

# Project Administration Manual

Project Number: 41340  
Loan Number: Loan 2779  
Updated November 2012

Republic of Uzbekistan: Advanced Electricity  
Metering Project

## CONTENTS

I.	PROJECT DESCRIPTION	5
A.	Objective	5
B.	Impact and Outcome	5
C.	Outputs	5
II.	IMPLEMENTATION PLANS	5
A.	Project Readiness Activities	5
B.	Overall Project Implementation Plan	6
III.	PROJECT MANAGEMENT ARRANGEMENTS	7
A.	Project Implementation Organizations – Roles and Responsibilities	7
B.	Key Persons Involved in Implementation	7
C.	Project Organization Structure	8
IV.	COSTS AND FINANCING	10
A.	Detailed Cost Estimates by Expenditure Category	11
B.	Allocation and Withdrawal of Loan Proceeds	11
C.	Detailed Cost Estimates by Financier	12
D.	Detailed Cost Estimates by Outputs/Components	13
E.	Detailed Cost Estimates by Year	14
F.	Contract and Disbursement S-curve	15
G.	Fund Flow Diagram	16
V.	FINANCIAL MANAGEMENT	16
A.	Financial Management Assessment	16
B.	Disbursement	17
C.	Accounting	17
D.	Auditing	17
VI.	PROCUREMENT AND CONSULTING SERVICES	18
A.	Advance Contracting and Retroactive Financing	18
B.	Procurement of Goods, Works and Consulting Services	18
C.	Procurement Plan	19
D.	Outline Consultant's Terms of Reference –Supervision and Project Management Consultant	21
VII.	SAFEGUARDS	22
VIII.	GENDER AND SOCIAL DIMENSIONS	22
IX.	PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION	29
A.	Project Design and Monitoring Framework	29
B.	Monitoring	31
C.	Evaluation	31
D.	Reporting	32
E.	Stakeholder Communication Strategy	32
X.	ANTICORRUPTION POLICY	32
XI.	ACCOUNTABILITY MECHANISM	32
XII.	RECORD OF PAM CHANGES	33

---

### **Project Administration Manual Purpose and Process**

1. The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.
2. Uzbekenergo, the executing agency, is wholly responsible for the implementation of ADB financed project, as agreed jointly between the borrower and ADB, and in accordance with government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by Uzbekenergo of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.
3. At Loan Negotiations the borrower and ADB shall agree to the PAM and ensure consistency with the Loan agreement. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan Agreement, the provisions of the Loan Agreement shall prevail.
4. After ADB Board approval of the project's report and recommendations of the President (RRP) changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

## **Abbreviations**

ADB	=	Asian Development Bank
AEM	=	advanced electricity metering
ADF	=	Asian Development Fund
AFS	=	audited financial statements
CWEN/CWRD	=	Energy Division, Central and West Asia Department
DMF	=	design and monitoring framework
EA	=	executing agency
FS	=	financial statements
GOU	=	Government of Uzbekistan
ICB	=	international competitive bidding
LIBOR	=	London interbank offered rate
MDM	=	meter data management
MOF	=	Ministry of Finance
NAS	=	National Accounting Standards
NGOs	=	nongovernment organizations
PAI	=	project administration instructions
PAM	=	project administration manual
PMU	=	project management unit
QCBS	=	quality- and cost based selection
RRP	=	report and recommendation of the President to the Board
SBD	=	standard bidding documents
SPS	=	Safeguard Policy Statement
SPRSS	=	summary poverty reduction and social strategy
TOR	=	terms of reference

## I. PROJECT DESCRIPTION

### A. Objective

1. The project will install an advanced electricity metering (AEM) system that uses modern, accurate, and theft-proof revenue meters for 1 million residential and commercial customers in Bukhara, Jizzakh and Samarkand regions. AEM will allow accounting for every unit of power consumed, which is essential to minimize commercial losses and identify upgrades that will lower technical losses. The project will help improve energy efficiency, reduce commercial losses, and improve the efficiency of electricity revenue collection.

### B. Impact and Outcome

2. **Impact.** Power sector financial viability increased.

3. **Outcome.** Commercial and tariff collection losses for residential and small business entity customers substantially reduced in the targeted regions of Bukhara, Jizzakh and Samarkand.

### C. Outputs

- (i) Advanced meters installed and associated data communication equipment functional.
- (ii) Data management system developed and operational.
- (iii) Customer services for end-users improved.

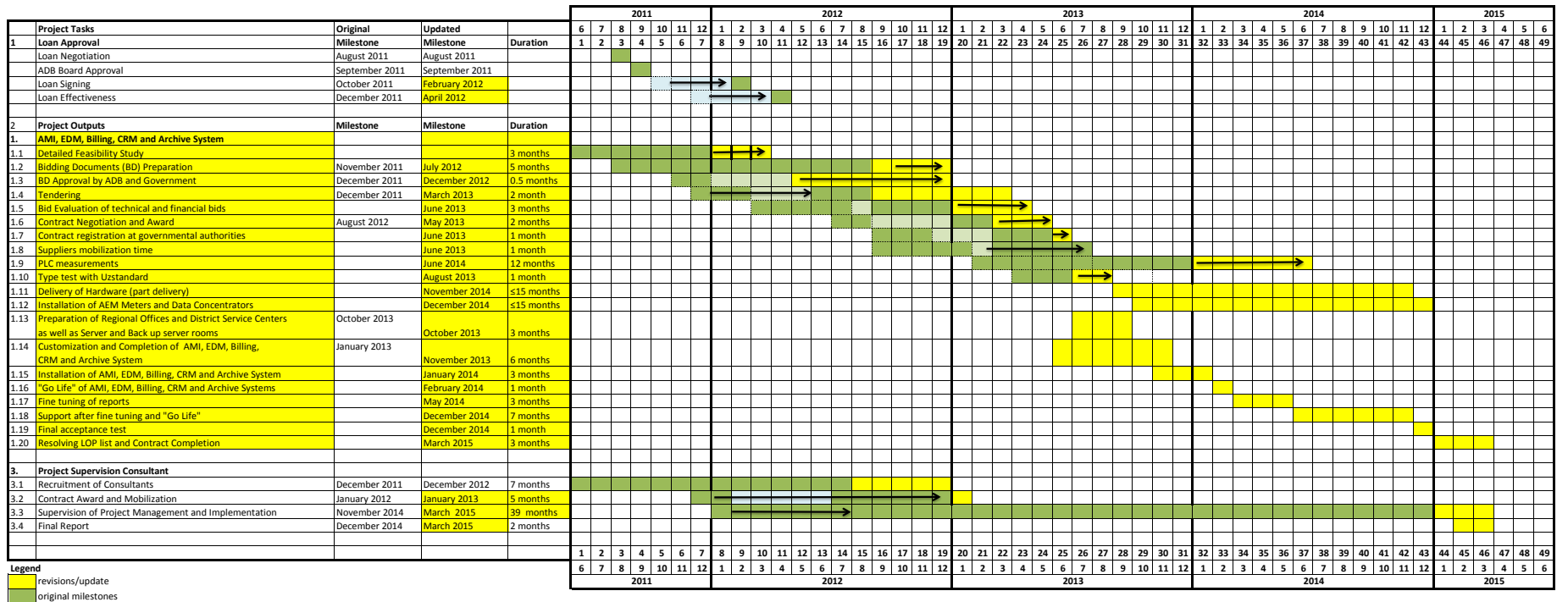
## II. IMPLEMENTATION PLANS

### A. Project Readiness Activities

Indicative Activities	2011				2012				Responsibility
	6	7	8	9	1	2	3	4	
Establish project implementation arrangements	X								Uzbekenergo
Advance contracting actions	X								
ADB Board approval				X					ADB
Loan signing						X			ADB, GOU
Government legal opinion provided								X	GOU
Loan effectiveness								X	ADB
Government budget inclusion								X	GOU

## B. Overall Project Implementation Plan

Implementation Plan (Revised November 2012)



### III. PROJECT MANAGEMENT ARRANGEMENTS

#### A. Project Implementation Organizations – Roles and Responsibilities

Project implementation Management Roles and Responsibilities organizations	
<ul style="list-style-type: none"> <li>Ministry of Finance (MOF) on behalf of the Republic of Uzbekistan</li> </ul>	<b>Borrower</b> <ul style="list-style-type: none"> <li>➤ Ministry representing for external borrowing.</li> <li>➤ Ensuring loan proceeds are used in accordance with the Loan Agreement</li> <li>➤ Handling of issues pertaining to project-related taxes and duties</li> <li>➤ Electricity tariff setting</li> </ul>
<ul style="list-style-type: none"> <li>SJSC Uzbekenergo</li> </ul>	<b>Executing Agency</b> <ul style="list-style-type: none"> <li>➤ Power generation, transmission and distribution</li> <li>➤ Funding balance of project cost and project management unit (PMU) recurrent costs</li> </ul>
<ul style="list-style-type: none"> <li>ADB</li> </ul>	<b>Lender</b> <ul style="list-style-type: none"> <li>➤ Main project financier</li> </ul>

#### B. Key Persons Involved in Implementation

Executing Agency		
SJSC Uzbekenergo	Officer's Name	Mr. Rustam Umirov
	Position	Project Director
	Telephone	+998 97 1191251 Fax : +998 71 278 9590
	Email address	<a href="mailto:rustam.umirov@mail.ru">rustam.umirov@mail.ru</a> , <a href="mailto:orgres@bk.ru">orgres@bk.ru</a>
	Office Address	[Project Management Unit] ORGRES 190 Mukimi Street, Chilanzar Area, Tashkent, 100096, Uzbekistan [Head Office] SJSC Uzbekenergo 6 Khorezmskaya Street, Tashkent, 100000, Uzbekistan
ADB		
Division Director	Staff Name	Rune Stroem
	Position	Director, Energy Division, Central and West Asia
	Department (CWRD/CWEN)	
	Telephone No.	+63-2-632-6356/6393
	Email address	<a href="mailto:rstroem@adb.org">rstroem@adb.org</a>
Mission Leader	Staff Name	Keiju Mitsushashi
	Position	Energy Specialist, CWEN
	Telephone No.	+63-2-632-5630/4156
	Email address	<a href="mailto:kmitsushashi@adb.org">kmitsushashi@adb.org</a>

## C. Project Organization Structure

4. SJSC Uzbekenergo has established a dedicated full-time project management unit (PMU). The PMU will administer all consulting and procurement contracts on behalf of Uzbekenergo. It will be responsible for preparing project plans, bid evaluation reports, progress reports, applications for withdrawal of funds, and any other required reports to ADB.

5. The Director of the PMU will report directly to the Chairman of SJSC Uzbekenergo. The PMU will be the main point of contact for working communication between SJSC Uzbekenergo and ADB. The PMU will coordinate the consultants and contractors.

6. The PMU, assisted by the consultants, will submit the necessary project plans, tender evaluation reports, progress reports, applications for withdrawal of funds, and any other required reports to ADB.

7. The PMU Director and PMU staff will have appropriate academic qualifications with experience of working on large investment projects. The Director and Managers will be senior engineers with experience in project implementation and/or operations. The Deputy Project Manager, Project Accountant, AEM Engineers, Data Communication Engineer, and Social Development (Gender)/Public Relations Officer will have relevant experience and academic qualifications in their specialty area. The Procurement Specialist will have required academic qualifications with experience in procurement of consultants and contractors.

8. The PMU will include the positions with the terms of reference as the following: The Terms of Reference of the Director PMU and PMU staff are as:

Position	Terms of Reference
Project Director, Project Management Unit (PMU)	<ul style="list-style-type: none"> <li>• Provide overall direction and management of PMU.</li> <li>• Ensure project is delivered on schedule to budget and specification</li> <li>• Manage relationships with financiers, consultants, and contractors</li> <li>• Ensure appropriate reporting to financiers</li> <li>• Ensure Chairman Uzbekenergo is appraised of project developments on ongoing basis</li> </ul>
Project Manager	<ul style="list-style-type: none"> <li>• Assist Director PMU in delivery of his/her duties</li> <li>• Manage supervision and project management consultant and contractors</li> <li>• Manage PMU staff</li> </ul>
Project Manager (Region)	<ul style="list-style-type: none"> <li>• Assist Director PMU in delivery of his/her duties</li> <li>• Manage supervision and project management consultant and contractors</li> <li>• Manage the installation works and database creation activities</li> </ul>
Deputy Project Manager	<ul style="list-style-type: none"> <li>• Assist Director PMU in delivery of his/her duties</li> <li>• Assist Project Managers (Technical and Region)</li> <li>• Coordinate with relevant government offices agencies</li> <li>• Coordinate with ADB</li> </ul>
AEM Engineer	<ul style="list-style-type: none"> <li>• Monitor consultants and contractors progress and delivery to contract</li> </ul>



<b>Position</b>	<b>Terms of Reference</b>
	<ul style="list-style-type: none"> <li>• Review submission by consultants in area of specialty</li> <li>• Prepare progress reports</li> <li>• Assist Project Managers (Technical and Region) in delivery of his/her duties</li> </ul>
Electrical Engineer (Regional)	<ul style="list-style-type: none"> <li>• Monitor consultants and contractors progress and delivery to contract</li> <li>• Review submission by consultants in area of specialty</li> <li>• Prepare progress reports</li> <li>• Assist Project Managers (Technical and Region) in delivery of his/her duties</li> </ul>
Economist-Accountant (Regional)	<ul style="list-style-type: none"> <li>• Submit report on the status of project</li> <li>• Submit report on the project disbursement</li> </ul>
Data communication Engineer	<ul style="list-style-type: none"> <li>• The same as above.</li> </ul>
Procurement Officer	<ul style="list-style-type: none"> <li>• Lead recruitment of supervision and project management consultant</li> <li>• Lead procurement of goods and services</li> <li>• Monitor compliance of consultants and contractors with contract requirements</li> <li>• Prepare overall project progress report</li> <li>• Prepare contract award and disbursement projections</li> </ul>
Project Accountant	<ul style="list-style-type: none"> <li>• Maintain project accounts</li> <li>• Prepare withdrawal applications</li> <li>• Monitor loan covenants</li> <li>• Prepare project financial reports</li> </ul>
Social Development (Gender)/Public Relations Officer	<ul style="list-style-type: none"> <li>• Ensure the implementation of the public information program</li> <li>• Ensure the implementation of gender action plan</li> <li>• Coordinate with Women's Committee</li> </ul>

\*The Supervision and Project Management Consultant will provide training to the Social Development (Gender)/Public Relations Officer.

#### IV. COSTS AND FINANCING

9. The project costs consist of:

- (i) **Supply of Goods and related services.** Supply contract is for (i) AEM meters and associated communication system and (ii) MDM and billing system. Implementation will be under Uzbekenergo's responsibility. It is financed out of the ADB loan proceeds which are relented by the government to Uzbekenergo in accordance with the Subsidiary Loan Agreement.
- (ii) **Installation Works and Services.** Uzbekenergo will provide necessary staff and resources for installation of the AEM meters and associated communication system, and creation of customer meter database for the MDM and billing system. The cost will be covered by Uzbekenergo's internal resources.
- (iii) **Supervision and Project Management Consultant.** Supervision and project management consultant (a firm) will be recruited by Uzbekenergo to assist PMU in project management and implementing public information program and gender action plan. This will be under Uzbekenergo's responsibility. It is financed out of the ADB loan proceeds which are relented by the government to Uzbekenergo in accordance with the Subsidiary Loan Agreement.
- (iv) **Social and Gender Program (Public Information Program and Gender Action Plan).** Uzbekenergo will be responsible for financing and implementing public information program and gender action plan in collaboration with Women's Committee.
- (v) **Taxes and duties.** Taxes and duties will be covered under government contribution as their share of the project cost.
- (vi) **Financial charges.** Uzbekenergo will finance the financial charges including interest during construction and commitment charges without capitalizing them into the loan.

10. **Recurrent costs** of the PMU are not included in the project cost. Such costs are to be financed by Uzbekenergo. However, these costs will be subject to audit and will be covered under the audited financial statement.

A.

## Detailed Cost Estimates by Expenditure Category

### A. Detailed Cost Estimates by Expenditure Category (\$ million)

	Total	% of
		Total
Item	Cost	Base
		Cost
<b>A. Investment Costs</b>		
1 Mechanical and Equipment	129.68	64.8%
2 Installation Works and Services	8.36	4.2%
3 Consulting Services	2.00	1.0%
4 Social and Gender Program	1.00	0.5%
5 Taxes and Duties	32.19	16.1%
<b>Subtotal (A)</b>	<b>173.23</b>	<b>86.6%</b>
<b>B. Contingencies</b>		
<b>Subtotal (B)</b>	<b>18.32</b>	<b>9.2%</b>
<b>C. Financing Charges During Implementation</b>		
1 Financial Charges During Implementation	8.45	4.2%
<b>Total Project Cost (A+B+C)</b>	<b>200.00</b>	<b>100.0%</b>

Source: Asian Development Bank estimates.

B.

## Allocation and Withdrawal of Loan Proceeds

CATEGORY			ADB FINANCING
Number	Item	Total Amount Allocated for ADB Financing (\$)	Percentage of ADB Financing from the Loan Account
1	Goods	129,679,000	100 percent of total expenditure claimed*
2	Consulting Services	2,000,000	100 percent of total expenditure claimed*
3	Unallocated	18,321,000	--
	<b>Total</b>	<b>150,000,000</b>	

\* Exclusive of taxes and duties imposed within the territory of the borrower.

Source: Asian Development Bank estimates.

C. **Detailed Cost Estimates by Financier**

(\$ million)					
	ADB	% of Cost	Borrower /UE	% of Cost	Total Cost
	Amount (A)	Category (A/C)	Amount (B)	Category (B/C)	Cost (C)
<b>A. Investment Costs</b>					
1 Mechanical and Equipment	129.7	100%	-	0%	129.7
2 Installation Works and Services	-	0%	8.4	100%	8.4
3 Consulting Services	2.0	100%	-	0%	2.0
4 Social and Gender Program	-	0%	1.0	100%	1.0
5 Taxes and Duties	-	0%	32.1	100%	32.1
<b>Subtotal (A)</b>	<b>131.7</b>	<b>76%</b>	<b>41.5</b>	<b>24%</b>	<b>173.2</b>
<b>B. Contingencies</b>					
<b>Subtotal (B)</b>	<b>18.3</b>	<b>100%</b>	<b>-</b>	<b>0%</b>	<b>18.3</b>
<b>C. Financing Charges During Implementation</b>					
1 Financial Charges During Implementation	-	0%	8.5	100%	8.5
<b>Total Project Cost (A+B+C)</b>	<b>150.0</b>	<b>75%</b>	<b>50.0</b>	<b>25%</b>	<b>200.0</b>
<b>% Total Project Cost</b>	<b>75%</b>		<b>25%</b>		<b>100%</b>

UE = Uzbekenergo

Source: Asian Development Bank estimates.

D. Detailed Cost Estimates by Outputs/Components

(\$ million)							
Item	Samarkand			Bukhara		Jizzakh	
	Total Cost	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
<b>A. Investment Costs</b>							
1 Mechanical and Equipment	129.7	66.7	51%	39.3	30%	23.8	18%
2 Installation Works and Services	8.4	4.2	51%	2.8	34%	1.3	16%
3 Consulting Services	2.0	1.0	51%	0.6	30%	0.4	18%
4 Social and Gender Program	1.0	0.5	51%	0.3	30%	0.2	18%
5 Taxes and Duties	32.1	16.5	51%	9.8	30%	5.8	18%
<b>Subtotal (A)</b>	<b>173.2</b>	<b>88.9</b>	<b>51%</b>	<b>52.8</b>	<b>30%</b>	<b>31.5</b>	<b>18%</b>
<b>B. Contingencies</b>							
<b>Subtotal (B)</b>	<b>18.3</b>	9.4	51%	5.6	30%	3.3	18%
<b>C. Financing Charges During Implementation</b>							
1 Financial Charges During Implementation	8.5	4.3	51%	2.6	30%	1.5	18%
<b>Total Project Cost (A+B+C)</b>	<b>200.0</b>	<b>102.7</b>	<b>51%</b>	<b>60.9</b>	<b>30%</b>	<b>36.3</b>	<b>18%</b>

Source: Asian Development Bank estimates.

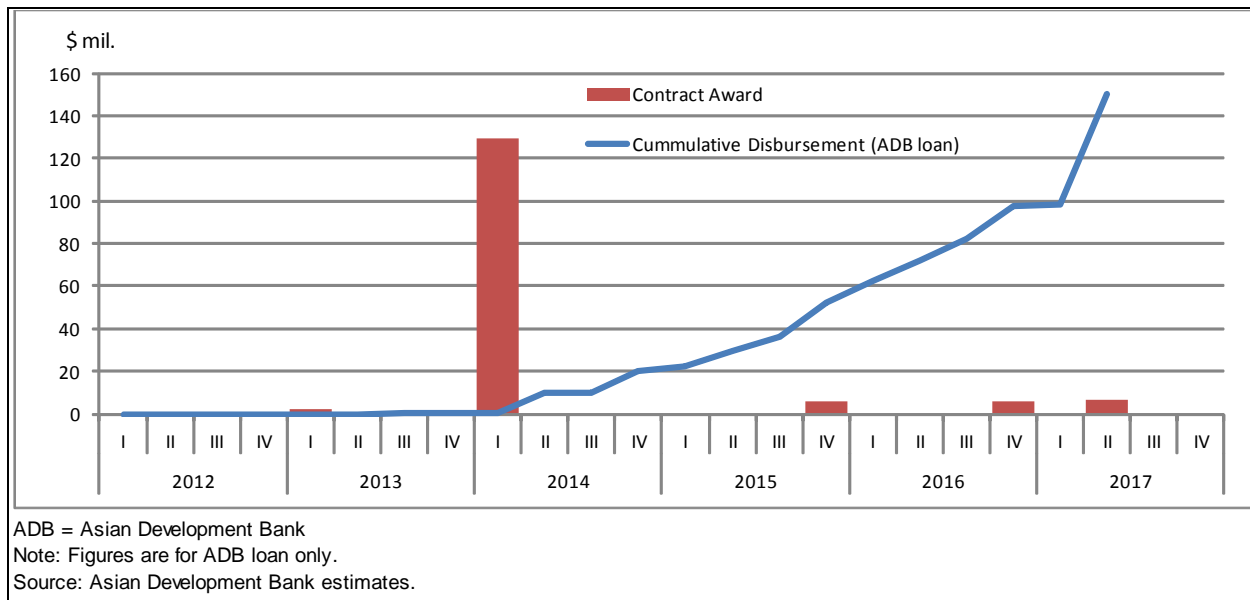
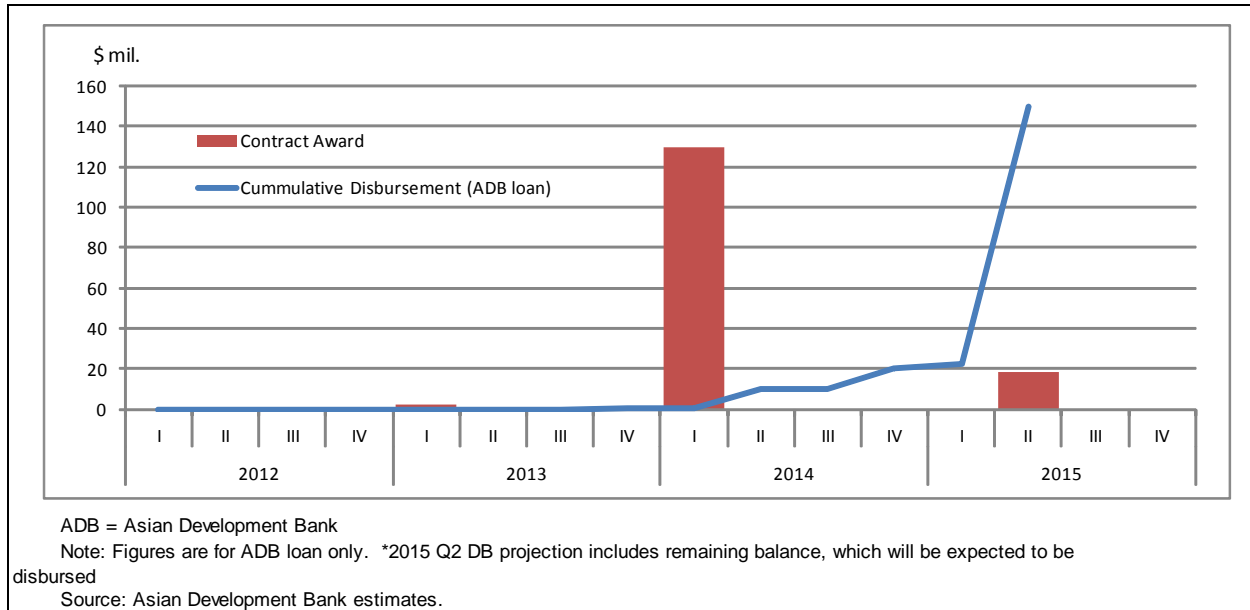
E. Detailed Cost Estimates by Year

(\$ million)							
Item	Total Cost	2012	2013	2014	2015	2016	2017
<b>A. Investment Costs</b>							
1 Turnkey Contract	129.68	-	-	19.5	25.9	38.9	45.4
2 Installation Works and Services	8.36	-	-	0.8	3.3	3.3	0.8
3 Consulting Services	2.00	-	0.2	0.3	0.5	0.5	0.5
4 Social and Gender Program	1.00	-	0.1	0.3	0.3	0.2	0.1
5 Taxes and Duties	32.19	-	1.6	8.0	8.0	8.0	6.4
<b>Subtotal (A)</b>	<b>173.23</b>	<b>-</b>	<b>1.9</b>	<b>28.9</b>	<b>38.1</b>	<b>51.0</b>	<b>53.3</b>
<b>B. Contingencies</b>							
a Physical	13.63	-	-	-	4.5	4.5	4.6
b Price	4.69	-	-	-	1.5	1.5	1.6
<b>Subtotal (B)</b>	<b>18.32</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.0</b>	<b>6.0</b>	<b>6.2</b>
<b>C. Financing Charges During Implementation</b>							
Interest During Implementation	8.45	0.1	0.3	0.8	1.7	2.5	3.0
<b>Total Project Cost (A+B+C)</b>	<b>200.00</b>	<b>0.1</b>	<b>2.2</b>	<b>29.8</b>	<b>45.9</b>	<b>59.6</b>	<b>62.4</b>

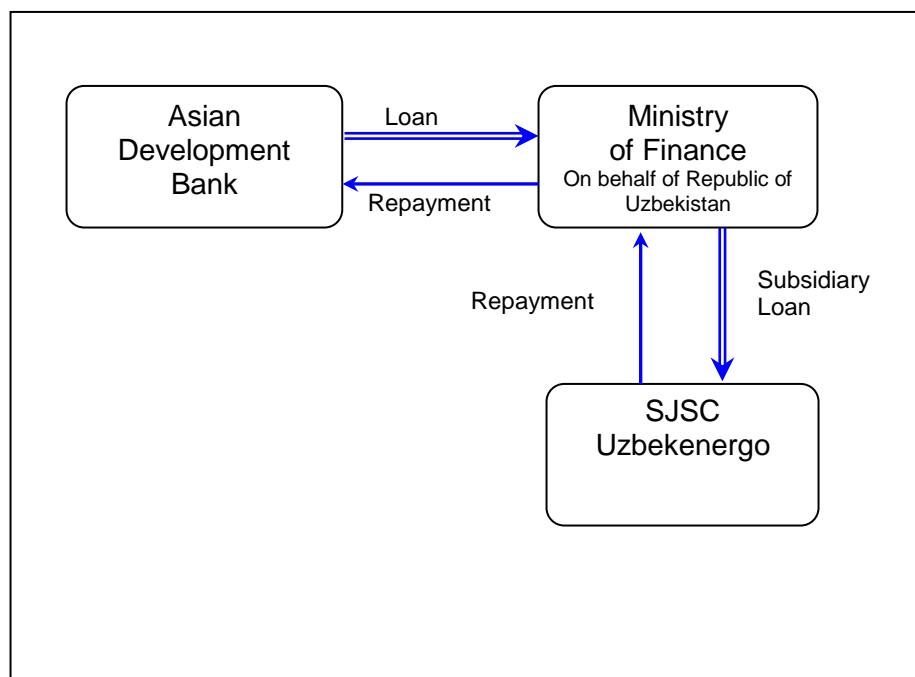
Revised PAM version Nov 2012, assuming the loan closing date is extended.

Source: Asian Development Bank estimates.

## F. Contract and Disbursement S-curve



G. **Fund Flow Diagram**



Source: Asian Development Bank

## V. FINANCIAL MANAGEMENT

A. **Financial Management Assessment**

11. A financial management assessment including assessed risks and mitigation measures, analysis on historical financial performance and projections of financial statements, were conducted according to ADB's guidelines. Uzbekenergo, the EA of the project, is a 100% state-owned holding company for power generation, transmission, and distribution in Uzbekistan. It was established in August 2001 after public sector reorganization and is the legal successor of the former Ministry of Energy and Electrification. Incorporated as an open joint-stock company, Uzbekenergo has 54 subsidiaries with its shares ranging from 51% to 100% in each subsidiary. These subsidiaries include power generation, transmission, and distribution and supply companies. Most of those subsidiaries are incorporated as separate joint-stock companies.

12. Uzbekenergo is required to maintain its accounting and reporting in accordance with National Accounting Standards (NAS). Annual financial statements (FS) of the Uzbekenergo, the parent company, have been prepared but without consolidating subsidiaries under its control required in NAS due to the complexity and the lack of skills. Uzbekenergo has been combining financial statements of its subsidiaries for internal use. The combination would have combined major like items of the parent with those of its subsidiaries, and would have eliminated major internal transactions. The unaudited combined FSs show profits in the past 5 years. Tariffs have been adjusted twice a year by the government given the high annual inflation rates of about 10% in the past, but are still relatively low as the average tariff is about \$0.05/kWh in 2011. The government adjusts tariff for Uzbekenergo to ensure long-term sustainability, and to cover market risks including inflation, foreign exchange and interest risks.



13. There is a need to develop capacity in Uzbekenergo for financial reporting, especially in preparing consolidated financial statements and detailed notes required. External audits should be conducted by an experienced, independent auditing firm in accordance with International Standards on Auditing. The PMU will maintain adequate and experienced staff, and training on ADB procedures is necessary. Supervision and project management consultant will be recruited to assist PMU and to ensure accurate project cost recording, timely disbursements, and accurate and comprehensive reporting. Overall control risks could be mitigated to medium level through various mitigation measures.

## **B. Disbursement**

14. The Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2007, as amended from time to time),<sup>1</sup> and detailed arrangements agreed upon between the government and ADB.

15. Pursuant to ADB's Safeguard Policy Statement (2009) (SPS),<sup>2</sup> ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS. All financial institutions will ensure that their investments are in compliance with applicable national laws and regulations and will apply the prohibited investment activities list (Appendix 5) to subprojects financed by ADB.

16. A team of supervision and project management consultant will be recruited to assist Uzbekenergo in project management including preparing disbursement projections, collecting supporting documents, and preparing and sending withdrawal applications to ADB through MOF. The firm will also assist in implementing public information program.

17. Direct payment will be adopted for the implementation consultant advance payment.

18. Before the submission of the first withdrawal application, MOF should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is US\$100,000, unless otherwise approved by ADB. MOF is to consolidate claims to meet this limit for reimbursement claims. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services were produced in or from ADB members, and are eligible for ADB financing.

## **C. Accounting**

19. Uzbekenergo will maintain separate project accounts and records by funding source for all expenditures incurred on the project. Project accounts will follow international accounting principles and practices.

## **D. Auditing**

20. Uzbekenergo will cause the detailed consolidated project accounts to be audited in accordance with International Standards on Auditing by an auditor acceptable to ADB. The

---

<sup>1</sup> Available at: [http://www.adb.org/Documents/Handbooks/Loan\\_Disbursement/loan-disbursement-final.pdf](http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf)

<sup>2</sup> Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

audited accounts will be submitted in the English language to ADB within 6 months of the end of the fiscal year by the executing agency. The borrower and Uzbekenergo have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited accounts. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures. For revenue generating projects only, ADB requires audited financial statements (AFS) for executing agency associated with the project.

## **VI. PROCUREMENT AND CONSULTING SERVICES**

### **A. Advance Contracting and Retroactive Financing**

21. All advance contracting and retroactive financing will be undertaken in conformity with ADB's *Procurement Guidelines* (April 2010, as amended from time to time) (ADB's *Procurement Guidelines*)<sup>3</sup> and ADB's *Guidelines on the Use of Consultants* (April 2010, as amended from time to time) (ADB's *Guidelines on the Use of Consultants*).<sup>4</sup> The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower and Uzbekenergo have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

22. Advance contracting will be undertaken for the procurement of contractors for goods and related services and recruitment of supervision and project management consultant. A consulting firm, engaged under ADB project preparatory technical assistance No. 7740, will assist PMU in bidding documents preparation for the supply contractor. PMU will undertake recruitment of supervision and project management consultant.

23. Retroactive financing will be applied not exceeding 20% of the total ADB loan, incurred before loan effectiveness, but not more than 12 months before the signing of the loan agreement.

### **B. Procurement of Goods, Works and Consulting Services**

24. All procurement of goods and works will be undertaken in accordance with ADB's *Procurement Guidelines*.

25. International Competitive Bidding (ICB) procedures will be used for supply contracts estimated to cost \$500,000 or more. ADB's standard bidding documents for Goods will be used.

26. Uzbekenergo will employ a single supply contractor to (i) procure the MDM and billing system for the regional offices and district service centers and (ii) the AEM meters and associated communication system using ADB's Single-Stage, Two-Envelope bidding procedure. The Contractor will provide related services, such as trainings, trouble-shooting, and customization and installation of MDM and billing system, to Uzbekenergo. The supply contract will be structured in such a way that (i) the scope of each of the three regions can be separately identified, (ii) meet the specific needs of each region, and (iii) while remaining compatible with each other, the system in each region can be operated independently from each other.

---

<sup>3</sup> Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

<sup>4</sup> Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

27. Meters and systems to be procured will have to satisfy local technical standards, which will be specified in the bidding documents. The Contractor will be responsible for acquiring and paying for all certification and/or licenses from all local, state or national government authorities which such authorities require the Contractor to obtain in its name and which are necessary for the performance of the Contract. The details will be developed by the PPTA consultant who prepares the bidding documents.

28. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.

29. All consultants will be recruited according to ADB's *Guidelines on the Use of Consultants*.<sup>5</sup> The outline terms of reference for all consulting services are detailed in Section D.

30. **Supervision and project management consultant.** An estimated 111 person-months (33 international, 78 national) of consulting services are required to (i) provide technical, financial and administrative support to the PMU during entire project implementation period, and (ii) implement social awareness-raising program. Estimated contract duration is 36 months. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality:cost ratio of 90:10, considering a high level of technical expertise and experience required for the supervision consultancy.

## C. Procurement Plan

### Basic Data

<b>Project Name:</b> Advanced Electricity Metering Project	
<b>Country:</b> Republic of Uzbekistan	<b>Executing Agency:</b> SJSC Uzbekenergo
<b>Loan Amount:</b> \$150 million	<b>Loan Number:</b> Loan 2779
<b>Date of First Procurement Plan:</b> August 2011	<b>Date of this Procurement Plan:</b> November 2012

## 1. Process Thresholds, Review and 18-Month Procurement Plan

### a. Project Procurement Thresholds

31. Except as the Asian Development Bank (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 Goods	Including and above \$500,000

### b. ADB Prior or Post Review

32. 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 Method	Prior or Post	Comments
<b>Procurement of Goods and Works</b>		
ICB Goods	Prior	
<b>Recruitment of Consulting Firms</b>		

<sup>5</sup> Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>

Procurement Method	Prior or Post	Comments
Quality- and Cost-Based Selection (QCBS)	Prior	

**c. Goods and Works Contracts Estimated to Cost More Than \$1 Million**

33. The following table lists goods and works contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Contract Value	Procurement Method	Prequalification of Bidders (y/n)	Advertisement Date (quarter/year)	Comments
Supply of Goods and related service for (i) AEM meters and associated communication system, and (ii) meter data management and billing system	\$129.7.0 million	ICB	N	Q4 2012	Single-Stage: Two-Envelope bidding method (SBD: Plant, Design, Supply and Install)

AEM = Advanced Electricity Meters; ICB = international competitive bidding.

**d. Consulting Services Contracts Estimated to Cost More Than \$100,000**

34. The following table lists consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Contract Value	Recruitment Method <sup>1</sup>	Advertisement Date (quarter/year)	International or National Assignment	Comments
---------------------	----------------	---------------------------------	-----------------------------------	--------------------------------------	----------

FTP = full technical proposal; QCBS = quality- and cost-based selection

**2. Indicative List of Packages Required Under the Project**

35. The following table provides an indicative list of all procurement (works and consulting services) over the life of the project. Contracts financed by the borrower and others should also be indicated, with an appropriate notation in the comments section.

General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Domestic Preference Applicable <sup>1</sup>	Comments
Supply of Goods and related service for (i) AEM meters and associated communication system, and (ii) meter data management	\$129.7 million	1	ICB	No	Single-Stage: Two-Envelope bidding method (SBD: Plant, Design, Supply and Install)

and billing  
system

General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Type of Proposal <sup>3</sup>	Comments
Supervision and project management consultant	\$2.0 million	1	QCBS with quality:cost ratio 90:10	FTP	Both international and national assignment

AEM = Advanced Electricity Meters; FTP = full technical proposal; ICB = international competitive bidding; QCBS = quality- and cost-based selection

### 3. Review of Contract Modifications

36. ADB will review contract modifications in accordance with the procedures set forth in the loan agreement between the borrower and ADB.

#### D. Outline Consultant's Terms of Reference –Supervision and Project Management Consultant

37. SJSC Uzbekenergo wishes to reduce distribution and collection losses in residential and small-scale commercial customer sectors in Bukhara, Jizzakh and Samarkand, regions through installation of (i) about one million Advanced Electricity Meters (AEM) and associated communication system and (ii) meter data management (MDM) and billing system in 3 regional offices and 45 district service centers.

38. The project is estimated at \$200.0 million. The project is expected to become effective by the end of 2011. Physical completion is expected in December 2014.

39. Uzbekenergo wishes to recruit a supervision and project management consultant (the Consultant; a firm) to assist the existing project management unit (PMU) in assuring that the project is constructed to the specified standard, completed on schedule and with costs monitored and controlled. The Consultant's responsibility will include (i) assisting PMU during tendering, bid evaluation, and contract negotiation and awards, (ii) project management activities controlling costs, quality and schedule of contractor's deliverables; (iii) project supervision, inspecting and accepting goods and services related to AEM revenue metering and associated communication system; (iv) confirming that the supplied goods and services conform to specifications, (v) recommending appropriate mitigation action when quality of deliverables does not meet the specifications, and (vi) implementation of public information program.

40. The Consultant will also assist Uzbekenergo PMU in preparing and implementing a Project Performance Monitoring System (PPMS) to evaluate effectiveness of the project. The PPMS will measure project performance against the parameters as set out in the Design and Monitoring Framework (DMF) of the Report and Recommendation of the President. The PPMS will establish baseline data and benchmarks, collect necessary information, monitor progress, identify benefits and evaluate social impact.

41. The Consultant will be engaged between January 2012 and December 2014, on an intermittent basis, under the overall direction of the Project Director of the PMU. The Consultant will include a smart metering specialist, an AEM information technology specialist, a procurement specialist, a contract administration specialist, a public relations specialist, and a

social and gender specialist. About 111 person-months (33 international, 78 national) of consulting services are required.

## **VII. SAFEGUARDS**

42. No major social or environmental safeguards issues are envisaged under the project. The project is categorized as a “C” project for all safeguard requirements as define in the ADB’s Safeguards Policy Statements, 2009. However, the project has to be planned, implemented, and operated in compliance with the government’s rules and regulations governing environmental and social aspects of the project.

## **VIII. GENDER AND SOCIAL DIMENSIONS**

43. The project will support the development of an improved customer services. It will (i) increase staffing of existing district service centers; (ii) introduce a 24-hours customer services hotline with emergency response services for households; (iii) establish functional complaint redress mechanism; and, (iv) develop a participatory public information program.

44. The project will improve fair billing for electricity. This project will empower consumers through public information program with women as ‘agents of change’ on energy efficiency, consumer rights, and the newly introduced billing system. The project will also improve career opportunities and working conditions for women and will allow women meter reader (controllers) to be absorbed and retrained into safer job environments. Gender action plan to be adopted under the project involves strategy to enhance the project benefits for women and thus improves gender equality in the energy sector.

## Gender Action Plan

**Objectives:** Improve career development for women in Uzbekenergo  
Empower women as customers and energy consumers

Objective	Activity	Indicator	Target group	Responsibility
<b>1. Output 2: Data management system developed and operational.</b>				
1.1 Women controllers/operators' employment and career opportunities at Uzbekenergo improved (no lay off for controllers)	1.1.1. Conduct training needs assessment for women controllers  1.1.2 Develop training and career development plan for women and men controllers (consider their gender related work-place needs)  1.1.3 Conduct training courses for women controllers/operators to be able to work in other positions	<ul style="list-style-type: none"> <li>All (80) women controllers/operators offered training and job opportunities at Uzbekenergo</li> </ul>	Women controllers/operators	Uzbekenergo
1.2 Working conditions of women and men employees at Uzbekenergo improved	1.2.1 Establish sanitary facilities <sup>6</sup> for women and men according to sanitary norms	<ul style="list-style-type: none"> <li>Every regional data management center and district service center has sufficient sanitary facilities<sup>7</sup> according to Uzbekistan norms</li> </ul>	Women employees	Uzbekenergo
1.3 Strengthened gender mainstreaming capacity of Uzbekenergo	1.3.1 Recruit national gender expert consultant (within the supervision consulting package)  1.3.2 Identify gender focal points at the regional and headquarters. <sup>8</sup>	<ul style="list-style-type: none"> <li>Gender specialist recruited</li> <li>GAP working group meeting minutes</li> <li>Sex-</li> </ul>	All employees of Uzbekenergo	Uzbekenergo

<sup>6</sup> According to Uzbekistan sanitary norms, there should be 1 toilet per 16 employees and 1 shower room per 35 employees

<sup>7</sup> 1 sanitary facility cost 3000-5000 USD

<sup>8</sup> Gender focal points appointed on voluntary basis

	<p>and establish GAP working group with National Women's Committee in Uzbekenergo, (hold quarterly meetings)</p> <p>1.3.3 Establish sex-disaggregated career development database for Uzbekenergo employees</p>	disaggregated Data-base of employees established		
<b>2. Output 3: Customer services for end-users improved.</b>				
2.1 Improved awareness of women consumers on their consumer rights, the role of the district service centers and energy efficiency	<p>2.1.1 Form women core group with members of the National Women's Committee at rayon/Makhalla level with 3-5 potential women leaders in the project areas<sup>9</sup> (in pilot first:1 urban, 1 rural in each region)</p> <p>2.1.2 Train one women of the core group (training of trainers) on consumer rights, energy efficiency</p> <p>2.1.3 Involve core groups in the development of the public information program and its implementation</p> <p>2.1.4 Develop monitoring tool to asses project implementation impact especially on vulnerable customers<sup>10</sup> at household level and implement the monitoring tool</p> <p>2.1.5 Core group contributes to customer/Uzbekenergo feedback mechanism (informed</p>	<ul style="list-style-type: none"> <li>• 30<sup>11</sup> women core groups formed in project area</li> <li>• 30 women leaders (1 of each core group) trained on energy efficiency, consumer rights</li> <li>• Follow-up HH survey conducted (in 2014) with 50% women respondents</li> <li>• 30% of households are aware of energy-saving household appliances (from 8% as baseline in 2011)</li> </ul>	Customers	Uzbekenergo, Women's Committee, Community

<sup>9</sup> Pilot area will be selected jointly with National Women Committee based on the National Regional Development Strategy

<sup>10</sup> Selection criteria of vulnerable groups (including female headed and poor households) will be further developed with the assistance of consultant.

<sup>11</sup> 3 urban and 3 rural core groups as pilot



	by monitoring tool)			
2.2 All 45 district service centers working and managed effectively by women staff	<p>2.2.1 Staff district service centers with women</p> <p>2.2.2 Develop customer service charter and train district service center staff</p> <p>2.2.3 Create 24-hours customer hotlines in each region with emergency response</p> <p>2.2.4 Establish sex-disaggregated database of customers</p>	<ul style="list-style-type: none"> <li>• 50% of district center staff are women</li> <li>• Sex-disaggregated database of customers established</li> <li>• 24 hour customer hotline created and staffed with women</li> <li>• Sex-disaggregated database on complainants established</li> </ul>	<p>Women employees of Uzbekenergo</p> <p>Customers</p>	Uzbekenergo

## Public Information Program: Work Plan

### Objectives:

- i. To help people understand that full payment for energy used is necessary for a better service and that smart meters are the best way to achieve that.
- ii. To help make this affordable by explaining how energy can be used most effectively.
- iii. To enhance the credibility of Uzbekenergo and the promised benefits by reassigning some of the meter readers to developing a more responsive customer and information service with 24 hour hotline and dispatch teams and working closely with community groups and volunteers.

<i>Type of activity</i>	<i>Quantity</i>	<i>Six months before installation</i>	<i>Three months before installation</i>	<i>Installation period</i>	<i>Measurable Indicators</i>	<i>Responsible</i>
<b>Team establishment – customer services</b>		Identify team at national, regional and district level, agree workplan, training needs analysis and trainings (This assumes the Customer service analysis has already been carried out and strategy developed) Agree internal coordination and reporting procedures Review implementation of customer services strategies, agree ongoing targets, confirm monitoring procedures			Staff designated and trained. Written procedures in place for monitoring, coordination and reporting, Report on implementation procedures, recommendations	Uzbekenergo with support of consultant
<b>Presentations and trainings for women's groups etc</b>	Trainings to all groups identified by gender expert	Presentations first to be made to Uzbekenergo staff who will in turn make presentations to Mahallas and women's groups	Follow-up workshops: lessons learned, challenges and how to deal with them		No of presentation to Mahalla and women leaders. Core women groups established and trained	Consultant to help develop presentations, workshop designs Uzbekenergo to deliver

<b>Advertisements</b> <ul style="list-style-type: none"> <li>• <b>Tv ads</b></li> <li>• <b>Radio ads</b></li> <li>• <b>Posters</b></li> </ul>	One long and one short version of each TV ad One long and one short version of each radio ads One poster each	Concept, Story line and production	Ad 1 Benefits of meters Ad 2. Get advice – there's no need to let your energy bills get out of hand Same as ads		No of Ads and numbers of time aired Poster produced and numbers printed and disseminated	Concept and storyline – consultant. Production and broadcast plant contracted UnInfoEnergo
<b>Publications</b> <ul style="list-style-type: none"> <li>• <b>Leaflet</b></li> <li>• <b>Brochure</b></li> </ul>	20 000 of each for dissemination at public meetings, customer service offices	Write, design and print	Leaflet = benefits Brochures + reduce your consumption hot tips		Nos of leaflets disseminated. How they are evaluated in survey.	Consultant with support from Uzbekenergo and UnInfoEnergo
<b>Mobile exhibition and displays</b>	At least one mobile exhibition per region. Display panels in district offices	Development	Displays in info centres. Mobile exhibitions at events and information days	As per plans	Existence of display panels, etc. No of events implemented	UnInfoEnergo , Uzbekenergo under guidance of consultant
<b>Letters to partners</b>	One letter to all those agreed in local database at each stage	Target group one: Smart meters will help our citizens and economy. Invite to meetings, presentations (where volunteers can get invited to training	We're counting on your support to explain these, co host public meetings	Successes and congratulations for support	Copies of letters, and list of recipients. Attendance at meetings)	Consultant with support from Uzbekenergo
<b>Media relations</b> <ul style="list-style-type: none"> <li>• <b>Press pack</b></li> </ul>	Ongoing as per media	Focus on benefits of meter and harm to everyone, the	Benefits of meters Get advice –	Focus on talking to individuals who	Number of clear, positive	Uzbekenergo and

<ul style="list-style-type: none"> <li>• <b>Press releases, conferences</b></li> <li>• <b>Briefing</b></li> <li>• <b>Interviews</b></li> <li>• <b>Talk show ops</b></li> </ul>	plan agreed with UzInfoEnergy	economy and environment of tampering	there's no need to let your energy bills get out of hand	found advice helpful, bills easier, more regular, etc, customer service much faster, staff more friendly etc	interesting articles, published or broadcast	UnInfoEner go with support from consultant
<b>Direct mailing to citizens with bills (mass mailing)</b>	To everyone at beginning of campaign		What is planned. Invite to public meeting to learn more and how this will help them			Consultant and Uzbekenergo
<b>Public meetings, information days citizens</b>	As per workplans		Benefits of meters and how people can reduce their energy bills		No of events and of attendees	Customer service officers, women groups
<b>Website and E-newsletter.</b>		Establish what types of news to go on which. Database for newsletter.			Existence of plan for website, newsletter template, database, plus number of newsletters	Consultant to help design and train PR unit to implement
<b>School competition – supported by presentations by Uzbekenergo staff</b>	optional			How we can be more EE and why this is important for our future		Consultant, supported by Uzbekenergo PR unit
<b>Coordination, Monitoring, reporting</b>	As agreed with team	Throughout project				

## IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

### A. Project Design and Monitoring Framework

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<b>Impact</b>  Power sector financial viability increased	Sustained profit generation by Uzbekenergo in the medium term (until 2020)  National system losses reduced from 21% in 2010 to 15% by 2020	Uzbekenergo's audited annual financial statements  Uzbekenergo's regional distribution units' monthly consumption and billing report	<b>Assumptions</b>  Metering system modernized in other regions and for all customer types by Uzbekenergo  Cost of power supply appropriately managed
<b>Outcome</b>  Commercial and tariff collection losses for residential and small business entity customers substantially reduced in the targeted regions of Bukhara, Jizzakh and Samarkand.	Commercial losses for the targeted customers in the three regions reduced from 20% in 2010 to 5% by 2015  Tariff collection rate for the targeted customers in the three regions increased from 60% in 2010 to 90% in 2015	Targeted distribution units' billing system database	<b>Assumptions</b>  Uzbekenergo continuing to embrace incentives to reduce distribution losses  All necessary legal and regulatory frameworks in place and effectively enforced by the government
<b>Outputs</b>  1. Advanced meters installed and associated data communication equipment functional           2. Data management system developed and operational	1.1. Advanced meters are installed at 1 million customers and relevant substations in the targeted regions by 2014.  1.2. Data communication system developed in the targeted regions and commissioned by 2013           2.1. Customer database is established and data management system developed in the targeted regions by 2014  2.2. 500 controllers and operators trained	Targeted distribution service centers' customer database      Commissioning certificate by Uzbekenergo      Commissioning certificate by Uzbekenergo      Project's training report	<b>Assumption</b>  Customers understanding and accepting the introduction of the AEM system  <b>Risks</b>  Availability of competent installation personnel limited  The system subject to system attacks or misuse of private information

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks										
3. Customer services for end-users improved	(including all 80 women personnel) on data collection and data management system by 2015												
	3.1 Customer relations officers positioned at each of 45 district service centers by 2014, and 50% of customer relations officers are women  3.2 20,000 public information leaflet distributed, complained-redress mechanism and emergency hotline operations are established and functional by 2014	Regional distribution unit human resource database  Regional distribution unit's operational reports											
Activities with Milestones		Inputs											
1. Uzbekenergo engages in the following 1.1. Advance action for the supervision and project management consultant recruitment (June 2011) 1.2. Recruitment and mobilization of consultant (December 2012) 1.3. Bidding announcement for procurement and installation contract (December 2012) 1.4. Contract award (March 2013 or 2014) 1.5. Meter installation training for Uzbekenergo staff (June 2014) 1.6. Uzbekenergo completes installation of 1 million meters (September 2016)  2. Uzbekenergo engages in the following 2.1. Bidding announcement for procurement and installation contract (December 2012) 2.2. Contract award (May2013) 2.3. Data entry and system operation training for Uzbekenergo staff (June 2014) 2.4. System completion and handover by contractor (September 2016)  3. Uzbekenergo implements public information program with creation of women core groups at the regional centers by 2013		Loan (ordinary capital resources) ADB: \$150.0 million											
		<table><tr><th>Item</th><th>Amount (\$ million)</th></tr><tr><td>Equipment</td><td>129.7</td></tr><tr><td>Consulting services</td><td>2.0</td></tr><tr><td colspan="2">(Excludes contingencies of \$18.3 million)</td></tr></table>		Item	Amount (\$ million)	Equipment	129.7	Consulting services	2.0	(Excludes contingencies of \$18.3 million)			
Item	Amount (\$ million)												
Equipment	129.7												
Consulting services	2.0												
(Excludes contingencies of \$18.3 million)													
		Government: \$50.0 million											
		<table><tr><th>Item</th><th>Amount (\$ million)</th></tr><tr><td>Installation works and services</td><td>8.4</td></tr><tr><td>Financial charges</td><td>8.5</td></tr><tr><td>Social and gender program</td><td>1.0</td></tr><tr><td>Taxes and duties</td><td>32.1</td></tr></table>		Item	Amount (\$ million)	Installation works and services	8.4	Financial charges	8.5	Social and gender program	1.0	Taxes and duties	32.1
Item	Amount (\$ million)												
Installation works and services	8.4												
Financial charges	8.5												
Social and gender program	1.0												
Taxes and duties	32.1												

ADB = Asian Development Bank, AEM = advanced electricity metering.

Source: Asian Development Bank.

## B. Monitoring

45. **Project performance monitoring** Following indicators will be updated in the quarterly progress reports and at the time of semi-annual meetings and the midterm review expected in two years from the date of loan effectiveness. The financial indicators will be monitored annually at the time of submission of annual financial report.

[Project performance indicators]

- National level system losses by region by customer category by technical/non-technical losses
- Distribution losses by region, by customer category
- Collection rate by region, by customer category
- Number of AEM installed by region
- Number of personnel trained by region, by sex, by job category
- Number of customer relations officers positioned at each district service center

[Financial indicators]

- Net income after tax - annually
- Debt service coverage ratio of Uzbekenergo (the ratio of cash flow from operations to annual debt service obligations) - annually
- Self financing ratio (the ratio of cash flow from operations to average capital expenditures) - annually

46. **Compliance monitoring:** Loan covenants — policy, legal, financial, economic, environmental, and others — will be monitored through semi-annual project meeting and the midterm review.

47. **Safeguards monitoring** will be performed by the project supervision and project management consultant and PMU. The monitoring results will be included in the quarterly progress reports, and semi-annual environmental reports.

48. **Gender and social dimensions monitoring** will be performed by the project supervision and project management consultant and PMU. The monitoring results will be included in the quarterly progress reports, and semi-annual environmental reports.

## C. Evaluation

49. **Inception Mission.** ADB will field an inception mission after loan signing to (i) establish a working relationship between ADB and the EA; and (ii) to ensure that the borrower and EA understand ADB's procedures.

50. **Review Missions.** ADB will field review missions at least once a year to review overall implementation of the project and update project implementation schedule based on mission findings.

51. **Midterm Review Mission.** ADB will field a midterm review mission after two years of loan signing to assess whether attainment of the project's immediate objective (purpose in terms of the design and monitoring framework) is still likely.

52. **Project Completion Review Mission.** ADB will field a project completion review mission upon physical completion of the project to commence preparation of ADB's project completion report. Uzbekenergo will submit a project completion report to ADB within 6 months

of physical completion of the project.<sup>12</sup>

#### **D. Reporting**

53. Uzbekenergo will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions; (c) updated procurement plan and (d) updated implementation plan for next 12 months; and (iii) a project completion report within 2 months of physical completion of the project. To ensure projects continue to be both viable and sustainable, project accounts and the executing agency AFSs, together with the associated auditor's report, should be adequately reviewed.

#### **E. Stakeholder Communication Strategy**

54. Project information will be strategically disseminated through media at main milestones including loan signing, contract awards and project completion. Grievance redress mechanism will establish at the PMU, by phone and email, and through public consultation events.

### **X. ANTICORRUPTION POLICY**

55. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.<sup>13</sup> All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.<sup>14</sup>

56. To support these efforts, relevant provisions are included in the loan agreement/regulations and the bidding documents for the project. Procurement will follow ADB's Procurement Guidelines, consultant selection will adopt ADB's Guidelines on the Use of Consultants, and disbursement will be made in accordance with ADB's disbursement policies, guidelines, practices, and procedures.

### **XI. ACCOUNTABILITY MECHANISM**

57. People who are, or may in the future be, adversely affected by the project may address complaints to ADB, or request the review of ADB's compliance under the Accountability Mechanism.<sup>15</sup>

---

<sup>12</sup> Project completion report format available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

<sup>13</sup> Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

<sup>14</sup> ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

<sup>15</sup> For further information see: <http://compliance.adb.org/>.



## XII. RECORD OF PAM CHANGES

1. Following are proposed changes to the Original Project Administration Manual.

Date Updated	PAM Section	Changes to Original PAM	Appendix
30 Nov 2012	<b>Cover page</b>	Updated the Loan number and date	As updated in PAM
	<b>Table of Contents</b>	Updated the TOC to include Chapter XII. Record of PAM Changes	As updated in PAM
	<b>Chapter II. Implementation Plans</b> A. Project Readiness Activities	Revised the table to reflect actual approvals	1
	<b>Chapter II. Implementation Plans</b> B. Overall Project Implementation Plan	Updated the table to reflect new Project Implementation plan schedule	2
	<b>Chapter III. Project Management Arrangements</b> C. Project Organization Structure	Updated the terms of reference according to the organizational chart	3
	<b>Chapter IV. Costs and Financing</b>	Inserted a text on para. 10. Recurrent Cost as follows "However, these costs will be subject to audit and will be covered under the audited financial statement."	4
	<b>Chapter IV. Cost and Financing</b> E. Detailed Cost Estimates by Year	Revised Cost estimate by year	5
	<b>Chapter IV. Cost and Financing</b> F. Contract and Disbursement S-Curve	Revised to reflect new contract awards and disbursements	5
	<b>Chapter V. Financial Management</b> B. Disbursement	Inserted a new para.17 to reflect direct payment to Project supervision consultant	As updated in PAM
	<b>Chapter VI. Procurement and Consulting Services</b>  <b>B. Consulting Services</b> Para. 30 and 41 Supervision and project management consultant	Revised the estimated person-months as follows: "56111 person-months (4433 international, 4278 national) of consulting services are required to...."	6
	<b>C. Procurement Plan</b> a. Goods and Works Contracts Estimated to Cost More Than \$1million (Table)  2. Indicative List of Packages Required Under the Project (Table)	-Indicated Loan number – Loan 2779 -Revised the Advertisement Date -Inserted (SBD: Plant, Design, Supply and Install) under comments	6
	<b>Chapter IX A. Project Design and Monitoring Framework</b>	Updated milestones dates	7

**II. IMPLEMENTATION PLANS****A. Project Readiness Activities**

Indicative Activities	2011							2012	Responsibility
	6	7	8	9	10	11	12	1	
Establish project implementation arrangements	X								Uzbekenergo
Advance contracting actions	X								
ADB Board approval				X					ADB
Loan signing					X				ADB, GOU
Government legal opinion provided							X		GOU
Loan effectiveness							X		ADB
Government budget inclusion								X	GOU

ADB = Asian Development Bank; GOU = Government of Uzbekistan

## Chapter II. Implementation Plans

## B. Overall Project Implementation Plan

			2011												2012												2013												2014											
	Project Tasks		6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12					
A.	Loan Approval	Milestone	Duration	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43				
	Loan Negotiation	August 2011																																																
	ADB Board Approval	September 2011																																																
	Loan Signing	October 2011																																																
	Loan Effectiveness	December 2011																																																
B.	Project Outputs	Milestone	Duration																																															
1.	Meter Data Management (MDM) and Billing Center (1-stage, 1-envelope)																																																	
1.1	Detailed Feasibility Study	3 months																																																
1.2	Bidding Documents (BD) Preparation	November 2011	4 months																																															
1.3	BD Approval by ADB and Government	December 2011	2 month																																															
1.4	Tendering	December 2011	3 months																																															
1.5	Bid Evaluation	5 months																																																
1.6	Contract Negotiation and Award	August 2012	2 months																																															
1.7	Preparation of Regional Offices and District Service Centers	November 2012	3 months																																															
1.8	Customization and Completion of Architecture of MDM and Billing System	January 2013	5 months																																															
1.9	Installation of MDM and Billing System Program	6 months																																																
1.10	Creation of Customer Meter Database	18 months																																																
2.	AEM Meters and Communication System (1-stage, 2-envelope)																																																	
2.1	Detailed Feasibility Study	3 months																																																
2.2	Bidding Documents Preparation	November 2011	4 months																																															
2.3	BD Approval by ADB and Government	December 2011	2 month																																															
2.4	Tendering	December 2011	3 months																																															
2.5	Bid Evaluation	5 months																																																
2.6	Contract Negotiation and Award	August 2012	2 months																																															
2.7	Delivery of Hardware (staged delivery)	18 months																																																
2.8	Installation of AEM Meters and Communication System	November 2014	18 months																																															
2.9	Contract completion																																																	
3.	Project Supervision Consultant																																																	
3.1	Recruitment of Consultants	December 2011	7 months																																															

## B. Project Organization Structure

### PMU TERMS OF REFERENCE

Position	Terms of Reference
Project Director, Project Management Unit (PMU)	<ul style="list-style-type: none"> <li>• Provide overall direction and management of PMU.</li> <li>• Ensure project is delivered on schedule to budget and specification</li> <li>• Manage relationships with financiers, consultants, and contractors</li> <li>• Ensure appropriate reporting to financiers</li> <li>• Ensure Chairman Uzbekenergo is appraised of project developments on ongoing basis</li> </ul>
Project Manager (Technical)	<ul style="list-style-type: none"> <li>• Assist Director PMU in delivery of his/her duties</li> <li>• Manage supervision and project management consultant and contractors</li> <li>• Manage PMU staff</li> </ul>
Project Manager (Region)	<ul style="list-style-type: none"> <li>• Assist Director PMU in delivery of his/her duties</li> <li>• Manage supervision and project management consultant and contractors</li> <li>• Manage the installation works and database creation activities</li> </ul>
Deputy Project Manager	<ul style="list-style-type: none"> <li>• Assist Director PMU in delivery of his/her duties</li> <li>• Assist Project Managers (Technical and Region)</li> <li>• Coordinate with relevant government offices agencies</li> <li>• Coordinate with ADB</li> </ul>
AEM Engineer	<ul style="list-style-type: none"> <li>• Monitor consultants and contractors progress and delivery to contract</li> <li>• Review submission by consultants in area of specialty</li> <li>• Prepare progress reports</li> <li>• Assist Project Managers (Technical and Region) in delivery of his/her duties</li> </ul>
Data communication Engineer	<ul style="list-style-type: none"> <li>• The same as above.</li> </ul>
Procurement Officer	<ul style="list-style-type: none"> <li>• Lead recruitment of supervision and project management consultant</li> <li>• Lead procurement of goods and services</li> <li>• Monitor compliance of consultants and contractors with contract requirements</li> <li>• Prepare overall project progress report</li> <li>• Prepare contract award and disbursement projections</li> </ul>
Project Accountant	<ul style="list-style-type: none"> <li>• Maintain project accounts</li> <li>• Prepare withdrawal applications</li> <li>• Monitor loan covenants</li> <li>• Prepare project financial reports</li> </ul>
Social Development (Gender)/Public Relations Officer	<ul style="list-style-type: none"> <li>• Ensure the implementation of the public information program</li> <li>• Ensure the implementation of gender action plan</li> <li>• Coordinate with Women's Committee</li> </ul>

\*The Supervision and Project Management Consultant will provide training to the Social Development (Gender)/Public Relations Officer.

### III. COSTS AND FINANCING

9. The project costs consist of:

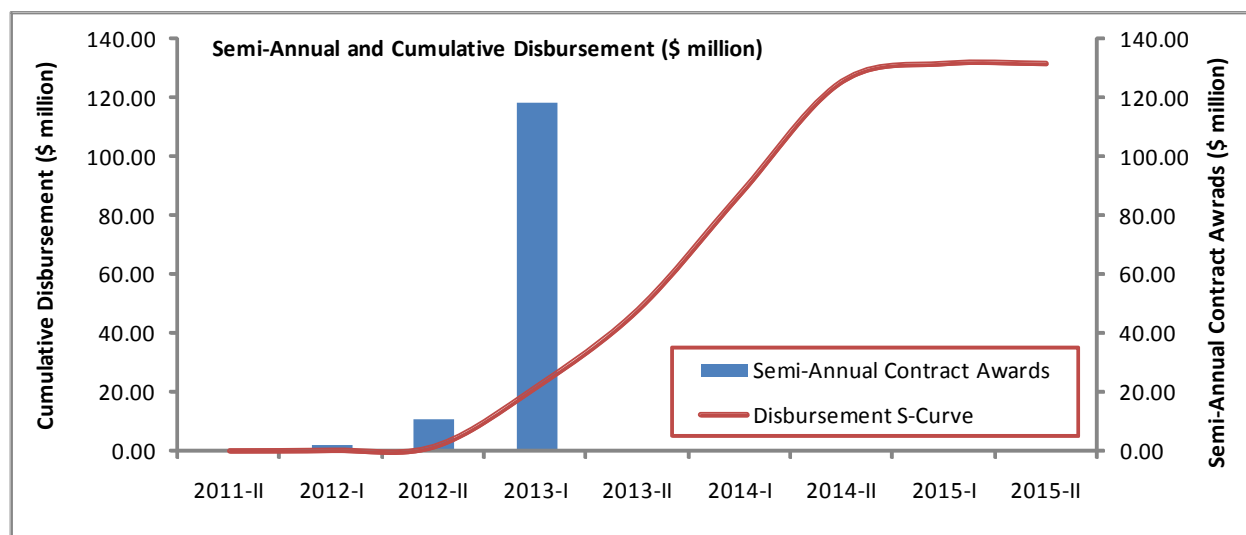
- (vii) **Supply of Goods and related services.** Supply contract is for (i) AEM meters and associated communication system and (ii) MDM and billing system. Implementation will be under Uzbekenergo's responsibility. It is financed out of the ADB loan proceeds which are relent by the government to Uzbekenergo in accordance with the Subsidiary Loan Agreement.
- (viii) **Installation Works and Services.** Uzbekenergo will provide necessary staff and resources for installation of the AEM meters and associated communication system, and creation of customer meter database for the MDM and billing system. The cost will be covered by Uzbekenergo's internal resources.
- (ix) **Supervision and Project Management Consultant.** Supervision and project management consultant (a firm) will be recruited by Uzbekenergo to assist PMU in project management and implementing public information program and gender action plan. This will be under Uzbekenergo's responsibility. It is financed out of the ADB loan proceeds which are relent by the government to Uzbekenergo in accordance with the Subsidiary Loan Agreement.
- (x) **Social and Gender Program (Public Information Program and Gender Action Plan).** Uzbekenergo will be responsible for financing and implementing public information program and gender action plan in collaboration with Women's Committee.
- (xi) **Taxes and duties.** Taxes and duties will be covered under government contribution as their share of the project cost.
- (xii) **Financial charges.** Uzbekenergo will finance the financial charges including interest during construction and commitment charges without capitalizing them into the loan.

10. **Recurrent costs** of the PMU are not included in the project cost. Such costs are to be financed by Uzbekenergo.

**E. Detailed Cost Estimates by Year**

(\$ million)					
Item	Total Cost	2012	2013	2014	2015
<b>A. Investment Costs</b>					
1 Mechanical and Equipment	129.7	1.1	45.9	76.7	5.9
2 Installation Works and Services	8.4	0.1	3.0	4.9	0.4
3 Consulting Services	2.0	0.4	0.6	0.9	0.1
4 Social and Gender Program	1.0	0.2	0.3	0.5	0.1
5 Taxes and Duties	32.1	0.3	11.3	19.0	1.5
<b>Subtotal (A)</b>	<b>173.2</b>	<b>2.1</b>	<b>61.1</b>	<b>102.1</b>	<b>8.0</b>
<b>B. Contingencies</b>					
<b>Subtotal (B)</b>	<b>18.3</b>	<b>0.2</b>	<b>6.0</b>	<b>11.1</b>	<b>1.0</b>
<b>C. Financing Charges During Implementation</b>					
1 Financial Charges During Implementation	8.5	0.3	1.0	2.9	4.3
<b>Total Project Cost (A+B+C)</b>	<b>200.0</b>	<b>2.6</b>	<b>68.1</b>	<b>116.1</b>	<b>13.2</b>

Source: Asian Development Bank estimates.

**F. Contract and Disbursement S-curve**

Source: Asian Development Bank estimates.

## VI. PROCUREMENT AND CONSULTING SERVICES

30. **Supervision and project management consultant.** An estimated 56 person-months (44 international, 12 national) of consulting services are required to (i) provide technical, financial and administrative support to the PMU during entire project implementation period, and (ii) implement social awareness-raising program. Estimated contract duration is 36 months. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality:cost ratio of 90:10, considering a high level of technical expertise and experience required for the supervision consultancy.

41. The Consultant will be engaged between January 2012 and December 2014, on an intermittent basis, under the overall direction of the Project Director of the PMU. The Consultant will include a smart metering specialist, an AEM information technology specialist, a procurement specialist, a contract administration specialist, a public relations specialist, and a social and gender specialist. About 56 person-months (44 international, 12 national) of consulting services are required.

### A. Procurement Plan

#### Basic Data

<b>Project Name:</b> Advanced Electricity Metering Project	
<b>Country:</b> Republic of Uzbekistan	<b>Executing Agency:</b> SJSC Uzbekenergo
<b>Loan Amount:</b> \$150 million	<b>Loan Number:</b> TBD
<b>Date of First Procurement Plan:</b> August 2011	<b>Date of this Procurement Plan:</b> August 2011

### 1. Process Thresholds, Review and 18-Month Procurement Plan

#### a. Project Procurement Thresholds

59. Except as the Asian Development Bank (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 Goods	Including and above \$500,000

#### b. ADB Prior or Post Review

60. 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 Method	Prior or Post	Comments
<b>Procurement of Goods and Works</b>		
ICB Goods	Prior	
<b>Recruitment of Consulting Firms</b>		
Quality- and Cost-Based Selection (QCBS)	Prior	

#### c. Goods and Works Contracts Estimated to Cost More Than \$1 Million

61. The following table lists goods and works contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Contract Value	Procurement Method	Prequalification of Bidders (y/n)	Advertisement Date (quarter/year)	Comments
Supply of	\$129.7.0	ICB	N	Q4 2011	Single-Stage:

Goods and related service for (i) AEM meters and associated communication system, and (ii) meter data management and billing system	million	Two-Envelope bidding method
---	---------	-----------------------------

AEM = Advanced Electricity Meters; ICB = international competitive bidding.

**d. Consulting Services Contracts Estimated to Cost More Than \$100,000**

62. The following table lists consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Contract Value	Recruitment Method <sup>1</sup>	Advertisement Date (quarter/year)	International or National Assignment	Comments
Supervision and project management Consultant	\$2.0 million	QCBS with quality:cost ratio 90:10	Q2 2011	Both international and national assignment	FTP

FTP = full technical proposal; QCBS = quality- and cost-based selection

**2. Indicative List of Packages Required Under the Project**

63. The following table provides an indicative list of all procurement (works and consulting services) over the life of the project. Contracts financed by the borrower and others should also be indicated, with an appropriate notation in the comments section.

General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Domestic Preference Applicable <sup>1</sup>	Comments
Supply of Goods and related service for (i) AEM meters and associated communication system, and (ii) meter data management and billing system	\$129.7 million	1	ICB	No	Single-Stage: Two-Envelope bidding method

General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Type of Proposal <sup>3</sup>	Comments
Supervision and project management consultant	\$2.0 million	1	QCBS with quality:cost ratio 90:10	FTP	Both international and national assignment

AEM = Advanced Electricity Meters; FTP = full technical proposal; ICB = international competitive bidding; QCBS = quality- and cost-based selection



### Chapter IX A. Project Design and Monitoring Framework

Activities with Milestones	Inputs
1. Uzbekenergo engages in the following 1.1. Advance action for the supervision and project management consultant recruitment (June 2011) 1.2. Recruitment and mobilization of consultant (December 2011) 1.3. Bidding announcement for procurement and installation contract (March 2012) 1.4. Contract award (August 2012) 1.5. Meter installation training for Uzbekenergo staff (June 2013) 1.6. Uzbekenergo completes installation of 1 million meters (November 2014)  2. Uzbekenergo engages in the following 2.1. Bidding announcement for procurement and installation contract (March 2012) 2.2. Contract award (August 2012) 2.3. Data entry and system operation training for Uzbekenergo staff (April 2013) 2.4. System completion and handover by contractor (June 2015)  3. Uzbekenergo implements public information program with creation of women core groups at the regional centers by 2013	<b>Loan (ordinary capital resources)</b> <b>ADB: \$150.0 million</b>
	<b>Item</b> <b>Amount (\$ million)</b>
	Equipment129.7
	Consulting services2.0
	(Excludes contingencies of \$18.3 million)
	<b>Government: \$50.0 million</b>
	<b>Item</b> <b>Amount (\$ million)</b>
	Installation works and services8.4
	Financial charges8.5
	Social and gender program1.0
Taxes and duties32.1	