evaluation reports are provided to ADB on a semiannual basis.
 - (vi) Participate in semi-annual meetings with the Borrower, PEPCO, and ADB to review and discuss the Tranche-1 implementation progress.
 - (vii) Establish **within three (3) months of the Effective Date**, the PPMS in a form and substance acceptable to ADB, in accordance with the Tranche-1 performance indicators and targets stipulated in the design and monitoring framework.
 - (viii) Prepare and submit through PEPCO their quarterly progress reports.
 - (ix) Maintain their internal controls in accordance with the national accounting standards of the Borrower and set up **within (4) four months of the Effective Date** its independent internal audit departments.
-

Annex 3: Procurement Plan

3.1 Process Thresholds and Reviews

(i) Thresholds

12. Except as ADB may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works	
Method	Threshold
International Competitive Bidding for Works	Above \$5,000,000
International Competitive Bidding for Goods	Above \$1,000,000
National Competitive Bidding for Works	Up to ICB thresholds
National Competitive Bidding for Goods	Up to ICB thresholds
Shopping for Works	Up to US\$ 100,000
Shopping for Goods	Up to US\$ 100,000

(ii) Reviews

13. Except as ADB may otherwise agree, the following prior or post review requirements apply to the various procurement and consultant recruitment methods used for the project.

Procurement of Goods and Works		
Procurement Method	Prior or Post	Comments
ICB Works, Goods	Prior	
LIB Works, Goods	Prior	
NCB Works, Goods	Prior to first procurement, post thereafter	In the event that the standard bidding documents shall apply to all DISCOs then one prior review for all DISCOs for each procurement method shall suffice. Otherwise, prior review shall apply on first procurement by each DISCO for each procurement method.
Shopping for Works, Goods	Prior to first procurement, post thereafter	

DISCO = distribution company, ICB = international competitive bidding, LIB = limited international bidding, NCB = national competitive bidding.

Recruitment of Consulting Firms		
Quality and Cost Based Selection (QCBS)	Prior	
Quality Based Selection (QBS)	Prior	
Other selection methods: Consultants Qualifications (CQS), Least Cost Selection (LCS), Fixed Budget (FBS), and Single Source (SSS)	Prior	
Recruitment of Individual Consultants		
Individual Consultants	Prior	

3.2 Procurement Plan

14. Loan 2439-PAK (Support Project) for \$10 million is for supporting the implementation of the Investment Program and will cover consulting services for (i) subproject preparation, (ii) subproject implementation, (iii) subproject monitoring activities, and (iv) capacity building of DISCOs. Table A3.1 details the breakdown of Support Project consulting services and engineering services envisaged for Tranche-1.

Table A3.1: Proposed Contract Packages for the Support Project Consulting and Engineering Services for Tranche-1

No	Proposed Procurement Package	Procurement Method	Quality:Cost Ratio	Proposed type	National/ International Assignment	Expected Advertising Date	Contract Amount (US\$ million)									
							FESCO	GEPCO	HESCO	IESCO	LESCO	MEPCO	PESCO	QESCO	PEPCO	Total
1	Design Engineering Services (Tranche-1)	QCBS	80:20	FTP	Intl	Q3/08			1.0	0.9	1.1					3.0
				STP	Intl	Q3/09	0.6					0.7	0.5		1.8	
				BD	Intl	Q3/10		0.2			0.4				0.6	
2	Implementation Consulting Services (Support Project)	QCBS	80:20	FTP	Intl	Q4/09									4.0	4.0
3	Monitoring Consultant (Support Project)	QCBS	80:20	STP	Intl	Q1/09									0.6	0.6
4	Capacity Building Consultant (Support Project)	QCBS	80:20	FTP	Intl	Arrangement to be agreed with the Asian Development Bank based on experience with capacity building consultant to be recruited under TA Loan 2178									1.2	1.2

BD = biodata technical proposal, FESCO = Faisalabad Electric Supply Company, FTP = full technical proposal, GEPCO = Gujranwala Electric Power Company, HESCO = Hyderabad Electric Supply Company, IESCO = Islamabad Electric Supply Company, Intl = International, LESCO = Lahore Electric Supply Company, MEPCO = Multan Electric Power Company, PEPCO = Pakistan Electric Power Company, PESCO = Peshawar Electric Supply Company, QCBS = quality- and cost-based selection method, QESCO = Quetta Electric Supply Company, STP = simplified technical proposal.

15. Consultants will be employed by PEPCO and will provide varying services to the DISCOs depending on their needs and capabilities. The terms of reference for consultants will be developed and agreed with ADB prior to recruitment.

16. Because of the significant volume of work, DISCO engineering capacity will be expanded during project execution by recruitment of services from external engineering companies. To this end, the procurement plan proposes recruiting an engineering services contractor for each DISCO. It is considered that sufficient domestic engineering capacity exists in Pakistan to meet this requirement.

17. The Table-A3.2 details the contract packages agreed for Tranche-1 to be financed under Loan 2438-PAK. During the ADB Inception Mission¹ it was observed that these packages might need further revision and consolidation. The DISCOs will submit their proposals to ADB for prior review and approval and will be made part of the FAM. Further breakdown of the contract packages is provided in Appendix __ (to be provided by DISCOs).

**Table A3.2: Tranche-1 Contract Packages for Goods and Works
(as agreed at the time of loan negotiations in July 2008)**

No.	Proposed Procurement Packages	Procurement Method	Domestic Preference	Pre-qualification	Contract Type	Bidding Procedure	Expected Advertising Date	FESCO	GEPCO	HESCO	IESCO	LESCO	MEPCO	PESCO	QESCO	PEPCO	Total \$
	(\$ million)		Y/N	Y/N													
1	132 kV Power Transformers	ICB	Y	N	G	SSOE	Q3/08	7.4		4.8	17.5	18.7	3.7	7.9	4.4		64
2	Circuit Breakers and Associated Equipment	ICB	Y	N	G	SSOE	Q3/08	2.5		2.4	0.9	2.1	0.8	2.7	1.1		12
3	Control and Relay Panels and Ancillary Equipment	ICB	Y	N	G	SSOE	Q3/08	2.8		1.9	5.6	6.3	1.4	2.9	1.0		22
4	Distribution System Modernization Equipment	ICB	Y	N	G	SSOE	Q4/08	8.7	1.2	5.9	2.8	6.3	1.1	6.3	2.8		35
5	Tower Steel Works and Insulators	NCB	N	N	G	SSOE	Q4/08		0.6				0.3	0.5	0.5		2
6	Overhead Line Conductors	ICB	Y	N	G	SSOE	Q4/08		3.7				5.6	2.8	6.2		18
7	L V Aerial Bundled Conductors	ICB	Y	N	G	SSOE	Q4/08			20.2							20
8	Distribution Transformers	ICB	Y	N	G	SSOE	Q4/08		1.5					6.5	3.3		11
9	Major Substation Build	ICB	Y	N	T	SSOE	Q3/08		2.7			2.9	5.4		3.4		14
10	Civil Works / Erection and Installation	NCB	N	N	w	SSOE	Q1/09	3.1	1.7	6.2	3.3	4.1	2.4	6.0	4.4		31
	Subtotal							24.5	11.3	41.3	30.2	40.4	20.6	35.6	27.1		231
	Number of procurement packages							5	6	6	5	6	8	8	9		53

FESCO = Faisalabad Electric Supply Company, G = goods, GEPCO = Gujranwala Electric Power Company, HESCO = Hyderabad Electric Supply Company, IESCO = Islamabad Electric Supply Company, LESCO = Lahore Electric Supply Company, MEPCO = Multan Electric Power Company, N = No, PEPCO = Pakistan Electric Power Company, PESCO = Peshawar Electric Supply Company, QESCO = Quetta Electric Supply Company, S = services, SSOE = single stage one envelope, T = turnkey, W = works, Y = Yes.

Note: Borrower may request approval from Asian Development Bank to apply domestic preference procedure to packages where goods are manufactured in Pakistan. The default procedure is for domestic preference not to apply.

¹ ADB Inception Mission was conducted on 29 January – 12 February 2009.

18. The templates below outline the tasks and the time it takes on average to complete a task under ICB procurement method and QCBS recruitment method. These are applicable to an average case, and therefore may vary depending on the specific needs of a project.

ICB – Single Stage One Envelope

ICB - Single-Stage: One-Envelope (1S1E) Procedure		254 days
	PREPARATORY	89
	1. EA drafting of bidding document including technical specifications and specific procurement notice (SPN)	60
	2. EA submitting draft bidding document and SPN to ADB	7
	3. ADB reviewing draft bidding document and SPN	10
	4. ADB posting of SPN on ADB website	1
	5. ADB sending consolidated comments to EA	2
	6. EA finalizing bidding documents	7
	7. EA advertising in local English newspaper	2
	ISSUANCE OF BIDDING DOCUMENTS	30
	8. EA issuing bidding documents	30
	BIDDING PERIOD	42
	9. Bidders preparing bids	42
	BID CLOSING/OPENING	8
	10. Bid closing and opening	1
	11. EA submitting signed record of public bid opening to ADB	7
	BID VALIDITY AND BID SECURITY	118
	12. Bid Validity Expiry Date	90
	13. Bid Security Expiry Date	28
	BID EVALUATION	52
	14. EA evaluating and preparing bid evaluation report	45
	15. EA submitting bid evaluation report to ADB	7
	ADB APPROVAL OF BID EVALUATION REPORT	23
	16. ADB reviewing of bid evaluation report	21
	17. ADB advising EA of approval	2
	AWARD OF CONTRACT	30
	18. EA notifying successful Bidder of award	2
	19. EA sending successful Bidder the Contract Agreement	7
	20. Successful Bidder submitting signed Contract Agreement to EA	28
	21. Successful Bidder furnishing Performance Security to EA	28
	EA SUBMITTING COPY OF SIGNED CONTRACT TO ADB	7

Quality and Cost Based Selection - Consultant recruitment

Loan_QCBS-FTP > \$1 million (Full Technical Proposal)	242 days
EA submitting advertisement to ADB for posting on ADB website	2 days
ADB reviewing before posting Consulting Services Recruitment Notice (CSRN) on ADB website	2 days
Consultants expressing interest	30 days
EA finalizing Terms of Reference (TOR), preparing Narrative Evaluation Criteria, Summary and Personnel Evaluation Sheets	30 days
EA Consultant Selection Committee (CSC) preparing longlist & shortlist	10 days
EA submitting shortlisting documents to ADB - Submission 1	10 days
ADB reviewing shortlisting documents	7 days
ADB sending approval of shortlist with comments on RFP to EA	1 day
EA revising RFP based on ADB comments	2 days
EA issuing RFP to shortlisted firms	3 days
Shortlisted firms preparing proposals	45 days
EA CSC evaluating technical proposals	21 days
EA convening CSC evaluation meeting	2 days
EA CSC preparing technical evaluation report	5 days
EA submitting technical evaluation report to ADB - Submission 2	2 days
ADB reviewing technical evaluation report	7 days
ADB sending approval of technical evaluation to EA	1 day
EA issuing invitation for public opening of financial proposals	1 day
Preparing for public opening	5 days
Public opening of financial proposals	1 day
EA CSC evaluating financial proposals and overall ranking	7 days
EA preparing and signing of overall ranking minutes	7 days
EA submitting signed overall ranking report to ADB - Submission 3	7 days
ADB reviewing overall ranking report	7 days
ADB sending approval of overall ranking to EA	1 day
EA issuing invitation for contract negotiations	2 days
Preparing for contract negotiations	14 days
EA negotiating contract with consultant	5 days
EA submitting draft negotiated contract to ADB - Submission 4	7 days
ADB reviewing and sending approval of draft negotiated contract to EA	5 days
EA signing of contract with consultant	7 days
EA issuing Notice to Proceed to consultant	2 days
Fielding of consultant's team	14 days

3.3 National Competitive Bidding (NCB)

19. The NCB procedures in detail are detailed below. These procedures will guide all procurement under NCB.

A. General

20. The procedures to be followed for national competitive bidding shall be those set forth in the Public Procurement Rules 2004 [S. R. O. 432 (1)/2004] issued on the 9th June 2004 by the Public Procurement Regulatory Authority Ordinance 2002 (XXII of 2002) of the Islamic Republic of Pakistan with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the ADB Procurement Guidelines.

B. Registration

21. Bidding shall not be restricted to pre-registered firms and such registration shall not be a condition for participation in the bidding process.

22. Where registration is required prior to award of contract, bidders: (i) shall be allowed a reasonable time to complete the registration process; and (ii) shall not be denied registration for

reasons unrelated to their capability and resources to successfully perform the contract, which shall be verified through post-qualification.

C. Prequalification

23. Normally, post-qualification shall be used unless prequalification is explicitly provided for in the loan agreement/procurement plan. Irrespective of whether post qualification or prequalification is used, eligible bidders (both national and foreign) shall be allowed to participate.

D. Bidding Period

24. The minimum bidding period is twenty-eight (28) days prior to the deadline for the submission of bids.

E. Bidding Documents

25. Procuring entities shall use the applicable standard bidding documents for the procurement of goods, works and services acceptable to ADB.

F. Preferences

26. No domestic preference shall be given for domestic bidders and for domestically manufactured goods.

G. Advertising

27. Invitations to bid shall be advertised in at least one widely circulated national daily newspaper or freely accessible, nationally-known website allowing a minimum of twenty-eight (28) days for the preparation and submission of bids. NCB contracts estimated to cost \$500,000 or more for goods and related services and \$1,000,000 or more for civil works will be advertised on ADB's website via the posting of the Procurement Plan.

H. Bid Security

28. Where required, bid security shall be in the form of a bank guarantee from a reputable bank.

I. Bid Opening and Bid Evaluation

29. Bids shall be opened in public.

30. Evaluation of bids shall be made in strict adherence to the criteria declared in the bidding documents and contracts shall be awarded to the lowest evaluated bidder.

31. Bidders shall not be eliminated from detailed evaluation on the basis of minor, non-substantial deviations.

32. No bidder shall be rejected on the basis of a comparison with the employer's estimate and budget ceiling without the ADB's prior concurrence.

33. A contract shall be awarded to the technically responsive bid that offers the lowest evaluated price and no negotiations shall be permitted.

J. Rejection of all Bids and Rebidding

34. Bids shall not be rejected and new bids solicited without the ADB's prior concurrence.

K. Participation by Government-owned enterprises

35. Government-owned enterprises in the Islamic Republic of Pakistan shall be eligible to participate as bidders only if they can establish that they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the contracting authority. Furthermore, they will be subject to the same bid and performance security requirements as other bidders.

L. ADB Member Country Restrictions

36. Bidders must be nationals of member countries of ADB, and offered goods and services must be produced in and supplied from member countries of ADB.

Annex 4: Safeguards Plan

4.1 Environment

37. All DISCOs shall ensure:

- (a) The Investment program and its subprojects are carried out in accordance with the Borrower's environmental laws and regulations, the ADB's Environment Policy (2002), the EARF, including updates thereto agreed with ADB, and respective IEEs, SIEEs, and EMPs included in the IEEs;
- (b) All mitigation and monitoring measures identified in the respective EMP are incorporated into detailed design of the Subproject and implemented during the construction and operation of the Project facilities;
- (c) All contracts under the Subprojects contain provisions on compliance with these requirements;
- (d) Implementation of the EMPs is monitored and evaluated internally and externally; and
- (e) Results of such monitoring and evaluation are reported to ADB.

38. The DISCO specific actions under Tranche-1, (These should be reviewed for each subproject prior to commencing works):

IESCO – PEPCO has prepared the IEE report. It includes the Environmental management plan, the mitigation measures and budget. The PMU will ensure that all necessary actions are fulfilled.

GEPCO – If Sheranwala Bagh (GIS substation) project is approved by ADB, then EPA approval should be obtained prior to commencement of any works.

LESCO – PEPCO has prepared the IEE report. Subsequently, submitted to EPA. It is currently under review (as of 31 January 2009). Action, if any, will be followed up.

Note: to be filled up by each DISCO:

FESCO –

HESCO –

IESCO –

MEPCO –

PESCO –

4.2 Land Acquisition and Resettlement

39. All participating DISCOs shall ensure that:
- (i) All land and rights-of-way required by the subprojects are made available in a timely manner;
 - (ii) Provisions of the relevant LARP are implemented promptly and efficiently according its terms, applicable laws and regulations of Pakistan, ADB's *Policy on Involuntary Resettlement*, ADB's Operational Manual F2 on Involuntary Resettlement (2003), and the Land Acquisition Resettlement Framework (LARF);
 - (iii) Relevant LARPs are updated based on the detailed design, prepared in full consultation with the affected persons and disclosed to them prior submitting the resettlement plan to ADB;
 - (iv) No "notice to proceed" is given to a contractor for commencement of construction works under the Subproject, until all compensations specified in the respective LARP have been paid to the affected persons;
 - (v) Contractors' activities are in compliance with requirements of resettlement plans, the LARF, applicable domestic laws, and ADB's *Policy on Involuntary Resettlement*;
 - (vi) Establish a grievance mechanism and procedure accessible to the Affected People;
 - (vii) An independent monitor acceptable to ADB should be engaged to carry out monitoring and evaluation and report to ADB in accordance with the requirements of the resettlement plans.
40. RPs under category 'B' and 'C' should be reviewed and approved by ADB's Resident Mission in Pakistan. For RPs under category 'A', it should be reviewed and approved by the Regional department at ADB headquarters (i.e., CWRD).
41. Any changes in the location, land alignment of facilitating roads, or environment impacts on account of detailed designs of related subprojects will be subject to prior approval by ADB or related agency in accordance with the subproject selection criteria and procedures included in the FFA. The signing of civil work contracts or a similar milestone are subject to ADB's review and approval.
42. DISCO specific actions under Tranche -1 (In addition to what is described above):

DISCO	Specific Actions	Remarks
IESCO	No specific actions are identified in the Plan.	
GEPCO	<u>Fatehpur 132 kV Transmission Line</u> Short LARP was prepared for 17.23 kilometer transmission line. Fifty four (54) affected families were identified due to project impact on crops and trees. Costs of compensation/ rehabilitation are calculated at \$124,576. Compensation of damages will be provided	If this is removed out of Tranche-1, then the action is outside the scope of the Investment Program

to the identified APs before the civil contract is awarded.

Note: If Sheranwala Barg (GIS) project is approved, the required assessments and due diligence should be carried out to determine what actions are required under ADB's IR policy.

LESCO	<p><u>132 kV Sukh Chayn Gardens Grid Station</u></p> <p>A DDR had been prepared for the land of the grid station. No involuntary resettlement impact recorded.</p>
MEPCO	<p><u>New LAR 132 kV Grid station and Transmission Line.</u></p> <p>Short LARP was prepared for 270 meter transmission line. A DDR prepared for the land of the grid station. The land purchased by MEPCO on a willing buyer and seller. Four affected families were identified due to project impact on crops and trees. Costs of compensation/ rehabilitation are calculated at \$232, 004. Compensation of damages will be provided to the identified APs <u>before</u> the civil contract is awarded.</p> <p><u>Fazilpur 132 kV Transmission Line</u></p> <p>Short LARP was prepared for 1.06 km transmission line. Four affected families were identified due to project impact on crops and trees. Costs of compensation/ rehabilitation are calculated at \$7,561. Compensation of damages will be provided to the identified APs <u>before</u> the civil contract is awarded.</p> <p><u>Shahdan Lund 132kV Transmission Line</u></p> <p>Short LARP was prepared for 2.95 kilometer transmission line. One affected family was identified due to project impact on crops and trees. Costs of compensation/ rehabilitation are calculated at \$17,173. Compensation of damages will be provided to the identified AP <u>before</u> the civil contract is awarded.</p>
PESCO	<p><u>Karak 132 kV Transmission Line</u></p> <p>Short LARP was prepared for 5.4 kilometer transmission line. Six affected families were identified due to project impact on crops and trees. Costs of compensation/ rehabilitation are calculated at \$25, 972. Compensation of damages will be provided to the identified Aps <u>before</u> the civil contract is awarded.</p>
QESCO	<p><u>Kanak 132 kV Transmission Line</u></p> <p>Short LARP was prepared for 5.4 kilometer transmission line. Six affected families were identified due to project impact on crops and trees. Costs of compensation/ rehabilitation are calculated at \$25, 972. Compensation of damages will be provided to the identified Aps <u>before</u> the civil contract is awarded.</p> <p><u>Alizai-Hurumzai 132 kV Transmission Line</u></p> <p>Short LARP was prepared for 13.42 kilometer transmission line. Twelve affected families were identified due to project impact on crops and trees. Costs of compensation/ rehabilitation are calculated at \$70,168. Compensation of damages will be provided to the identified Aps <u>before</u> the civil contract is awarded.</p>

Land Acquisition and Resettlement (LAR) Committees & Other Institutions

43. As indicated in the approved and agreed Land Acquisition and Resettlement Framework (LARF) three coordination committees are required to be established of the LAR process. But as the impact of LAR activities in the Tranche-1 subprojects are small and limited, only two LAR

related committees are required to be established and initiated by relevant PMUs/ DISCOs. They are:

- (i) **A LAR Coordination committees (LCC).** This committee to be formed in every district of the subproject with LAR impacts. This committee will provide coordinating node for preparation and implementation of LARPs. The members of the committee include representative of PIU, Social Cell, DCO, DOR, of the concerned district, as well as the Tehsildar and Nazim of the concerned sub district to represent the Aps. This committee should be established in the beginning of project implementation.
- (ii) **Grievance Redressal Committee (GRC).** This committee should be established in the concerned District office under request by relevant PMU before the implementation of LARPs. The committee will be activated by a grievance lodged in the district office. The members of this committee are representative of PIU, Social/ resettlement cell, Union Council/ Nazims, members of local NGO or resettlement specialist/ consultant specifically hired for the purpose.

DISCO/PEPCO Complaint Cells

44. Aside from the committees above, the Complaint Cells at each DISCO can be utilized by the Affected People to file their complaints related to the subprojects. The staff of the existing complaint cell at each DISCO and PEPCO office will be responsible to register the complaints and forward the case to the respective PMU Team Leader and Social Cell for their response and action. The respective officers need to response within 21 days of the complaint.

External Monitoring Agency (EMA)

45. As required by ADB resettlement policy and indicated in the approved and agreed LARP documents an independent agency will be appointed for external monitoring activity of each subproject. However, as the LAR impacts in the tranche-1 subprojects are small and limited, a single agency can be appointed to monitor all the subprojects. Below are the specific conditionality of EMA selection and appointment.

- (i) EMA will be selected and appointed by PMUs/ DISCOs
- (ii) The EMA will be chosen among the local consultants/ NGO or university.
- (iii) ADB will provide TOR of EMA and to be finalized by the PMU.
- (iv) The EMA should be appointed before the contract award of subprojects with LAR impacts
- (v) EMA reports and results have to be communicated to ADB through project quarterly implementation reports.

LAR Activities Schedule and Budget

46. Each participating DISCO is required to prepare and submit to ADB the LAR activities schedule/time frame, cost and financing plan to be included in this document. Some key milestone activities to be included in the schedule are:

- (i) LARP finalizing/ updating (damage assessment/survey, consultation and determination of compensation rate)
- (ii) LARP disclosure

- (iii) The EMA selection and appointment
 - (iv) Establishment of LAR and GRC committees
 - (v) LARP implementation (payment of lost and damages and other entitlements to the affected people)
 - (vi) LARP monitoring and reporting to ADB
 - (vii) Contract award and starting the civil work activities
-

4.3 Indigenous People

47. No Indigenous People (IP) identified in the project affected areas for Tranche-1 subprojects.

48. However, if there is IP identified during the project implementation the DISCO shall ensure:

- (a) all Subprojects affecting indigenous people are constructed and operated in accordance with the requirements of the Borrower's applicable laws and regulations, ADB's *Policy on Indigenous Peoples* (1998) as specified in the IPDF, and detailed in the respective IPDPs (or LARPs);
- (b) the implementation of the IPDPs is monitored and evaluated internally and externally; and (c) results of such external monitoring and evaluation are reported to ADB.

49. As specified in the IPDF project to be carried out in tribal areas like FATA, PATA, Frontier Regions (FR) attached to various Districts in NWFP, Balochistan and Punjab provinces Indigenous People Identification Assessment or IPIA will have to be prepared. An IPDP or specific Indigenous People Development Action (IPDA) might be required as part of preparation of each tranche.

50. IPDPs category 'B' will be reviewed and approved by PRM and for IPDPs category 'A' by regional departments at headquarters.

4.4 Other Safeguards

51. The DISCO shall ensure that all contracts under the Project include specific clauses requiring that all contractors:

- (a) Comply with all applicable labor laws of the Borrower and pertinent occupational health and safety regulations;
- (b) Use their best efforts to employ women living in the vicinity of the Project Area;
- (c) Disseminate information at worksites on the risks of sexually transmitted diseases and HIV/AIDS for those employed during construction, and take measures to protect workers from potential exposure to sexually transmitted diseases;
- (d) Do not differentiate between men and women's wages or benefits for work of equal value; and

(e) Abstain from child labor. The DISCO shall strictly monitor the effects of Subprojects on women during their implementation through gender-disaggregated data collected, where relevant, pursuant to the PPMS.

52. The DISCO shall ensure:

- (a) within (6) months of the Effective Date, an environmental officer and a social officer are appointed in the DISCO's environmental and social cell to conduct an internal monitoring and evaluation of the implementation of the LARPs, IPDPs, and EMPs;
 - (b) results of such monitoring are included in quarterly progress reports to be submitted to ADB;
 - (c) within four (4) months of the Effective Date, an external agency or an NGO acceptable to ADB is engaged to conduct external monitoring and evaluation of the implementation of the LARPs, IPDPs, EMPs and their impacts; and
 - (d) external monitoring and evaluation reports are provided to ADB on a semi-annual basis.
-

Annex 5: Financing Plan

5.1 ADB Financing, Fund Flow and Disbursement Arrangements

Power Distribution Sector Investment Plan (2008-2017)

53. The financing plan (Table A5.1) is a combination of funds from DISCOs, ADB, and other financiers. It was agreed that DISCOs would provide at least 20% from their own resources and that ADB could fund up to 80% of the total amount for each tranche.

Table A5.1: Overall Financing Plan
(\$ million)

Source	Investment Projects		Program Support	
	Amount	Share (%)	Amount	Share (%)
ADB	OCR 800	15	ADF 10.0	80
Other Financiers	2,400	46	0.0	0.0
DISCOs	2,043	39	2.5	20
Total	5,243	100	12.5	100

ADB = Asian Development Bank, ADF = Asian Development Fund, DISCO = distribution company.

Tranche-1 and Support Project Financing Plan

54. The cost of the subprojects identified under Tranche-1 is estimated at 2007 current prices to be \$327 million (including the Support Project). The Government and DISCOs requested ADB to finance \$252 million, which is approximately 77% of the total project cost for Tranche-1 and the Support Project. The remaining portion will be met by DISCOs' internally generated funds.

Loan 2438-PAK (OCR) in US\$

	OCR Loan
FESCO	23,290,000.00
GEPCO	11,370,000.00
HESCO	39,630,000.00
IESCO	30,060,000.00
LESCO	39,060,000.00
MEPCO	20,140,000.00
PESCO	36,600,000.00
QESCO	27,850,000.00
Interest Charges	14,000,000.00
	242,000,000.00

Loan 2439-PAK (ADF) in US\$ Equivalent

	ADF Loan
PEPCO	10,000,000.00

Tranche-1 and Support Project Disbursement Arrangements for ADB Financing

55. **Loan 2438-PAK (OCR)** – All loan disbursements will be carried out in accordance with ADB's Loan Disbursement Handbook (2007, as amended from time to time). Detailed procedures are described in the Disbursement Letter issued by ADB. Each DISCO will establish an imprest account for its share of loan/financing no later than 31 March 2009. Statement of Expenditure (SOE) procedure may be used to reimburse or liquidate the imprest account advances for individual eligible expenditures related individual payments under \$100,000.

56. **Loan 2439-PAK (ADF)** – All loan disbursements will be carried out in accordance with ADB's Loan Disbursement Handbook. Detailed procedures are described in the Disbursement Letter issued by ADB. PEPCO will establish an imprest account. Statement of Expenditure (SOE) procedure may be used to reimburse or liquidate the imprest account advances for individual eligible expenditures related payments under \$50,000.

5.2 Loan Allocation Tables

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS – Loan 2438-PAK (OCR) (Power Distribution Enhancement Investment Program – Tranche-1, Investment Project)				
CATEGORY				ADB FINANCING BASIS
Number	Item	Total Amount Allocated for ADB Financing (\$)		Percentage of ADB Financing from the Loan Account
		Category	Subcategory	
1	FESCO	23,290,000		
1A	Civil Works		1,800,000	80 percent of total expenditure claimed
1B	Equipment		18,390,000	80 percent of total expenditure claimed
1C	Consulting (engineering)		600,000	80 percent of total expenditure claimed
1D	Unallocated		2,500,000	
2	GEPCO	11,370,000		
2A	Civil Works		800,000	80 percent of total expenditure claimed
2B	Equipment		8,870,000	80 percent of total expenditure claimed
2C	Consulting (engineering)		200,000	80 percent of total expenditure claimed
2D	Turnkey		100,000	80 percent of total expenditure claimed
2E	Unallocated		1,400,000	
3	HESCO	39,630,000		
3A	Civil Works		900,000	80 percent of total expenditure claimed

3B	Equipment		34,630,000	80 percent of total expenditure claimed
3C	Consulting (engineering)		1,000,000	80 percent of total expenditure claimed
3D			3,100,000	
4	IESCO	30,060,000		
4A	Civil Works		2,600,000	80 percent of total expenditure claimed
4B	Equipment		22,760,000	80 percent of total expenditure claimed
4C	Consulting (engineering)		900,000	80 percent of total expenditure claimed
4D	Unallocated		3,800,000	
5	LESCO	39,060,000		
5A	Civil Works		3,300,000	80 percent of total expenditure claimed
5B	Equipment		28,260,000	80 percent of total expenditure claimed
5C	Consulting (engineering)		1,100,000	80 percent of total expenditure claimed
5D	Turnkey		1,800,000	80 percent of total expenditure claimed
5E	Unallocated		4,600,000	
6	MEPCO	20,140,000		
6A	Civil Works		1,800,000	80 percent of total expenditure claimed
6B	Equipment		12,780,000	80 percent of total expenditure claimed
6C	Power Lines		300,000	80 percent of total expenditure claimed
6D	Consulting (engineering)		400,000	80 percent of total expenditure claimed
6E	Turnkey		2,700,000	80 percent of total expenditure claimed
6F	Unallocated		2,160,000	
7	PESCO	36,600,000		
7A	Civil Works		2,700,000	80 percent of total expenditure claimed
7B	Equipment		28,400,000	80 percent of total expenditure claimed
7C	Power Lines		600,000	80 percent of total expenditure claimed
7D	Consulting (engineering)		700,000	80 percent of total expenditure claimed
7E	Unallocated		4,200,000	

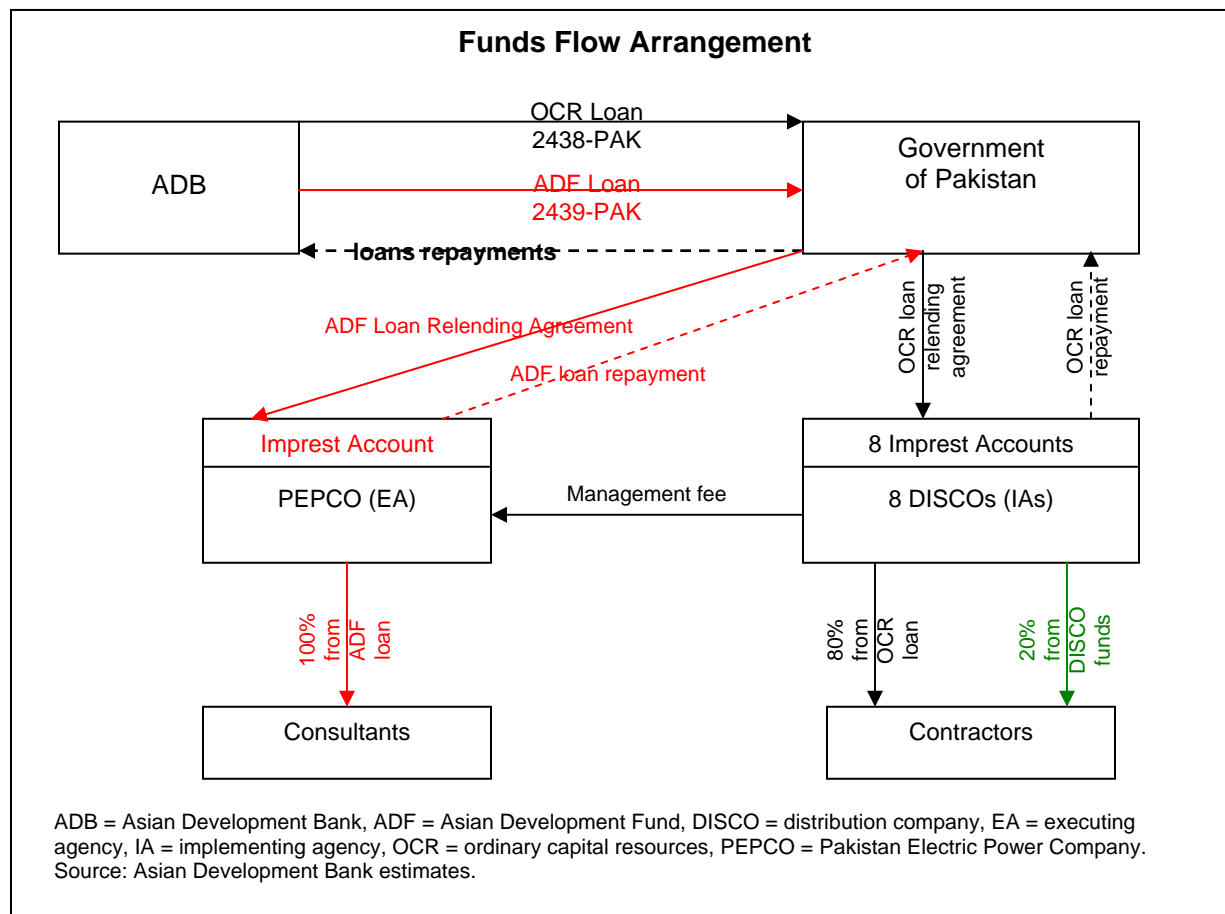
8	QESCO	27,850,000		
8A	Civil Works		1,900,000	80 percent of total expenditure claimed
8B	Equipment		19,340,000	80 percent of total expenditure claimed
8C	Power Lines		800,000	80 percent of total expenditure claimed
8D	Consulting (engineering)		500,000	80 percent of total expenditure claimed
8E	Turnkey		2,100,000	80 percent of total expenditure claimed
8F	Unallocated		3,210,000	
9	Interest and Commitment Charges	14,000,000		100 percent of amount due
	Total	242,000,000		

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS – Loan 2439-PAK (ADF) (Power Distribution Enhancement Investment Program – Tranche-1, Support Project)				
CATEGORY				ADB FINANCING BASIS
Number	Item	Total Amount Allocated for ADB Financing SDR		Percentage of ADB Financing from the Loan Account
		Category	Subcategory	
1	Consulting Services	6,009,000		
1A	Implementation		3,557,000	100 percent of total expenditure claimed
1B	Preparation		613,000	100 percent of total expenditure claimed
1C	Monitoring		613,000	100 percent of total expenditure claimed
1D	Capacity Building		1,226,000	100 percent of total expenditure claimed
2	Unallocated	123,000		
	Total	6,132,000		

5.3 Government (DISCO) Financing and Funds Flow

57. ADB Loan 2438-PAK funds which will be relented from the Government to the DISCOs will finance up to 80% of the Tranche-1 investment cost and the DISCO will finance the remaining amount (approximately 20%) of the total investment cost through self-generated funds. The DISCOs will repay the Government the loaned funds in accordance with the Relending Agreement that each DISCO will execute with the Government. The Government will repay ADB the loan in accordance with the amortization schedule set in the Loan Agreement. The closing date of withdrawals from the Loan Account is 30 June 2012.

58. ADB Loan 2439-PAK funds which will be relented from the Government to PEPCO will finance up to 100% of the consultant service costs under the Support Project. PEPCO will repay the Government the loaned funds in accordance with the Relending Agreement that it will execute with the Government. In accordance with the legal agreements DISCOs will be responsible for paying a management fee to PEPCO for providing the coordination and management support to the implement the investment projects under the MFF. The management fee will enable PEPCO to repay the loan to the Government. The Government will repay ADB the loan in accordance with the amortization schedule set in the Loan Agreement. The closing date of withdrawals from the Loan Account is 31 December 2018.



Annex 6: Investment (Cost) Plan

6.1 Detailed Cost Estimates

Table A6.1: Tranche-1 and Support Project Financing Plan
(\$ million)

Expenditure Accounts by Financiers	Asian Development Bank MFF		Government of Pakistan		Asian Development Bank ADF		Total	
	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs								
A. Subprojects								
Equipment - Secondary transmission grid	90.7	80.0	22.7	20.0	0.0	0.0	113.3	34.7
Equipment - Energy loss reduction	42.8	80.0	10.7	20.0	0.0	0.0	53.5	16.4
Equipment - Capacitors	18.2	80.0	4.5	20.0	0.0	0.0	22.7	6.9
Equipment - Distribution of power	27.7	80.0	6.9	20.0	0.0	0.0	34.6	10.6
Equipment - Rehabilitation	6.1	80.0	1.5	20.0	0.0	0.0	7.6	2.3
Equipment - System modernization	9.3	80.0	2.3	20.0	0.0	0.0	11.6	3.5
Civil works	18.2	80.0	4.5	20.0	0.0	0.0	22.7	7.0
Power lines	1.9	80.0	0.5	20.0	0.0	0.0	2.3	0.7
Engineering	6.1	80.0	1.5	20.0	0.0	0.0	7.6	2.3
Overheads (administration costs, audit, inspection, LC opening, and local transportation)	0.0	0.0	16.6	100.0	0.0	0.0	16.6	5.1
Environmental mitigation	0.0	0.0	0.1	100.0	0.0	0.0	0.1	0.0
Resettlement	0.0	0.0	0.9	100.0	0.0	0.0	0.9	0.3
Turnkey	7.4	80.0	1.8	20.0	0.0	0.0	9.2	2.8
Subtotal (A1)	228.2	75.3	74.7	24.7	0.0	0.0	302.9	92.7
B. Project Management and Support	0.0	0.0	0.0	0.0	9.8	100.0	9.8	3.0
Total Project Costs	228.2	73.0	74.7	23.9	9.8	3.1	312.7	95.7
Interest During Implementation	13.4	98.7	0.0	0.0	0.2	1.3	13.5	4.1
Commitment Charges	0.6	100.0	0.0	0.0	0.0	0.0	0.6	0.2
Total	242.2	74.1	74.7	22.8	10.0	3.1	326.8	100.0

ADF = Asian Development Fund, MFF = multitranches financing facility.

Sources: Asian Development Bank and project preparatory technical assistance consultant estimates.

Table A6.2: Tranche-1 and Support Project Financing Plan (DISCOs and PEPCO)

Item	PRs Million			\$ Million		
	Local	Foreign	Total	Local	Foreign	Total
A. Subprojects						
1. Secondary Transmission Grid						
LESCO	2,063.5	273.3	2,336.8	34.4	4.6	38.9
IESCO	1,847.9	94.4	1,942.3	30.8	1.6	32.4
GEPCO	239.1	35.9	275.1	4.0	0.6	4.6
MEPCO	487.6	417.5	905.1	8.1	7.0	15.1
PESCO	961.7	197.7	1,159.4	16.0	3.3	19.3
QESCO	693.9	200.9	894.7	11.6	3.3	14.9
FESCO	764.9	301.6	1,066.5	12.7	5.0	17.8
HESCO	589.3	117.3	706.6	9.8	2.0	11.8
Subtotal (A1)	7,648.0	1,638.5	9,286.5	127.5	27.3	154.8
2. Energy Loss Reduction						
GEPCO	248.9	0.0	248.9	4.1	0.0	4.1
MEPCO	456.0	0.0	456.0	7.6	0.0	7.6
QESCO	362.2	0.0	362.2	6.0	0.0	6.0
HESCO	290.8	1,630.4	1,921.1	4.8	27.2	32.0
Subtotal (A2)	1,357.8	1,630.4	2,988.2	22.6	27.2	49.8
3. Capacitors						
LESCO	67.5	174.9	242.4	1.1	2.9	4.0
IESCO	31.0	99.6	130.6	0.5	1.7	2.2
MEPCO	33.9	51.1	85.0	0.6	0.9	1.4
PESCO	71.7	119.5	191.2	1.2	2.0	3.2
QESCO	35.3	57.9	93.2	0.6	1.0	1.6
FESCO	188.3	283.4	471.6	3.1	4.7	7.9
HESCO	78.1	119.8	197.9	1.3	2.0	3.3
Subtotal (A3)	505.8	906.2	1,411.9	8.4	15.1	23.5

4. Other Equipment						
LESCO	156.7	121.8	278.5	2.6	2.0	4.6
IESCO	90.6	0.0	90.6	1.5	0.0	1.5
PESCO	57.7	0.0	57.7	1.0	0.0	1.0
QESCO	40.4	0.0	40.4	0.7	0.0	0.7
FESCO	171.4	0.0	171.4	2.9	0.0	2.9
Subtotal (A4)	516.7	121.8	638.5	8.6	2.0	10.6
5. Distribution of Power						
GEPCO	248.8	0.0	248.8	4.1	0.0	4.1
PESCO	1,080.1	0.0	1,080.1	18.0	0.0	18.0
QESCO	498.1	0.0	498.1	8.3	0.0	8.3
Subtotal (A5)	1,827.0	0.0	1,827.0	30.5	0.0	30.5
Subtotal (A)	11,855.3	4,296.9	16,152.1	197.6	71.6	269.2
B. Project Management and Support						
PEPCO	147.5	442.5	590.0	2.5	7.4	9.8
Subtotal (A+B)	12,002.8	4,739.4	16,742.1	200.0	79.0	279.0
Physical Contingencies	592.8	214.8	807.6	9.9	3.6	13.5
Price Contingencies	1,141.6	70.8	1,212.4	19.0	1.2	20.2
Interest During Implementation	0.0	812.6	812.6	0.0	13.5	13.5
Commitment Charges	0.0	35.3	35.3	0.0	0.6	0.6
Total	13,737.1	5,872.9	19,610.0	229.0	97.9	326.8

FESCO = Faisalabad Electric Supply Company, GEPCO = Gujranwala Electric Power Company, HESCO = Hyderabad Electric Supply Company, IESCO = Islamabad Electric Supply Company, LESCO = Lahore Electric Supply Company, MEPCO = Multan Electric Power Company, PEPCO = Pakistan Electric Power Company, PESCO = Peshawar Electric Supply Company, QESCO = Quetta Electric Supply Company.

Sources: Asian Development Bank and project preparatory technical assistance consultants' estimates.

6.2 Forecast of Cost to Complete

[Each DISCO will have to workout the most recent forecast considering the Gantt implementation chart]

Pakistan

Distribution Enhancement Project

Project Components by Year – Base Costs

	Base Cost (Local Million)				Base Cost (US\$ Million)			
	2008	2009	2010	Total	2008	2009	2010	Total
A. Subprojects								
1. Secondary Transmission Grid								
LESCO	934.7	934.7	467.4	2,336.8	15.6	15.6	7.8	38.9
IESCO	776.9	776.9	388.5	1,942.3	12.9	12.9	6.5	32.4
GEPCO	110.0	110.0	55.0	275.1	1.8	1.8	0.9	4.6
MEPCO	362.0	362.0	181.0	905.1	6.0	6.0	3.0	15.1
PESCO	463.8	463.8	231.9	1,159.4	7.7	7.7	3.9	19.3
QESCO	357.9	357.9	178.9	894.7	6.0	6.0	3.0	14.9
FESCO	426.6	426.6	213.3	1,066.5	7.1	7.1	3.6	17.8
HESCO	282.6	282.6	141.3	706.6	4.7	4.7	2.4	11.8
Subtotal Secondary Transmission Grid	3,714.6	3,714.6	1,857.3	9,286.5	61.9	61.9	31.0	154.8
2. Energy Loss Reduction								
GEPCO	99.6	99.6	49.8	248.9	1.7	1.7	0.8	4.1
MEPCO	182.4	182.4	91.2	456.0	3.0	3.0	1.5	7.6
QESCO	144.9	144.9	72.4	362.2	2.4	2.4	1.2	6.0
HESCO	768.4	768.4	384.2	1,921.1	12.8	12.8	6.4	32.0
Subtotal Energy Loss Reduction	1,195.3	1,195.3	597.6	2,988.2	19.9	19.9	10.0	49.8
3. Capacitors								
LESCO	96.9	96.9	48.5	242.4	1.6	1.6	0.8	4.0
IESCO	52.2	52.2	26.1	130.6	0.9	0.9	0.4	2.2
MEPCO	34.0	34.0	17.0	85.0	0.6	0.6	0.3	1.4
PESCO	76.5	76.5	38.2	191.2	1.3	1.3	0.6	3.2
QESCO	37.3	37.3	18.6	93.2	0.6	0.6	0.3	1.6
FESCO	188.7	188.7	94.3	471.6	3.1	3.1	1.6	7.9
HESCO	79.1	79.1	39.6	197.9	1.3	1.3	0.7	3.3
Subtotal Capacitors	564.8	564.8	282.4	1,411.9	9.4	9.4	4.7	23.5
4. Other Equipment								
LESCO	111.4	111.4	55.7	278.5	1.9	1.9	0.9	4.6
IESCO	36.2	36.2	18.1	90.6	0.6	0.6	0.3	1.5
PESCO	23.1	23.1	11.5	57.7	0.4	0.4	0.2	1.0
QESCO	16.1	16.1	8.1	40.4	0.3	0.3	0.1	0.7
FESCO	68.5	68.5	34.3	171.4	1.1	1.1	0.6	2.9
Subtotal Other Equipment	255.4	255.4	127.7	638.5	4.3	4.3	2.1	10.6
5. Distribution of Power								
GEPCO	99.5	99.5	49.8	248.8	1.7	1.7	0.8	4.1
PESCO	432.0	432.0	216.0	1,080.1	7.2	7.2	3.6	18.0
QESCO	199.2	199.2	99.6	498.1	3.3	3.3	1.7	8.3
Subtotal Distribution of Power	730.8	730.8	365.4	1,827.0	12.2	12.2	6.1	30.5
Subtotal Subprojects	6,460.8	6,460.8	3,230.4	16,152.1	107.7	107.7	53.8	269.2
B. Project Management and Support	295.0	295.0	-	590.0	4.9	4.9	-	9.8
Total BASELINE COSTS	6,755.8	6,755.8	3,230.4	16,742.1	112.6	112.6	53.8	279.0
Physical Contingencies	323.0	323.0	161.5	807.6	5.4	5.4	2.7	13.5
Price Contingencies	180.9	554.8	476.7	1,212.4	3.0	9.2	7.9	20.2
Total PROJECT COSTS	7,259.8	7,633.6	3,868.6	18,762.1	121.0	127.2	64.5	312.7
Taxes	380.4	398.6	209.0	987.9	6.3	6.6	3.5	16.5
Foreign Exchange	2,036.8	2,058.5	929.7	5,025.0	33.9	34.3	15.5	83.7

Pakistan

Distribution Enhancement Project

Project Components by Year -- Totals Including Contin

(US\$ Million)

	Totals Including Contingencies			
	2008	2009	2010	Total
A. Subprojects				
1. Secondary Transmission Grid				
LESCO	16.9	17.9	9.5	44.3
IESCO	14.1	15.0	8.0	37.0
GEPCO	2.0	2.1	1.1	5.2
MEPCO	6.5	6.7	3.5	16.7
PESCO	8.4	8.9	4.7	21.9
QESCO	6.4	6.8	3.6	16.8
FESCO	7.7	8.1	4.2	20.0
HESCO	5.1	5.4	2.9	13.4
Subtotal Secondary Transmission Grid	66.9	70.9	37.6	175.4
2. Energy Loss Reduction				
GEPCO	1.8	1.9	1.0	4.8
MEPCO	3.3	3.5	1.9	8.7
QESCO	2.6	2.8	1.5	6.9
HESCO	13.6	13.8	7.0	34.4
Subtotal Energy Loss Reduction	21.3	22.1	11.4	54.8
3. Capacitors				
LESCO	1.7	1.8	0.9	4.4
IESCO	0.9	0.9	0.5	2.4
MEPCO	0.6	0.6	0.3	1.6
PESCO	1.4	1.4	0.7	3.5
QESCO	0.7	0.7	0.4	1.7
FESCO	3.4	3.5	1.8	8.6
HESCO	1.4	1.5	0.8	3.6
Subtotal Capacitors	10.0	10.3	5.3	25.7
4. Other Equipment				
LESCO	2.0	2.1	1.1	5.2
IESCO	0.7	0.7	0.4	1.7
PESCO	0.4	0.4	0.2	1.1
QESCO	0.3	0.3	0.2	0.8
FESCO	1.2	1.3	0.7	3.3
Subtotal Other Equipment	4.6	4.9	2.6	12.0
5. Distribution of Power				
GEPCO	1.8	1.9	1.0	4.8
PESCO	7.8	8.4	4.5	20.7
QESCO	3.6	3.9	2.1	9.5
Subtotal Distribution of Power	13.2	14.2	7.6	35.0
Subtotal Subprojects	116.1	122.3	64.5	302.9
B. Project Management and Support	4.9	4.9	-	9.8
Total PROJECT COSTS	121.0	127.2	64.5	312.7

Annex 7: Execution Plan

7.1 Work Breakdown Structure (WBS)

59. WBS provides the basis for preparing the Implementation schedule or the Gantt Chart. The proposed WBS for this Investment Program will have a three-level structure as follows:

Level-1

- Tranche Number

Level-2

- Pre-startup stage
- PEPCO
- DISCO

Level-3

- Grouping of activities/tasks

60. It is up to each DISCO and PEPCO to determine whether a more detailed level of activity break down is required. If so, then Level-4 breakdown should be thought through and built in to the WBS.

61. ADB recommends PEPCO take the initial leadership in setting up a central level Implementation schedule and gradually to transfer the responsibility of maintaining it to the DISCO over time. The Implementation schedule or the Gantt chart of the Investment Program is best prepared using the MS Project or equivalent software.

7.2 Responsibility Allocation by Activity

62. The responsibility assignment by activity is shown in the Implementation schedule shown in the MS Project Gantt chart – see column "Resource Name".

7.3 Project Implementation Schedule (Gantt Chart) Tranche-1

63. The Implementation schedule shown below is based on information provided by PEPCO and the DISCOs during the Inception mission.

64. Notwithstanding, Tranche-1 Loan agreement stipulates that the estimated project completion date is 31 December 2011. Therefore, unless otherwise amended, the Loan agreement will prevail over this FAM.

ID	TaskName	Resource Names	Duration	Start	Finish	2008												2009			2010			2011			2012		
						Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
0	PAK: Power Distribution Enhanceme		2329 days?	Wed 03/09/08	Thu 03/08/17	[Gantt bar from Q2 2008 to Q3 2012]																							
1						[Gantt bar from Q2 2008 to Q3 2012]																							
2	Tranche-1		1014 days?	Wed 03/09/08	Thu 19/07/12	[Gantt bar from Q2 2008 to Q3 2012]																							
3	Pre-startup		97 days	Wed 03/09/08	Tue 13/01/09	[Gantt bar from Q2 2008 to Q3 2012]																							
4	Boad Approval	ADB	1 day	Wed 03/09/08	Wed 03/09/08	[Gantt bar from Q2 2008 to Q3 2012]																							
5	Loan Signing	ADB	1 day	Sat 29/11/08	Sat 29/11/08	[Gantt bar from Q2 2008 to Q3 2012]																							
6	Loan Effectivity	ADB	1 day	Tue 13/01/09	Tue 13/01/09	[Gantt bar from Q2 2008 to Q3 2012]																							
7	PEPCO		1002 days	Fri 19/09/08	Thu 19/07/12	[Gantt bar from Q2 2008 to Q3 2012]																							
8	Consultant recruitment - In	PEPCO	180 days	Fri 02/01/09	Thu 10/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
9	Consultant recruitment - M	PEPCO	180 days	Fri 01/05/09	Thu 07/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
10	Project performance moni	Consulta	22 mons	Fri 08/01/11	Thu 19/07/11	[Gantt bar from Q2 2008 to Q3 2012]																							
11	Consultant recruitment - C	PEPCO	235 days	Fri 19/09/08	Tue 11/08/09	[Gantt bar from Q2 2008 to Q3 2012]																							
12	Capacity building	Consulta	22 mons	Wed 12/08/09	Tue 21/02/11	[Gantt bar from Q2 2008 to Q3 2012]																							
13	Consultant recruitment - P	PEPCO	28 days	Thu 01/01/09	Mon 09/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
14	Project preparation for Tr	Consulta	6 mons	Tue 10/02/09	Mon 19/10/09	[Gantt bar from Q2 2008 to Q3 2012]																							
15	Project preparation for Tr	Consulta	12 mons	Mon 02/11/09	Fri 18/03/11	[Gantt bar from Q2 2008 to Q3 2012]																							
16	FESCO		800 days?	Mon 02/02/09	Fri 24/02/11	[Gantt bar from Q2 2008 to Q3 2012]																							
17	Setup PMU	FESCO	5 days	Mon 02/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
18	Consultant recruitment - D	FESCO	0 days	Fri 06/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
19	Procurement - 132kv Powe	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
20	Procurement - Circuit brea	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
21	Procurement - Control & r	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
22	Procurement - Distribution	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
23	Procurement - Civil works	Consulta	150 days?	Mon 09/02/09	Fri 04/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
24	Delivery - ICB	Contractc	180 days	Mon 01/02/11	Fri 08/10/11	[Gantt bar from Q2 2008 to Q3 2012]																							
25	Construction - Civil works	Contractc	12 mons	Mon 11/10/11	Fri 24/02/12	[Gantt bar from Q2 2008 to Q3 2012]																							
26	GEPCO		817 days	Fri 19/09/08	Thu 03/11/11	[Gantt bar from Q2 2008 to Q3 2012]																							
27	Setup PMU	GEPCO	5 days	Mon 02/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
28	Consultant recruitment - D	GEPCO	0 days	Fri 06/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
29	Consultant recruitment - D	GEPCO	0 days	Fri 06/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
30	Procurement - Distribution	Consulta	174 days	Mon 09/02/09	Thu 08/10/09	[Gantt bar from Q2 2008 to Q3 2012]																							
31	Procurement - Tower steel	Consulta	150 days	Mon 09/02/09	Fri 04/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
32	Procurement - Overhead l	Consulta	174 days	Mon 09/02/09	Thu 08/10/09	[Gantt bar from Q2 2008 to Q3 2012]																							
33	Procurement - Distribution	Consulta	174 days	Mon 09/02/09	Thu 08/10/09	[Gantt bar from Q2 2008 to Q3 2012]																							
34	Procurement - Major subst	Consulta	0 days	Fri 19/09/08	Fri 19/09/08	[Gantt bar from Q2 2008 to Q3 2012]																							
35	Procurement - Civil works	Consulta	0 days	Fri 19/09/08	Fri 19/09/08	[Gantt bar from Q2 2008 to Q3 2012]																							
36	Construction - Major subst	Contractc	0 mons	Fri 19/09/08	Fri 19/09/08	[Gantt bar from Q2 2008 to Q3 2012]																							
37	Delivery of Goods - ICB	Contractc	180 days	Fri 09/10/09	Thu 17/06/11	[Gantt bar from Q2 2008 to Q3 2012]																							
38	Delivery of Goods - NCB	Contractc	90 days	Mon 07/09/09	Fri 08/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
39	Construction - Civil works	Contractc	12 mons	Fri 18/06/11	Thu 03/11/11	[Gantt bar from Q2 2008 to Q3 2012]																							
40	HESCO		800 days?	Mon 02/02/09	Fri 24/02/11	[Gantt bar from Q2 2008 to Q3 2012]																							
41	Setup PMU	HESCO	5 days	Mon 02/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
42	Consultant recruitment - D	HESCO	0 days	Fri 06/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
43	Procurement - 132kv Powe	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
44	Procurement - Circuit brea	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
45	Procurement - Control & r	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
46	Procurement - Distribution	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
47	Procurement - L V Aerial E	Consulta	255 days	Mon 09/02/09	Fri 29/01/11	[Gantt bar from Q2 2008 to Q3 2012]																							
48	Procurement - Civil works	Consulta	150 days?	Mon 09/02/09	Fri 04/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
49	Delivery - ICB	Contractc	180 days	Mon 01/02/11	Fri 08/10/11	[Gantt bar from Q2 2008 to Q3 2012]																							
50	Construction - Civil works	Contractc	12 mons	Mon 11/10/11	Fri 24/02/12	[Gantt bar from Q2 2008 to Q3 2012]																							
51	Construction - Installation	Contractc	18 mons	Thu 01/10/10	Wed 26/10/11	[Gantt bar from Q2 2008 to Q3 2012]																							
52	IESCO		759.9 days?	Mon 02/02/09	Fri 30/12/11	[Gantt bar from Q2 2008 to Q3 2012]																							
53	Setup PMU	IESCO	5 days	Mon 02/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
54	Consultant recruitment - D	IESCO	0 days	Fri 06/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
55	Procurement - 132kv Powe	Consulta	175 days	Mon 09/02/09	Fri 09/10/09	[Gantt bar from Q2 2008 to Q3 2012]																							
56	Procurement - Circuit brea	Consulta	175 days	Mon 09/02/09	Fri 09/10/09	[Gantt bar from Q2 2008 to Q3 2012]																							
57	Procurement - Control & r	Consulta	175 days	Mon 09/02/09	Fri 09/10/09	[Gantt bar from Q2 2008 to Q3 2012]																							
58	Procurement - Distribution	Consulta	175 days	Mon 09/02/09	Fri 09/10/09	[Gantt bar from Q2 2008 to Q3 2012]																							
59	Procurement - Civil works	Consulta	150 days?	Mon 09/02/09	Fri 04/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
60	Delivery - ICB	Contractc	180 days	Mon 12/10/09	Fri 18/06/11	[Gantt bar from Q2 2008 to Q3 2012]																							
61	Construction - Civil works	Contractc	13.33 mons	Mon 21/06/11	Fri 30/12/11	[Gantt bar from Q2 2008 to Q3 2012]																							
62	LESCO (...no consultant pack		759.9 days?	Mon 02/02/09	Fri 30/12/11	[Gantt bar from Q2 2008 to Q3 2012]																							
63	Setup PMU	LESCO	5 days	Mon 02/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
64	Consultant recruitment - D	LESCO	0 days	Fri 06/02/09	Fri 06/02/09	[Gantt bar from Q2 2008 to Q3 2012]																							
65	Procurement - 132kv Powe	Consulta	160 days	Mon 09/02/09	Fri 18/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
66	Procurement - Circuit brea	Consulta	160 days	Mon 09/02/09	Fri 18/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
67	Procurement - Control & r	Consulta	160 days	Mon 09/02/09	Fri 18/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
68	Procurement - Distribution	Consulta	160 days	Mon 09/02/09	Fri 18/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
69	Procurement - Major subst	Consulta	160 days	Mon 09/02/09	Fri 18/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
70	Procurement - Civil works	Consulta	150 days?	Mon 09/02/09	Fri 04/09/09	[Gantt bar from Q2 2008 to Q3 2012]																							
71	Construction - Major subst	Contractc	19.83 mons	Mon 21/09/09	Fri 30/12/11	[Gantt bar from Q2 2008 to Q3 2012]																							
72	Delivery - ICB	Contractc	180 days	Mon 21/09/09	Fri 28/05/11	[Gantt bar from Q2 2008 to Q3 2012]																							
73	Construction - Civil works	Contractc	13.83 mons	Mon 31/05/11	Fri 30/12/11	[Gantt bar from Q2 2008 to Q3 2012]																							

7.4 Annual Operational Plan for Tranche-1

65. This should be completed by each DISCO considering: (i) Procurement plan, (ii) Implementation schedule, and (iii) Forecast Cost-to-complete. It is recommended that the outputs 2 and 3 described in the box below are provided at best monthly and at minimum quarterly.

Expected Outputs: (To be finalized during Inception mission)

1. Planned work program and project activities for the year
 2. Projected contract awards
 3. Projected disbursements (ADB, Government and Other sources)
 4. Updated Project activity schedule (Grant Chart)
-

Annex 8: Performance Monitoring and Evaluation

8.1 Deliverables for Tranche-1

Note: In accordance with the legal agreements, Tranche-1 subprojects are scheduled for completion by 31 December 2011.

Ref.	Subproject Name	Capital (US\$)	Remarks
FESCO			
	<u>STG subprojects (13 deliverables):</u>		
	26MVA transformer extension – Kud Lathi	1.98	
	26MVA transformer extension – Jhang II	1.80	
	26MVA transformer extension – Gojra	1.43	
	Additional transformer bay	0.17	
	26MVA transformer extension – Sadar Pur Noon	1.43	
	26MVA transformer extension – Wanbachran	1.98	
	26MVA transformer extension – Lalian	1.43	
	26-40MVA augmentation – Old Thermal Faisalabad	1.51	
	26-40MVA augmentation – Chinot Road Faisalabad	1.51	
	26-40MVA augmentation – Sammandari Road Faisalabad	1.51	
	26-40MVA augmentation – Narwala Road Faisalabad	1.51	
	26-40MVA augmentation – Factory Area Faisalabad	1.51	
	13-26MVA augmentation – Ludewala	1.07	
	<u>Non-STG subprojects (deliverables):</u>		
	Installation of Capacitors – 132kV & 11kV capacitors		
	Modernization – Construction Equipment		
	Modernization – Automated Meter Reading		
	Modernization – Computerized Accounting System		
	Rehabilitation – Replace time expired/technically inadequate substation equipment		
GEPCO			
	<u>STG subprojects (1 deliverable):</u>		
	Upgrade (Conversion) from 66kV to 132kV – Fatehpur	5.49	Fatehpur is already completed. Pending ADB's approval for retroactive financing
	<u>Non-STG subprojects (deliverables):</u>		
	Energy Loss Reduction – Reconductoring, and reconfiguring networks (17 11kV feeders and 184 LT works)		
	Distribution of Power – 11kV / LV extensions, distribution substations (4 11kV feeders and 325 LT works)		
HESCO			
	<u>STG subprojects (10 deliverables):</u>		
	13-26MVA augmentation – Jacobabad	1.07	
	6-13MVA augmentation – Nabisar	0.93	
	13-26MVA augmentation – Gambat	1.07	
	13-26MVA augmentation – T A Yar	1.07	
	13-26MVA augmentation – T Adam	1.07	
	13-26MVA augmentation – Sukkur Site	1.07	
	13-26MVA augmentation – Deharki	1.07	
	13MVA transformer extension – Badin	1.10	
	13MVA transformer extension – Thari Mirwah	1.10	
	13MVA transformer extension – Dokri	1.11	
	<u>Non-STG subprojects (deliverables):</u>		
	Energy Loss Reduction – Reconductoring, and reconfiguring networks		
	Installation of Capacitors – 132kV & 11kV capacitors		
	Rehabilitation – Replace time expired/technically inadequate substation equipment		
IESCO			
	<u>STG subprojects (25 deliverables):</u>		
	13-40MVA augmentation – H-11 Islamabad	1.51	
	26-40MVA augmentation – Chakwal	1.51	

26-40MVA augmentation – KTM	1.51
13-26MVA augmentation – Rawalkot	1.07
13-40MVA augmentation – F-11 Islamabad	1.51
2 x 26-40MVA augmentation – Zero Point	3.02
2 x 26-40MVA augmentation – Rawal	3.02
2 x 26-40MVA augmentation – I-8 Islamabad	3.02
26-40MVA augmentation – Pir Wadhai	1.51
13-26MVA augmentation – Kahuta City	1.07
13-26MVA augmentation – Fariqabad	1.07
13-26MVA augmentation – Margalla	1.07
13-26MVA augmentation – Dina	1.07
13-26MVA augmentation – Jatli	1.07
13-26MVA augmentation – Chak Sawari	1.07
13-26MVA augmentation – Attock	1.07
26-40MVA augmentation – Kamalabad	1.51
26-40MVA augmentation – Cant Rawalpindi	1.51
13-26MVA augmentation – Mangla R Bank	1.07
13-26MVA augmentation – Mangla L Bank	1.07
26MVA transformer extension – F-6 T/Shahheed	1.98
13MVA transformer extension – Khoi Ratta	1.17
26MVA transformer extension – Taxila	1.43
26MVA transformer extension – Gujar Khan	1.43
26MVA transformer extension – Mirpur	1.43

Non-STG subprojects (deliverables):

Installation of Capacitors – 132kV & 11kV capacitors
 Modernization – Install reclosers & sectionalisers to improve system performance
 Rehabilitation – Replace time expired/technically inadequate substation equipment

LESCO

STG subprojects (29 deliverables):

26MVA transformer extension – Chung	1.43
26MVA transformer extension – Bhai Pheru	1.43
26MVA transformer extension – Bhikki	1.43
26MVA transformer extension – Rustam	1.80
26MVA transformer extension – Shamkey	1.43
13-26MVA augmentation – Wan Radha Ram (Habibabad)	1.07
26-40MVA augmentation – Allama Iqbal Town	1.51
26-40MVA augmentation – Said Pur	1.51
26-40MVA augmentation – Chah Miran	1.51
26-40MVA augmentation – Defence	1.51
13-26MVA augmentation – Ellahabad	1.07
13-26MVA augmentation – Renala Khurd	1.07
26-40MVA augmentation – Fateh Garh	1.45
26-40MVA augmentation – Garden Town	1.45
26-40MVA augmentation – Gulshan-e-Ravi	1.45
26-40MVA augmentation – Johar Town	1.45
26-40MVA augmentation – Kasur	1.45
26-40MVA augmentation – Mcload Road	1.51
26-40MVA augmentation – Model Town	1.51
26-40MVA augmentation – Old Kot Lakhpat (OKLP)	1.51
26-40MVA augmentation – Okara City-I	1.51
26-40MVA augmentation – Rehman Park	1.51
26-40MVA augmentation – Shadman	1.51
26-40MVA augmentation – Shahdara New	1.51
26-40MVA augmentation – Town Ship	1.51
26-40MVA augmentation – Badami Bagh	1.51
26-40MVA augmentation – Qartaba	1.51
26-40MVA augmentation – Bhogijwal	1.07
New Site – Sukh Chan Multan Road	4.51

Non-STG subprojects (deliverables):

Installation of Capacitors – 132kV & 11kV capacitors
 Modernization – Automated Meter Reading
 Modernization – Distribution Trans Protection Pilot Subproject
 Modernization – Install reclosers & sectionalisers to improve system performance
 Rehabilitation – Replace time expired/technically inadequate substation equipment

MEPCO

STG subprojects (14 deliverables):

New Site – Lar	4.28
Additional line bay – Bahawalnagar	0.18
Two additional line bays 220kV – Bahawalpur	0.36
Additional line bay – Chistian	0.18
Additional transformers & line bay – Gujrat South	0.36
26MVA transformer extension – Khan Pur	1.43
66kV to 132kV Conversion – Shadan Lund	1.95
13-26MVA augmentation - Shujabad	1.07
13-26MVA augmentation – Bonga Hayat	1.07
13-26MVA augmentation – Rajan Pur	1.07
Transformer by extension – Feroza	0.17
26MVA transformer extension – Sama Satta	1.43
2 x 26MVA augmentation – Liaqat Pur	2.13
66kV to 132kV Conversion – Shadan Lund	1.95

Non-STG subprojects (deliverables):

Energy Loss Reduction – Reconductoring, reconfiguring networks

Installation of Capacitors – 132kV & 11kV capacitors

PESCO

STG subprojects (16 deliverables):

26MVA transformer extension – Shabqadar	1.43
26MVA transformer extension – Dalazak	1.43
26MVA transformer extension – Peshawar Cant.	1.43
26MVA transformer extension – Jhangaria	1.43
26MVA transformer extension – Temergara	1.43
26MVA transformer extension – Battal	1.43
26MVA transformer extension – Hattar	1.43
26MVA transformer extension – Gadoon Amazai	1.43
26MVA transformer extension – Rehman Baba	1.43
26MVA transformer extension – Prova	1.43
13-26MVA augmentation – D.I. Khan	1.07
26MVA transformer extension – Jalala	1.43
13-26MVA augmentation – Mardan II	1.07
13-26MVA augmentation – Chakdara	1.07
13-26MVA augmentation – Khawaza Khela	1.07
Transmission line & line bays - Karak	1.77

Non-STG subprojects (deliverables):

Distribution of Power – 11kV / LV extensions, distribution substations

Installation of Capacitors – 132kV & 11kV capacitors

Modernization – Install reclosers & sectionalisers to improve system performance

Rehabilitation – Replace time expired/technically inadequate substation equipment

QESCO

STG subprojects (9 deliverables):

26MVA transformer extension – Kalat)	1.43
13-26MVA augmentation – Kalat)	1.07
26MVA transformer extension – Mastung	1.43
26MVA transformer extension – Nai	1.43
26MVA transformer extension – Musferpur	1.43
26MVA transformer extension – Barkhan	1.43
26MVA transformer extension – Rakni	1.43
26-40MVA augmentation – Sariab	1.51
66kV-132kV Conversion – Ali Zai	3.28
66kV-132kV Conversion – Kanak	2.79

Non-STG subprojects (deliverables):

Energy Loss Reduction – Reconductoring, reconfiguring networks

Distribution of Power – 11kV / LV extensions, distribution substations

Installation of Capacitors – 132kV & 11kV capacitors

Rehabilitation – Replace time expired/technically inadequate substation equipment

8.2 Performance Indicators (as specified in the Design and Monitoring Framework)

66. **Physical:** (Review and revise as necessary)

- (i) 12,000 GWh of additional power distributed annually to customers by 2009,
- (ii) Grid-connected customers increased to 90% of the population by 2011,
- (iii) Bidding for procurement of equipment for Tranche-1 subprojects completed by August 2008 and for civil works by October 2008,
- (iv) Implementation of Tranche-1 subprojects begun by August 2008,
- (v) Procurement of equipment under Tranche-1 completed by December 2008,
- (vi) Installation of equipment for Tranche-1 subprojects completed by March 2009, and
- (vii) Systems technical losses are reduced each year by 10% of the previous year's loss figure.

67. **Non-Physical:** (Review and revise as necessary)

- (i) DISCOs' full compliance with license requirements by 2009;
- (ii) DISCOs restructuring completed and operational, and financial autonomy achieved in 2008; and
- (iii) DISCOs implement adequate project management and information systems by 2008.

8.3 Progress Report

1. Project Performance Monitoring System

68. The DISCO shall establish, within 3 months of the Effective Date, the Project Performance Monitoring System (PPMS) in a form and substance acceptable to ADB, in accordance with the Project performance indicators and targets stipulated in the design and monitoring framework.

2. Quarterly Progress Report

69. Each DISCO will prepare and submit through PEPCO to ADB quarterly progress reports for the individual Subproject under the MFF. The reports will include a description of physical progress, problems, and difficulties encountered and a summary of financial accounts that will consist of loan expenditures during the period, year to day and total to date and include a report on progress of the implementation of land acquisition and resettlement plans; indigenous development plans; environmental management plan; measures to ensure environmentally responsible procurement; and other mitigation measures as specified in the contracts.

70. The quarterly progress report prepared by each DISCO will provide (i) a narrative description of projects made during the period (progress on compliance with environmental and social requirements, including the environmental management plan (EMP) and resettlement framework, will also be included);(ii) changes in the implementation schedule; (iii) problems or difficulties encountered; and (iv) work to be

carried out in the next period. The progress reports will also include a summary financial account for the subproject components, consisting of subproject expenditures during the period, total-expenditure to date and benefit monitoring in accordance with procedures and details acceptable to ADB. Performance will be evaluated on the basis of indicators and targets stipulated in the design and monitoring framework.

71. Each DISCO shall ensure that the appointed ESDC will conduct internal monitoring and evaluation of the implementation of the LARPs, IPDP and EMPs. The report will also include any changes in the implementation schedule, problems or difficulties encountered and work to be carried out in the next period and a summary financial account of the subproject components, consisting of expenditures during the period, total expenditure to date, and benefit monitoring in accordance with procedures and details acceptable to ADB. Performance will be evaluated on the basis of indicators and targets stipulated in the design and monitoring framework. ADB Management will prepare periodic reports to inform ADB's Board of Directors of overall progress. A Board information report will be submitted annually, and progress reports will be submitted to inform the Board of the approval of Loan Agreements.

3. Project Completion Report (PCR)

72. Promptly after physical completion of the Tranche-1, but in any event not later than **three (3) months thereafter** the DISCO shall prepare and furnish through PEPCO to ADB a project completion report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Tranche-1, including its cost, the performance by the DISCO of its obligations under the Project Agreement and the accomplishment of the purposes of the Loan.

78. Promptly after physical completion of the Support Project, but in any event not later than **three (3) months thereafter** PEPCO shall prepare and furnish to ADB a project completion report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Support Project, including their cost, the performance by PEPCO of its obligations under the Project Agreement and the accomplishment of the purposes of the Loan.

Annex 9: Major Covenants

9.1 Legal Covenants

73. The Government and DISCOs have agreed to the following specific assurances, in addition to the standard assurances and assurances agreed to in the FFA, which will be incorporated in the legal documents.

74. **Policy Dialogue.** The Government will ensure that ADB is kept informed about the Government's policies and programs related to the power sector that will materially affect the financial viability of DISCOs and each subproject under the Investment Program, and in particular the power generation and transmission policies and program, as well as the power distribution policies and program.

75. **Tariff.** DISCOs will submit petitions for tariff revision as required to maintain its financial viability. Following tariff determination by NEPRA, the Government will undertake to notify such tariff determination in a prompt manner. Starting 2009, the Government will ensure that the tariff formulated for DISCOs are adequate to cover operating costs, maintenance, depreciation, and financing cost and to allow an acceptable return on the equity of DISCOs.

9.2 Financial Covenants

76. **Financial Performance.** The Government will ensure that each DISCO maintains a debt service coverage ratio of at least 1.2 from 2011 onward and a self-financing ratio of at least 20% from 2011 onward.

77. **Financial Autonomy.** The Government will ensure that DISCOs bill all customers directly and in a timely manner for the power distribution services rendered. The Government will ensure that all government paying authorities provide prompt payment to DISCOs, and in case of any shortfall from the paying authority, the Government finances such shortfall in a timely manner.

78. **Auditing and Accounting.** The Government will cause DISCOs to ensure that proper accounts and records are maintained in a timely manner to adequately identify the use of tranche proceeds in such a manner and details as may be specified in each loan agreement and project agreement. Audited financial reports of each DISCO will be submitted to ADB within 6 months of the end of fiscal year to which they relate.

79. **Financial Governance.** The Government will cause each DISCO to ensure that its internal controls are in accordance with the National Accounting Standards, and an independent and autonomous internal audit department is set up within each DISCO.

9.3 Safeguards Covenants

80. **Land Acquisition and Resettlement.** Medium/low voltage lines up to 11 kV causing LAR or income impacts will not be eligible to financing under the MFF. However, lines at voltages of 33 kV and above and substation subprojects causing LAR or income impacts will be fully eligible for financing under the MFF. In the case of these subprojects,

the Government will cause each DISCO to ensure that (i) all land and rights-of-way required by the subprojects are made available in a timely manner; (ii) the provisions of the relevant LARP are implemented promptly and efficiently according to its terms, applicable laws and regulations of Pakistan, ADB's *Policy on Involuntary Resettlement*, ADB's Operations Manual F2 on Involuntary Resettlement (2003), and the LARF; (iii) the relevant LARP is updated based on the detailed design, prepared in full consultation with the affected persons and disclosed to them prior to submitting the LARP to ADB; (iv) the contractors' activities are in compliance with requirements of the relevant LARP and the LARF, and (v) an independent monitor acceptable to ADB is engaged to carry out monitoring and evaluation and report to ADB in accordance with the requirements of the LARPs. The signing of civil work contracts or a similar milestone will be subject to ADB's review and approval of the relevant LARP and award of civil works will be subject to ADB review and approval of implementation of the relevant LARPs, including the provision of full compensation to the affected people.

81. **Indigenous Peoples.** The Government will cause each DISCO to ensure that all subprojects affecting tribal peoples are constructed and operated in accordance with the requirements of ADB's *Policy on Indigenous Peoples* as specified in the IPDF and indigenous peoples development plans (IPDPs) agreed with ADB. Each DISCO will ensure that the IPDP are monitored and evaluated by an independent agency.

82. **Environment.** The Government will cause each DISCO to ensure that (i) the subprojects are designed, constructed, operated, and maintained in accordance with all applicable laws and regulations of Pakistan and ADB's *Environment Policy*; (ii) all subprojects will strictly follow the mitigation measures in the IEE, including the EMPs and the EARF; (iii) mitigation measures identified in the EMPs will be incorporated in bidding documents and civil work contracts and implemented under supervision of the DISCOs; and (iv) environmental monitoring reports will be submitted to ADB twice annually during the construction and operation period, including progress made on the mitigation measures, monitoring data, problems encountered, enforcement plan, complaints, violations, or modifications to mitigation measures to take account of unexpected environmental impacts and the acceptability of the residual impacts.

83. **Social Impacts.** The Government will cause each DISCO to ensure that all civil works contractors (i) comply with all applicable labor laws of Pakistan and pertinent occupational health and safety regulations, (ii) use their best efforts to employ women living in the vicinity of the project/subproject area, (iii) disseminate information at worksites on the risks of sexually transmitted diseases and HIV/AIDS for those employed during construction, and (iv) are required not to differentiate between men and women's wages or benefits for work of equal value, and not to use child labor. Contracts for all projects to be financed under the Investment Program must include specific clauses on these undertakings, and compliance will be strictly monitored.

84. The Government will cause each DISCO to monitor the subproject effects on women during each subproject implementation, through, where relevant, gender-disaggregated data collected pursuant to the monitoring and evaluation system referred to in the subproject performance monitoring system.

Annex 10: Appendixes

1. Safeguards Frameworks:
 - (i) Land Acquisition and Resettlement Framework Is part of the Framework Financing Agreement and can be accessed in the Project Documents Folder provided to each DISCO Project Management Unit during ADB's Inception Mission on 29 January – 12 February 2009.
 - (ii) Indigenous People's Development Framework is part of the Framework Financing Agreement and can be accessed in the Project Documents Folder provided to each DISCO Project Management Unit during ADB's Inception Mission on 29 January – 12 February 2009.
 - (iii) Environmental Assessment and Review Framework is part of the Framework Financing Agreement and can be accessed in the Project Documents Folder provided to each DISCO Project Management Unit during ADB's Inception Mission on 29 January – 12 February 2009.
 2. Independent Monitoring Report Outline
 - (i) Quarterly Progress Report
 - (ii) Framework and Guidelines in Calculating Project Progress
 3. External Monitoring Agency Terms of Reference
 4. Social Development/ Resettlement Cell Terms of Reference
-

INDEPENDENT MONITORING REPORT OUTLINE

A. QUARTERLY PROGRESS REPORT

Pro Forma of the Executing Agency's Project Progress Report

A. Introduction and Basic Data

1. Provide the following:

- (i) ADB loan number, project title, borrower, executing agency(ies), implementing agency(ies);
- (ii) total estimated project cost and financing plan;
- (iii) status of project financing including availability of counterpart funds and cofinancing;
- (iv) dates of approval, signing, and effectiveness of ADB loan;
- (v) original and revised (if applicable) ADB loan closing date and elapsed loan period based on original and revised (if applicable) loan closing dates; and date of last ADB review mission.

B. Utilization of Funds (ADB Loan, Cofinancing, and Counterpart Funds)

2. Provide the following:

- (i) cumulative contract awards financed by the ADB loan, cofinancing, and counterpart funds (commitment of funds to date), and comparison with time-bound projections (targets);
- (ii) cumulative disbursements from the ADB loan, cofinancing, and counterpart funds (expenditure to date), and comparison with time-bound projections (targets); and
- (iii) reestimated costs to completion, need for reallocation within ADB loan categories, and whether an overall project cost overrun is likely.

C. Project Purpose

3. Provide the following:

- (i) status of project scope/implementation arrangements compared with those in the report and recommendation of the President (RRP), and whether major changes have occurred or will need to be made;
- (ii) an assessment of the likelihood that the immediate development objectives (project purpose) will be met in part or in full, and whether remedial measures are required based on the current project scope and implementation arrangements;
- (iii) an assessment of changes to the key assumptions and risks that affect attainment of the development objectives; and
- (iv) other project developments, including monitoring and reporting on environmental and social requirements that might adversely affect the project's viability or accomplishment of immediate objectives.

D. Implementation Progress

4. Provide the following:

- (i) assessment of project implementation arrangements such as establishment, staffing, and funding of the PMO or PIU;
- (ii) information relating to other aspects of the EA's internal operations that may impact on the implementation arrangements or project progress;
- (iii) progress or achievements in implementation since the last progress report;
- (iv) assessment of the progress of each project component, such as,
 - recruitment of consultants and their performance;
 - procurement of goods and works (from preparation of detailed designs and bidding documents to contract awards); and
 - the performance of suppliers, manufacturers, and contractors for goods and works contracts;
- (v) assessment of progress in implementing the overall project to date in comparison with the original implementation schedule—quantifiable and monitorable target, (include simple charts such as bar or milestone to illustrate progress, a chart showing actual versus planned expenditure, S-curve graph showing the relationship between physical and financial performance, and actual progress in comparison with the original schedules and budgets, the reference framework or guidelines in calculating the project progress including examples are shown in Appendix 2); and
- (vi) an assessment of the validity of key assumptions and risks in achieving the quantifiable implementation targets.

E. Compliance with Covenants

5. Provide the following:

- (i) the borrower's compliance with policy loan covenants such as sector reform initiatives and EA reforms, and the reasons for any noncompliance or delay in compliance;
- (ii) the borrower's and EA's compliance with financial loan covenants including the EA's financial management, and the provision of audited project accounts or audited agency financial statements; and
- (iii) the borrower's and EA's compliance with project-specific loan covenants associated with implementation, environment, and social dimensions.

F. Major Project Issues and Problems

6. Summarize the major problems and issues affecting or likely to affect implementation progress, compliance with covenants, and achievement of immediate development objectives. Recommend actions to overcome these problems and issues (e.g., changes in scope, changes in implementation arrangements, and reallocation of loan proceeds).

B. FRAMEWORK AND GUIDELINES IN CALCULATING PROJECT PROGRESS

A. Introduction

1. To ensure that all implementation activities are reflected in measuring implementation progress against the project implementation schedule, the term "physical completion" in the PPR has been changed to "project progress."

2. Physical and precommencement activities are considered in calculating project implementation progress. These activities, which may include recruitment of consultants, capacity building, detailed design, preparation of bid and prequalification documents, etc., could constitute a significant proportion of overall implementation and therefore should be counted.

3. Each activity in the implementation schedule will be weighted according to its overall contribution (using time as a reference) to progress of project implementation. These weights will then be used to calculate the percentage of project progress along the entire time span of the project. This is to provide a holistic view of the pace of implementation.

B. Framework for Compiling Activity List and Assigning Weights

4. As implementation activities and their corresponding weights will vary according to the type of project, sector, and country, sector divisions or RMs will be responsible for determining and including them in the project administration memorandum. The actual project implementation progress of these activities should be reported regularly through the EA's quarterly project progress report. To ensure ADB-wide consistency, the following framework has been established; its application will be monitored through the PPR.

1. Compilation of Activity List

5. Sector divisions or RMs concerned should identify major implementation activities and include them in the implementation schedule, which is attached as an appendix in the report and recommendation of the President (RRP). The implementation schedule should follow the critical path of the project's major activities in project implementation taking account of various country, sector, and project constraints.

2. Assignment of Weights

6. Corresponding weights for each activity should be assigned to ensure that "project progress" measures the percentage of achievement (nonfinancial except when the project has credit components) for all events during the entire duration of the implementation schedule. To avoid disproportionate assignment of weights, to the extent possible these should be evenly distributed along the implementation schedule. When activities are concurrent, avoid "double counting."

3. Computation of Project Progress

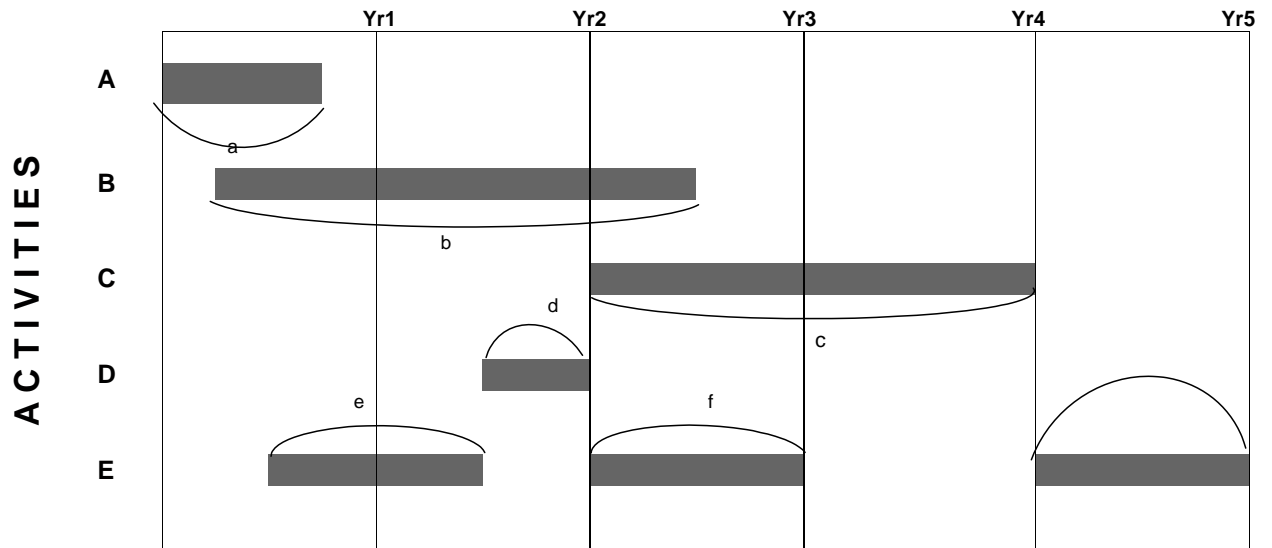
7. Once all activities are identified and corresponding weights assigned, project progress should be calculated using the following steps:

- (i) Determine the actual percentage progress (nonfinancial) of each activity.
- (ii) Multiply these percentages by the assigned weight of each activity to arrive at the weighted progress.
- (iii) Add up the resulting weighted progress of all activities to determine the project progress.

8. Page 3 of this Appendix provides an illustration of this calculation using a generic sample implementation schedule and this Appendix, page 4 a specific example in the education sector.

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Appendix 2

Implementation Schedule with Activities and Weights



1. Sum of all weights should equal 100 percent ($a+b+c+d+e+f+g = 100\%$)
2. When calculating the percentage of "project progress," all completed activities should be counted as accomplished, regardless of when they were scheduled to be completed. For example, when calculating the percentage of "project progress" after year 3, if activity D is completed in year 3 rather than in year 2, it should still be included in the computation.
3. Total weight of each activity is as follows: Activity A–a; Activity B–b; Activity C–c; Activity D–d; and Activity E–e + f + g
4. Project progress of a project is the summation of the actual percentage of progress for each activity multiplied by the total weight of each activity.

**PAI 5.01
Appendix 2**

Sample Implementation Schedule

Activities	Year 1	Year 2	Year 3	Year 4	(a) Assigned Weight	(b) Actual Progress	(a) x (b) Weighted Progress
Establish PIU	█				5%	100%	6%
Establish Accreditation Board, etc.		█			5%	0%	0%
Appoint Staff and Budget	█				4%	75%	3%
Adopt Architecture Plans		█			2%	100%	2%
Shortlist Consulting Firms	█				6%	100%	6%
Prepare Fellowship Program		█			6%	76%	4%
Prepare Civil Works Tendering		█			30%	0%	0%
Civil Works: Classrooms, Dorms, etc.		█	█	█	6%	0%	0%
Procurement of Furniture and Equipment				█	16%	10%	2%
Field Work of Consultants		█	█		7%	0%	0%
Provide Fellowships				█	6%	0%	0%
Conduct Study Tours			█		6%	0%	0%
Provide Curriculum Standards				█	6%	0%	0%
				Total Weight	100%		
				Imp. Progress			24%

(a) Assigned weight for each activity
 (b) Actual progress of each activity
 (a) x (b) weighted progress for each activity
 Project progress = sum of all weighted progress for each activity

EXTERNAL MONITORING AGENCY TERMS OF REFERENCE

A. Terms of Reference for an External Agency for Monitoring and Evaluation

Monitoring is an integral part of the resettlement process. The agency will be involved in ongoing monitoring of resettlement implementation.

Objective/Purpose of the Assignment:

The objectives of external M&E are to review implementation, and assess the (i) achievement of resettlement objectives, (ii) changes in living standards and livelihoods and restoration of economic and social base of the APs, (iii) the effectiveness, impact and sustainability of entitlements, (iv) the need for further mitigation measures if any. External M&E should also enable the Executing Agency to make timely decisions on corrective measures needed to implement resettlement effectively, and learn strategic lessons for future policy formulation and planning.

Qualifications

The selected organization should be of high professional standing and have a strong track record in the field of social development and resettlement. It should also have a proven record in project monitoring and be able to demonstrate adequate resources

Scope of Work

The major tasks expected from the external monitor are:

- (i) Review and verify internal monitoring systems and findings.
- (ii) Conduct independent investigations of project implementation, including PIUs, local offices and consultations with village leaders, NGOs and affected people, especially women and vulnerable groups.
- (iii) Prepare independent reports based on monitoring visits.
- (iv) Suggest major recommendations for remedial actions.
- (v) Identify lessons learned.
- (vi) Maintain database of independent surveys.
- (vii) Suggest remedial actions with time-based outputs.
- (viii) Share the major lessons from the process both in terms of success and failure.

Detailed Tasks:

- (i) Prior to commencement, prepare a Monitoring and Evaluation plan giving details on:
 - (a) Aim and scope of monitoring system
 - Setting up the objectives of monitoring
 - Defining the monitoring system and monitoring cycle
 - Defining the scope of monitoring

(b) Monitoring Strategy

The general approach to be used to monitor activities and results ensuring participation of all stakeholders, especially women and vulnerable groups.

(c) Project Results

A summary of the major project activities, expected results, and the indicators to be used to monitor the progress and achievement of results

(d) Defining and Selecting Indicators

- Identify key indicators to be monitored
- Indicators for each stage of project implementation
- Gender-disaggregated indicators
- Select only those which are simple, specific, and verifiable

(e) Collection and Analysis of Data

- Method of data collection
- Sampling (20% of affected people and 20% of vulnerable groups)
- Analysis

- (ii) Verify the internal monitoring process and reporting by executing agency (EA) through field visits and independent investigations.
- (iii) Assess the extent to which the resettlement plan is being followed and objectives being met.
 - Institutional arrangements;
 - Adequacy of the Management Information System;
 - Payment of compensation, adequacy of budget and timeliness of payment;
 - Land readjustments;
 - Consultation and information dissemination;
 - Preparation and adequacy of resettlement sites;
 - House construction;
 - Provision of employment, its adequacy, and income levels;
 - Training;
 - Gender impacts;
 - Rehabilitation of vulnerable groups;
 - Infrastructure repair, relocation, or replacement;
 - Enterprise relocation, compensation and its adequacy; and
 - Transition allowances.
- (iv) Monitor the different stages (resettlement and rehabilitation stages) of the project with specific and need based framework.
- (v) Monitor the quality, effectiveness, efficiency and sustainability of the resettlement efforts.
- (vi) Monitor the process undertaken by EA for implementing resettlement and develop a framework for process monitoring.

- (vii) Highlight the major problems being faced and limitations of implementing the RP and identify corrective measures needed to implement resettlement effectively.

Methodology

- (i) Study the baseline data on income and expenditure, occupational and livelihood patterns, arrangements for use of common property, social organization, leadership patterns, community organizations and cultural parameters from the available reports.
- (ii) Identify an appropriate set of indicators for gathering and analyzing information on resettlement impacts; the indicators shall include but not be limited to issues such as payment of compensation, relocation and resettlement assistance, delivery of entitlement packages, restoration of income and living standards, level of satisfaction by the affected persons, and the quality of resettlement operations.
- (iii) Review results of internal monitoring and verify claims through random checking at the field level to assess whether resettlement objectives have been generally met. Involve the affected people and community groups in assessing the impact of resettlement for Monitoring and Evaluation purposes.
- (iv) Conduct both individual and community level impact analysis through the use of formal and informal surveys, key informant interviews, focus group discussions, community public meetings, and in-depth case studies of affected people from various social classes (e.g., scheduled caste, scheduled tribes, other backward castes) to assess the impact of resettlement.
- (v) Identify the strengths and weaknesses of the resettlement objectives and approaches, implementation strategies, including institutional issues, and provides suggestions for improvements in future ADB-funded resettlement planning and implementation.

Reporting Requirements

- (i) Monitoring and Evaluation Plan
- (ii) Quarterly reports for large-scale projects reducing over time
- (iii) A baseline survey data report prior to commencement,
- (iv) A semi-annual or annual report during resettlement implementation,
- (v) Annual evaluation reports for at least 2 years or until resettlement has been declared successfully completed
- (vi) Final M&E Report

SOCIAL DEVELOPMENT / RESETTLEMENT SPECIALIST TERMS OF REFERENCE

Terms of Reference for Social/ Resettlement Team

Objective/ Purpose of the Social/ Resettlement Team

Social development/ resettlement team/cell is a team (the Team) that needs to be established by the Implementing Agency to manage the resettlement activities of the project. The Team will be positioned under Project Management Office (PMO) and report activities to the Director, PMO.

The objectives of the cell is to ensure social/ resettlement issues, requirements and provisions of the project activities are met and well coordinated with the relevant parties within the PMO, the executing agency and relevant external agencies.

Qualifications

The team should be led by a highly qualified resettlement/ social development specialist. Other team members may come from other relevant education background with a good knowledge on social and resettlement related issues.

Scope of Work

The major tasks expected from the Team are:

- (i) Implement and monitor the approved Land Acquisition and Resettlement Plan (LARP/s)
- (ii) Prepare new and/ or updated LARPs when required
- (iii) Set up internal monitoring system on the project's social and resettlement issues and requirements
- (iv) Select and appoint an External Monitoring Agency (EMA)
- (v) Project Information Management and Development
- (vi) Capacity Building
- (vii) Conduct internal and external coordination with relevant parties in social/resettlement activities/ requirements of the project.
- (viii) Set up redress and grievance mechanism for project activities
- (ix) Report preparation and submission
- (x) Provide advice/ recommendation to the Director, PMO on social safeguard/ resettlement problems/requirements
- (xi) Redress or follow up actions based on findings and requirements of EMA reports

Detailed Tasks

- (i) LARP Implementation
The Team will be responsible for the implementation of approved LARP/s. All provisions and requirements in the LARP/s will have to be fulfilled. This includes:
 - Setting up the required institutional arrangements such as grievance and redress mechanism
 - Report for any changes, delayed or problems in the LARP implementation to the PMO team leader.

- Assist in the delivery of compensation, allowances and other resettlement provisions
 - Submit LARP/s completion report
- (ii) LARP/s Updating and Preparation
- The Team will prepare updated/ final LARP/s and/or new LARP/s when required. Activities under this task include:
- Conduct detail/ final survey of the affected people (AP) and inventory of losses
 - Prepare updated/ final/ new LARP documents and submit to ADB
 - Prepare leaflet, brochure of resettlement activities/ entitlement for distribution to the AP
 - Conduct consultation with AP for finalization of entitlement matrix
 - Create a specific web page related to resettlement and land acquisition, Upload the final LARP/s documents at project's website when available
 - Update the web page periodically
 - Ensure regular consultations with affected persons
- (iii) Internal and External Monitoring
- The Team will require developing and providing input for internal and external monitoring purposes. For internal monitoring activity, the tasks will include:
- Provide regular update and input to the Director, PMO on the progress and issues related to LARP implementation
 - Develop LARP implementation monitoring system and required action plans to be follow up with the responsible parties
 - Prepare quarterly internal monitoring reports on land acquisition and resettlement and submit to the Director, PMO.
- For external monitoring the cell will be responsible for the following:
- Select suitable candidates/organizations for external monitoring activities to be approved by ADB and appointed by PMO
 - Prepare the TOR for EMA activities with ADB approval
 - Develop monitoring criteria and indicators together with the appointed EMA
 - Provide the baseline information and necessary documents of the project
 - Monitor and report to PMO of the EMA activities
 - Review the EMA reports and submit to ADB
 - Prepare action plan/s for following up the EMA findings and recommendation when required.
- (iv) Project Information Management and Development
- Develop baseline data/ information of project AP, through socio economic survey, secondary data collection, field visits, etc.
 - Maintain social/ resettlement information system of the project areas through regular updating of LARP status, report monitoring and record filling
- (v) Capacity Development
- Conduct training/ workshop for LAR policies and requirement for project staff and relevant government officers
 - Encouraged proper implementation of the country's land acquisition policy and strengthened the roles of LAC to safeguard the country's LAR policy
 - Share and disseminate knowledge of ADB social safeguard policies within the agency and relevant external agencies and exchange best practices of LAR implementation activities
- (vi) Internal and External Coordination

The Team should actively seek coordination within relevant divisions of PMO for avoiding conflicting schedule and activities with other divisions. Coordinate and develop working relationships with external agencies relevant with social and resettlement issues. This is especially important for the establishment of grievance and redress mechanism of the projects that require involvement of external agencies (i.e. NGO, local governments, revenue office, justice departments, etc.).

(vii) Reporting, Technical Advising and Redressing

The Team will have the responsibility to support the PMO to comply and submit all the resettlement related reporting requirements to ADB. The Team might need to provide technical advice on resettlement/social issues to the Director, PMO. Also prepare a plan/ follow up actions for any problems in LARP implementation/ other resettlement and social issues as indicated in the EMA reports.

Reporting Requirements

- (i) LARP progress report
- (ii) LARP completion report
- (iii) Summary EMA reports

Budget

Specific budget for the required activities and staff remuneration must be prepared and included in the project financing plan and cost. It should indicate the source of fund for each allocated/ required activities.
