Project Administration Manual

Project Number: 47296-001 Loan Number: XXXX August 2015

Republic of Uzbekistan: Northwest Region Power Transmission Line Project

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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
EA	=	executing agency
EMP	=	environmental management plan
GOU	=	Government of Uzbekistan
ICB	=	international competitive bidding
LARP	=	land acquisition and resettlement plan
MDM	=	meter data management
MOF	=	Ministry of Finance
PAM	=	project administration manual
RPIU	=	regional project implementation unit
PMU	=	project management unit
QCBS	=	quality- and cost based selection
TOR	=	terms of reference

I. PROJECT DESCRIPTION

1. **Project's rationale, location and beneficiaries**. The objectives of the proposed project are to (i) improve power transmission network capacity and reliability in the northwest region of the country, the Karakalpakstan and Khorezm regions; (ii) reduce transmission losses; and (iii) improve the operational efficiency of the power sector. The project will strengthen energy security through improved power system reliability and efficiency by constructing a new domestic transmission line without passing through any other country.¹ The new line will evacuate power from Takhiatash Thermal Power Plant (TPP).² The project will also increase power supply reliability for the Karakalpakstan³ and Khorezm⁴ regions in the northwestern part of Uzbekistan where major investments are scheduled, benefiting at least three million people.

2. **Impact and Outcome.** The project's impact will be improved reliability of power supply in Uzbekistan. The outcome will be an expanded and modernized high-voltage transmission grid in Khorezm and Karakalpakstan regions.

- 3. **Outputs**. The project outputs consist of the following components.
 - Strengthening of Northwest Region Power Transmission Network. Construction of 364 km of 220 kV single-circuit overhead transmission line between Takhiatash TPP - Khorezm Substation (SS) (197.4 km) - Ellikkala SS (166.1 km);
 - (ii) Expansion/Rehabilitation/Construction of 3 Substations. Comprising (a) rehabilitation and expansion of 220/110 kV open switchyards at Takhiatash TPP, (b) rehabilitation and expansion of 220/110 kV Khorezm SS; and (c) construction of a 500/220 kV Ellikkala SS; and
 - (iii) Support for institutional development and capacity building. Comprising (a) upgrading Uzbekenergo transmission system planning and dispatch automation, (b) strengthening Uzbekenergo transmission assets management system, (c) external auditing for project account, and (d) strengthening Uzbekenergo operational and maintenance capacity for transmission assets.

¹ The existing transmission line from Takhiatash to Navoi passes through Turkmenistan. Although the transmission assets belong to Uzbekistan, the difficulty to maintain them causes frequent and prolonged outage which brings down production rate, and hampers development of small-scale businesses which lead to people's dissatisfaction.

² Takhiatash TPP is the main source of power supply in the Karakalpakstan and Khorezm regions. The existing Takhiatash TPP has installed capacity of 870 megawatt (MW). Two new CCGT of 250 MW have been planned for Takhiatash TPP. With the proposed project, the surplus power can be reliably transmitted to the load centers.

³ Karakalpakstan is about 37% of the land area of Uzbekistan and has a population of 1.7 million people and is rich in natural resources.

⁴ Khorezm has a population of 1.6 million people. It is one of the agro-industrial regions.

Project Readiness Activities Α.

Indicative Activities				1	201	20	016	Responsibility							
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	
Advance action for recruitment of project supervision and management consultants				Х	Х	Х	Х	Х	Х	Х	Х	Х			EA-PMU
Procurement of goods contracts													Х	Х	EA-PMU
Loan negotiations								Х							EA
ADB Board approval									Х						ADB
Loan signing											Х				ADB-GOU
Government Legal opinion provided													Х		GOU
Government budget inclusion													Х		GOU
Loan effectiveness													Х		GOU-ADB
ADB = Asian Development Bank, EA = Executing Agency, GOU = Government of Uzbekistan. PMU = project management unit.										n. PMU =					

B. Overall Project Implementation Plan

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ndicative Activities				203	15					2	016									20										018									2019									202				
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Loan Negotiation																																																	Т			
ADB Board Approval																																																	Т			
Loan Signing																																																	Т			
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3. Project Outputs									П																																		Г						Т		1	
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220 kV Transmission Line									П																																		Т						Т			
.1 Bidding Documents and Specification Preparation									П																																		Т						Т			
.2 Bidding Period				П																																							Τ				T	T				t
.3 Bid Evaluation																																															T					t
.4 Contract Negotiation and Award								Π						1	Π			1				T	1		1					1	Π			11		Τ	Π			1			Т			1	Ħ	T	T	1	1	Г
.5 Site Preparation and Civil Works						T			Π										1			T			Ì	T			Ť					T I		1				1			T	T T	T		h	T	+		1	t
.6 Manufacturing Materials and Equipment						T			Π	T	1								1			T			Ì	T			Ť					T I		1				1			T	T T	T		h	T	+		1	t
.7 Construction and Installation									Π		1				П																									1			Т			T	Ħ	T	T	1	1	Г
.8 Commissioning and Final Test				\square		T			Π	T	1		T				Τ					Τ																					F	ΠŤ	T		Ħ	T	T	T	1	t
.9 Completion of Contract																																															T					t
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Substations Rehabilitation, Expansion, and Construction																																															T					t
.1 Bidding Documents and Specification Preparation																																															T					t
.2 Bidding Period									H																																		\top				h		1		1	t
2.3 Bid Evaluation																																															T					t
2.4 Contract Negotiation and Award																																											\top				h		1		1	t
2.5 Site Preparation and Civil Works																																															T					t
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B Project Supervision and Management Consultants																																											\top				Ħ		+		1	t
8.1 RFP issued							1			Ť			T									T	1			Ť	1			1				T I		1				1	İ İ		+		Ť	1	Ħ		-		Ť	t
8.2 Proposal evaluation																																											\top				Ħ		+		1	t
3.3 Contract negotiation and award																																											\top				Ħ		+		1	t
8.4 Consulting team mobilization																																															T					t
B.5 Project supervision and management																																															Ħ		+		1	t
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.4 Implementation of assets management system				+ +		h		\square	Ħ	+	1				Π											+	\square		+	\square	H		+	\square	-	+	H		+	1		+	+	H	+		Ħ	+	+	+	1	t
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5.1 RFP issued	+			+		H		\square	\vdash		1			+	+	H	+	+	1		+		+				\square		+	+	H		+	\square	+	+	H		+	+		+	+	H		+	H	+	+	+	+	t
5.2 Proposal evaluation				++	+	\vdash		\square	H		-				\square	\vdash	+		+		+	+				+	\square		+	\square	\vdash		+	\square	+	+	\vdash		+	+	\mathbf{H}	+	+	\vdash	+		H	+	+	+	+	┢
5.3 Contract negotiation and award		+	+	++		\vdash	+	+	\vdash	+	+					H	+		+		+	+	1		ł	+	\square	-	+	+	H		+	++	+	+	H		+	+	H	+	+	\vdash	+	1	H	+	+	+	+	t
5.4 External auditing		+	+	+	+	\vdash	+	\square	\vdash	+	+	\vdash	+	+				+	+	H	+	+	+	\square				-	+	+	H		+	\vdash			H		+	+	H	+	+	\vdash	+	+	H	+	+	+	+	t
		+	+	++	+	\vdash	+	+	\vdash	+	+	\vdash	+	+	+				+-		+	+	+		+			+	+	+	+	+	+	H			H	+	+	+		+	+	\vdash	+	+	H	+	+	+	+	t
C. Loan Closing		_	-	4-4	_	\vdash	_	1			1	1			1			_	_	-			_	-			4		_	1				1		_				1	-		4			_		_	+	+	+	⊢

kV = kilovolt, RFP = request for proposal.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

Project Implementation Organizations	Management Roles and Responsibilities
 Ministry of Finance (MOF) on behalf of the Republic of Uzbekistan 	 Borrower Ministry representing for external borrowing Ensuring loan proceeds are used in accordance with the Loan Agreement Handling of issues pertaining to project-related taxes and duties Electricity tariff setting
 Joint-Stock Company (JSC) Uzbekenergo 	 Executing Agency Project execution, including consultant recruitment and procurement of all contracts Funding civil work contracts cost, project management unit (PMU) recurrent costs, and balance of project cost (financial charges). Project progress reporting to ADB
• ADB	 Froject progress reporting to ABB Lender Main project financier

B. Key Persons Involved in Implementation

Executing Agency		
JSC Uzbekenergo	Officer's Name Position Telephone Email address Office Address	Iskandar S. Basidov Chairman of the Board (+998 71) 2336128 basidov@uzbekenergo.uz JSC Uzbekenergo 6 Istiklol Street, Tashkent, 100000, Uzbekistan
	Officer's Name Position Telephone Email address	Zafarjon Kamolov Project Director northwest220@uzbekenergo.uz
	Office Address	[NWPTL Project Management Unit] JSC Uzbekenergo 6 Istiklol Street, Tashkent, 100000, Uzbekistan
ADB Division Director	Staff Name	E. Cleo Kawawaki
	Position	Director, Energy Division, Central and West Asia Department (CWRD/CWEN)
	Telephone No.	+63-2-632-6113/5950
	Email address	<u>cwen@adb.org; fkawawaki@adb.org</u>
Mission Leader	Staff Name Position Telephone No. Email address	Tianhua Luo Senior Energy Specialist, CWEN +63-2-632-6388/5391 <u>tluo@adb.org</u>

C. Project Organization Structure

4. JSC Uzbekenergo, the project executing agency, has established a dedicated full-time project management unit (PMU). The PMU will administer all consulting and procurement contracts on behalf of Uzbekenergo.

5. The PMU Manager will be supervised by the General Director of Uzelectroset and Head of Foreign Economic Relations and Investment Department who will report to the Chairman of JSC Uzbekenergo. The PMU will be the main point of contact for working communication between JSC Uzbekenergo and ADB. The PMU will coordinate the consultants and contractors.

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

7. The PMU Manager will have appropriate academic qualifications with experience of working on large investment project implementation and/or operations. The PMU will comprise of (i) a dedicated manager; (ii) procurement specialists; (ii) transmission engineers; (iii) substation engineers; (iv) accountant; (v) social and environmental specialists, and (vii) interpreters.

Position	Terms of Reference
Project Manager	 Manage the project implementation, schedule, and budget Manage PMU staff and PMU activities Manage supervision and project management consultants and contractors Undertake administrative coordination and liaising with financiers Prepare project reports and other project documentation Coordinate with Regional Managers, Regional Project Implementation Units in the respective regions Be responsible for keeping record of all project related correspondence and data Be responsible for coordinating ADB missions and meetings with Uzbekenergo
Procurement Specialist	 Lead recruitment of project management and supervision consultant Lead procurement of goods and works Provide inputs identify and resolve issues in the area of specialty Monitor compliance of consultants and contractors with contract requirements Assist the Project Manager in contract administration of the consultants and contractors Prepare overall project progress report Prepare contract award and disbursement projections Coordinate with other Specialists in the PMU in the respective regions
Transmission Engineers	 Coordinate with the project manager in ensuring efficient project implementation; Prepare technical data and inputs to project reports and other project documentation Review the contractor's design submissions; Supervise and monitor the project implementation of related transmission lines works; Monitor progress against plan; and

8. The PMU will include the positions with the following terms of reference (TOR):

Position	Terms of Reference										
	Ensure adherence to project quality assurance plan										
Substation Engineers	 Coordinate with the project manager in ensuring efficient project implementation; 										
	 Prepare technical data and inputs to project reports and other project documentation 										
	 Review the contractor's design submissions; 										
	 Supervise and monitor the project implementation of related substations works; 										
	 Monitor progress against plan; and 										
	Ensure adherence to project quality assurance plan										
Accountant Maintain project accounts											
	Prepare withdrawal applications										
	• Prepare reports on the project disbursement as required by respective										
	financiers and government authorities										
	Monitor loan covenants										
	 Prepare project financial statements and reports 										
	 Provide inputs identify and resolve issues in the area of specialty 										
	Assist Project Manager in delivery of his/her duties										
	Coordinate with other Specialists in the PMU in the respective regions										
Environmental	Ensure EMP included in bidding documentation and contract document										
Specialist	Monitor the implementation of EMP and prepare environmental monitoring										
	reports for quarterly progress reports and semiannual environmental monitoring reports										
	 Work closely with Contractor's Supervisor (Project Engineer), monitor (cross check) and supervise the contractor in implementing EMP 										
	 Supervise monitoring plan and EMF measurements in accordance with EMP requirements 										
	Coordinate and monitor the implementation of GRM										



9. The project implementation organizational structure will be as below:

IV. COSTS AND FINANCING

10. The project costs consist of: (i) goods and civil works contracts for construction of 220 kV transmission lines; (ii) goods and civil works contracts for rehabilitation, expansion, and construction of three substations; (iii) consulting services, (iv) capacity building, (v) environmental impact mitigation; (vi) land acquisition and resettlement, (vii) taxes and duties, (viii) recurrent costs, and (ix) financial charges. ADB loan will cover the entire costs for goods contracts, consulting service contracts, and capacity building contracts excluding taxes and duties which will be covered by the Government. Uzbekenergo will finance the costs of entire

civil works, environmental impact mitigation, land acquisition and resettlement, financing charges, and PMU recurrent costs.

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

				Foreign Exchange	Local Currency	Total Cost	% of Total Base Cost
Α.	Inve	stme	ent Costs ^a		j		
	1.	22	0kV Transmission lines	84.02	47.66	131.68	59.6%
		a.	Physical investment	84.02	46.33	130.35	59.0%
		b.	Environmental impact mitigation	-	1.00	1.00	0.5%
		C.	Land acquisition and resettlement	-	0.33	0.33	0.1%
	2.	Su	bstations and switching stations	39.73	14.52	54.25	24.6%
		a.	Physical investment	39.73	14.26	53.99	24.5%
		b.	Environmental impact mitigation	-	0.26	0.26	0.1%
		c.	Land acquisition and resettlement	-	-	-	0.0%
	3.	Ins	stitutional development Project implementation consulting	8.33	-	8.33	3.8%
		a.	services	2.50	-	2.50	1.1%
		b.	Transmission system planning	0.53	-	0.53	0.2%
		c.	Asset Management system	4.80	-	4.80	2.2%
		d.	External audit	0.50	-	0.50	0.2%
	4.	Та	xes and Duties	-	25.25	25.25	11.4%
		Su	btotal (A)	132.08	87.43	219.51	99.4%
В.	Rec	urrer	nt Costs	-	1.30	1.30	0.6%
		То	tal Base Cost	132.08	88.73	220.81	100.0%
C.	Con	tinge	encies ^b				
	1.	Ph	ysical	14.00	6.43	20.43	9.3%
	2.	Pri	ce	4.05	1.71	5.76	2.6%
		Su	btotal (C)	18.05	8.14	26.19	11.9%
D.	Fina	ncin	g Charges During Implementation ^c				
	1.	Inte	erest during implementation	7.31	-	7.31	3.3%
	2.	Co	ommitment charges	0.65	-	0.65	0.3%
		Su	btotal (D)	7.96	-	7.96	3.6%
Tota			tost (A+B+C+D)	158.09	96.87	254.96	115%

^a In mid-2015 prices.

^b Physical contingencies computed at 10% for base cost. Price contingencies computed at 1.5% on foreign exchange costs and 10% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5% and a maturity premium of 0.1%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Source: Asian Development Bank estimates.

B. Allocation and Withdrawal of Loan Proceeds

	CATEG	ADB FINANCING	
Number	ltem	Total Amount Allocated for ADB Financing (\$)	Percentage of ADB Financing from the Loan Account
1	Goods	129,000,000	100 percent of total expenditures claimed*
2	Consulting Services	3,000,000	100 percent of total expenditures claimed*
3	Unallocated	18,000,000	
	Total	150,000,000	

* 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 Amount (A)	% of Cost Category (A/D)	Uzbekenergo Amount (B)	% of Cost Category (B/D)	Government Amount (C)	% of Cost Category (C/D)	Total Cost (D)
Α.	١nv	estr	ment Costs ^ª							
	1.	220	0kV Transmission lines	84.02	63.8%	47.66	36.2%	-	0.0%	131.68
		a.	Physical investment					-	0.0%	130.35
			i. Civil Works	-	-	46.33	35.5%	-	-	-
			ii. Goods	84.02	64.5%	-	-	-	-	-
		b.	Environmental impact mitigation	-	0.0%	1.00	100.0%	-	0.0%	1.00
		C.	Land acquisition and resettlement	-	0.0%	0.33	100.0%	-	0.0%	0.33
	2.	Su	bstations and switching stations	39.73	73.2%	14.52	26.8%	-	0.0%	54.25
		a.	Physical investment					-	0.0%	53.99
			i. Civil Works	-	-	14.26	26.4%		-	-
			ii. Goods	39.73	73.6%	-	-	-	-	-
		b.	Environmental impact mitigation	-	0.0%	0.26	100.0%	-	0.0%	0.26
		C.	Land acquisition and resettlement	-	0.0%	-	0.0%	-	0.0%	-
	3.	Ins	stitutional development	8.33	100.0%	-	0.0%	-	0.0%	8.33
		a.	Project implementation consulting services	2.50	100.0%	-	0.0%	-	0.0%	2.50
		b.	Transmission system planning	0.53	100.0%	-	0.0%	-	0.0%	0.53
		C.	Asset Management system	4.80	100.0%	-	0.0%	-	0.0%	4.80
		d.	External audit	0.50	100.0%	-	0.0%	-	0.0%	0.50
	4.	Ta	xes and Duties	-	0.0%	-	0.0%	25.25	100.0%	25.25
		Su	btotal (A)	132.08	60.2%	62.18	28.3%	25.25	11.5%	219.51
В.	Re	curr	rent Costs	-	0.0%	1.30	100.0%	-	0.0%	1.30
		То	tal Base Cost	132.08	59.8%	63.48	28.7%	25.25	11.4%	220.81
C.	Co	ntin	gencies ^b							
	1.		ysical	14.00	68.5%	6.43	31.5%	-	0.0%	20.43
	2.	Pri	се	4.05	70.3%	1.71	29.7%	-	0.0%	5.76

	Subtotal (C)	18.05	68.9%	8.14	31.1%	-	0.0%	26.19
D.	Financing Charges During Implementation ^c							
	1. Interest during implementation	-	0.0%	7.31	100.0%	-	0.0%	7.31
	2. Commitment charges	-		0.65	100.0%	-	0.0%	0.65
	Subtotal (D)	-	0.0%	7.96	100.0%	-	0.0%	7.96
	Total Project Cost (A+B+C+D)	150.13	58.9%	79.58	31.2%	25.25	9.9%	254.96
	% Total Project Cost		58.9%		31.2%		9.9%	

^a In mid-2015 prices.

^b Physical contingencies computed at 10% for base cost. Price contingencies computed at 1.5% on foreign exchange costs and 10% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5% and a maturity premium of 0.1%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

D. Detailed Cost Estimates by Outputs/Components (\$ million)

			220kV Transmission Lines		Substatio Switching		Institut Develop	
				% of Cost		% of Cost		% of Cost
		Total	Amount	Category	Amount	Category	Amount	Category
Α.								
	1. 220kV Transmission lines	131.68	131.68	100%	-	0%	-	0%
	a. Physical investment	130.35	130.35	100%	-	0%	-	0%
	b. Environmental impact mitigation	1.00	1.00	100%	-	0%	-	0%
	c. Land acquisition and resettlement	0.33	0.33	100%	-	0%	-	0%
	2. Substations and switching stations	54.25	-	0%	54.25	100%	-	0%
	a. Physical investment	53.99	-	0%	53.99	100%	-	0%
	b. Environmental impact mitigation	0.26	-	0%	0.26	100%	-	0%
	c. Land acquisition and resettlement	-	-	0%	-	0%	-	0%
	3. Institutional development	8.33	-	0%	-	0%	8.33	100%
	a. Project implementation consulting services	2.50	-	0%	-	0%	2.50	100%
	b. Transmission system planning	0.53	-	0%	-	0%	0.53	100%
	c. Asset Management system	4.80	-	0%	-	0%	4.80	100%
	d. External audit	0.50	-	0%	-	0%	0.50	100%
	4. Taxes and Duties	25.25	16.11	64%	7.57	30%	1.57	6%
	Subtotal (A)	219.51	147.79	67%	61.82	28%	9.90	5%
В.	Recurrent Costs	1.31	0.88	67%	0.37	28%	0.06	5%
	Total Base Cost	220.82	148.67	67%	62.19	28%	9.96	5%
C.	Contingencies ^b							
	1. Physical	20.42	13.75	67%	5.75	28%	0.92	5%
	2. Price	5.76	3.88	67%	1.62	28%	0.26	5%
	Subtotal (C)	26.18	17.63	67%	7.37	28%	1.18	5%
D.	Financing Charges During Implementation ^c							
	1. Interest during implementation	7.31	4.92	67%	2.06	28%	0.33	5%

2. Commitment charges	0.65	0.44	68%	0.18	28%	0.03	5%
Subtotal (D)	7.96	5.36	67%	2.24	28%	0.36	5%
Total Project Cost (A+B+C+D)	254.96	171.66	67%	71.80	28%	11.50	5%

^a In mid-2015 prices.

^b Physical contingencies computed at 10% for base cost. Price contingencies computed at 1.5% on foreign exchange costs and 10% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5% and a maturity premium of 0.1%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

E. Detailed Cost Estimates by Year (\$ million)

			Total Cost	2016	2017	2018	2019	2020
Α.	Inv	vestment Costs ^a						
	1.	220kV Transmission lines	131.68	1.17	25.23	47.51	39.11	17.67
		a. Physical investment	130.35	0.83	25.04	47.11	38.81	17.57
		b. Environmental impact mitigation	1.00	0.01	0.19	0.40	0.30	0.10
		c. Land acquisition and resettlement	0.33	0.33	-	-	-	-
	2.	Substations and switching stations	54.25	0.40	16.41	12.30	20.25	4.89
		a. Physical investment	53.99	0.39	16.32	12.25	20.14	4.88
		b. Environmental impact mitigation	0.26	0.00	0.09	0.05	0.10	0.01
		c. Land acquisition and resettlement	-	-	-	-	-	-
	3.	Institutional development	8.33	0.47	2.67	3.68	1.23	0.28
		a. Project implementation consulting services	2.50	0.47	0.63	0.63	0.63	0.16
		b. Transmission system planning	0.53	-	0.24	0.29	-	-
		c. Asset Management system	4.80	-	1.68	2.64	0.48	-
		d. External audit	0.50	-	0.13	0.13	0.13	0.13
	4.	Taxes and Duties	25.25	0.17	5.67	8.13	8.08	3.07
		Subtotal (A)	219.51	2.20	49.98	71.62	68.66	25.91
В.	Re	ecurrent Costs	1.30	0.30	0.30	0.30	0.20	0.20
		Total Base Cost	220.81	2.50	50.28	71.92	68.86	26.11
C.	Со	ontingencies ^b						
	1.	Physical	20.43	-	-	-	6.43	14.00
	2.	Price	5.76	-	-	-	1.71	4.05
		Subtotal (C)	26.19	-	-	-	8.14	18.05
D.	Fin	nancing Charges During Implementation ^c						
	1.	Interest during implementation	7.31	0.02	0.42	1.33	2.35	3.19
	2.	Commitment charges	0.65	0.22	0.20	0.14	0.07	0.02
		Subtotal (D)	7.96	0.24	0.62	1.47	2.42	3.21
Tot		Project Cost (A+B+C+D)	254.96	2.74	50.90	73.39	79.42	47.37

^a In mid-2015 prices. ^b Physical contingencies computed at 10% for base cost. Price contingencies computed at 1.5% on foreign exchange costs and 10% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. ^c Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year

forward London interbank offered rate plus a spread of 0.5% and a maturity premium of 0.1%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

F. Contract and Disbursement S-curve



S-Curve Baseline Projections

	Contract Aw	ards (in USD	million)			Disbursements (in USD million)				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2016	2.500000	0.000000	20.000000	20.000000	42.500000	0.000000	0.200000	0.200000	1.400000	1.800000
2017	89.000000	0.100000	0.000000	0.000000	89.100000	11.600000	2.100000	15.300000	3.100000	32.100000
2018	0.000000	0.000000	0.000000	0.000000	0.000000	3.000000	11.400000	19.700000	11.100000	45.200000
2019	0.000000	0.300000	0.000000	0.000000	0.300000	13.000000	12.500000	12.500000	4.300000	42.300000
2020	0.000000	18.100000	0.000000	0.000000	18.100000	10.500000	18.100000	0.000000	0.000000	28.600000
	Total Contract Awards			150.000000			Total Di	sbursements	150.000000	

Contract awards for 2020 are contingencies.

G. Fund Flow Diagram



ADB = 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, was conducted. 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's financial management risk is considered high, and Uzbekenergo needs to strengthen its financial management capacity. Uzbekenergo's accounting policies, procedures, and financial reporting have followed the National Accounting Standards of Uzbekistan and National Standards on Auditing. Under Presidential Resolution 48 article 442 of 2010, Uzbekenergo is also required to adopt international auditing standards for external auditing of its financial statements during the period 2011-15. In order to comply with this resolution and to enhance its financial management, Uzbekenergo undertook an external audit based on International Standards on Auditing issued by the International Assurance Auditing Standards Board of its financial statements from the fiscal year ending on 31 December 2011. The results of the audit indicate the need for further improvements in areas such as the classification methods and impairment provisions on account receivables, the scope of account consolidation and the accounting system.

13. Uzbekenergo has started adopting International Financial Reporting Standards (IFRS) conversion since the fiscal year ending on 31 December 2012 and plans to complete full conversion to cover all subsidiaries for the fiscal year ending 31 December 2015. The capacity development plan under other ADB loan projects⁵ and World Bank projects will address the training of the IFRS specialists as well as the strengthening of Uzbekenergo's information systems with the objective of improving its financial management capability.

14. While Uzbekenergo's financial management capacity requires improvement, Uzbekenergo is expected to operate profitably throughout the period under the loans. With improving collection rate and commissioning of new generation facilities as well as other rehabilitated infrastructure, Uzbekenergo's financial situation will continue to improve. The financial performance of Uzbekenergo, however, is sensitive to the gas price changes. Such changes need to be factored into electricity tariff adjustments in order to ensure adequate cashflow for operation and financing of investments.

15. Table 1 summarizes the financial management risks of Uzbekenergo and mitigation measures.

⁵ ADB. 2010. Report and Recommendation of the President to the Board of Directors: Proposed Loans and Administration of Loan to the Republic of Uzbekistan for the Talimarjan Power Project. Manila. (Loans 2629-UZB, 2630-UZB, and 8944-UZB).

Risk	Risk Assessment	Management Plan and/or
		Mitigation Measures
1. Inherent risks	High	- The project management unit (PMU) to be supported by international consultants. Training on ADB procedures to be provided.
2. Funds flow arrangements	Substantial	 ADB direct payment, commitment letters, and reimbursement procedures are to be used for the project. No imprest account will be established. Relending agreement between the Ministry of Finance and Uzbekenergo to be submitted to ADB.
3. Staffing	High	Uzbekenergo to be responsible for retaining adequate staffing and timely payment of salaries to staff. Recruitment and training of staff for international financing reporting standards (IFRS) to be implemented by Uzbekenergo with the help of international consultant.
4. Accounting policies, procedures, and systems	Substantial	 An accounting system to be established and maintained for the project in order to minimize risk. IT systems diagnosis and strategy development to be carried out by international consultant to identify the weaknesses and to design mitigation plan including upgrading accounting system and the introduction of an integrated management information system. Recruitment of or internally trained IFRS accountants to introduce the adoption of IFRS. Documented procedures and staff training to be provided to retain institutional knowledge.
5. Internal audit	Substantial	- Adequate staffing in the newly established internal audit unit and sufficient training to be provided by Uzbekenergo through the help of international consultant.
6. External audit	Substantial	- Loan and project agreements require Uzbekenergo's financial statements and project financial statements be audited in accordance with International Standards on Auditing (ISA) by auditor acceptable to ADB. Uzbekenergo will submit to ADB the audited project financial statements within 6 months of the end of the fiscal year.
7. Reporting and monitoring	High	 A reporting system, which will have functionality for automatic generation of financial reports to be established and maintained for the project. Implementation consultants will be recruited to assist PMU in supervising the project implementation, recording project costs, preparing withdrawal applications, and progress reports.
8. Information systems	High	- Information systems and processes to be enhanced to meet the demands of organization, ensure operational stability, and allow for full consolidation of management information as well as financial data.
Overall	High	

Table 1: Financial Management Risks and Mitigation Measures

16. Based on this assessment, action plans to improve financial management capacity of Uzbekenergo are the following:

Action	Responsibility	Resources	Timing
Development of management information system to improve accounting infrastructure of the company	Uzbekenergo' s PMU, IT Department	ADB Loan (Talimarjan Power Project)	2015-2018
Regular training of accounting staff to improve their financial management capacity	Uzbekenergo's Accounting Department	Uzbekenergo's internal resources	From the beginning of the project on regular basis

Action	Responsibility	Resources	Timing
Engagement of reputable external auditors to conduct entity and project account audits	Uzbekenergo's Accounting Department	ADB loans (2010-11, 2017-21) and World Bank loan (2012-2016)	Annually
Engagement of consultants to provide project supervision and monitoring and financial management training to clarify ADB requirements including disbursement requirements and financial covenants calculation	Uzbekenergo's PMU	ADB Loan	From the beginning of the project on a regular basis
Engagement of training contractors for enhancement of IFRS-based accounting capacity, including asset valuation and consolidation of subsidiary accounts	Uzbekenergo's Accounting Department	World Bank Ioan	Within 6 months

B. Disbursement

17. The Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time),⁶ and detailed arrangements agreed upon between the government and ADB.

18. A project management and supervision consultant (project implementation 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.

19. Direct payment and commitment procedure will be adopted for the procurement of goods and consulting services contracts.

20. 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 equivalent. Individual payments below this amount should be paid by the government or Uzbekenergo and subsequently claimed to ADB through reimbursement, unless otherwise accepted by ADB. National companies are paid into national bank accounts for nationally-based work. Payments will be made only into countries in which the contractor, subcontractor or supplier is incorporated. It will not be allowed to pay into third country bank accounts, or pay into bank account of non-ADB member country.

C. Accounting

21. Uzbekenergo will cause PMU to maintain separate project account and records by funding source for all expenditures incurred on the project. The PMU will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices, in accordance with the International Public Sector Accounting Standard "Financial Reporting under the Cash Basis of Accounting" (IPSAS)". The annual entity's financial statements will follow international accounting principles and practices in accordance with the International Financial Reporting Standards (IFRS).

⁶ Available at: <u>http://www.adb.org/documents/loan-disbursement-handbook.</u>

D. Auditing

22. Uzbekenergo will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and with the government's audit regulations, by an independent auditor acceptable to ADB. The audited project financial statements (APFS) will be submitted in the English language to ADB within six months of the end of the fiscal year by the executing agency.

23. Uzbekenergo will also cause the entity-level financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited entity-level financial statements, together with the auditors' report and management letter, will be submitted in the English language to ADB within one month after their approval by the competent authority.

24. The annual audit report will include an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan proceeds were used only for the purposes of the project or not; and (iii) the level of compliance for each financial covenant contained in the legal agreements for the project.

25. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal project supervision, and followed up regularly with all concerned, including the external auditor.

26. The government, Uzbekenergo and PMU have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.⁷ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower, or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. 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.

27. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011).⁸ After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

⁷ ADB Policy on delayed submission of audited project financial statements:

[•] When audited project financial statements are <u>not received by the due date</u>, ADB will write to the executing agency advising that (i) the audit documents are overdue; and (ii) if they are not received within the next six months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.

[•] When audited project financial statements <u>have not been received within 6 months after the due date</u>, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (i) inform the executing agency of ADB's actions; and (ii) advise that the loan may be suspended if the audit documents are not received within the next six months.

[•] When audited project financial statements <u>have not been received within 12 months after the due date</u>, ADB may suspend the loan.

⁸ http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

28. All advance contracting will be undertaken in conformity with ADB's *Procurement Guidelines* (2015, as amended from time to time) (ADB's *Procurement Guidelines*)⁹ and ADB's *Guidelines on the Use of Consultants and Its Borrowers* (2013, as amended from time to time) (ADB's *Guidelines on the Use of Consultants*).¹⁰ The issuance of invitations to bid under advance contracting will be subject to ADB's approval. The borrower and Uzbekenergo have been advised that approval of advance contracting does not commit ADB to finance the project.

29. Advance contracting will be undertaken by PMU for the recruitment of supervision and project management consultants.

B. Procurement of Goods, Works and Consulting Services

30. All procurement of goods and works will be undertaken in accordance with ADB's *Procurement Guidelines.* Procurement of civil works, which will be financed entirely by Uzbekenergo, will be subject to, and will be governed by, all applicable laws and regulations of the Borrower relating to procurement and contract management.

31. International Competitive Bidding (ICB) procedure will be used for goods contract estimated to cost \$2,000,000 or more. ADB's standard bidding documents for goods contract will be used.

32. 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.

33. All consultants will be recruited according to ADB's *Guidelines on the Use of Consultants*.¹¹

34. **Supervision and project management consultant.** An estimated 92 person-months (60 international, 32 national) of consulting services are required to provide technical, financial, and administrative support to the PMU during entire project implementation period. 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. The supervision and project management consultant contract shall be awarded, approved by the Ministry of Foreign Economic Relations, Investment and Trade (MFERIT), and that key personnel shall be deployed prior to procurement of goods contracts.

⁹ Available at: <u>http://www.adb.org/documents/procurement-guidelines</u>

¹⁰ Available at: <u>http://www.adb.org/documents/guidelines-use-consultants-asian-development-bank-and-its-borrowers</u>.

¹¹ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <u>http://www.adb.org/documents/handbook-project-implementation.</u>

C. Procurement Plan

Basic Data							
Project Name: Northwest Power Transmission Line	Project						
Project Number: 47296-001	Approval Number: TBD						
Country: Uzbekistan	Executing Agency: UzbekEnergo						
Project Procurement Classification: A	Implementing Agency:						
Project Procurement Risk: High	N/A						
Project Financing Amount: US\$ 255,000,000	Project Closing Date: 30 June 2020						
ADB Financing: US\$ 150,000,000							
Non-ADB Financing: US\$ 105,000,000							
Date of First Procurement Plan: 15 March 2015	Date of this Procurement Plan: 12 August 2015						

1. Methods, Thresholds, Review and 18-Month Procurement Plan

a. Procurement and Consulting Methods and Thresholds

35. 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 Comments							
International Competitive Bidding for Goods	\$2,000,000	Prior review required					
Government Procedure for Works	No threshold	To be entirely financed by Uzbekenergo					
	(allowed for						
	any amount)						
Cor	nsulting Servic	es					
Method		Comments					
Quality and Cost Based Selection (QCBS)		Prior review required					
Consultants Qualification Selection (CQS)		Prior review required					

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

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

Package Number	General Description	Estimated Value	Procurement Method	Review (Post/Prior)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
1	Substation Equipment Lot 1: Transformers and Static Var Compensators Lot 2: High Voltage Equipment Lot 3: Protection Devices Lot 4: Communication, Control and Automation Equipment	\$39.5 million \$23.2 million \$11.0 million \$1.2 million \$3.5 million	ICB	Prior	1S2E	Q1/2016	
	Lot 5: Maintenance Means	\$0.6 million					

2	Transmission Line Equipment	\$83.1 million	ICB	Prior	1S2E	Q1/2016	
	Lot 1: Galvanized Tower Steel Structures Wires, Ropes and Accessories.	\$42.7 million					
	Lot 2: Insulators and Hardware	\$6.6 million					
	Lot 3: Conductors, Cables, and OPGW	\$16.2 million					
	Lot 4: Concrete Foundations and Piles	\$17.6 million					
3	IT and service contract for implementation of assets management system.	\$4.8 million	ICB	Prior	1S2E	Q2 2016	

ICB = international competitive bidding. 1S2E = single stage two envelopes

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

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

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
CS-01	Project Supervision and Management	\$2.5 million	QCBS with quality: cost ration of 90:10	Prior	Q4/2014	FTP	Recruitment advance action
CS-02	External audit (three multi- year contracts)	\$500,000	CQS	Prior	Q4/2016	STP	

CQS = consultant qualification selection, QCBS = quality- and cost-based selection, FTP = full technical proposal, BTP = biodata technical proposal, STP = simplified technical proposal

d. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

38. The following table lists smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and	Goods and Works							
Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertise ment Date (quarter/ year)	Comments ⁷
1	Upgrading transmission system planning (IT product and services)	\$500,000	1	ICB	Prior	1S2E	Q2 2016	

ICB = international competitive bidding

Consulting	Services							
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertise ment Date (quarter/ year)	Type of Proposal	Comments
None								

2. Indicative List of Packages Required Under the Project

39. The following table provides an indicative list of goods, works, and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
None							

Consulting	Services						
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None							

3. Non-ADB Financing

35. The following table lists goods, works and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments
Civil works contract	\$62 million	1	Government Procedure for Works	To be entirely financed by Uzbekenergo

4. **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.

VII. SAFEGUARDS

37. Pursuant to ADB's *Safeguard Policy Statement* (2009) (SPS), 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. The government through the Uzbekenergo will ensure that all safeguard requirements prescribed for project that have been prepared will be implemented. The project, in accordance with ADB *SPS* (2009), was categorized as "B" for environment, as "B" for involuntary resettlement, and as "C" for indigenous peoples. Therefore, the following safeguard documents were prepared during project preparation:

- (i) The initial environmental examination (IEE) report, including its environmental management plan (EMP), was prepared. The IEE report identified potential impacts related with the project and proposed mitigation measures and monitoring plan that presented in the EMP. The IEE report also includes the findings from environmental compliance audit report and recommended corrective actions for the existing facilities.
- (ii) The land acquisition and resettlement plan (LARP).

38. The government through Uzbekenergo is obliged to implement recommendation from these two safeguard reports that were prepared with adequate consultation with people living in surrounding project areas. The following paragraphs describe briefly the activities to be implemented during project implementation and operation.

(i) Environment

39. Potential environmental impacts from the project activities, area of impact influence, project alternatives, and their potential impacts were examined. The EPM includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators at each stage of project cycle. If any unanticipated environmental risks or impacts arise during construction, implementation or operation of the Project that were not considered in the IEE and the EMP, the update of the environmental assessment and EMP is required.

40. Environmental impacts are not expected to be significant and can be managed at all stages: pre-construction, construction, operation and maintenance, and decommissioning.

41. Pre-construction activities have minor impact to soil, air quality, terrestrial vegetation, and land use. Also some noise and vibration are caused in this phase of the project. All these adverse impacts can be minimized by mitigation measures proposed in the EMP e.g. detailed planning of the OHL corridor location, careful planning and execution of works and by selecting low-emission equipment. Permanent loss of agriculture land shall be minimized by detailed planning of the OHL corridor location and compensated to the affected households according to the Land Acquisition and Resettlement Plan. The overall impact of the pre-construction phase is minor.

42. Most of the environmental impacts of the project take place during the construction of the OHL and expansion and rehabilitation of related substations and switchyards. Major potential environmental impacts during the construction activities include limited impacts on land hydrology, soil erosion, and water quality, terrestrial and aquatic ecology, air quality and noise, waste generation and disposal, oil management, historical and cultural resources, traffic disturbance, health and safety issue to workers and to the local communities.

43. The EMP defines required mitigation measures for adverse impacts of construction of OHL and 220 kV switchyard of Ellikkala SS, expansion of 220 kV switchyard at Takhiatash TPP, and expansion and rehabilitation of SS 220 kV Khorezm. These measures include detailed planning of the structures and routes, timing of the construction works, careful planning and execution of works, selecting a low-emission equipment, health and safety training of the personnel and informing local residents, and application of waste management good practices.

44. During the operation and maintenance phase, main impacts are noise from transformers and wires, electro-magnetic field, soil contamination due to spills, birth deaths, and impacts to

the occupational health and safety. All these impacts can be minimized by careful planning of the structures and by proper safety and accident prevention training of the personnel.

45. Environmental impacts caused by decommissioning activities are related to the waste disposal, possible spills, and occupational health and safety issues. Proper waste management practices, safety and accident prevention training of the personnel and accurate planning and execution of demolition works will be used to mitigate these possible adverse impacts. The overall impact of the decommissioning phase is minor.

46. The tentative budget for environmental impact mitigation measures is estimated to be US\$ 1,260,000. The cost for mitigation and monitoring measures will be included in the contractor contracts.

(ii) Involuntary Resettlement

47. To assess and mitigate physical and economic involuntary displacement impacts caused by the project and provide adequate displacement and rehabilitation assistance to the affected households, a Land Acquisition and Resettlement Plan (LARP) was prepared. The LARP includes the Entitlements Matrix summarizing all compensation and assistance provided in this project, resettlement budget and financing plan, as well as implementation schedule for the land acquisition and resettlement activities. The LARP is based on the pre-project design documents and needs to be updated after approval of the detailed design.

- 48. The Project will require:
 - (i) permanent land acquisition for construction of transmission line towers for erection of OHL towers permanently 13.32 ha of land will be required from which 4.35 ha are occupied by affected households (AHs). 118 AHs in Khorezm province and 36 in Karakalpakstan will be the objects of the permanent impact. 8.97 ha of the permanently affected land is state owned, reserve, forest, and other land.
 - (ii) permanent land acquisition for a new switch substation at Ellikala: Land for a new 220 kV switching station at Ellikala will be allocated from state reserve land.
 - (iii) temporary land acquisition for stringing the conductor cables of the transmission line: Temporarily affected area will be 536.01 ha in total. The AH's land is 158.73 ha and 133 AHs in Khorezm province and 36 in Karakalpakstan will be the objects of the permanent impact. 377.28 ha of the temporarily affected area is state owned, reserve, forest, and other land.

49. Affected households incurring impact on their cropping farmlands will not experience significant impact since the impact in terms of percentage consists of maximum 8.4%. There are no significantly vulnerable AHs affected. 3 disabled APs in 2 AHs in Karakalpakstan and 1 female headed household in Khorezm were identified.

50. For this project, the compensation for agricultural land is based on monetary compensation only. The LARP sets eligibility and entitlement provisions establishing compensation rates in accordance with guidelines from the GOU and ADB SPS 2009.

51. Under this project AHs will not experience a significant loss of their productive assets. On this basis, the income restoration and rehabilitation measures are not applicable for these households, as described in the draft LARP. Livelihood improvement measures will be undertaken under existing governmental social support scheme. If based on updated LARP,

there arises a need to develop income restoration program, Uzbekenergo will work closely with local CBOs and authorities to provide the necessary support and develop income restoration program.

52. The tentative LARP budget, based on compensation calculations for losses to agricultural land, forestry trees and plants, agricultural land replacement and support allowances is estimated to be \$ 330,000. In order to ensure that sufficient funds are available for land acquisition and resettlement tasks, the Uzbekenergo as the EA will allocate 100% of the cost of compensation at replacement cost and expected allowances estimated in each LARP plus contingencies before LARP implementation.

53. Compensation and other assistances will be scheduled and paid to AHs prior to commencement of civil work. PMU will develop compensation payment plan after receiving final design and confirmation of amount of affected assets and number of AHs.

(iii) Indigenous Peoples

54. No special action is required concerning Indigenous Peoples safeguards under this project since there were no ethnic groups identified which maintains cultural and social identities separate from the mainstream Uzbek society, fitting the ADB definition of Indigenous Peoples in the context of the project's area of influence.

(iv) Institutional Arrangements for Safeguard Management

55. Uzbekenergo will have the overall responsibility to implement the EMP as the executing agency. The PMU within Uzbekenergo will hire Safeguards Specialist who will be responsible for the EMP implementation, monitoring, and reporting tasks set forth in the IEE.

56. The Project Management Consultant (PMC), recruited by Uzbekenergo is to assist the PMU in the project implementation, monitoring and reporting of the implementation of EMP during the construction phase. During the operation and maintenance phase, Uzbekenergo is responsible for ensuring that EMP implemented by the operators of the substations and OHL. The PMC will provide guidance to contractors in preparing site-specific EMP (SEMPs) and endorse SEMPs for Uzbekenergo approval before construction/physical work.

57. Uzbekenergo will have overall responsibility to implement the LARP as the executing agency. The PMU within Uzbekenergo will be responsible for the day-to-day management of LARP implementation. The PMU team will consist of Resettlement Expert responsible for planning, implementation and monitoring of LARP. The PMU will work closely with relevant government agencies and community based organizations. The PMU Resettlement Expert will carry out internal monitoring routinely in close coordination with local khokimiyat.

58. The PMU will establish a simple and accessible Grievance Redress Mechanism (GRM) to address grievances and complaints of any affected person in a timely and satisfactory manner. Uzbekenergo will ensure the GRM is properly staffed and working on ground and that the procedure to resolve issues will be followed strictly based on the five levels of grievance redressal.

(v) Information Disclosure and Consultation

59. The IEE report will be translated into Uzbek language and disclosed at project sites. The English version of the IEE report will be posted on ADB website. Public consultation is being conducted along the transmission line route and in the communities where the substations are located. Records of the consultation will be attached to the final draft IEE.

60. The public consultation process is an ongoing process continuing throughout the Project phases and beyond. Uzbekenergo will do its best during construction, operation and maintenance to inform the public of major environmental issues and concerns related to its operation through mass media and local community networks.

61. Nine consultations were carried out with AHs during LARP preparation. Similar consultations need to be carried out after LARP is updated and before starting payment of compensations.

62. Disclosure meeting describing the final LARP will be organized to all AHs and respective community based organizations and local authorities during LARP evaluation stage. A leaflet in local language will be distributed to AHs, relevant agencies and civil society organizations during the disclosure meeting. The draft and final LARP document will be disclosed on the websites of the Uzbekenergo and ADB upon approval by both ADB and the EA.

63. The Project GRM will be disseminated via the LARP leaflet that will be distributed to AHs through local khokimiyat, the mahalla, village assembly of citizens or farmers councils during the disclosure process.

VIII. GENDER AND SOCIAL DIMENSIONS

64. A poverty and socio-economic assessment report was prepared. The increased efficiency and reliability of power supply resulting from the project will have a positive impact on economic growth, poverty reduction, and social services such as schools, colleges and kindergartens, clinics and shops, which ultimately improve well-being and community welfare. Improved energy supply will have a positive effect on business development and thus support new job creation. The project has no gender issues envisaged during the project construction and implementation. The improvement in the delivery of electricity will equally benefit households and business run by women.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

Impacts the Project is aligned with:

Adequate and reliable power supply in Uzbekistan by 2023 (*Program of Measures to Promote Structural Reforms, Modernization and Diversification of Production in 2015-2019,* the Government of Uzbekistan, 2015)

Project Results	Performance Indicators with	Data Sources or	
Chain	Targets and Baselines	Reporting Mechanisms	Risks
Outcome An expanded and modernized high- voltage transmission grid in Khorezm and	By 2020: a. Power transmission capacity in Khorezm and Karakalpakstan regions increased to 813 MW (2014 baseline: 513 MW)	ac. Uzbekenergo's annual report	Investments made by other financiers that have direct effects on the Project are
Karakalpakstan regions	 b. Losses in power transmission network reduced to below 4%. (2014 baseline: 5%) c. Energy not served to consumers due to transmission lines outages reduced to less than 80 GWh (2014 baseline: 120 GWh). 		delayed.
Outputs 1. 220 kV transmission line between Takhiatash Thermal Power Plant – Khorezm Substation – Ellikkala Substation commissioned.	364 km of new 220 kV transmission line commissioned and operational by 2020. (2014 baselines: 0)	Commissioning certificates by Uzbekenergo	Weak institutional capacity delays approval of procurement contracts and registration. Weak financial management and accounting
2. Substations rehabilitated and new switching station constructed.	Two substations at Takhiatash TPP and Khorezm rehabilitated and expanded and one new 500/220 kV Ellikkala constructed and operational by 2020. (2014 baselines: 0)	Commissioning certificates by Uzbekenergo	policies, procedures and systems.
3. Support for institutional development and capacity building.	 a. Modern transmission system planning programs and computerized assets management system established and operational by 2019. (2014 baselines: 0) b. At least 50 staff (at least 20%) 	ac. Uzbekenergo's project completion report	
	women) are trained in key aspects of transmission network operation and maintenance by 2019. (2014 baselines: 0).		

c. At least 10 staff from Uzbekenergo project management unit are trained in procurement, contract management, financial management, safeguards, and overall project management by 2019 (2014 baselines: 0).	

Key Activities with Milestones

1. 220 kV transmission line between Takhiatash thermal power plant – Khorezm substation – and Ellikkala substation commissioned

- 1.1 Finalize tender documents by September 2015.
- 1.2 Completed land acquisition and compensation by March 2016.
- 1.3 Procure equipment and materials, and civil works contracts by June 2016.
- 1.4 Complete construction and installation by June 2019.
- 1.5 Complete commissioning and final test by December 2019.

2. Substations rehabilitated and new switching station constructed

- 2.1 Finalize tender documents by September 2015.
- 2.2 Complete land acquisition and compensation by March 2016.
- 2.3 Procure equipment and materials, and civil works contracts by June 2016.
- 2.4 Complete construction and installation by June 2019.
- 2.5 Complete commissioning and final test by December 2019.
- 3. Uzbekenergo's capacities for project supervision and management enhanced and operational efficiency improved
- 3.1 Engage project supervision and management consultants by December 2015
- 3.2 Award contracts for transmission planning system and asset management systems by December 2016.
- 3.3 Establish operational transmission planning system and asset management systems by December 2017.
- 3.4 Train staff in key aspects of transmission network operation and maintenance by December 2019.
- 3.5 Project supervision and management consultants train staff from the project management unit in procurement, contract management, financial management, safeguards, and overall project management by December 2019.

Inputs	
Loan	
Asian Development Bank	\$150 million (ordinary capital resources)
Government of Uzbekistan	\$25 million
Joint Stock Company Uzbekenergo	\$80 million
Total	\$255 million

ADB = Asian Development Bank, GWh = gigawatt-hour, km = kilometer, kV = kilovolt, MW = megawatt, PMU = project management unit, PPTA = project preparatory technical assistance, TPP = thermal power plant. Source: Asian Development Bank.

B. Monitoring

65. **Project performance monitoring.** The 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

- Installed transmission line by kV (km)
- Power transformer capacity (MVA)
- Losses in high-voltage transmission network (%)
- Average yearly energy not served (KWh)
- Power tariff structure and level (sum/kWh)
- Power trade volume (GWh/year) and amount (\$ million) by country
- JSC Uzbekenergo's annual report and financial statements (including balance sheet/cash-flow/income statement)

Risks and Assumptions

• Customer tariff by customer category

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
- Days in Receivables (Average Accounts Receivable x 360 days/Revenues)

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

67. **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.

C. Evaluation

68. **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.

69. **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.

70. **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.

71. **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.¹²

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

D. Reporting

72. Uzbekenergo will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system and containing sections on compliance with safeguard requirements; (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; (iii) semi-annual environmental monitoring reports starting from the contract award to be submitted to ADB in January and July (within one month after each half calendar year); and (iv) a project completion report within 2 months of physical completion of the project. To ensure projects to 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

73. Project information will be strategically disseminated through media at main milestones including loan signing, contract awards, and project completion. The GRM will be established at the PMU and each relevant PES and distribution service centers, by phone and email, and through public consultation events.

74. In compliance with the minimum requirements of ADB's Public Communications Policy (2011), the Uzbekenergo will designate an officer as focal point for regular contact with project-affected people and other stakeholders at PMU. The designated officer will be responsible for obtaining the information from the complainant to identify source of problem and verify the complaint. The PMU shall provide project performance updates on progress every six months.

Project Documents [language]	Means of Communication	Responsible Party	Frequency	Audience(s)
Project Information Document (PID) [English/Russian]	ADB's website	ADB	initial PID no later than 30 calendar days of approval of the concept paper; quarterly afterwards	General Public
Design and Monitoring Framework (DMF) [English]	ADB's website	ADB	draft DMF after post fact- finding mission	General Public
Report and Recommendation of the President [English]	ADB's website	ADB	within 2 weeks of Board approval of the project	General Public
₋egal Agreements English]	ADB's website	ADB	within 2 weeks of Legal Agreements signing	General Public
Social Poverty Reduction and Social Strategy English]	ADB's website	ADB	within 2 weeks of Board approval of the project	General Public, project
Project Administration Manual English]	ADB's website	ADB	within 2 weeks of Board approval of the project	General Public
Major Change to Project English]	ADB's website	ADB	within 2 weeks of approval of the change	General Public
Completion Report [English]	ADB's website	ADB	within 2 weeks of circulation to the Board for information	General Public
Business opportunities, bidding process and guidelines, results of bidding process,	ADB's website Uzbekenergo's website	ADB Uzbekenergo	per project progress,	General Public

ADB Public Communications Strategy

75. The work plan on public information program is summarized under XIII Gender and Social Dimensions.

X. ANTICORRUPTION POLICY

76. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.¹³ 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.¹⁴

77. 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 (April 2015, as amended from time to time), consultant selection will adopt ADB's Guidelines on the Use of Consultants (March 2013, as amended from time to time), and disbursement will be made in accordance with ADB's disbursement policies, guidelines, practices, and procedures.

XI. ACCOUNTABILITY MECHANISM

78. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.¹⁵

XII. RECORD OF PAM CHANGES

79. All revisions/updates during course of implementation should be retained in this Section to provide a chronological history of changes to implemented arrangements recorded in the PAM.

Date Revised/Updated	PAM Section	Change

¹³ Available at: <u>http://www.adb.org/documents/anticorruption-policy.</u>

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

¹⁵ For further information see: <u>http://www.adb.org/site/accountability-mechanism/main.</u>