

Project Administration Manual

Project Number: 46390-002
September 2015

Myanmar: Power Transmission Improvement Project

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Project Administration Manual Purpose and Process

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 of the Republic of the Union of Myanmar and Asian Development Bank (ADB) policies and procedures.

The Ministry of Electric Power (MOEP) and the Myanma Electric Power Enterprise (MEPE) are wholly responsible for the implementation of ADB financed projects, 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 MOEP, and MEPE of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the borrower and ADB 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.

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
ADF	=	Asian Development Fund
AFS	=	audited financial statements
DMF	=	design and monitoring framework
EMP	=	environmental management plans
FMA	=	financial management assessment
FMAQ	=	financial management assessment questionnaire
ICB	=	international competitive bidding
IEE	=	initial environmental examination
MEPE	=	Myanma Electric Power Enterprise
MOD	=	Ministry of Defence
MOECAF	=	Ministry of Environmental Conservation and Forestry
MOEP	=	Ministry of Electric Power
MOT	=	Ministry of Transport
OAG	=	Office of the Auditor General
PAI	=	project administration instructions
PAM	=	project administration manual
PIC	=	Project Implementation Consultant
PIU	=	project implementation unit
PPR	=	project performance reporting
QCBS	=	quality-and-cost based selection
RRP	=	report and recommendation to the President
SPS	=	ADB's Safeguard Policy Statement 2009
YCDC	=	Yangon City Development Committee

Weights and Measures

GWh	=	gigawatt-hour
km	=	kilometer
kV	=	kilovolt
MVA	=	megavolt-ampere

I. PROJECT DESCRIPTION

1. The project will (i) construct 8.2 kilometer (km) of 230 kilovolt (kV) transmission line double circuit between Thida and Thaketa substations and 8.6 km of 230 kV single circuit transmission line between Thaketa and Kyaikasan substations; (ii) extend the switchyard of the existing 230 kV Thaketa substation to accommodate two new 230 kV transmission lines; (iii) upgrade the existing 66 kV Kyaikasan substation to 230 kV substation; and (iv) build new 230 kV substations at South Okkalapa and West University. The project will strengthen the capacity of the staff of Myanmar Electric Power Enterprise (MEPE) in implementing projects financed by the Asian Development Bank (ADB). The project will help to complete the critically important 230 kV transmission ring supplying electricity for the Yangon region and ensure reliable electricity supply to support sustainable economic development for Myanmar.

2. **Impact and Outcome.** The impact of the project will be economic and social benefits to residential, commercial, and industrial consumers from reliable and sustainable electricity supply for the Yangon region. The outcome will be improved reliability of the Yangon power transmission system.

3. **Outputs.** The project outputs will be (i) a 230 kV power transmission ring including 230 kV transmission line and substations developed for the Yangon region¹ and (ii) capacity of staff of Myanmar Electric Power Enterprise (MEPE) in implementing ADB financed projects strengthened.

¹ The existing 230 kV system connects the existing 230 kV substations at Ahlone, Hlaing Thayar, Myang Tagar, Hlawga and Thaketa. **However, the Thaketa-Thida-Ahlone section, that supplies the Yangon City, remains at 66 kV.** MEPE is now upgrading the Ahlone-Thida section to 230 kV. The project will help upgrading the Thida-Thaketa-Kyaikasan system to 230 kV and construct two new substations at South Okkalapa and West University, thus complete the critical 230 kV ring for Yangon (Ahlone-Thida-Thaketa-South Okkalapa-Hlawga-Myang Tagar-West University-Hlaing Thayar-Ahlone). MEPE will also be responsible for connecting the South Okkalapa and West University substations to the network.

II. IMPLEMENTATION PLANS

4. The project is expected to be approved in November 2015. Loan effectiveness is expected in February 2016. The project implementation period is 48 months. The project is expected to be physically completed by 30 June 2019. Monitoring of project performance and outcome will be until 31 December 2019, including preparation of project completion report. Loan closing date is 31 December 2019. The project preparation milestones and overall project implementation schedule are as follows:

A. Project Readiness Activities

Indicative Activities	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Responsible
MRM	█									ADB
RRP, linked documents, draft LA send to MEPE	█									ADB
Establishment of project implementation unit	█									MEPE
Advance contracting	█	█	█	█	█	█	█	█	█	ADB, MEPE
Parliament endorsement of the project			█							MOEP, GOM
Loan negotiation				█						ADB, GOM
ADB Board approval					█	█	█			ADB
Loan signing							█			ADB, GOM
Legal opinion provided								█	█	GOM
Loan effectiveness									█	ADB, GOM

Note: ADB = Asian Development Bank, GOM = Government of the Republic of the Union of Myanmar, including Ministry of Electric Power, Central Bank of Myanmar, Ministry of Finance, MEPE = Myanma Electric Power Enterprise.

B. Overall Project Implementation Schedule

INDICATIVE ACTIVITY	Start	End	2015		2016				2017				2018				2019			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. 230 kV transmission lines and substations built																				
1.1 Complete bidding documents (December 2015)	Jun-15	Dec-15	█	█																
1.2 Recruit PIC (March 2016)	Jul-15	Mar-16			█															
1.3 Update bidding documents, update and implement RP, DDRs (September 2016)	Apr-16	Sep-16				█	█													
1.4 Bidding for contract for transmission lines package (March 2017)	Jun-16	Mar-17					█	█	█											
1.5 Bidding for contract for substations package (March 2017)	Jun-16	Mar-17					█	█	█											
1.6 Construct 230 kV transmission lines (March 2019)	Apr-17	Mar-19								█	█	█	█	█	█	█			█	
1.7 Construct 230 kV substations (March 2019)	Apr-17	Mar-19								█	█	█	█	█	█	█				
1.8 Testing and commissioning (by June 2019)	Apr-19	Jun-19																	█	
2. Capacity of MEPE staff developed																				
2.1 Establish fully staffed PIU (September 2015)	Jun-15	Sep-15	█	█																
2.2 Recruit PIC (March 2016)	Jul-15	Mar-16			█															
2.3 Update and implement RPs for project area (September 2016)	Apr-16	Sep-16				█	█													
2.4 Recruit contractors working together with PIC (March 2017)	Sep-16	Mar-17					█	█	█											
2.5 Monitor project implementation	Apr-16	Dec-19				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
2.6 Complete project implementation and monitoring (Dec 2019)	Jun-19	Dec-19																		█

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

5. The key implementation organizations involved in the project include the Ministry of Electric Power (MOEP), Myanmar Electric Power Enterprise (MEPE) (including the Project Implementation Unit [PIU]), as well as the Ministry of Finance. ADB will monitor all project implementation activities. Details of the implementation organization key roles and responsibilities are indicated in the table below:

Project Implementation Organizations	Responsibilities
<ul style="list-style-type: none"> • Executing/Implementing Agencies Ministry of Electric Power (MOEP) 	<ul style="list-style-type: none"> ➤ Responsible for overall supervision of the project implementation; ➤ Responsible for coordination with governmental agencies, ministries and Yangon City authorities to support project implementation; ➤ Timely provision of agreed counterpart funds for project activities; ➤ Complying with all loan covenants in the Loan Agreement; and ➤ Review and endorse any proposed key changes if any in project implementation.
<ul style="list-style-type: none"> • Myanmar Electric Power Enterprise (MEPE) 	<ul style="list-style-type: none"> ➤ Responsible for the overall supervision and execution of the project; ➤ Establish the PIU with sufficient staff and appropriate qualification; ➤ Timely provide agreed counterpart funds for project activities; ➤ Timely review detailed design of project components and resettlement plans submitted by PIU; ➤ Timely review and endorse bid evaluation reports and contract award recommendations submitted by PIU; ➤ Timely award contracts and signing contracts; ➤ Manage contract execution; ➤ Timely review and endorse withdrawal applications submitted by PIU and then submit to MOEP; ➤ Ensure timely financial audits as per agreed timeframe and take recommended actions; ➤ Comply with all loan covenants in the Loan Agreement ; ➤ Responsible for collection and retention of all support documents, reporting documents and annual audit report and financial statements;
<ul style="list-style-type: none"> • Project Implementation Unit (PIU) 	<ul style="list-style-type: none"> ➤ Take advance actions to recruit project implementation consultant (PIC); ➤ Together with PIC update all resettlement plans and DDRs, obtain approval of resettlement plans and DDRs by MEPE and MOEP and by ADB; ➤ Implement the approved resettlement plans and DDRs; ➤ Together with PIC, finalize bidding documents, conduct bidding and bid evaluation and finalize contracts for all

- contract packages;
 - Prepare and obtain approval by MEPE/MOEP of withdrawal applications;
 - Monitor and evaluate project activities and outputs, including periodic review, preparation of review reports identifying issues and action plans;
 - Prepare regular periodic progress reports and project completion report and submit timely to ADB.

 - Ministry of Finance (MOF)
 - Signing the Loan Agreement;
 - Allocating and releasing counterpart funds;
 - Endorsing to ADB the authorized staff with approved signatures for withdrawal applications processing;
 - Processing and submitting to ADB any request, when required, for reallocating the loan proceeds.

 - ADB
 - Assist MOEP and MEPE and the PIU in providing timely guidance at each stage of project implementation in accordance with the agreed implementation arrangements;
 - Review all the documents that require ADB approval;
 - Conduct an inception mission, periodic loan review missions, a mid-term review, a completion mission for the project, and an overall project completion mission;
 - Monitor and require compliance of all loan covenants;
 - Timely process withdrawal applications and release eligible funds;
 - Monitor and require the compliance of financial audit recommendations;
 - Regularly update ADB's project performance review reports with assistance of MOEP, MEPE and its progress reports; and
 - Regularly post on ADB website the updated project information documents for public disclosure.
-

B. Key Persons Involved in Implementation

Executing/Implementing Agencies

Ministry of Finance	Director General, Treasury Department Fax: (95) 67 410198 Office Address: Office Building No. 26, Naypyitaw
Ministry of Electric Power	Director General, Department of Electric Power Planning Telephone: (95) 67 410205 Email address: k.maung.winn@gmail.com Office Address: Office Building No. 27, Naypyitaw
Myanma Electric Power Enterprise	Managing Director Telephone: (95) 67 410202 Email address: mepemd@mepe.gov.mm Office Address: Office Building No. 27, Naypyitaw

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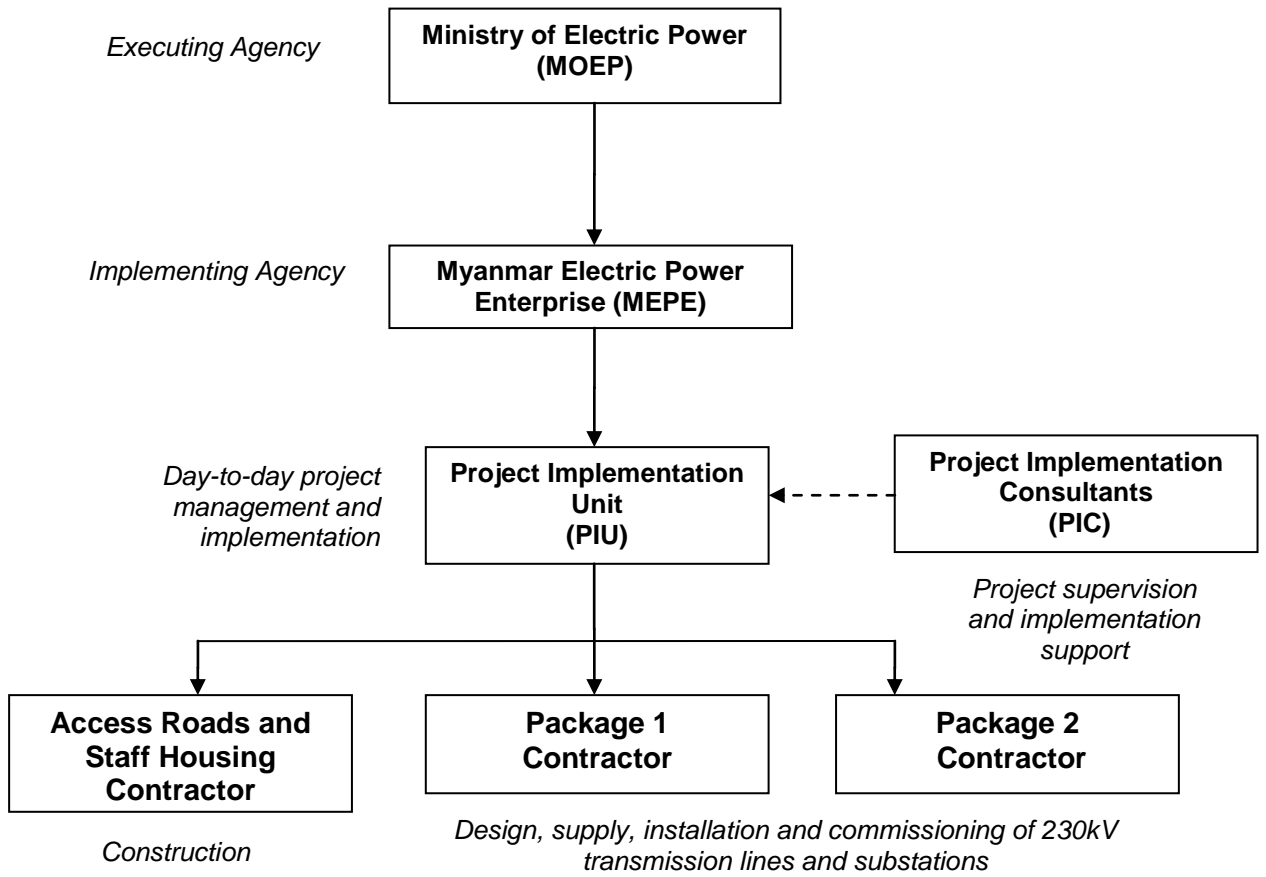
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C. Project Organization Structure

6. The executing agency (EA) will be the Ministry of Electric Power (MOEP). The implementing agency (IA) will be the Myanma Electric Power Enterprise (MEPE) which will be responsible for overall project implementation and management.

7. MEPE will establish PIU which will be responsible for day-to-day project management and implementation. The PIU, with support from the PIC will conduct bidding, bid evaluation, conduct contract negotiations, finalize contracts, and supervise the design, supply, installation and commissioning works. The PIU together with the PIC will implement the resettlement plans and due diligence reports (DDRs) and monitor status of compliance with initial environmental examination (IEE) and environmental management plans (EMPs). The PIU will also be responsible for disbursement, project monitoring, preparation of progress reports, ensuring that financial and reporting requirements are met and ADB procurement procedures followed. The PIU will comprise six full-time counterpart staff supported by the project implementation consultants. The six staffs are: a substation engineer (team leader), a transmission engineer, a procurement specialist, a financial specialist, an environment specialist, and a social resettlement specialist.



IV. COSTS AND FINANCING

8. The project cost is estimated at \$83.3 million equivalent, including physical and price contingencies, financing charges during implementation, and taxes and duties. ADB will provide a loan of \$80.0 million from the Asian Development Fund to cover the costs of (i) contracts for design, supply, installation, and commissioning of the transmission lines and substations under the project; (ii) consulting services; (iii) taxes and duties; (iv) contingencies; and (v) interest charges during implementation. The Government will finance costs of project administration, the environmental and social safeguard measures, construction of access road and staff housing in the new South Okkalapa and West University substations, and project administration costs. The total contribution of the Government is estimated at \$3.3 million equivalent. The investment plan is summarized in the following tables.

A. Detailed Cost Estimates by Expenditure Category

Item	Kyat (million)			\$ (million)			% of Total Base Cost
	Foreign Exchange	Local Currency	Total Cost	Foreign Exchange	Local Currency	Total Cost	
A. Investment Costs ^a							
1 Civil Works (Access Roads and Staff Housing)	-	2,560.8	2,560.8	-	2.2	2.2	3.3%
2 Plant - Design, Supply and Installation							
a. Thida - Thaketa transmission line	3,954.5	1,860.9	5,815.4	3.4	1.6	5.0	7.4%
b. Thaketa substation (extension)	3,928.0	-	3,928.0	3.4	-	3.4	5.0%
c. Thaketa - Kyaikasan transmission line	3,297.0	1,551.5	4,848.5	2.8	1.3	4.2	6.2%
d. Kyaikasan substation (upgrade)	14,298.7	2,381.8	16,680.5	12.3	2.0	14.3	21.3%
e. South Okkalapa substation (new)	15,735.2	2,499.5	18,234.7	13.5	2.1	15.7	23.3%
f. West University substation (new)	13,968.4	2,442.5	16,410.9	12.0	2.1	14.1	21.0%
3 Project Implementation Consultant	3,757.3	643.7	4,401.0	3.2	0.6	3.8	5.6%
4 Project Administration Cost	-	931.2	931.2	-	0.8	0.8	1.2%
5 Safeguard Measures	-	349.2	349.2	-	0.3	0.3	0.4%
6 Taxes & Duties	-	3,998.6	3,998.6	-	3.4	3.4	5.1%
Subtotal (A)	58,939.0	19,219.8	78,158.8	50.6	16.5	67.1	100.0%
B. Contingencies							
1 Physical ^b	6,347.7	2,070.0	8,417.7	5.5	1.8	7.2	10.8%
2 Price ^c	3,091.7	5,650.9	8,742.6	2.7	4.9	7.5	11.2%
Subtotal (B)	9,439.4	7,720.9	17,160.3	8.1	6.6	14.7	22.0%
C. Financing Charges During Implementation ^d							
1 Interest During Implementation	1,641.6	-	1,641.6	1.4	-	1.4	2.1%
Subtotal (C)	1,641.6	-	1,641.6	1.4	-	1.4	2.1%
Total Project Cost (A+B+C)	70,020.0	26,940.6	96,960.7	60.2	23.1	83.3	124.1%

^a In July 2015 prices.

^b Computed at 10% for all expenditure items.

^c Computed using inflation rates of 0.3% for 2015, 1.5% for 2016, 1.4% for 2017 and 1.5% for 2018-2020 on foreign exchange costs. For local currency costs, inflation rates of 6.3% for 2015, 6.6% for 2016, 6.3% for 2017, 6.1% for 2018-2020 apply.

^d Interest during implementation calculated at 1%.

Source: Asian Development Bank estimates.

B. Allocation and Withdrawal of Loan Proceeds

No.	Item	Total amount allocated for ADB financing (SDR)		Basis for withdrawal from the loan account
		Category	Subcategory	
1	Plant–Design, Supply and Installation	42,154,000		
1a	Thida–Thaketa–Kyaikasan transmission lines		6,758,000	100% of total expenditures claimed
1b	Thaketa, Kyaikasan, South Okkalapa, West University substations		35,396,000	100% of total expenditures claimed
2	Project implementation consultant	3,080,000		100% of total expenditures claimed
3	Interest during construction	999,000		100% amounts due
4	Unallocated*	10,445,000		
	Total	56,678,000		

*May be used for physical and price contingencies.

C. Detailed Cost Estimates by Financier

Item	ADB		Myanmar Government		Total Cost
	\$ million	%	\$ million	%	\$
A. Investment Costs ^a					
1 Civil Works (Access Roads and Staff Housing)	0.0	0.0%	2.2	100.0%	2.2
2 Plant - Design, Supply and Installation					
a. Thida - Thaketa transmission line	5.2	100.0%	0.0	0.0%	5.2
b. Thaketa substation (extension)	3.6	100.0%	0.0	0.0%	3.6
c. Thaketa - Kyaikasan transmission line	4.3	100.0%	0.0	0.0%	4.3
d. Kyaikasan substation (upgrade)	15.1	100.0%	0.0	0.0%	15.1
e. South Okkalapa substation (new)	16.5	100.0%	0.0	0.0%	16.5
f. West University substation (new)	14.8	100.0%	0.0	0.0%	14.8
3 Project Implementation Consultant	4.3	100.0%	0.0	0.0%	4.3
4 Project Administration Cost	0.0	0.0%	0.8	36.4%	0.8
5 Safeguard Measures	0.0	0.0%	0.3	13.6%	0.3
Subtotal (A)	63.8	95.1%	3.3	4.9%	67.1
B. Contingencies	14.7	100.0%	0.0	0.0%	14.7
C. Financing Charges During Implementation ^d	1.4	100.0%	0.0	0.0%	1.4
Total Project Cost (A+B+C)	80.0	96.0%	3.3	4.0%	83.3
% Total Project Cost		96.0%		4.0%	100.0%

^a In July 2015 prices. Includes taxes and duties of \$3.4 million to be financed by ADB resources.

^b Computed at 10% for all expenditure items.

^c Computed using inflation rates of 0.3% for 2015, 1.5% for 2016, 1.4% for 2017 and 1.5% for 2018-2020 on foreign exchange costs. For local currency costs, inflation rates of 6.3% for 2015, 6.6% for 2016, 6.3% for 2017, 6.1% for 2018-2020 apply.

^d Interest during implementation calculated at 1%.

Source: Asian Development Bank estimates.

Detailed Cost Estimates by Output/Components (US\$ million)

C. Detailed Cost Estimate by Output/Components

Item	TL		Thaketa		TL		Kyaikasan		South Okkalapa		West University		Civil Works	
	Thida-Thaketa	% of Cost	Substation	% of Cost	Thaketa-Kyaikasan	% of Cost	Substation	% of Cost	Substation	% of Cost	Substation	% of Cost	works	% of Cost
	\$ million	Category	\$ million	Category	\$ million	Category	\$ million	Category	\$ million	Category	\$ million	Category	\$ million	Category
A. Investment Costs^a														
1 Plant-Design, Supply and Installation & Civil Works	5.00	70.6%	3.37	70.6%	4.17	70.6%	14.33	70.6%	15.67	70.6%	14.10	70.6%	2.20	70.6%
2 Project Implementation Consultant	0.32	4.5%	0.22	4.5%	0.27	4.5%	0.92	4.5%	1.01	4.5%	0.91	4.5%	0.14	4.5%
3 Project Administration Cost	0.07	1.0%	0.05	1.0%	0.06	1.0%	0.19	1.0%	0.21	1.0%	0.19	1.0%	0.03	1.0%
4 Environmental and Safeguard	0.03	0.4%	0.02	0.4%	0.02	0.4%	0.07	0.4%	0.08	0.4%	0.07	0.4%	0.01	0.4%
5 Taxes and Duties	0.29	4.1%	0.20	4.1%	0.24	4.1%	0.84	4.1%	0.91	4.1%	0.82	4.1%	0.13	4.1%
Subtotal (A)	5.70	80.6%	3.85	80.6%	4.75	80.6%	16.36	80.6%	17.88	80.6%	16.09	80.6%	2.51	80.6%
B. Contingencies														
1 Physical ^b	0.61	8.7%	0.41	8.7%	0.51	8.7%	1.76	8.7%	1.93	8.7%	1.73	8.7%	0.27	8.7%
2 Price ^c	0.64	9.0%	0.43	9.0%	0.53	9.0%	1.83	9.0%	2.00	9.0%	1.80	9.0%	0.28	9.0%
Subtotal (B)	1.25	17.7%	0.85	17.7%	1.04	17.7%	3.59	17.7%	3.93	17.7%	3.53	17.7%	0.55	17.7%
C. Financing Charges During Implementation^d														
1 Interest During Implementation	0.12	1.7%	0.08	1.7%	0.10	1.7%	0.34	1.7%	0.38	1.7%	0.34	1.7%	0.05	1.7%
Subtotal (C)	0.12	1.7%	0.08	1.7%	0.10	1.7%	0.34	1.7%	0.38	1.7%	0.34	1.7%	0.05	1.7%
Total Project Cost (A+B+C)	7.07	100.0%	4.78	100.0%	5.90	100.0%	20.29	100.0%	22.18	100.0%	19.96	100.0%	3.12	100.0%

^a In July 2015 prices.

^b Computed at 10% for all expenditure items.

^c Computed using inflation rates of 0.3% for 2015, 1.5% for 2016, 1.4% for 2017 and 1.5% for 2018-2020 on foreign exchange costs.

For local currency costs, inflation rates of 6.3% for 2015, 6.6% for 2016, 6.3% for 2017, 6.1% for 2018-2020 apply.

^d Interest during implementation calculated at 1%.

Source: Asian Development Bank estimates.

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

Item	2015	2016	2017	2018	2019	Total Amount
A. Investment Costs ^a						
1 Civil works (Access Roads and Staff Housing)	0.0	0.4	0.9	0.9	0.0	2.2
2 Plant - Design, Supply and Installation						
a. Thida - Thaketa transmission line	0.0	0.0	1.0	3.0	1.0	5.0
b. Thaketa substation (extension)	0.0	0.0	0.7	2.0	0.7	3.4
c. Thaketa - Kyaikasan transmission line	0.0	0.0	0.8	2.5	0.8	4.2
d. Kyaikasan substation (upgrade)	0.0	0.0	2.9	8.6	2.9	14.3
e. South Oakkalarpa substation (new)	0.0	0.0	3.1	9.4	3.1	15.7
f. West University substation (new)	0.0	0.0	2.8	8.5	2.8	14.1
3 Project Implementation Consultant	0.0	0.9	0.9	0.9	0.9	3.8
4 Project Administration Cost	0.0	0.2	0.2	0.2	0.2	0.8
5 Safeguard Measures	0.0	0.3	0.0	0.0	0.0	0.3
6 Taxes & Duties	0.0	0.0	0.7	2.1	0.7	3.4
Subtotal (A)	0.000	1.885	14.039	38.065	13.159	67.1
B Contingencies						
1 Physical ^b	0.0	0.2	1.5	4.1	1.4	7.2
2 Price ^c	0.0	0.2	1.2	4.3	1.9	7.5
Subtotal (B)	0.0	0.4	2.7	8.4	3.3	14.7
C Financing charges during implementation ^d	0.0	0.0	0.1	0.5	0.8	1.4
Subtotal (C)	0.0	0.0	0.1	0.5	0.8	1.4
Total Project Cost (A+B+C+D)	0.0	2.3	16.9	46.9	17.2	83.3
% of Total Project Cost	0.0%	2.7%	20.3%	56.4%	20.6%	100.0%

^a In July 2015 prices.

^b Computed at 10% for all expenditure items.

^c Computed using inflation rates of 0.3% for 2015, 1.5% for 2016, 1.4% for 2017 and 1.5% for 2018-2020 on foreign exchange costs.

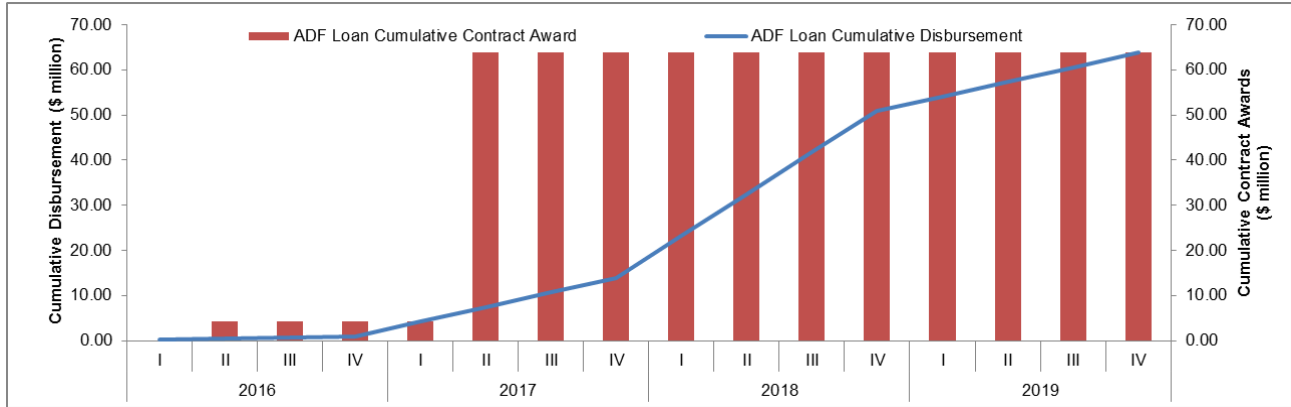
For local currency costs, inflation rates of 6.3% for 2015, 6.6% for 2016, 6.3% for 2017, 6.1% for 2018-2020 apply.

^d Interest during implementation calculated at 1%.

Source: Asian Development Bank estimates.

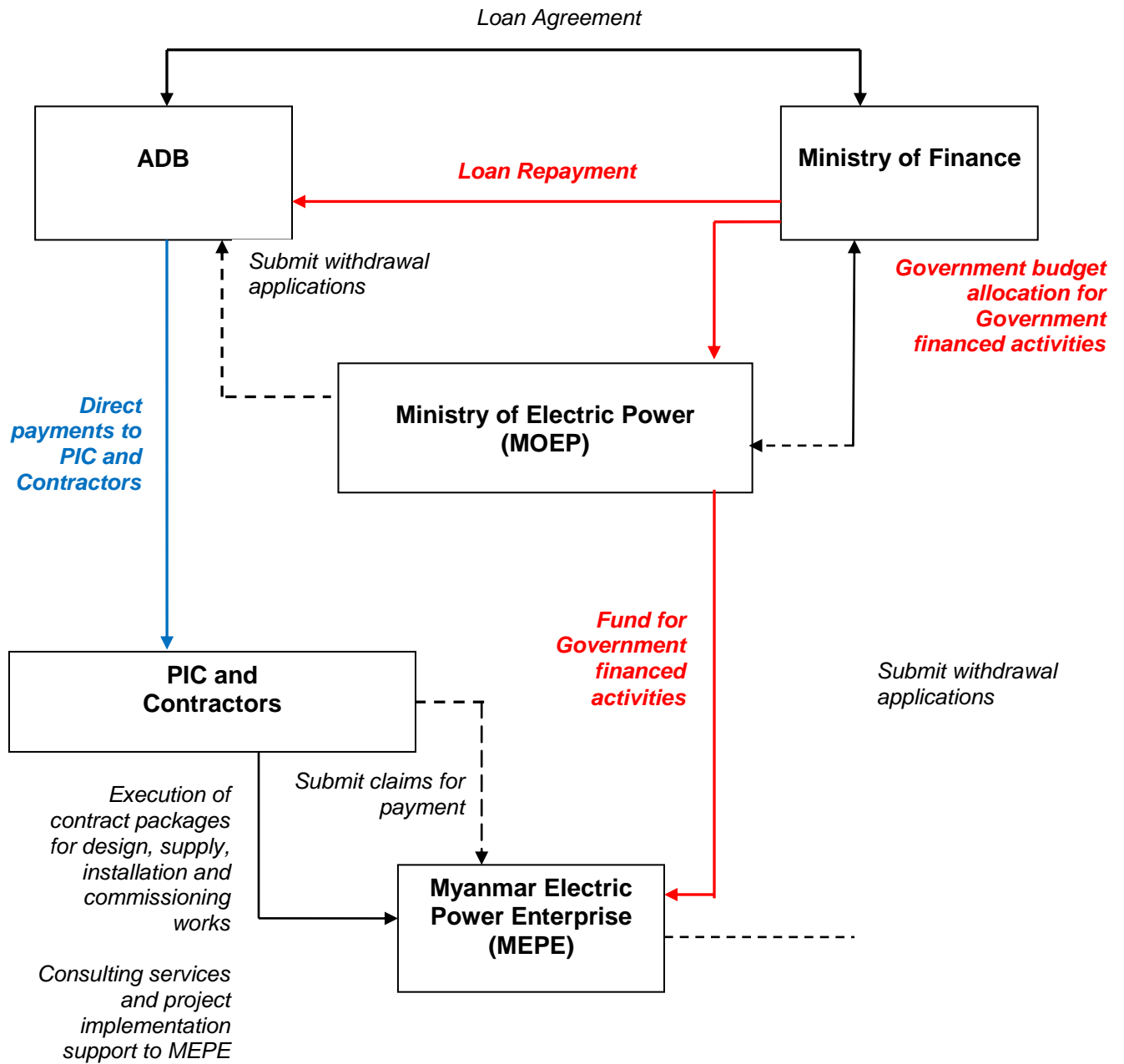
E. Contract and Disbursement S-curve

9. The graph below shows the contract awards and disbursement projections over the implementation period for the project.



	2016				2017				2018				2019			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
million \$																
Quarterly Contract awards		4.35				59.48										
Cumulative Contract awards	0.00	4.35	4.35	4.35	4.35	63.82	63.82	63.82	63.82	63.82	63.82	63.82	63.82	63.82	63.82	63.82
Quarterly Disbursement	0.24	0.24	0.24	0.24	3.24	3.24	3.24	3.24	9.25	9.25	9.25	9.25	3.24	3.24	3.24	3.24
Cumulative Disbursement	0.24	0.47	0.71	0.95	4.18	7.42	10.66	13.90	23.15	32.40	41.64	50.89	54.13	57.37	60.61	63.85

F. Fund Flow Diagram



Note: no imprest account will be used

Legend:

- ADB loan fund flow
- Government fund flow / loan repayment

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

10. A financial management assessment (FMA) on Myanmar's power sector agencies was conducted under ADB's technical assistance² over the period January-July 2013. The FMA was the first such review conducted by the ADB in Myanmar, and covered all power sector institutions which could be candidates for any possible future ADB assistance in ADB lending operations to the power sector in Myanmar. The collection of information from the power sector agencies, including MEPE, was guided by the Financial Management Assessment Questionnaire (FMAQ) that was discussed with MEPE's staff.

11. Under the proposed project the PIU staff will be supported by qualified international and national financial management consultants, and the appropriate computer hardware and software applications. The PIU will be responsible for day-to-day implementation and preparation of progress reports, ensuring that financial and reporting requirements are met and ADB procurement procedures will be followed. The PIU will comprise six counterpart staff and will include among others a finance specialist. By working alongside the PIC, MEPE staff will gain capacity and capability in the implementation and monitoring of projects. This arrangement has been discussed and agreed on with MEPE/MOEP.

12. **Accounting policies and procedures.** MEPE prepares its financial statements based on an accrual basis, and in accordance with the Myanmar Standards of Accounting, which is based on the International Accounting Standards. The accounting manuals that MEPE uses are outdated and in urgent need of updating to bring it in line with international best practices. In addition to the manuals mentioned above, there is also a set of Government financial regulations which Government agencies are obliged to follow. The Myanmar Accountancy Council (MAC) under the guidance of the Office of the Auditor General, is responsible for setting accounting standards, and has the mandate to set the accounting standards for both the private and public sectors.

13. **Accounting/financial information systems.** A basic, mainly manual accounting system is currently maintained by MEPE. There is low level of computerization in all areas, including electric billing activity, financial transaction processing and financial reporting. In terms of financial transaction processing and financial reporting, only the cash book entry transactions are computerized. The rest are manually recorded. MEPE maintains general ledgers and subsidiary ledgers for such activities as substation projects implemented by the agency. A selective check of these ledgers was done and found to be satisfactory.

14. **Internal control systems.** The internal control systems of MEPE generally provide for job segregation and authorization, management of cash and bank, management of bills, and accounting supervision to strengthen the internal control and management of funds.

15. **Budgeting and variance analysis.** MEPE follows a sound budget formulation process. MEPE's budget is prepared in accordance with the Government's schedule and is approved well in advance of the start of the financial year. The budget process starts in November of each year and is concluded by January of the following year. It is approved in line with Government procedures. The capital budgets are prepared by the engineering departments and

² ADB. 2012. *Technical Assistance to the Republic of the Union of Myanmar for Financial Management Assessment of Energy Sector*. Manila.

the recurrent budgets are prepared by the Finance Department. The budget committee oversees the budget preparation activities. Once the budgets are activated the monitoring is rather weak. Variance analyses are prepared on a monthly basis, but are done in a very simplistic and ineffective manner, and MEPE does not use this as a meaningful management tool. Part of the problem is related to the lack of computerization, as without the aid of electronic processing, it is very difficult to produce meaningful financial reports which can be used as a management tool.

16. **Safeguards over assets.** MEPE's Finance Department takes physical inventories and examines fixed assets and stocks, together with other departments, at least once a year. Any discrepancy identified between the physical count and the records is brought to the attention of the Executive Committee of MOEP, who takes the appropriate action in accordance with the Government regulations. It was also noted that MEPE do not cover all assets with comprehensive insurance for damages and theft. Only motor vehicles are insured, while the rest of the assets are uninsured.

17. **External Audit.** The Office of the Auditor General (OAG) audits all Government accounts, including MEPE's account. The financial statements are normally prepared by MEPE within 3 months of the end of the financial year and submitted to OAG. Audit reports for the fiscal year ended March 2014 were issued in December 2014.

18. Given the capacity and capability constraints that have been identified in the FMA, it is apparent that building appropriate capacity and capabilities within MEPE can only be achieved on a longer term basis. However, with its existing financial management system, MEPE is capable of implementing and monitoring ADB-financed projects, with appropriate support from PIC. MEPE's accounting and finance staff are well qualified, adequate accounting/reporting policies and procedures are followed, and sound internal control procedures and systems are in place ensuring the security of data and transactions, and which conform to ADB's requirements.³

B. Disbursement

19. The Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time),⁴ and detailed arrangements agreed upon between the Government and ADB. Pursuant to ADB's *Safeguard Policy Statement* (2009) (SPS),⁵ 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.

20. Payments for goods, works and consulting services will be disbursed by ADB through commitment and direct payment procedures as applicable, and should be certified by the PIU and MEPE based on the payment terms in the contracts. The PIU, through MEPE and MOEP, will be responsible for (i) preparing disbursement projections; (ii) requesting budgetary

³ The World Bank recently approved a \$130 million loan to the Government of Myanmar for the installation of a CCGT power plant with a \$10 million TA component to strengthen the institutional capacity of MEPE. The World Bank assessed the overall financial management risk as "moderate" citing the main risks that needs to be addressed as: (i) inadequate documentation of policies and procedures (although the system of internal control themselves are reasonably strong), and (ii) inexperience with managing and implementing donor funded projects. The TA component involves improving the financial management (FM) capacity and training in international FM standards and procedures.

⁴ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf

⁵ Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

allocations for counterpart funds; (iii) collecting supporting documents; and (iv) preparing and sending withdrawal applications to ADB. Each withdrawal application must include the claim or invoice from the contractor or consultant and approved by the borrower's authorized representative.

21. 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 and subsequently claimed to ADB through reimbursement, unless otherwise accepted by ADB.

C. Accounting

22. MOEP will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. MOEP 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.

D. Auditing

23. MOEP will cause the detailed 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 will be submitted in the English language to ADB within six months of the end of the fiscal year by MOEP.

24. MOEP will also cause MEPE's 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 MEPE financial statements, together with the auditors' report and management letter, will be submitted in the English language to ADB within six months from the end of each fiscal year.

25. The annual audit report for the project financial statements 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 agreement for the project.

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

27. The Government, MOEP and MEPE have been made aware of ADB's approach on delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.⁶ ADB reserves the right to require a change in the auditor (in a

⁶ ADB approach on delayed submission of audited project financial statements:

- When audited project financial statements are not received by the due date, 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,

manner consistent with the constitution of the Republic of the Union of Myanmar), 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.

28. 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).⁷ 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.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Action for Consultant Recruitment

29. All advance action for consultant recruitment will be undertaken in conformity with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).⁸ Any advertisement seeking expressions of interest under advance action will be subject to ADB approval. The Government, MOEP, and MEPE have been advised that approval of advance action for consultant recruitment does not commit ADB to finance the project.

30. The project involves recruitment of a consulting firm for project implementation using quality- and cost-based selection (QCBS) using full technical proposal with a quality-cost ratio of 90:10. It is expected that preparation of request for proposal (RFP) documents for recruitment of the PIC will commence in August 2015.

B. Procurement of Goods, Works and Consulting Services

31. All procurement of goods and works under the ADB financing will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time) and the procurement plan for the project.

32. The project involves the procurement of two (2) plant-design, supply and installation contracts. International competitive bidding (ICB) with single stage one-envelop method will be used for the procurement of these contracts, which have estimated contract values of more than \$3 million (the ADB threshold for ICB procurement of works/plant in Myanmar). ADB's prior review procedures will be followed. MEPE agreed to include the relevant sections of ADB's Anticorruption Policy (1998) in all bidding and contractual documents. Construction of access roads and staff housing in substations will be financed using Government counterpart funds and will follow the Government's procurement guidelines.

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 have not been received within 6 months after the due date, 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 have not been received within 12 months after the due date, ADB may suspend the loan.

⁷ Available at <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>.

⁸ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

33. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages is in Section C. The plan will then be reviewed annually thereafter.

34. The PIC will be recruited according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).⁹ The terms of reference for the PIC are outlined in Section D. An estimated 209 person-months (117 international, 92 national) of consulting services are required to (i) support the PIU in project implementation, monitoring, and reporting and (ii) strengthen the institutional and operational capacity of the executing agency.

C. Procurement Plan (Draft)

Basic Data

Project Name: Power Transmission Improvement Project	
Country: Myanmar	Executing Agency: Ministry of Electric Power (MOEP)
Loan Amount: \$80.0 million	Loan Number: 46390-002
Date of First Procurement Plan: 29 Jan 2015	Date of this Procurement Plan: 31 July 2015

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

a. Project Procurement Thresholds

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

Procurement of Goods and Works

Method	Threshold
International Competitive Bidding for Works (including Plant)	\$3,000,000 and above

b. ADB Prior or Post Review

36. 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
Procurement of Goods and Works		
International Competitive Bidding for Works (including Plant)	Prior	
Recruitment of Consulting Firms		
Quality- and Cost-Based Selection (QCBS)	Prior	

⁹ 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/>

c. Goods and Works Contracts Estimated to Cost More Than \$3,000,000

37. 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	Estimated Contract Value (\$ million)	Procurement Method	Prequalification of Bidders (y/n)	Advertisement Date (quarter/year)	Comments
Package 1 Design, Supply, Installation and Commissioning of 230 kV transmission lines from Thida to Thaketa and from Thaketa to Kyaikasan	9.538	ICB	N	2Q/2016	to be financed by ADB
Package 2 Design, Supply, Installation and Commissioning of extension of Thaketa substation; upgrade of Kyaikasan substation, and new South Okkalapa, and West University substations	49.961	ICB	N	2Q/2016	to be financed by ADB

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

38. 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	Estimated Contract Value (\$ million)	Recruitment Method	Advertisement Date (quarter/year)	International or National Assignment	Comments
Project Implementation Consultant (PIC)	4.348	QCBS 90:10	4Q/2015	International	to be financed by ADB

2. Indicative List of Packages Required Under the Project

39. The following table provides an indicative list of all procurement (goods, 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 Contract Value (\$ million)	Estimated Number of Contracts	Procurement Method	Domestic Preference Applicable	Comments
<u>Plant-Design, Supply and Installation</u>					
Package 1 230 kV transmission lines from Thida to Thaketa and from Thaketa to Kyaikasan	9.538	1	ICB	N/A	to be financed by ADB
Package 2 Extension of Thaketa substation, upgrade of Kyaikasan substation, and new South Okkalapa, West University substations	49.961	1	ICB	N/A	to be financed by ADB
<u>Works</u>					
Access roads and staff housing	2.20	1	To be undertaken by MEPE	N/A	to be financed by the Government
<u>Consulting Services</u>					
Project Implementation Consultant (PIC)	4.348	1	QCBS 90:10 both International and National	Full Technical Proposal	to be financed by ADB

D. Consultants' Outline Terms of Reference

40. **Background and Objective.** The project consists of design, supply, installation, and commissioning of the 230 kilovolt (kV) transmission lines and substations, namely: (i) about 8.2 kilometer (km) 230 kV transmission line between Thida and Thaketa substations; (ii) about 8.63¹⁰ km 230 kV transmission line between Thaketa and Kyaikasan substations; (iii) extension of the Thaketa substation; (iv) upgrading of the existing 66 kV Kyaikasan substation into a full 230 kV substation (230/66/11 kV, 2 x 150 MVA); and (v) new substations at South Okkalapa (230/66/11 kV, 2 x 150 MVA) and West University (230/33/11 kV, 2 x 150 MVA). The project implementation consultant (PIC) will be engaged to assist the Ministry of Electric Power (MOEP) and Myanma Electric Power Enterprise (MEPE) with the implementation of the project, in particular, to: (i) review and update as necessary the bidding documents which have been prepared by the project preparatory technical assistance (PPTA) consultants; (ii) assist MEPE in conducting the bidding process for contract packages financed by ADB and the Government from advertisement to contract awarding; (iii) update as necessary the resettlement plan and

¹⁰ The line between Thida and Thaketa will have double circuit towers (for 230 kV and 66 kV conductors). The lengths of the lines are indicative.

due diligence reports (DDRs), obtain ADB’s approval for the updated resettlement plans and DD Rs and implement them; (iv) assist MEPE in preparing appropriate resettlement plans and DD Rs for associated transmission lines in accordance with the Government and ADB safeguard policies and obtaining ADB approval for the same; (v) supervise project implementation and management, including design, supply, installation, and commissioning works; and (vi) assist and build capacity for MEPE in financial management, disbursements, reporting, social & environmental planning, coordination with stakeholders, and overall project implementation, monitoring, and evaluation of the project’s progress.

41. **Scope of Work.** The services of a multidisciplinary team will be required, consisting of international (117 person-months) and national (92 person-months) consultants. The PIC will be responsible for timely and economical implementation of the project taking into account the resources and costs involved, and the critical time frame for the completion of the project. The envisaged composition of the PIC is as follows:

Positions	Number	Person–Months
International	9	117
Substation Engineer - Team leader	1	36
Overhead Transmission Engineer	1	18
Communication System Specialist	1	4
Civil Engineer	1	12
Procurement Specialist	1	9
Financial Specialist	1	12
Environment Specialist	1	8
Social Development Specialist (Resettlement)	1	12
Stakeholder Communication Specialist	1	6
National	6	92
OH Transmission Engineer	1	18
Substation Engineer	1	30
Civil Engineer	1	12
Financial Specialist	1	12
Environment Specialist	1	8
Social Development Specialist (Resettlement)	1	12
Total	15	209

42. During the procurement period, the PIC team will be based in the MEPE office in Nay Pyi Taw, during the construction period, the PIC team will be based on MEPE office in Yangon. The PIC will visit project areas on a regular basis. The PIC team is also required to visit the MOEP and MEPE Offices in Nay Pyi Taw as necessary. International and national experts will work on an intermittent basis and national experts will help the international experts in delivering the required outputs. The team is responsible for full delivery of the required outputs in a timely and efficient manner.

43. The PIC will work closely with MEPE and MOEP and will assist MEPE in the following scope of work, which shall include, **but not limited to**:

- a. **Pre-Construction Phase.** During this phase PIC will perform **(but not limited to)** the following tasks.

44. **Task 1:** Assist MEPE in the conduct of the bidding process in accordance with ADB's Procurement Guidelines (2015, as amended from time to time) (Responsible: Team leader, substation engineer, transmission engineers, communication system specialist, civil engineers; environmental specialists and procurement specialist):

- (i) Review, update and finalize the draft bidding documents, which have been initially prepared by PPTA consultants, for approval by the Government and ADB;
- (ii) Ensure that all relevant requirements of the Environmental Management Plans (EMPs) are adequately addressed in the bidding documents (instruction to bidders), and in the evaluation criteria for awarding contracts;
- (iii) Conduct the bid, including but not limited to assistance during pre-bid meetings, issuing clarifications on the tender documents, bid opening, bid evaluation, and preparation of bid evaluation reports for approval of the Government and ADB; and
- (iv) Provide guidance and advice to MOEP and MEPE during contract negotiations and in the finalization of contract documents and contract award.

Task 1 required deliverables: approved bidding documents; approved bid evaluation reports; approved contracts and contracts signed and awarded.

45. **Task 2:** Assist MEPE in updating and implementing resettlement plan and DDRs. (Responsible: Team leader, social development specialists, and environmental specialists):

- (i) Update the resettlement plan for Thida–Thaketa transmission line, the DDRs of Thaketa–Kyaikasan transmission line, South Okkalapa substation, and West University substation; prepare the instruments for, and train personnel involved in the conduct of, the detailed measurement survey (DMS) of affected assets per approved detailed engineering designs, conduct the replacement cost study (RCS) for affected fixed assets, conduct consultations with affected households; and prepare the updated resettlement plan and DDRs;
- (ii) Obtain ADP approval for the updated resettlement plan and DDRs. Implement timely the updated resettlement plans and DDRs, ensure that compensation and resettlement are carried out according to the approved updated resettlement plan and DDRs and agreed procedures for negotiated settlement;
- (iii) Help the project implementation unit (PIU) to establish and maintain a database of the affected households and affected institutions, including information on the socioeconomic situation of the affected households, their affected assets, compensation and allowances they are entitled to receive, and amounts of compensation and allowances actually paid;
- (iv) Help the PIU ensure that the complaints of affected households and affected institutions are addressed and resolved according to the project resettlement policy; help the PIU establish and maintain a database of complaints received, updating this database on a monthly basis to indicate the status of their resolution;
- (v) Help the PIU in the conduct of public information dissemination and consultation regarding the project;

- (vi) Prepare for submission to the Government and ADB the monitoring reports on the implementation completion of the updated resettlement plan and DDRs;
- (vii) Update the Initial Environmental Examination (IEE)/EMPs to ensure that they address the detailed designs and engineering of the 230 kV transmission lines and substations. Updates to EMPs include mitigation and monitoring plans, budget, capacity development needs of PIU.

Task 2 required deliverables: approved update resettlement plan and DDRs; documented satisfactory implementation of approved resettlement plan and DDRs; implementation report to ADB and the Government; established database of the affected households and institutions with necessary information; updated EMPs.

46. **Task 3:** Assist MEPE in implementing the Stakeholder Communication Strategy (SCS) (Responsible: Team leader, Stakeholder Communication Specialist):

- (i) Prior to the construction of transmission lines and substations in the project areas, the PIC will conduct studies and provide appropriate conflict sensitive approach/program on mitigating conflicts in the project areas, if any; identify stakeholders' priority communication needs, assess any information gaps, and provide an overview of how the stakeholders primarily receive and process information;
- (ii) Develop a detailed project communication strategy. The strategy should include two-way communication mechanisms for the regular sharing of information about project progress with key stakeholder groups, and detailed information dissemination;
- (iii) Implement the SCS and project communications strategy fully; assist the PIU in planning and implementing specific communication activities set forth in the SCS, including public information dissemination, sustained public relations and stakeholder consultation and engagement; and
- (iv) Facilitate meetings and communications with stakeholders in the project areas, if relevant, to help increase understanding of the ADB-financed project and the expected impact.

Task 3 required deliverables: appropriately prepared for the project area Stakeholder Communication Strategy; report of the implementation of the SCS.

b. Construction Phase. During this phase, PIC will perform **(but not limited to)** the following tasks.

47. **Task 4: Construction Supervision.** (Responsible: Team leader, substation engineer, transmission engineers, communication system specialist, civil engineers; financial specialists, and procurement specialist):

- (i) Assist MEPE with approvals of the contractor's detailed field designs;
- (ii) Review and approve the equipment drawings, calculations, delivery program, and documents submitted by the contractors; oversee the Clearance to Proceed notices issued by MEPE following compensation of affected households/entities along the transmission line route and substation areas;

- (iii) Witness factory inspections and performance tests within the framework of the contracts;
- (iv) Identify any problem areas during project implementation, propose remedial actions, and promptly report any outstanding issues to MEPE;
- (v) Conduct field visits at regular and appropriate times during construction/installation, testing, and commissioning works;
- (vi) In line with the work programs of the contractors, prepare and advise MEPE on the outage planning of existing facilities during implementation. The outage planning will be modified/updated regularly and will have to take into account any unplanned outages resulting from any faults arising in the network. Special attention will be given to minimize as much as possible the impact of the outages in the supply of power;
- (vii) Coordinate safety measures between live components in operation and components under rehabilitation; give advice and when required training to MEPE on safety planning and safety measures;
- (viii) Review and approve the commissioning test reports submitted by the contractors; attend the commissioning; establish the list of deficiencies after commissioning; and prepare a time frame for the contractors to remedy the deficiencies, establish a monitoring program for the use;
- (ix) Review and approve the as-built drawings and operation and maintenance manuals;
- (x) Advise MEPE on any contractual or technical disputes that may arise between contractors and MEPE during the implementation phase;
- (xi) Provide advice and support to MEPE for the settlement of contractor claims;
- (xii) Advise MEPE and seek approval from ADB for any variation orders to be issued to the contractors;
- (xiii) Review and approve the contractor's invoices and assist MEPE in the preparation of the withdrawal applications; and
- (xiv) Prepare and issue the provisional acceptance certificate for the works as well as for the spare parts; prepare the final taking over certificate along with the final payments to be issued by MEPE after the end of the warranty period and the remedy of all deficiencies.

Task 4 required deliverables: timely assistance provided as required by and timely completion of each individual subtasks throughout the project implementation and PIC contract.

48. **Task 5: Environmental Monitoring.** (Responsible: Team leader, environmental specialist). PIC will:

- (i) Ensure that contractors prepare their respective site-specific Contractor's Environmental Management Plans (CEMPs) based on the updated EMPs and actual site conditions;
- (ii) Oversee the implementation of all environmental safeguards of the EMPs relating to construction phase activities including public nuisance impacts (i.e., noise, dust, traffic disruption, blocked access), local air quality and water quality of Pazundaung creek protection, solid and liquid waste management, and

- construction site management and restoration including tree replacement program;
- (iii) Coordinate with the Ministry of Environment Conservation and Forestry (MOECAF) and Yangon City Development Committee (YCDC) on all relevant environmental regulatory compliance issues;
 - (iv) Assist MEPE to prepare and implement the necessary environmental due diligence assessment of the possible associated facilities related to the South Okkalapa and West University substations for full integration of the project into the 230 kV network;
 - (v) Conduct the required water and air quality sampling and laboratory analyses for the monitoring plans for the two EMPs;
 - (vi) Dissemination to stakeholders the results of environment quality monitoring and implementation of safeguards, especially among households and small businesses near the civil construction works areas;
 - (vii) Prepare regular reports PIU must submit to MOEP/MEPE on the implementation of EMPs, environmental, issues, and corrective actions;
 - (viii) Prepare a simple report template for construction contractors to report monthly to PIU on mitigation activities, and environmental issues that occur during the construction phase;
 - (ix) Prepare semiannual status reports and period spot checks on the implementation of EMPs, environmental issues, and public safety protection to be submitted through PIU/EA to the MOECAF and ADB; and
 - (x) Provide training to MOEP/MEPE/PIU on the purpose, content, and roles and responsibilities for implementation of updated EMPs.

Task 5 required deliverables: timely assistance provided as required; timely completion of monitoring reports as required.

49. **Task 6: Implementation of the Social Plan.** (Responsible: Team leader, social development specialists). PIC will:

- (i) Assist MEPE in applying ADB's procedures for preparing resettlement plan and DDRs for the possible associated facilities related to the South Okkalapa and West University substations; prepare the instruments for, and train personnel involved in the conduct of, the detailed measurement survey (DMS) of affected assets per MEPE detailed engineering designs; prepare the TOR of the specialist that will conduct the replacement cost study (RCS) for affected fixed assets; conduct consultations with affected households; and prepare resettlement plan and DDRs as applicable;
- (ii) Implement timely these resettlement plans and DDRs;
- (iii) Help the PIU in the conduct of public information dissemination and consultation regarding the project;

Task 6 required deliverables: timely assistance provided as required; timely completion of reports as required.

c. Tasks to be implemented throughout the project: The PIC will perform (but not limited to) the following tasks:

50. **Task 7: Project Administration.** (Responsible: Team leader with inputs from the entire PIC team):

- (i) Set up a project performance monitoring program with measurable indicators, keep record of project performance, keep records of all correspondence between MEPE, contractors, PIC and ADB;
- (ii) Prepare the overall disbursement plan, monitor costs, and maintain project accounts;
- (iii) Monitor the execution of the project in line with the project time schedules and the work programs provided by the contractors;
- (iv) Update the project disbursement schedule and physical target accomplishment; keep records of any disbursement under the project; prepare and update on a regular basis the forecast disbursement schedule;
- (v) Update regularly the PAM taking into account the changes in the project organization, disbursement progress, and project time schedule;
- (vi) Prepare regular project progress reports in accordance with ADB requirement for submission to the government and ADB;
- (vii) Prepare the project completion report in accordance with ADB requirements; and
- (viii) Provide on-the-job training to the MEPE staff and PIU in the fields of financial management, procurement, contract management, technical, environmental, and social issues;

51. **Task 8: Reporting.** (Responsible: Team leader with inputs from the entire PIC team):
The PIC will prepare the following reports:

- (i) Inception Report, to include the pre-construction activities, within two months following the start of the services;
- (ii) Semiannual project monitoring reports within 15 days after the end of the calendar month that will include but not limited to:
 - Introduction and basic data;
 - Utilization of the ADB loan and counterpart funds;
 - Status of project scope/implementation arrangements, assessment of changes in the key assumptions and risks, etc;
 - Implementation progress;
 - Compliance with the loan assurances;
 - Major project issues and problems;
- (iii) Updated resettlement plan and DDRs and their implementation, report the implementation and completion of the resettlement plan and DDRs to ADB at least one month prior to the commencement of construction works;
- (iv) Semi-annual environmental monitoring reports;
- (v) Project mid-term review report to be prepared after the mid-term review;

- (vi) Project Completion Report.

Required deliverables of Tasks 7 and 8: established project performance monitoring system; updated PAM; reports as specified.

52. **Task 9: Financial Management.** (Responsible: Team leader, financial specialist). PIC will:

- (i) Determine the necessary hardware and software requirements for financial reporting and monitoring, and assist MEPE in setting up the identified system;
- (ii) Assist MOEP in establishing and maintaining the different budgets for the project ensuring the project is included in the Government of Myanmar's Budget of MOEP leading to financial commitments in the Government of Myanmar's Annual Budget allocations; assist MOEP in establishing and maintaining project accounts (accounting and financial management systems and records) in compliance with the procedures and guidelines of the Government and the ADB;
- (iii) Assist MOEP/MEPE in maintaining proper internal controls within the financial operations of the project, particularly for bank accounts and cash advances;
- (iv) Assist MOEP/MEPE in the management and administration of all financial transactions under the project;
- (v) Assist MOEP in the approval of expenditures;
- (vi) Assist MOEP in the generation of the project financial statements and various financial reports necessary for effective and responsible financial management and decision-making in a timely manner;
- (vii) Assist MEPE in preparing financial statements in a timely manner;
- (viii) Assist MOEP in preparing the External Auditor's Terms of Reference, and in facilitating the audit of the project financial statements, and MEPE's financial statements in a timely manner;
- (ix) Provide on-the-job training and develop staff capability on financial management and reporting, and train counterpart MOEP and MEPE staff in all aspects of financial management and reporting processes and procedures.

Task 9 required deliverables: timely assistance provided as required; timely completion of financial statements, financial reports as required.

53. **Task 10: Capacity building for PIU.** (Responsible: Team leader with inputs from the entire PIC team): The PIC will:

- (i) Based on the actual work programs of the PIC, develop an on-the-job training program to be provided to PIU. The trainings include financial management, procurement, contract management, technical, environmental, and social issues (refer to task 1 to 9 above for details);
- (ii) Implement this on-the-job training program as appropriate.

54. Apart from the above defined tasks, the PIC is required to perform any project-related tasks as requested by MEPE for the successful completion of the Project.

55. Qualification Requirements

- (i) The international consultants should have a university degree in engineering or related fields, preferably at post-graduate degree and with at least seven years of relevant professional experience in the power sector including transmission and substation system to undertake the responsibilities mentioned above;
- (ii) The national consultants shall have a bachelor's and preferably a post-graduate degree and at least 5 years of relevant professional experience. The experts should have a good knowledge of power transmission and substation sector in Myanmar;
- (iii) The Team leader (international substation engineer) and the international transmission engineer should have demonstrated working experience in design and/or construction of medium/high voltage transmission lines and substation;
- (iv) The Team leader (international substation engineer) and the international transmission engineer should have working experience at least as a team member of PIC in at least one ADB-financed project, evidenced by the past records;
- (v) The international environment specialist and the international social development specialist (resettlement) should have working experience as a member of an ADB-financed project implementation consultant and/or project preparatory technical assistance;
- (vi) The team leader should be versed with the monitoring and reporting requirements in ADB-financed projects, demonstrated by past records; and
- (vii) The team leader should have demonstrated leadership ability in working in the less developing countries in Southeast Asia and be able to adapt to working environment. Working experience in Myanmar is an advantage.

56. Working Arrangement

- (i) The executing agency (EA) will be the Ministry of Electric Power (MOEP). The implementing agency (IA) will be the Myanma Electric Power Enterprise (MEPE) and will be responsible for overall project implementation and management. Within MEPE, a project implementation unit (PIU) will be created to handle project implementation;
- (ii) MEPE will provide counterpart staff, office space, and other logistical support, as necessary. Consultant will procure office equipment, such as desktop computers, printers, photocopying machines, etc. The equipment will be handed over to MEPE after the completion of the project. Provisional sums for the above items will be identified in the Project Information Sheet. MEPE will provide all available reports, existing acts and regulations, and other pertinent data. It will also facilitate interagency coordination and applicable permits, as necessary.

VII. SAFEGUARDS

57. Project safeguards documents have been prepared in accordance with the laws and regulations of the Republic of the Union of Myanmar, and the ADB Safeguards Policy Statement (2009). The project safeguard categorization for environment and involuntary resettlement is B. The safeguard categorization for indigenous peoples is C.

58. Relevant safeguard documents include: (i) the initial environmental examination (IEE) with environmental management plans (EMP) for the Thida–Thaketa and Thaketa–Kyaikasan transmission lines; South Okkalapa substation and West University substation and (ii) a resettlement plan for the Thida–Thaketa transmission line and due diligence reports for Thaketa–Kyaikasan transmission line and for South Okkalapa substation and West University substation. The respective safeguard action plans in the IEE/EMPs and resettlement plan provide detailed implementation guidance.

59. **Environment.** As Category B project, an IEE has been undertaken to identify the potential environmental impacts and required impact mitigation measures, including environmental compliance audits of existing facilities. Since climate risk is predicted to be medium, a more detailed risk and vulnerability assessment is being undertaken to supplement the IEE. Required impact mitigation and environmental monitoring for project implementation are developed into mitigation and monitoring plans of the two EMPs. The IEE and EMPs address the three stages of subproject implementation defined by pre-construction, construction and operation phases. The potential environmental impacts are primarily construction-phase related, which can be mitigated and managed, and which are not expected to be irreversible, diverse or unprecedented. The concerns and issues identified during the public and stakeholder consultations focused on public and worker safety during the construction of transmission towers and substations, risk of electrical shock and failure of transmission towers and cables, sedimentation of Pazundaung creek from construction of the tower foundations built on the banks of the creek, the negative health effects of electromagnetic fields (EMF) emanating from transmission lines and substations, increased traffic and risk of traffic accidents near construction sites, and work camp waste management and workers' health and safety. Expected impacts and risks are site-specific and appropriate mitigating measures have been incorporated into the EMPs for the transmission lines and substations.

60. The IEE and EMPs have been prepared in consultation with affected communities and stakeholders in Yangon in accordance with the SPS and laws and regulations of the Republic of the Union of Myanmar. The IEE has been disclosed on the ADB website. The EMPs, which will be updated during detailed design and will form part of bidding documents, will ultimately guide civil/installation/commissioning works, supervision, and O&M of project components. Prior to the commencement of civil/installation works the Government will re-assess the potential impacts on environmental receptors and ensure appropriate mitigation measures are in place and that all environmental certificates and permits have been obtained before commencement of any civil works including land preparation and site clearance. MEPE will submit semiannual environmental monitoring reports to ADB to be disclosed promptly to the ADB website. A grievance redress mechanism and monitoring requirements are specified in the IEE/EMPs.

61. The MEPE with support from the PIU and PIC, has overall responsibility for ensuring that the project and EMPs are implemented successfully in accordance with the laws and regulations of the Republic of the Union of Myanmar, and the SPS. The PIU is responsible for ensuring adequate resources are allocated and timely disbursed to implement the EMPs, and for liaising with MEPE, PIC on environmental management matters that require action.

62. Details of impact assessment and implementation of EMPs are set out in the Initial Environment Examination.¹¹ Any unanticipated impacts not identified in the IEE will be reflected

¹¹ Initial Environment Examination is accessible through linked document (Appendix 2 of the RRP).

in the monitoring reports prepared by MEPE/PIC with corrective action in response to these impacts. These will be communicated to the Contractors and the PIU for compliance.

63. Involuntary Resettlement and Indigenous Peoples. To comply with the SPS, MEPE conducted social impacts assessment in the project area. The project involves the following impacts: (i) permanent land acquisition for tower footing of Thida–Thaketa–Kyaikasan transmission lines (and Kyaikasan substation upgrade) and land for construction of new South Okkalapa and West University substations and (ii) temporary impacts during the construction of the transmission lines.

64. Following the social impact assessment and inventory of losses conducted in October 2014, a resettlement plan was prepared to address the impacts of the Thida–Thaketa transmission line. In addition, due diligence reports (DDR) were prepared for the Thaketa–Kyaikasan transmission line, the South Okkalapa substation and the West University substation because negotiated settlements will be carried out for all land acquisitions.

65. All land needed for the project, including land for foundations of monopoles, for footings of steel lattice towers, and land for new substations will be acquired through negotiated settlement between MEPE and relevant Government institutions, particularly the Yangon City Development Council (YCDC), the Ministry of Transport (MOT), Ministry of Defence (MOD), and Ministry of Sport (MOS) and one affected household. In addition, negotiated settlement will also be conducted between MEPE and two affected households for plots of land to be used for an access road to the West University substation.

66. The resettlement plan presents an assessment of the potential adverse social impacts of the construction of the Thida–Thaketa transmission line, the policy that guides land acquisition and resettlement, and the entitlements of affected households and institutions. The DDRs for Thaketa–Kyaikasan transmission line, West University substation, and South Okkalapa substation present the scope of land acquisition and the procedures for conducting negotiated settlement with affected households and institutions. The resettlement policy for Thida–Thaketa transmission line and the procedures for conducting negotiated settlement for Thaketa–Kyaikasan transmission line, West University substation, and South Okkalapa substation are consistent with applicable laws of Republic of the Union of Myanmar and with the SPS.

67. Resettlement Plan for Thida-Thaketa transmission line. A total estimated 2,640 square meters (m²) of land will be permanently acquired for foundations of 67 monopoles and 2 steel lattice towers. The owners of this land are YCDC and MOT. The temporary impacts include 25 structures (i.e., house-cum-shops and residences) during the stringing and construction of the line. The resettlement plan lists the entitlements of the owners of 25 structures for compensation and allowances, procedures and requirements applicable for negotiated settlement for the acquisition of foundations of monopoles and towers, and also the grievance redress mechanism. The resettlement plan was prepared in consultation with affected households and project stakeholders.

68. Due Diligence Report for Thaketa-Kyaikasan transmission line. Civil works for the Thaketa–Kyaikasan will require the expansion of the existing 0.5 ha Kyaikasan substation into the property of the Ministry of Sport (MOS) (3,875 m²), and the construction of 69 monopoles and 2 steel lattice towers. An aggregate of 2,598 m² for the footings of 2 steel lattice towers for the foundations of 69 monopoles will be acquired permanently. The expansion of Kyaikasan substation will require an area of 3,875 m² of the MOS. With the exception of 1 private person whose lumberyard will be acquired for the footing of 1 steel lattice tower, the location of the

monopoles and the other steel lattice tower will be on vacant lands that belong to YCDC, the MOS, and MOD. Negotiated settlement for land needed for the expansion of the Kyaikasan substation and the foundations of the monopoles and a steel lattice tower will be carried by MEPE with YCDC, MOS, and MOD. Acquisition of land occupied by one private affected household for the footing of one steel lattice tower in Thingangyun Township will be carried out through negotiated settlement consistent with the requirements of the SPS.

69. Due Diligence Reports for South Okkalapa and the West University substations.

The new South Okkalapa substation will be constructed on a 5.8 hectare (ha) of land that belongs to MOD, which is currently empty. The new West University substation will be constructed on part of MEPE's 22.7 ha property near Hlaing Thar Yar Special Economic Zone. For this substation, MEPE needs to acquire 0.68 ha of paddy land to build a 15.24 m wide and 445 m long access road to the village road (total 6,782 m²). Acquisition of lands for the two substations will be carried out through negotiated settlement, consistent with the requirements of the SPS.

70. Procedures for negotiated settlement. Negotiated settlement will be carried out consistent with Safeguard Requirements 2, paragraph 25 of the SPS, in particular:

- a. During the negotiation for compensation with the landowner, a third party (i.e., neutral organization or person) engaged by MOEP/MEPE will record in writing the proceedings of the negotiation. The third party will record, among others, the amounts of compensation proposed by both MEPE and the landowner; the amounts agreed, if there is agreement; and the differing amounts, if there is no agreement. The minutes of the negotiation will be signed by the MEPE representative, the landowner, and the third party. If no agreement is reached during this meeting, the minutes of negotiation will indicate the date when MEPE representative will return for a final attempt at reaching a negotiated settlement with the landowner.
- b. The third party will record the proceedings of the second attempt at negotiated settlement. As in the first attempt at negotiation, the 3 parties will sign the proceedings. If no agreement is reached during the second attempt at negotiated settlement, MEPE will inform the landowner that it will look for another location for, and/or access road to, its substation. MEPE confirmed that it will not resort to expropriation measures in this case.
- c. If negotiated settlement is reached, a memorandum of agreement will be signed by the MEPE representative, the landowner, and the third party that spells out the amounts of compensation agreed, the date compensation will be paid, and the date and procedures for handing over the land to be acquired. The minutes of the negotiation will be attached to the memorandum of agreement. The landowner will keep a copy of the signed memorandum of agreement.
- d. Civil works for the West University Substation and South Okkalapa Substation may only begin after negotiated settlement has been concluded satisfactorily (i.e., owners of the affected assets are paid their compensation in full as per agreement with MEPE) and after the sites and access roads of the West University Substation and South Okkalapa Substation are free from encumbrances (i.e., physical and legal obstacles).

71. **Commencement of construction/installation works.** The PIU with assistance by the PIC will be responsible for the implementation of the resettlement plan and recommendations of the DDRs, ensuring that resources are made available for their implementation. For Thida–Thaketa transmission line, civil/installation works will not be allowed to commence until the confirmation of the full compensation payment as per approved update resettlement plan. Construction of monopoles and steel lattice towers and their stringing may be done section by section, starting in areas where there are no resettlement impacts, but only after MEPE is able to conclude satisfactorily with concerned Government agencies the negotiation for the locations of the foundation of monopoles or footing of steel lattice towers. For the Thaketa–Kyaikasan transmission line, the South Okkalapa Substation, and the West University Substation, construction works may only commence after the final detailed engineering designs have been approved and negotiated settlement with affected landowners for those facilities have been concluded satisfactorily as described in the DDRs.¹² Satisfactory implementation of resettlement plan and DDRs should be reported to MOEP and ADB at least one month prior to the commencement of the construction work.

72. **Responsibilities of MEPE.** MEPE will be responsible for:

- a. Overall implementation of the project and for coordination/liaison between MOEP and other concerned Government agencies;
- b. Assisted by the PIC, update the resettlement plan following the conduct of a detailed measurement survey (DMS) that is based on the approved detailed engineering designs;
- c. Ensure that adequate budgetary support is fully committed and made available to cover the costs of compensation before the commencement of construction;
- d. Ensure that institutional arrangements are in place for the effective and timely design, planning, consultation and implementation of compensation;
- e. It will identify and set in place appropriate reporting, monitoring and evaluation mechanisms as part of the resettlement management system;
- f. Assisted by the PIC, conducts regular monitoring of all resettlement implementation work. The databank created during the DMS and resettlement plan updating will form the basis for monitoring of resettlement work. Semi-annual monitoring report on resettlement plan implementation will be submitted to MOEP and ADB. Monitoring and supervision roles will ensure that affected people are fully compensated in accordance with the resettlement plan;
- g. MEPE will set up a project implementation unit (PIU).

73. **Roles and responsibilities of PIU.** PIU will be responsible for the day-to-day implementation of the project and in the preparation of technical, safeguards, and financial reports. Specifically, the PIU will:

- a. Provide compensation for any asset used by an identifiable person/household for livelihood purposes at full replacement cost if it is affected during implementation of the Project.
- b. Work with the PIC, which will have a resettlement specialist on the team, for resettlement supervision and capacity building to ensure effective implementation of resettlement activities.

¹² Resettlement Plan and Due Diligence Reports are accessible through linked documents (Appendix 2 of the RRP).

- c. Ensure that the grievance procedure is established and in place and affected people informed of them before any compensation activities begin.
- d. Distribute details of the resettlement plan to the affected peoples in the form of a project information booklet in Burmese language. A summary version of the endorsed resettlement plan, in Burmese language, will be posted at the Government administration offices of townships and wards affected by the project, and at relevant offices of MOEP and MEPE. The summary version of the resettlement plan will be for the reference of affected peoples as well any interested groups.

VIII. GENDER AND SOCIAL DIMENSIONS

74. Overall, the project does not have a gender component or highly significant gender impacts. At future construction sites the influx of male workers could lead to some prostitution and related sexually transmitted infections as awareness levels are low. In order to mitigate these impacts, turnkey contracts will include prevention and health and safety measures. A Code of Conduct for workers is included in the EMP. Women should be equally considered for employment during construction phase. In addition, the PIC will conduct trainings and information campaigns for PIU, local communities and workers on gender issues, including HIV/AIDS and human trafficking prevention. The social aspects of the project are described in the Summary Poverty Reduction and Social Strategy.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

Impacts the Project is aligned with:

Economic and social benefits to residential, commercial, and industrial consumers in the Yangon region from reliable and adequate supply of electricity (National Energy Policy, National Electrification Plan, Country Operations Business Plan, 2015–2017 for Myanmar)^a

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
<p>Outcome Improved reliability of the Yangon region's power transmission network</p>	<p>By 2020</p> <p>a. Power transmission capacity increased by 900 MVA (2014 baseline: 1,315 MVA)</p> <p>b. Transmission loss reduced by one percentage point (2014 baseline = 5.7%)</p> <p>c. Electricity consumption increased by 1,200 GWh (2014 baseline = 6,000 GWh)</p>	<p>a–c. Annual reports of MEPE and YESC</p> <p>a–c. Project benefit monitoring and post evaluation reports</p>	<p>The large capital investments needed for the long-term expansion of the power subsector may not be available</p>
<p>Outputs 1. A 230 kV power transmission ring, including 230 kV transmission lines and substations, developed for the Yangon region</p>	<p>By December 2019 (2014 baseline: 0)</p> <p>1a. 8.2 km 230 kV double-circuit transmission line between Thida and Thaketa substations constructed and operational</p> <p>1b. 8.6 km 230 kV single-circuit transmission line between Thaketa and Kyaikasan substations constructed and operational</p> <p>1c. Thaketa substation extended to accommodate incoming and outgoing 230 kV transmission lines</p> <p>1d. Kyaikasan substation upgraded to a full 230/66/11 kV 2 x 150 MVA substation and operational</p> <p>1e. A 230/66/11 kV 2 x 150 MVA substation at South Okkalapa constructed and operational</p> <p>1f. A 230/33/11 kV 2 x 150 MVA substation at West University constructed and operational</p>	<p>1a–f. MOEP and MEPE annual reports</p> <p>1a–f. ADB review missions</p> <p>1a–f. ADB project completion report</p>	<p>Cost overruns</p>
<p>2. Capacity of MEPE staff to implement ADB-financed projects strengthened</p>	<p>2a. MEPE staff of PIU capable of (i) preparing resettlement plans and initial environment examinations in accordance with</p>		

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
	the ADB Safeguard Policy Statement (2009); (ii) implementing resettlement plans, DDRs, and EMPs as approved; (iii) conducting bidding and bid evaluation in accordance with ADB's Procurement Guidelines (2015, as amended from time to time); (iv) contract award and signing; (v) contract management; and (vi) preparing project implementation monitoring reports and withdrawal application		
<p>Key Activities with Milestones</p> <p>1. Output 1: A 230 kV power transmission ring, including 230 kV transmission line and substations, developed for the Yangon region</p> <p>1.1 Complete first bidding documents (by October 2015) 1.2 Recruit PICs (by March 2016) 1.3 Update bidding documents and update and implement resettlement plans and DDRs (by September 2016) 1.4 Award contract for transmission lines package (by March 2017) 1.5 Award contract for substations package (by March 2017) 1.6 Construct 230 kV transmission lines (by March 2019) 1.7 Construct 230 kV substations (by March 2019) 1.8 Complete testing and commissioning (by June 2019)</p> <p>2. Output 2: Capacity of MEPE staff to implement ADB-financed projects strengthened</p> <p>2.1 Establish fully staffed PIU (by September 2015) 2.2 Recruit PICs (by March 2016) 2.3 Update and implement resettlement plans and DDRs for project area (by September 2016) 2.4 Work with PICs to award contracts for transmission lines package and for substation package by March 2017 2.5 Monitor project implementation (until December 2019) 2.6 Complete project implementation monitoring (December 2019)</p>			
<p>Inputs:</p> <p>ADB: \$80,000,000 Government: \$ 3,300,000</p>			
<p>Assumptions for Partner Financing</p> <p>Outputs necessary to reach DMF outcome that are not administered by ADB include (i) upgrading Ahlone–Thida transmission line to full 230 kV system, (ii) construction of transmission lines to connect West University substation with the future 500/230 kV Hlang Thayar substation, and (iii) rerouting the current 230 kV transmission line between Hlawga and Thaketa via South Okkalapa substation. All will be financed by the government.</p>			

ADB = Asian Development Bank, DDR = due diligence report, DMF = design and monitoring framework, GWh = gigawatt-hour, kV = kilovolt, MEPE = Myanmar Electric Power Enterprise, MOEP = Ministry of Electric Power, MVA = megavolt-ampere, PIC = project implementation consultant, PIU = project implementation unit, YESC = Yangon Electricity Supply Corporation.

^a ADB. 2015. *Country Operations Business Plan: Myanmar, 2015–2017*. Manila; MOEP. Forthcoming. *Myanmar National Electrification Plan*. Nay Pi Taw.

Source: ADB estimates

B. Monitoring

75. **Project performance monitoring and Progress Reports.** Within 6 months of the date of loan effectiveness, MOEP will establish a project performance monitoring system (PPMS) for the project, in form and substance acceptable to ADB. The PPMS will track the project implementation activities, corresponding target dates, expected outcomes, and assigned responsibilities under a monitoring mechanism that can be used to track progress on specific activities. The PPMS will aim to detect any deficiency and discrepancy between the plan and the execution of the Project in using the resources efficiently in order to ensure that timely corrections can be made to adjust the design of the Project as feasible. ADB inception mission will provide to MOEP and MEPE a checklist of the above data, which will be updated and reported quarterly through the MEPE's quarterly progress reports and after each ADB review mission. These quarterly reports will provide information to regularly update ADB's PPR system.¹³

76. **Compliance monitoring.** Compliance for all loan covenants (environmental safeguards, financial, economic, and others) will be jointly monitored by MOEP, MEPE, and ADB through quarterly updates provided by the PIU. In this respect, the PIU will submit to ADB a status report on the covenants summary with the explanation and time-bound actions on partly or non-complied covenants. As part of the joint efforts, ADB's Resident Mission in Myanmar will hold quarterly review meetings with MOEP and MEPE to ensure the full compliance of all the loan covenants. In addition, MOEP, MEPE, and ADB shall undertake a comprehensive midterm review after 2 years of project commencement. At the conclusion of the mid-term review, ADB and the Government may agree on changes in both Project scope and implementation arrangements, as deemed necessary.

77. **Safeguards monitoring.** Compliance to environmental and involuntary resettlement safeguards and corrective action, if any, will be included in the quarterly progress report to be prepared by the PIC and PIU. MEPE will submit semiannual environmental monitoring reports to ADB and to be disclosed promptly to ADB website to comply with the Public Communications Policy (2011).

78. **Gender and social dimensions monitoring.** The project has no gender and social issues/concerns and will not require gender and social monitoring.

C. Evaluation

79. Following loan signing, a project inception mission will be fielded to confirm the working relationship between ADB and MOEP, MEPE, and PIU staff involved in the implementation of the project. Progress under the project will be subject to a formal review every six months by ADB, following loan effectiveness to enable adjustment of project design and implementation arrangements, where required. The review will address policy, institutional, administrative, organizational, technical, environmental, social, economic, financial, and other relevant factors that may have an impact on project performance and its continuing viability. A comprehensive midterm review is tentatively scheduled two years after the inception mission. Within six months of physical completion of the project, MOEP and MEPE will submit a project completion report to ADB.¹⁴ The MEPE and PIU will evaluate each project area performance based on indicators

¹³ ADB's project performance reporting system is available at:

<http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

¹⁴ Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

and targets stipulated in the design and monitoring framework and baseline profiling data collected at project appraisal. Subsequently, ADB will field a mission to finalize the PCR. Evaluation activities are summarized in Table below.

Summary of Evaluation Activities

Evaluation Activity	Purpose	Methodology	Who are responsible and involved
Review Mission	Review the progress of the project and provide guidance to facilitate implementation	Site visit and meetings with EA/IA officials, contractors, consultants twice a year	ADB MOEP MEPE
Project Completion Report	Evaluate the overall output of the project and its relevance and suitability	Site visit and meetings with EA/IA officials, consultants	ADB MOEP MEPE

D. Reporting

80. MOEP 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 six 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.

81. All agreements will be in English and Myanmar language. ADB recommends that all reports and supporting documents that require ADB's approval and review shall be submitted in English.

E. Stakeholder Communication Strategy

82. PIU with assistance by the PIC will develop and implement a Stakeholder Communication Strategy as per the TOR for PIC. MEPE will post all relevant information on its website. The website posts will include at minimum information regarding the bidding process, bidders, contract awards, use of funds disbursed under the project and physical progress. The project will also follow the ADB's Public Communications Policy 2011¹⁵ and its guidelines on the disclosure and exchange of information. The PIC will assist PIU in preparing and implementing a Stakeholder Communication Strategy.

¹⁵ ADB. 2011. Public Communications Policy 2011, *Disclosure and Exchange of Information*. Manila.

X. ANTICORRUPTION POLICY

83. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy (1998, as amended to date) relating to the project.¹⁶ 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.¹⁷

84. To support these efforts, relevant provisions are included in the loan agreement/regulations and the bidding documents for the project.

XI. ACCOUNTABILITY MECHANISM

85. 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.¹⁸

XII. RECORD OF PAM CHANGES

86. This first draft of PAM has been prepared and discussed during the loan fact-finding mission on 19–29 January 2015. The PAM was first updated in March 2015 incorporating comments from MOEP and MEPE and was further updated in July 2015 to reflect project readiness and refined TOR for PIC.

87. The PAM will be subject to change after ADB Board approval of the project and during the period of project implementation. All revisions and updates of the PAM should be recorded in this section to provide a chronological history of the changes to the implementation arrangements recorded in the PAM.

¹⁶ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

¹⁷ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

¹⁸ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.