Project Administration Manual

Project Number: 41074-013

Loan and/or Grant Number(s): L3015; G0354

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Indonesia West Kalimantan Power Grid Strengthening 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 and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The PT (Persero) Perusahaan Listrik Negara [State Electricity Corporation] (PLN) is 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 PLN of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the Borrower and ADB shall agree to the PAM and ensure consistency with the Loan and Grant Agreements. 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 and Grant Agreements, the provisions of the Loan and Grant Agreements 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

AFD – Agence Française de Développement

AFS – audited financial statements CDM – Clean Development Mechanism

CEFPF – Clean Energy Financing Partnership Facility

CER – certified emission reduction
CMI – Carbon Market Initiative

CO₂ – carbon dioxide

DGE – Directorate General for Electricity

EBITDA – earnings before interest, taxes, depreciation, and amortization

EIA – environmental impact assessment
EIRR – economic internal rate of return
EURIBOR – Euro interbank offered rate
EMP – environmental management plan

FIRR – environmental management plan FIRR – financial internal rate of return ICB – international competitive bidding IEE – initial environmental examination

LED – light-emitting diode

LAR – land acquisition and resettlement
NCB – national competitive bidding
NGO – nongovernment organizations
PAM – project administration manual
PIU – project implementation unit

PLN – PT (Persero) Perusahaan Listrik Negara

QCBS – quality- and cost-based selection

SAIDI – system average interruption duration index SAIFI – system average interruption frequency index

SOE – statement of expenditure SPS – Safeguard Policy Statement

TOR – terms of reference

UNFCCC - United Nations Framework Convention on Climate Change

I. PROJECT DESCRIPTION

- 1. The proposed project will reduce the cost of operating the power system in West Kalimantan. Oil is one of the most expensive power generation fuels accounting for a quarter of power generation in Indonesia and all power generation in West Kalimantan; hence, the average cost of power generation is about \$0.25 per kilowatt-hour (kWh).¹ Coal, an abundant local² undeveloped resource is a substitute fuel for oil, with costs below \$0.10/kWh.³ However, as developing these coal resources will take time (7–10 years), and West Kalimantan urgently needs additional electricity supply to meet growing needs, West Kalimantan considers access to cross-border power supply a priority to meet rising demand and at reduced costs. The proposed interconnection with Sarawak at a negotiated import price of \$0.10 kWh will enable Indonesia's PLN to import 230 MW equivalent of power generation to the West Kalimantan grid by January 2015. This will enable PLN to enhance its least-cost generation plan by combining hydropower imports from Sarawak with other Indonesian base-load generation from oil or coal. The proposed power imports may further reduce power generation costs in the future as Sarawak plans to develop more hydropower for an average power generation cost below \$0.10/kWh.
- 2. The West Kalimantan system demand will grow to about 600 MW by 2020, from about 200 MW in 2012, and in the absence of the proposed interconnection, PLN plans to build new coal generation to switch from the rented oil generators that PLN now uses. The interconnection has always been an alternative option to meet long term system demand. Since the early 1990s, the power utilities in the island of Borneo have been developing a 1,300 km long high-voltage power transmission link, the Trans Borneo Power Grid, to connect the West Kalimantan power grid across Sarawak, Brunei Darussalam, to Sabah and enable power exchanges between the BIMP-EAGA countries.⁴ This transmission system development will help each area take advantage of the different power systems and different power generation mixes on the island of Borneo: West Kalimantan relies almost entirely on oil, Sarawak largely on hydropower, Brunei Darussalam on gas, and Sabah predominantly on diesel and fuel oil.
- 3. **Reduced Carbon footprint.** Currently PLN relies entirely on oil for power generation in West Kalimantan. As PLN will eventually stop using oil-based power generation because of the import, the overall carbon footprint of Borneo will be reduced. The power interconnection will benefit also both West Kalimantan and Sarawak directly. A base-load supply of 50 MW and about 180 MW for 6 hours a day will amount to about 650,000 megawatt-hours of import of cheaper power from Sarawak to West Kalimantan each year, at a negotiated import price of \$0.10/kWh—PLN as the buyer will save about \$100 million by avoiding oil generation and Sarawak as the seller will earn about \$33 million with its low-cost power generation. This will also create opportunities for future power exports and sharing of system reserve margins between the two countries enabling further reduction of carbon footprint.
- 4. The proposed interconnection with Sarawak is of strategic importance to PLN. With the experience of this interconnection, PLN plans to expand its power exchange arrangements with its neighbor, although the West Kalimantan system is relatively small

² Indonesia is a lead coal exporter: About 50% of reserve in Kalimantan (34% in East Kalimantan, 16% in South Kalimantan, and about 3% in West Kalimantan).

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¹ About 3 times more than the average cost of generation by other power systems in Southeast Asia.

In December 2011, PLN signed an independent power producer contract for 2 x 25 MW at \$0.0909/kWh for 25 years. Government of Indonesia, Ministry of Energy and Mineral Resources. http://www.esdm.go.id/news-archives/electricity/46-electricity/5252-pln-signed-ipp-contract-pltu-pontianak-3.html

⁴ BIMP-EAGA refers to the subregional initiative covering Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area (http://www.bimp-eaga.org/).

compared with the Indonesian system: in 2012, demand for power from the West Kalimantan system was about 200 MW compared with total Indonesian system demand of about 30,000 MW; and the proposed 83 km long 275-kilovolt (kV) transmission line is relatively small—PLN plans to build about 50,000 km of transmission lines over the next 10 years, including 5,000 km of 275 kV lines.

- 5. **Signed power exchange agreement.** On 5 September 2012, PLN and Syarikat SESCO confirmed their commitment to the project by signing the power exchange agreement (PEA) based on the term sheet signed on 18 July 2011. The PEA is for 20 years: the first phase covering the first 5 years has take-or-pay and take-and-pay prices. The second-phase duration could be for long term, medium term, or short term within a maximum capacity of 230 MW. The PEA covers purchase of about 50 MW of capacity as base load on a take-or-pay basis for 5 years. In addition, PLN will be able to purchase another 180 MW of capacity as a take-and-pay contract. Both parties secured their performance obligations with bank guarantees of \$35 million to each other. The parties agreed also to enter into an interconnection agreement before 30 June 2013. The PEA includes strict milestone schedules—(grid completion: 31 December 2014, and supply start: 1 January 2015) in order to avoid paying the \$25,000-a-day penalty to each other. PLN has awarded contracts for four main packages and have signed these contracts under the approved advanced procurement action.
- 6. **ADB's continued support for regional cooperation.** The project is aligned with ADB's energy sector assessment strategy and road map⁶ and the BIMP-EAGA implementation blueprint,⁷ which made improving infrastructure facilities a priority and power interconnection a key strategic pillar. The project is also in line with the Association of Southeast Asian Nations (ASEAN) Connectivity Plan.⁸ ADB supports investment in strategic transmission assets that connects regions or countries to optimize power networks by removing transmission bottlenecks and transmitting cheaper power from one area to the other, thereby helping achieve overall regional socioeconomic and environmental improvement. This project is consistent with ADB's country partnership strategy, 2012–2014⁹ and country operations business plan, 2012–2014, ¹⁰ which support the government's economic growth target of 6.3%–6.8% per annum in 2010–2014 to and to remain around 6.5% by 2014 despite protracted global recovery. Furthermore, ADB is now working with PLN on the Sumatra–Peninsular Malaysia power interconnection (250 km, 500 kV, high-voltage direct current line for the sharing of power between Indonesia (Sumatra) and Peninsular Malaysia.
- 7. **Partnership with Agence Française de Développement (AFD).** This project will strengthen ADB's partnership with AFD in financing PLN projects. In 2010, AFD cofinanced \$50 million for the Java-Bali Distribution Performance Improvement project¹¹.

⁵ Take-or-pay amounts are like capacity payments: payments for full amounts have to be made even if only a portion of the contract amount is consumed. Take-and-pay allows the buyer to pay only for the amounts used.

⁶ Sector Assessment: Energy (accessible from the list of linked documents in Appendix 2).

BIMP-EAGA. 2012. BIMP-EAGA Implementation Blueprint, 2012–2016. http://bimp-eaga.org

⁸ The ASEAN Secretariat, August 2012. ASEAN Connectivity. Jakarta.

⁹ ADB. 2012. Country Partnership Strategy: Indonesia, 2012–2014. Manila.

¹⁰ ADB. 2012. Country Operations Business Plan: Indonesia, 2012–2014. Manila.

¹¹ ADB. 2010. Report and Recommendation of the President of the Board of Directors: Proposed Loan and Administration to the Republic of Indonesia; Java-Bali Electricity Distribution Performance Improvement Project.

A. Impact and Outcome

- 8. The impact of the project will be sustainable power supply in West Kalimantan and the outcome is reduced cost of operating the power system in West Kalimantan.
- 9. The project will have three outputs: (i) construction of about 83 km of 275 kV double-circuit transmission line between Bengkayang and the border with Sarawak, with a new 275/150/20 kV substation in Bengkayang; (ii) construction of about 145 km of 150 kV double-circuit Bengkayang–Ngabang–Tayan distribution line, with a new 150/250kV substation in Ngabang and a four-line distribution feeder extension for the 150 kV Tayan substation and Bengkayang substation; and (iii) new connections to 8,000 households in West Kalimantan.

II. IMPLEMENTATION PLANS

10. The Project will be approved in 2013. After the four main contracts are signed under the approved advanced procurement action and retroactive financing, the Project implementation period is 67 months commencing 4 April 2014 and Loan closing date is 30 November 2019. The Project is expected to be completed by 30 November 2019. The Project's milestones of readiness activities and implementation schedule are as follows:

A. Project Readiness Activities

1. ADB

	2011	2012				2013				2014	Respon sible Party
Indicative Activities	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sep	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sep	Oct- Dec	Jan- Mar	•
Advance contractir actions	ng										PLN, ADB
Retroactive financing actions											MOF, PLN, ADB
Establish project implementation arrangements	done										PLN, ADB
ADB Board approval											ADB
Loan signing											MOF, ADB
Government legal opposited	opinion										MOJ, ADB,
Government budget inclusion	Done f operati	or 1 st yea on	ar								MOF, BAPPE NAS, PLN
Loan effectiveness											MOF, ADB

Government of Indonesia¹² 2.

	2012				2013				2014	Respons ible Party
Indicative Activities	Jan- Mar	Apr- Jun	Jul- Sep	Oct- Dec	Jan- Mar	Apr- Jun	Jul- Sep	Oct- Dec	Nov	
Monitoring the evaluation performance indicators	Done									PLN, ADB
Counterpart fund allocated for the first year operation of activity	Done									MOF, BAPPEN AS, PLN
Land acquisition and/or land resettlement plan is available	Done									PLN, MOF, ADB
Resettlement plan is u	ıpdated									
Project Management Unit (PMU and Project implementation unit are already established	Done									PLN
Bidding, evaluation, a packages	nd contrac	cting of								
Finalized project admi manual	n.									PLN, ADB

¹² Based on Government Regulation No. 2/2006. Conditions prior Loan Negotiations

B. Overall Project Implementation Plan

Indicative Activities	2012 2013 2014 2015 2016			016			2	017			2	018		2019																		
	I	II	Ш	IV	I	II	Ш	IV	I	II	Ш	IV	ı	II	Ш	IV	ı	II	Ш	IV	ı	II	Ш	IV	I	II	Ш	IV	ı	II	Ш	IV
A. Design and																																
Monitoring Framework				-																												\vdash
Activities with Milestones																																<u> </u>
Output 1: 83 km of 275																																
kV transmission network with Substation																																
1.1 Tender out of																																
two turnkey packages for																																
(i) Bengkayang substations																																
and the (ii) 275 kV																																l
transmission link with bid																																
evaluation report approved																																
by January 2013																																l
1.2 Turnkey contracts																																
signed by June 2013																																
1.3 Delivery of equipment																																\vdash
and installation of the																																
transmission lines by																																
September 2014																																
1.4 Completion/					1																											$\vdash \vdash \vdash$
Commissioning of																																
transmission network with																																
substation by December																																
2014 Output 2: 145 km of 150				-	<u> </u>																											$\vdash \vdash$
kV transmission network and new																																
substations/upgrade																																$\vdash \vdash$
2.1 Tender out of																																
two turnkey packages for																																
(i) 150kV transmission																																
lines and (ii) new 150/20																																
kV Ngabang Substation																																
and 150 kV Tayan																																
Substation (Extension) with																																i '
bid evaluation reports									l																							i '
approved by January 2013				<u> </u>					<u> </u>	<u> </u>											<u> </u>	ļ			<u> </u>	ļ			ļ			<u> </u>
2.2 Turnkey contracts									l																							i '
signed by June 2013																																<u>'</u>
2.3 Delivery of equipment																																i '
and installation of the																																i '
transmission lines by																																i '
October 2014																																

2.4 Completion/Commissioning of distribution network and substations by March 2015 Output 3: Construction of new transmission network in West Kalimantan (Tayan-Sanggau-Sekadau) 3.1 Tender out three turnkey packages for (i) 150 kV transmission line (Tayan-Sanggau); (ii) 150 kV transmission line (Sanggau-Sekadau) and (iii) new 150/20 kV Sanggau and Sekadau substation (extension) with bid evaluation reports approved by November 2016. 3.3 Have equipment delivered and transmission line installed by June 2018 3.4 Complete and commission transmission in single line (and the complete and commission transmission transmission in single line (and the complete and commission transmission).	
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3.4 Complete and commission and comm	
commission transmission	
commission transmission	
network and substations by	
November 2019	
Output 4: Grant for new	
connection	
3.1 Identify household for	\vdash
targeting benefits by	
December 2013	
3.2 Tender out connection	\vdash
kits and associated	
equipment by March 2014	
3.3 Install equipment and	\vdash
connect customers March	
2015	
B. Management	\vdash
Activities	
Procurement plan key	t
activities to procure	

Indicative Activities		2	012			2	013			2	014			20)15			20	016			2	017			2	018			20)19	
	Ι	II	Ш	IV	ı	II	Ш	IV	I	II	Ш	IV	I	II	Ш	IV	I	II	III	IV	I	II	Ш	IV	ı	II	Ш	IV	ı	II	Ш	IV
contract packages																																
Consultant selection procedures																																
Environment management plan key activities																																
Gender action plan key activities																																
Communication strategy key activities																																
Annual/Mid-term review									Ī		R		R		М		R			R		R		R		R	R		R		R	
Project completion report																																

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations - Roles and Responsibilities

Project implementation organizations	Management Roles and Responsibilities
Executing agency: PT Persero Perusahaan Listrik Negara [State Electricity Corporation] (PLN)	Responsible for overall project implementation including submission of the Withdrawal Applications, retention of supporting documents, and any reporting requirements, including, the annual audit report and financial statements.
Project Management Unit (PMU)	 Report to the Board of Directors through the Director of Planning and Risk Management; Responsible for overall procurement, planning, project supervision, monitoring, accounting, and consolidated reporting; Coordination with the Sarawak counterpart; and Selection, contracting, and supervision of project implementation consultants.
Project Implementation Unit PIU: GM PLN (Persero) Unit Induk Pembangunan Kalimantan Barat	Day-to-day supervision of Project implementation, including undertaking monitoring and reporting requirements as well as resolving environmental and social safeguard issues with the support of the PMU.
• ADB	Lender Main project financier Monitoring project implementation and covenant compliance
• AFD	Cofinancier

B. Key Persons Involved in Implementation

Executing agency: Mr. Rawan Insani **Executive Vice President of Corporate Planning** PT Persero Perusahaan Tel: +62 21 725 1234/ Fax: +62 21 739 7359 Listrik Negara [State Electricity Corporation] Email address: rawan.insani@pln.co.id Office Address: 13th Floor, PLN Head Office, JL. (PLN)

Trunojoyo, Blok M/135, Kebayoran Baru

ADB

Energy Division: Mr. Andrew Jeffries

Director

Tel: (63-2) 632-6409/Fax: (63-2) 636-2336

E-mail: ajeffries@adb.org

Mission Leader: Ms. Ira Palupi

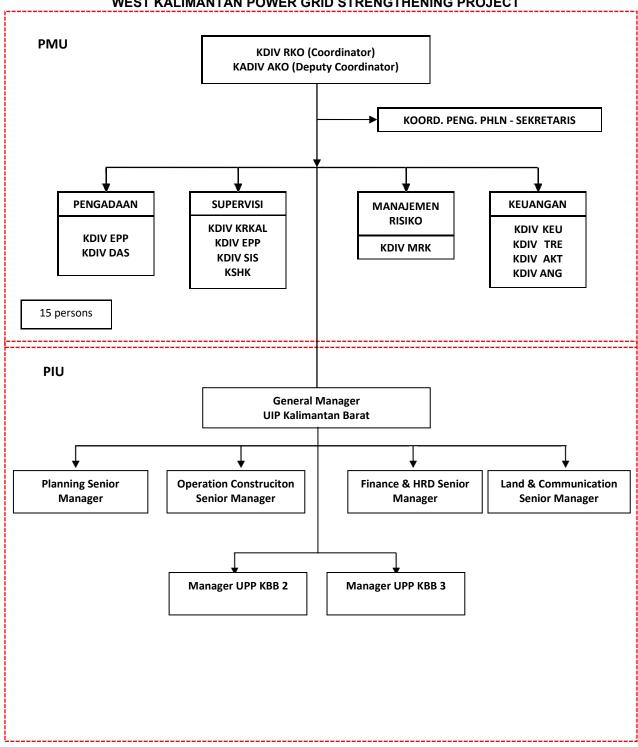
Senior Project Officer (Infrastructure)

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C. Project Organization Structure

TIM KERJA PROJECT MANAGEMENT UNIT (PMU) DAN PROJECT IMPLEMENTATION UNIT (PIU) UNTUK ADB LOAN WEST KALIMANTAN POWER GRID STRENGTHENING PROJECT



PROJECT ORGANIZATION STRUCTURE

Occupation	Abbreviations of Department	Who Responsible
EVP RKO	Executive Vice President of Corporate Strategic Planning Division	Rawan Insani
EVP PMO	Executive Vice President of Project Management Office	Hening Kyat Pamungkas
EVP EPP	Executive Vice President of Strategic Procurement Planning Division	Anang Yahmadi
EVP SIS	Executive Vice President of System Planning Division	Adi Priyanto
EVP DAS	Executive Vice President of Strategic Procurement Division	Sandika Aflianto
EVP KRKAL	Executive Vice President of Regional Kalimantan Construction Division	Iswan Prahastono
SVP HK	Senior Vice President Corporate Legal Service Unit	Dedeng Hidayat
EVP MRK	Executive Vice President of Risk Management Division	Wasito Adi
EVP KEU	Executive Vice President of Corporate Finance Division	Sulistyo Biantoro
EVP TRE	Executive Vice President of Treasury Division	Iskandar
EVP AKT	Executive Vice President of Accounting Tax and Insurance Division	Alfath Cordea Imalutha
EVP ANG	Executive Vice President of Budget Monitoring Planning Division	Khusnul Mubien

IV. COSTS AND FINANCING

- 11. The project is estimated to cost \$130.0 million (Table 1). The government has requested a loan of \$49.5 million from ADB's ordinary capital resources to help finance the project. The OCR loan will have a loan term of 20-years, including a grace period of 3 years, and a repayment based on 5% annuity payment. The loan will have an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, and a commitment charge of 0.15% per annum and such other terms and conditions set forth in the draft loan and project agreements. The government has provided ADB with (i) the reasons for its decision to borrow under ADB's LIBOR-based lending facility based on these terms and conditions and (ii) an undertaking that these choices were its own independent decision and not made in reliance on any communication or advice from ADB.
- 12. The Agence Française de Développement (AFD) will cofinance the project with a loan of \$49.5 million, at an interest rate in United States dollar equivalent to EURIBOR plus 30 basis points and a term of 15 years including a grace period of 5 years. PLN will finance the balance of \$18.8 million and Government will finance about \$10.2 million. The Government will enter into a subsidiary loan agreement with PLN to relend the \$99 million on terms and conditions satisfactory to ADB and AFD. ADB will partially administer the AFD loan in regard to procurement, recruitment of consultants, and disbursement in accordance with a cofinancing agreement to be signed. The Multi-Donor Clean Energy Fund under the Clean Energy Financing Partnership Facility Grant (CEF under CEFPF) will provide a cofinancing grant equivalent to \$2 million for the "Access to Power" component to be administered by PLN. The Multi-Donor Clean Energy Fund under the CEFPF is administered by ADB.

Table 1: Project Investment Plan

(\$million)

Item	Amount
A. Base Cost ^a	
1. Substation 275kV	17.70
2. Transmission Line 275 kV	20.24
3. Expansion of Existing Grid 150kV SS + lines	59.57
4. Environment and Social Mitigation	5.73
5. Consulting Services	1.72
Subtotal (A)	104.96
3. Increasing Access to Power	3.80
Subtotal (B)	3.80
C. Contingencies ^b	1.55
Subtotal (C)	1.55
D. Financial Charges During Implementation ^c	4.50
Subtotal (D)	4.50
E. Taxes	11.50
Subtotal (E)	11.50
Total	126.32

^a Based on loan reallocation approved on 10 September 2019

b Remaining contingencies after loan reallocation
c Includes interest during construction and commitment charges. Interest during construction for ADB loan has been computed at the 5-year London interbank offered rate fixed swap rate plus a spread of 0.4%. Commitment charges for the ADB loan are 0.15% per year to be charged on the undisbursed loan amount. Transportation and insurance cost may be financed by ADB/AFD/CEFPF funds Source: Asian Development Bank Estimates

A. Detailed Cost Estimates by Expenditure Category

	1000'	IDR	Total —	USE)	Total
	Local	Foreign	Total	Local	Foreign	lotai
A. Investment Costs						
1. Civil Works	193,984,739	-	193,984,739	20,413,000	-	20,413,000
2. Equipment	130,224,996	518,706,365	648,931,361	13,703,567	54,583,433	68,287,000
3. Environment and Social Mitigation	54,452,190	-	54,452,190	5,730,000	-	5,730,000
4. Consultants	6,942,311	12,063,689	19,006,000	730,539	1,269,461	2,000,000
Subtotal (A)	- 385,604,236	530,770,054	916,374,290	40,577,106	55,852,894	96,430,000
B. Access to energy	-	-				
Distribution Line	8,600,215	8,600,215	17,200,430	905,000	905,000	1,810,000
2. Connection Equipment and Works	5,844,345	5,844,345	11,688,690	615,000	615,000	1,230,000
3. Consulting Services	1,187,875	1,187,875	2,375,750	125,000	125,000	250,000
Subtotal (B)	15,632,435	15,632,435	31,264,870	1,645,000	1,645,000	3,290,000
	-	-				
C. Contingencies	-	-				
1. Physical	57,236,176	50,052,694	107,288,870	6,022,959	5,267,041	11,290,000
2. Price	26,183,523	2,230,447	28,413,970	2,755,290	234,710	2,990,000
Subtotal (C)	83,419,699	52,283,141	135,702,840	8,778,249	5,501,751	14,280,000
	-	-				
	-	-				
D. Financial Charges During Implementa	-	42,763,500	42,763,500	-	4,500,000	4,500,000
Subtotal (D)	-	42,763,500	42,763,500	-	4,500,000	4,500,000
Total Project Cost (A+B+C+D)	484,656,370	641,449,130	1,126,105,500	51,000,355	67,499,645	118,500,000
Tax	43,191,135	66,093,365	109,284,500	4,545,000	6,955,000	11,500,000
	-	-	100,201,000	.,5 .5,500	3,333,330	,
Grand total	527,847,505	707,542,495	1,235,390,000	55,545,355	74,454,645	130,000,000

B. Allocation and Withdrawal of Loan and Grant Proceeds

13. In Loan/Grant Agreement, the Schedule entitled 'Allocation and Withdrawal of Loan/Grant Proceeds' normally contains both narrative paragraphs and the 'Table of Allocation and Withdrawal of Loan Proceeds'. In this case copy only the table into this section. If a table is not provided then copy the narrative description to this section.

ADB Loan

	ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS (Strengthening West Kalimantan Power Grid Project)												
	CATEGORY ADB FINANCING												
Number	Item	Total Amoun For ADB F (\$)	inancing	Percentage and Basis for Withdrawal from the Loan Account									
		Category	Subcategory										
1	Works	16,657,556.65											
1A	275 kV Line		3,490,549.04	50% of total expenditure*									
1B	Bengkayang Substation		2,224,006.38	50% of total expenditure*									
1C	150 kV Lines		4,200,000.00	50% of total expenditure*									
1D	Ngabang and Tayan Substations		805,000.00	50% of total expenditure*									
1E	Tayan-Sanggau-Sekadau Substation (Frontload) ¹		1,850,000.00	100% of total expenditure*									
1F	Tayan-Sanggau-Sekadau Line - Advance		418,466.23	50% of total expenditure*									
1G	Tayan-Sanggau-Sekadau Line – Progress (Frontload) ²		3,669.535.00	100% of total expenditure*									
2	Equipment	31,980,535.15											
2A	275 kV Line		6,668,091.71	50% of total expenditure*									
2B	Bengkayang Substation		6,641,937.31	50% of total expenditure*									
2C	150 kV Lines		7,600,000,00	50% of total expenditure*									
2D	Ngabang and Tayan Substations		1,705,000.00	50% of total expenditure*									
2E	Tayan-Sanggau-Sekadau Substation (Frontload) ³		2,678,000.00	100% of total expenditure*									
2F	Tayan-Sanggau-Sekadau Line - Advance		681,047.74	50% of total expenditure*									
2G	Tayan-Sanggau-Sekadau Line – Progress (Frontload) ⁴		6,033,458.39	100% of total expenditure*									
3	Consulting Service	861,908.20		50% of total expenditure*									
	Total	49,500,000.00											

^{*} Exclusive of taxes and duties imposed within the territory of the Borrower.

¹ Frontloading is applied: (1) Up to and on 30 June 2018: AFD loans (100%); (2) beyond 30 June 2018 up to 30 November 2019: (a) ADB loans (100%), then (b) PLN budget (100%).

² Frontloading is applied: (1) Up to and on 30 June 2018: AFD loans (100%); (2) beyond 30 June 2018 up to 30 November 2019: (a) ADB loans (100%), then (b) PLN budget (100%).

³ Frontloading is applied: (1) Up to and on 30 June 2018: AFD loans (100%); (2) beyond 30 June 2018 up to 30 November 2019: (a) ADB loans (100%), then (b) PLN budget (100%).

⁴ Frontloading is applied: (1) Up to and on 30 June 2018: AFD loans (100%); (2) beyond 30 June 2018 up to 30 November 2019: (a) ADB loans (100%), then (b) PLN budget (100%).

AFD LOAN

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS (Strengthening West Kalimantan Power Grid Project)

	CATEGO	AFD FINANCING		
Number	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			Percentage and Basis for Withdrawal from the Loan Account
		Category	Subcategory	
1	Works	16,557,000		
1A	275 kV Line		3,520,000	50% of total expenditure*
1B	Bengkayang Substation		2,260,000	50% of total expenditure*
1C	150 kV Lines		4,600,000	50% of total expenditure*
1D	Ngabang and Tayan Substations		805,000	50% of total expenditure*
1E	Tayan-Sanggau-Sekadau Substation (Frontload) ⁵		1,772,000	100% of total expenditure*
1F	Tayan-Sanggau-Sekadau Line - Advance		430,000	50% of total expenditure*
1G	Tayan-Sanggau-Sekadau Line – Progress (Frontload) ⁶		3,170,000	100% of total expenditure*
2	Equipment	32,023,000		
2A	275 kV Line		6,700,000	50% of total expenditure*
2B	Bengkayang Substation		6,640,000	50% of total expenditure*
2C	150 kV Lines		7,800,000	50% of total expenditure*
2D	Ngabang and Tayan Substations		1,705,000	50% of total expenditure*
2E	Tayan-Sanggau-Sekadau Substation (Frontload) ⁷		2,678,000	100% of total expenditure*
2F	Tayan-Sanggau-Sekadau Line - Advance		700,000	50% of total expenditure*
2G	Tayan-Sanggau-Sekadau Line – Progress (Frontload) ⁸		5,800,000	100% of total expenditure*
3	Consulting Service	920,000		50% of total expenditure*
	Total	49,500,000		

^{*} Exclusive of taxes and duties imposed within the territory of the Borrower.

⁵ Frontloading is applied: (1) Up to and on 30 June 2018: AFD loans (100%); (2) beyond 30 June 2018 up to 30 November 2019: (a) ADB loans (100%), then (b) PLN budget (100%).

⁶ Frontloading is applied: (1) Up to and on 30 June 2018: AFD loans (100%); (2) beyond 30 June 2018 up to 30 November 2019: (a) ADB loans (100%), then (b) PLN budget (100%).

⁷ Frontloading is applied: (1) Up to and on 30 June 2018: AFD loans (100%); (2) beyond 30 June 2018 up to 30 November 2019: (a) ADB loans (100%), then (b) PLN budget (100%).

⁸ Frontloading is applied: (1) Up to and on 30 June 2018: AFD loans (100%); (2) beyond 30 June 2018 up to 30 November 2019: (a) ADB loans (100%), then (b) PLN budget (100%).

	ALLOCATION AND WITHDRAWAL OF GRANT PROCEEDS								
	(Access to Power: Reve	olving Fund f	or New Conne	ection)					
	CATEGORY	ADB FINANCING BASIS							
		nt Allocated Financing	Percentage of ADB Financing from the						
Number	Item		\$	Grant Account*					
		Category	Subcategory						
1	Main Equipment (change to Equipment and installation)	1,950,000							
1A	Equipment		1,500,000	100 percent of total expenditure*					
1B	Installation		450,000	100 percent of total expenditure*					
2	Consulting Services (Training and Awareness Building)	50,000		100 percent of total expenditure*					
	Total	2,000,000							

^{*} Exclusive of local taxes and duties

C. Detailed Cost Estimates by Financier (\$ million)

	ADE	3	Α	FD	CE	FPF	PI	LN	Gover	nment	Total Cost	Taxes	and Dutie	ès .
		% of Cost												
	Amount	Category		PLN	Govt.	Total								
A. Investment Costs														
1. Civil Works	16.66	50%	10.80	33%	_	0%	5.66	17%	_	0%	33.11	_	2.04	2.04
2. Equipment	31.98	50%	27.10	42%	_	0%	5.32	8%	_	0%	64.40	_	6.83	6.83
3. Environment and Social Mitigation	_	0%	_	0%	_	0%	5.73	100%	_	0%	5.73	0.39	_	0.39
4. Consultants	0.86	50%	0.86	50%	_	0%	_	0%	_	0%	1.72	_	0.20	0.20
Subtotal (A)	49.50	47%	38.76	37%	_	0%	16.71	16%	_	0%	104.96	0.39	9.07	9.46
B. Access to energy							1.80				1.80			-
1. Distribution Line	_	0%	_	0%	1.95	100%		0%	_	0%	1.95	0.12	_	0.12
2. Connection Equipment and Works	_	0%	_	0%	_	0%		0%	_	0%	_	0.08	_	0.08
3. Consulting Services	_	0%	_	0%	0.05	0%		0%	_	0%	0.05	0.03	_	0.03
Subtotal (B)	_	0%	_	0%	2.00	53%	1.80	47%	_	0%	3.80	0.23	_	0.23
B. Contingencies							1.55				1.55			
1. Physical	_	0%	_	0%	_	0%		0%	_	0%	_	0.27	1.01	1.28
2. Price	_	0%	_	0%		0%		0%	_	0%	_	0.18	0.12	0.30
Subtotal (B)	_	0%	_	0%	_	0%	1.55	100%	_	0%	1.55	0.45	1.13	1.58
									_					
C. Financial Charges During Implementation	_	0%	_	0%	_	0%	4.50	100%	_	0%	4.50	_	_	_
Total Project Cost (A+B+C)	49.50	43%	38.76	34%	2.00	2%	24.56	21%	_	0%	114.82	_	<u> </u>	_
Тах	_	0%	_	0%	_	0%	1.30	11%	10.20	89%	11.50	_	_	_
Grand total	49.50	39%	38.76	31%	2.00	2%	25.86	20%	10.20	8%	126.32	1.30	10.20	11.50

ADB = Asian Development Bank, AFD = Agence Française de Développement, CEFPF = Clean Energy Financing Partnership Facility, PLN = PT (Persero) Perusahaan Listrik Negara

Source: ADB Staff and PLN Estimates

D. Detailed Cost Estimates by Outputs/Components

			Outp	out 1			Outp	put 2			Out	out 3		Ou	tput 4		gencies, I Charges
	Total Cost	275 k\	-	Bengkay	_	150kV		Ngabang, S	S	150kV		Tayan Ext, Sekad	lau SS	Access t		du: Implemen	ring tation, and xes
		Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs																	
1. Civil Works	33.11	6.95	30.62%	4.46	24.48%	8.31	30.19%	1.54	29.07%	7.80	37.00%	4.06	39.93%				
2. Equipment	64.40	13.29	58.58%	13.24	72.67%	15.19	55.17%	3.30	62.23%	13.27	63.00%	6.10	60.07%				
Environment and Social Mitigation	5.73	2.02	8.90%	0.09	0.49%	3.6	13.08%	0.03	0.57%	0	0.00%	0.00	0.00%				
4. Consultants	1.72	0.43	1.90%	0.43	2.36%	0.43	1.57%	0.43	8.13%	0	0.00%	0.00	0.00%				
Subtotal (A)	104.96	22.69	100.00%	18.22	100.00%	27.53	100.00%	5.30	100.00%	21.07	100.00%	10.16	100.00%				
B. Access to energy																	
Distribution Line	1.95													1.95	51.32%		
Connection Equipement and Works	0.00													0	0.00%		
Consulting Services	0.05													0.05	1.32%		
4. PLN Financing	1.80													1.8	47.37%		
Subtotal (B)	3.80													3.80	100.00%		
C. Contingencies	1.55															1.55	100%
D. Financial Charges During Implementation	4.50															4.5	
Total Project Cost (A+B+C+D)	114.82	22.69		18.22		27.53		5.30		21.07		10.16		3.8		6.05	
Тах	11.5															11.5	
Grand total	126.32	22.69		18.22		27.53		5.30		21.07		10.16		3.80		17.55	

E. Detailed Cost Estimates by Year

Item	Total	Year 1	(2013)	Year 2	(2014)	Year 3	(2015)	Year 4	4 (2016)
		Amount	% of Cost Category						
A. Investment Costs									
1. Civil Works	20.41	9.53	20.5%	9.93	21.8%	0.95	22.4%	0.01	0.2%
2. Equipment	68.29	31.89	68.7%	33.21	73.0%	3.15	74.8%	0.03	0.8%
3. Environment and Social Mitigation	5.73	4.58	9.9%	1.15	2.5%	0.00	0.0%	0.00	0.0%
4. Consultants	2.00	0.40	0.9%	1.20	2.6%	0.12	2.8%	0.28	6.6%
Subtotal (A)	96.43	46.41	100.0%	45.48	100.0%	4.22	100.0%	0.32	7.6%
B. Access to energy	3.29			2.47		0.82			
Subtotal (B)	3.29	0.00		2.47		0.82		0.00	
C. Contingencies									
1. Physical	11.30	5.28		5.50		0.53		0.00	
2. Price	2.97	1.39		1.44		0.14		0.00	
Subtotal (C)	14.27	6.66		6.94		0.67		0.00	
D. Financial Charges During Implementation									
1. IDC	4.51	1.35		1.80		0.90		0.45	
Subtotal (D)	4.51	1.35		1.80		0.90		0.45	
Total Project Cost (A+B+C+D)	118.50	54.42		56.69		6.61		0.77	
Тах	11.50	5.28		5.50		0.64		0.08	
Grand total	130.00	59.70		62.19		7.25		0.85	

F. Contract and Disbursement S-curve

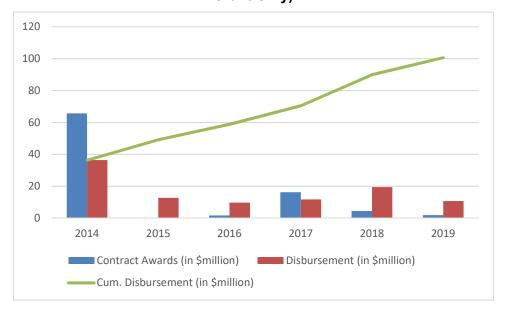
14. **Figure 1** shows contract awards and disbursement for the ADB Loan portion over the life of the project and grant (combined), and annually based on the contract awards and disbursement projections. **Figure 2** presents contract awards and disbursement for both the ADB and AFD Loans portion over the life of the project and grant (combined). The amounts indicated do not include the contingencies or unallocated and financial charges during implementation. The projections will be reviewed on a yearly basis during the implementation period.

Disbursement (in \$million) Contract Awards (in \$million) Cum. Disbursement (in \$million)

Figure 1: Contract Awards and Disbursement S-Curve (ADB loan and CEFPF Grant Only)

	In \$ Million								
Year	Contract Awards	Cum CA	Disbursement	Cum. Disbursement					
2014	33.85	33.85	18.19	18.19					
2015	0	33.85	6.36	24.55					
2016	1.66	35.51	5.71	30.26					
2017	9.35	44.86	3.17	33.43					
2018	4.45	49.31	7.03	40.46					
2019	1.85	51.16	10.7	51.16					

Figure 2: Contract Awards and Disbursement S-Curve (ADB and AFD Loan and CEFPF Grant Only)

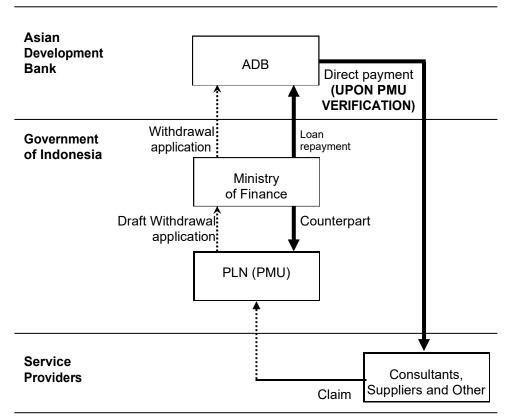


	In \$ Million							
Year	Contract Awards	Cum CA	Disbursement ⁹	Cum. Disbursement				
2014	65.7	65.7	36.38	36.38				
2015	0	65.7	12.72	49.10				
2016	1.66	67.36	9.76	58.86				
2017	16.26	83.62	11.69	70.55				
2018	4.45	88.07	19.41	89.96				
2019	1.85	89.92	10.7	100.66				

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⁹ AFD disbursement is frontloaded up to 30 June 2018

G. Fund Flow Diagram



flow of funds
PAYMENT REQUEST

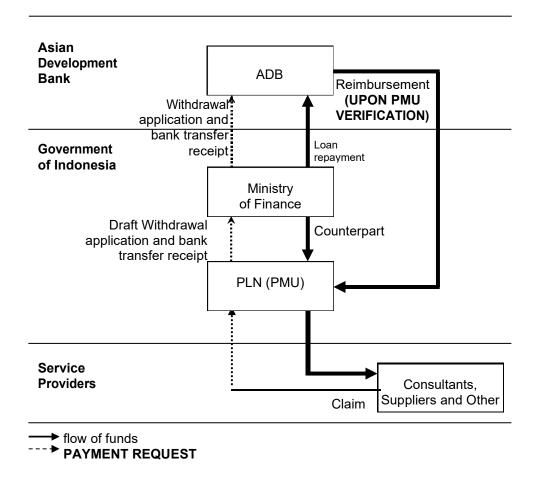


Figure: Reimbursment for Retroactive Financing

V. FINANCIAL MANAGEMENT

15. The following reflect the project's specific financial management arrangements.

A. Financial Management Assessment

16. PLN has a special project implementation office in each geographical region including West Kalimantan, which is commonly referred as Project Implementation Unit (PLN UPK). PLN UPK has finance, budget, accounting, and revenue control divisions with experienced staff. Each unit has computerized enterprise resource planning systems to control financial management, budget planning, and human resource management, and produces branch annual financial statements and budget reports. The financial reports include the balance sheet, profit and loss reports, and cash-flow reports. All the report and activities are regularly audited by PLN internal auditors, external auditors, and state auditors. The financial management system and PLN UPK staff are considered adequate for accounting purposes. However, it is recommended that implementation consultants support PLN finance and accounting staff to follow ADB's requirements and procedures for preparing withdrawal applications and maintaining project accounts, because PLN UPK staffs have limited experience in implementing ADB projects.

B. Disbursement

- 17. The ADB and AFD loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2012, as amended from time to time), ¹³ and detailed arrangements agreed upon between the Government and ADB. Pursuant to ADB's Safeguard Policy Statement (2009) (SPS), ¹⁴ ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 (page 76) of the SPS. All financial institutions will ensure that their investments are in compliance with applicable national laws and regulations and will apply the prohibited investment activities list to subprojects financed by ADB. Disbursements including payments to consultants, contractors, and suppliers of the main procurement packages, will generally be made by direct payment.
- 18. Before the submission of the first withdrawal application, the Government should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is US\$100,000, unless otherwise approved by ADB. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services were produced in or from ADB members, and are eligible for ADB financing.
- 19. The project is cofinanced by AFD and ADB is partially administering AFD loan. For the AFD loan, the EA should simultaneously submit two WAs (one to ADB and one to AFD for their records) for AFD financing. ADB will review the WA, and advise AFD to execute the payment.
- 20. For the CEFPF grant, grant proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2012)¹⁵.

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

¹⁴ Available at: http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf

¹⁵ ADB. 2010. TA Disbursement Handbook. Manila.

C. Accounting

21. The Government and PLN will maintain separate books and records by funding source for all expenditures incurred on the Project. Each of PLN's regional offices will also maintain separate records and will submit annual financial statements to PLN for consolidation. Project financial statements will be prepared in accordance with internationally acceptable accounting principles and practices and in accordance with PSAK or Indonesian generally accepted accounting principles. In addition, to the project financial statements, PLN will provide to ADB a copy of its annual consolidated financial statements prepared in accordance with International Financial Reporting Standards or national equivalent.

D. Auditing

- 22. PLN will cause the consolidated project financial statements to be audited in accordance with auditing standards acceptable to ADB by an independent auditor acceptable to ADB. The audited project financial statements will be submitted, in English, within six months of the end of the fiscal year to ADB and AFD.
- 23. The Independent auditor will provide an audit management letters 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 and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; (iv) compliance with the imprest fund procedure; and (v) compliance with use of the SOE procedure certifying (a) to the eligibility of those expenditures claimed under SOE procedures, and (b) proper use of the procedure in accordance with ADB's Loan Disbursement Handbook and the project documents.
- 24. PLN's audited consolidated financial statements will be provided to ADB within one month of their approval by the relevant authority.
- 25. The Government and PLN have been made aware of ADB's Public Communication Policy (2011) and that the consolidated Audited Project Financial Statements (including audit opinion, financial statements and accompanying notes) will be disclosed within 30 calendar days of receipt by ADB.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

26. All advance contracting will be undertaken in conformity with ADB's *Procurement Guidelines* (April 2010, as amended from time to time) (ADB's *Procurement Guidelines*)¹⁶ and ADB's *Guidelines on the Use of Consultants* (April 2010, as amended from time to time).¹⁷ The issuance of invitations for bid under advance contracting will be subject to ADB's prior approval. The borrower has been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the Project. AFD has approved its retroactive financing facility for PLN under this Project. Four international competitive bidding packages have been bid out in August 2012 and ADB has issued no objection for three of the four bids as of 7 March 2013 with a total value of about \$68 million.

Available at: http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf

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

27. In the case of retroactive financing, withdrawals from the Loan Account may be made for reimbursement, it will cover all eligible expenditures under equipment, civil works, and Consulting Services to be procured under the Project, the equivalent of 20% of the total ADB loan of \$49.5 million, incurred before loan effectiveness, but not more than 12 months before the signing of the loan agreement. Same retroactive financing provisions will be included in the AFD loan.

B. Procurement of Goods, Works and Consulting Services

- 28. All procurement of goods and works will be in accordance with ADB's *Procurement Guidelines* (2010, as amended from time to time). Civil works will be procured through international competitive bidding (ICB) procedures for packages exceeding \$10,000,000 equivalent, and through NCB procedures acceptable to ADB for packages up to and including \$10,000,000 equivalent. Goods will be procured through ICB procedures for packages exceeding \$1,000,000 equivalent, and through NCB procedures acceptable to ADB for packages up to and including \$1,000,000 equivalent. For packages of \$100,000 equivalent or less, shopping may be used.
- 29. Before the start of any procurement under NCB procedure, ADB and the Government will review the public procurement laws of the central and state governments to ensure consistency with ADB's *Procurement Guidelines*.
- 30. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.
- 31. All consultants will be recruited according to ADB's *Guidelines on the Use of Consultants* ¹⁰The terms of reference for all consulting services are detailed in Section D. Consulting services will include 206 person-months (28 person-months international, and 178 person months national) for project implementation support. Consultants will be selected through ADB's quality and cost-based selection (QCBS) method with a standard quality cost ratio of 80:20. ADB approved advance action on procurement.

C. Procurement Plan

32. Please use this link to see the updated Procurement Plan in ADB website.

D. Consultant's Terms of Reference

1. Scope of Services for Project Implementation Consultants (Firm)

33. An international team of consultants (firm consultant) and individual consultants will be responsible for PT PLN Persero, the Executing Agency (EA) to develop and implement a comprehensive project management plan to ensure the most efficient, timely, and economical implementation of the Strengthening the West Kalimantan Power Grid Project (the Project). This plan should take into consideration the engineering technology required, the resources and costs involved, and the critical time frame for completion of the Project.

36

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/

- 34. The consultants will be responsible during the implementation phase, including making recommendations for testing, and commissioning of all components of the Project.
- 35. The project will have three outputs: (i) construction of about 83 km of 275 kV double-circuit transmission line between Bengkayang and the border with Sarawak, with a new 275/150/20 kV substation in Bengkayang; (ii) construction of about 145 km of 150 kV double-circuit Bengkayang–Ngabang–Tayan distribution line, with a new 150/250kV substation in Ngabang and a four-line distribution feeder extension for the 150 kV Tayan substation and Bengkayang substation; and (iii) new connections to 8,000 households in West Kalimantan.

a. Pre-construction Phase

36. The consultants will have the following pre-construction responsibilities:

Along with preparation of the final detailed design, reviewing the changes in design affecting the resettlement plans (RP) and environmental management plan (EMP); assessing whether a new affected person (AP) census and impacts assessment is needed; and updating the RP detailing appropriate and possibly additional compensation entitlements fitting ADB's Safeguard Policy Statement (2009) requirements, impact figures, and costs accordingly; ensuring that the approval of the contractor's contract is preceded by the review/update of the RPs. In addition, ensuring that no construction takes place before the compensation program detailed by the RPs is fully implemented and ADB provides no-objection to contractors' mobilization.

b. Construction Phase

- 37. The firm consultants will have the following responsibilities in the construction phase:
 - (i) Preparing a project implementation manual covering the project organization, payment procedures, and project time schedule and quality insurance program. The consultant will also establish a computerized project monitoring program using off-the-shelf software packages.
 - (ii) Preparing the overall disbursement plan, monitoring costs, and maintaining project accounts.
 - (iii) Reviewing and approving the engineering design drawings, calculations, delivery program, and documents submitted by the contractors and provide PLN with technical advice.
 - (iv) Monitoring the execution of the Project in line with the project time schedules and the work programs provided by the contractors.
 - (v) Advising the EA and seeking approval from ADB for any variation orders to be issued to the contractors.
 - (vi) Identifying any problem areas during project implementation, proposing remedial actions, and promptly reporting any outstanding issues to the EA.
 - (vii) Conducting field visits at regular and appropriate times during construction testing and commissioning. For the transmission line, the consultant will organize for coordination purposes a joint meeting with the Malaysian counterparts at regular intervals.
 - (viii) Advising the EA on any contractual or technical disputes that may arise between contractors and the EA during the implementation phase.
 - (ix) Providing advice and support to the EA for the settlement of contractor claims.

In line with the work programs of the contractors, preparing and advising the EA 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. The consultant will give special attention to minimizing as much as possible the impact of the outages in the supply of power. Considerations such as seasonal or weekly constraints will have to be taken into account. The consultant should hold periodic meetings with PLN Wilayah Kalimantan Barat for this purpose.

- (x) Coordinating safety measures between live components in operation and components under rehabilitation. Giving advice and when required training to the EA on safety planning and safety measures.
- (xi) Witnessing performance tests within the framework of the contracts.
- (xii) Reviewing and approving the calculations for protection settings submitted by the contractor.
- (xiii) Reviewing and approving the commissioning test reports submitted by the contractors; attending the commissioning phase; establishing the list of deficiencies after commissioning; and preparing a time frame for the contractor to remedy the deficiencies, establishing a monitoring program for the use of the EA.
- (xiv) Reviewing and approving the as-built drawings and operation and maintenance manuals.
- (xv) Preparing and issuing the provisional acceptance certificate for the works as well as for the spare parts; preparing the final taking over certificate along with the final payments to be issued by the EA after the end of the warranty period and the remedy of all deficiencies.
- 38. **Project Administration**. During project implementation, in addition to providing on-the-job training to the EA in the fields of procurement, contract management, technical, environmental, and social issues, the Firm consultant will do the following:
 - (i) Keep records of all correspondence between the EA, contractors, the consultant, ADB and other co-financiers.
 - (ii) Keep records of any disbursement under the Project. Prepare and update on a regular basis the forecast disbursement schedule.
 - (iii) Develop and implement applicable procedures required to ensure adequate control of the manufacturing, factory tests, delivery, and acceptance of the materials and equipment.
 - (iv) Update the overall project disbursement schedule and physical target accomplishment periodically.
 - (v) Prepare and implement an environment monitoring plan on the basis of the initial impact assessment report.
 - (vi) Capacity building for environment and health safety.
 - (vii) Assist with the implementation and, if necessary, periodic revisions of the RPs and ensure that timely reporting on RPs implementation is carried out and included in the quarterly report. Assist the EA and the local government with necessary public consultations. Liaise with EA and local government to ensure that all compensations are paid in a timely manner.
 - (viii) Undertake project monitoring and evaluation during the project implementation.

- (ix) Prepare the project completion report.
- 39. **Reporting**. The Firm consultant will prepare the following reports:
 - (i) Quarterly progress reports that will include but not limited to: (a) introduction and basic data; (b) utilization of the funds (ADB Loan, co-financing and counterpart funds); (c) project purpose (status of project scope/implementation arrangements; assessment of changes in the key assumptions and risks; etc.); (d) implementation progress; (e) compliance with the loan covenants; (f) social and environmental reports; (g) grant reports; and (h) major project issues and problems.
 - (ii) Annual projections in terms of contract award and forecast disbursement.
 - (iii) Design report.
 - (iv) EA's Project completion report.
- 40. **Implementation arrangements**. The EA will provide counterpart staff, office space, including telephone and internet connection and office furniture. The consultant will have to bear all other costs such as local travel and accommodation.
- 41. The consultant will purchase under its contracts 1 computer, printer- scanner photocopier; and one camera that will be used for the purpose of the project. The consultants will have the full responsibility of the operation and maintenance of these equipments. The equipment will be handed over to the EA at the end of the project.
- 42. The project will be implemented over a period of 67 months and the 275 kV transmission lines and substations are expected to be commissioned by 30 November 2019.
- 43. A total of 206 person-months (28 person-months of international and 178 person-months of national consultants) are required.

44. International consultants

- (i) Team Leader/ Transmission Line Engineer (16 Person months)
 □ To provide guidance, instruction, coordination, direction and report for the purpose of achieving the project.
 □ To review and approve the commissioning test reports submitted by the contractors about the system design; To review and approve the as-built transmission line drawings and operation-maintenance manual.
- (ii) HV Substation Engineer (8 Person months)

 To review and approve the commissioning test reports submitted by the contractors about the HV Substation design; To review and approve the as-built HV Substation drawings and operation-maintenance manual.
- (iii) Automation and Telecommunication Specialist (2 Person months)

 To review and approve the commissioning test reports submitted by the contractors about the Automation and Telecommunication design; To review and approve the calculations for protection settings submitter by the contractor.

(iv) Structural Engineer (2 Person months)

To review and approve the commissioning test reports submitted by the contractors about the Structures Engineering design, and Construction Engineering; To review and approve the as-built Structures drawings and operation-maintenance manual.

45. National consultant

(i)	Deputy Team Leader/ Transmission Line Engineer	(24 Person months)
(ií)	HV substation Engineer 1	(16 Person months)
(iii)	HV substation Engineer 2	(15 Person months)
(iv)	Civil Engineer 1	(12 Person months)
(v)	Civil Engineer 2	(11 Person months)
(vi)	Protection and Telecommunication Specialist 1	(12 Person months)
(vii)	Protection and Telecommunication Specialist 2	(11 Person months)
(viii)	Structural Engineer 1	(12 Person months)
(ix)	Structural Engineer 2	(11 Person months)
(x)	Social and Resettlement Specialist	(18 Person months)
(xi)	Environmental Specialist	(16 Person months)
(xii)	Health and Safety Specialist	(16 Person months)
(xiii)	Carbon Credit Specialist	(4 Person months)

A requirement for all the experts is to have minimum 5 years' experience in their expertise.

46. **Specialist Services**. Specific terms of reference are detailed for Carbon Credit Specialist and Social and Resettlement Specialist.

a. Carbon Credit Specialist

(6 person-months over 12 months, national). The responsibilities for the CDM Specialist shall include:

- (i) Collection and analysis of data and information to evaluate the potential of the project to quality for certified emissions credits (CERs) under the UNFCCC's CDM or other GHG emission trading mechanisms.
- (ii) Identify and assess in detail the baseline and monitoring methodology applicable for the project as required.
- (iii) Preparation of the Prior Consideration of CDM form, Project Idea Note (PIN), Project Design Document (PDD) including estimation of emission reductions, establishing of the baseline, determination of applicable methodology, demonstration of additionality, preparation of monitoring plan, etc.
- (iv) Explore the possibility to sell carbon credits under some other international GHG emission reduction scheme.

b. Social and Resettlement Specialist

The purpose of the consultancy is to assist PLN in complying with ADB's social safeguard requirements in the delivery of the Strengthening the West Kalimantan Power Grid project.

The consultants will have qualifications in social sciences and have a minimum of 10 years experience in resettlement, particularly for resettlement of ADB funded projects. The Consultants must be fluent in written and spoken English.

A total of 9 person-months is required. The consultants will work in PLN (West Kalimantan) offices to ensure appropriate safeguard compliance and coordination and will also spend extensive periods in the field.

The consultant will deliver the following specific tasks:

- (v) To provide guidance to PLN on documentation to meet ADB's social safeguard requirements. In particular, this will involve assisting PLN in the updating of the approved Draft Resettlement Plan, including issues associated with indigenous people.
- (vi) Carry-out awareness raising and capacity building to PLN (West Kalimantan) and local planning and implementation agencies on ADB's social safeguard requirements and procedures as well as the specific requirements of the approved Draft Resettlement Plan.
- (vii) Provide guidance to and supervise the local planning and implementation agencies on implementation of social safeguards to ensure compliance with ADB's social safeguard policy.
- (viii) Review documents to confirm to the PLN that the required standard of reporting is being prepared.
- (ix) Assist PLN to prepare corrective action plans following the due diligence reports, monitoring reports, mission findings and others.
- (x) Advising PLN when social impacts created by contractors are not being effectively managed.
- (xi) Providing a coordinated approach to social impact management for the project.
- (xii) Supervise the implementation of project social safeguard policies by local planning and implementation agencies.
- (xiii) Prepare the progress reports and supervision reports to submit quarterly to the PLN and to ADB.
- (xiv) Prepare the supervision report.

2. Scope of Services for Grant Implementation Consultants (Individual Consultants)

- 47. ADB and PT PLN (Persero), together with the project implementation unit, will implement the Access to Power component which aims to facilitate new household connection for 8,000 households in the project area, especially in the Bengkayang and Sarawak border area.
- 48. Aside from coordinating with PIU on the technical aspects of the low voltage distribution component (financed by PLN), community participation is strongly taken into consideration under this program. Therefore ADB will mobilize individual international and national consultants to conduct the following main tasks: (i) identify new households to be connected; (ii) tender out connection kits and associated equipment; (iii) monitor installation of equipment and

electricity connection new customers. The services will be implemented for 24 months tentatively commencing on October 2013 to September 2015. A detailed term of reference will be refined during the Project Inception Review Mission. It is envisaged that the following specialist will be engaged.

- 49. International consultants include but not limited to the following (total of 10 PM):
 - (i) Team Leader/ Low Voltage Line Engineer (6 PM)
 - (ii) Social/ Community Development Specialist (2 PM)
 - (iii) Environmental Specialist (2 PM)
- 50. National consultants include but not limited to the following (total of 14 PM):
 - (i) Deputy Team Leader / Low Voltage Engineer (8 PM)
 - (ii) Social/ Community Development Specialist (4 PM)
 - (iii) Environmental Specialist (2 PM)
- 51. Researchers for baseline studies as required during the course of the implementation.

2. Summary Procurement Schedule

52. All procurement packages are completed. Please use think link to see the updated Procurement Plan in ADB website.

VII. SAFEGUARDS

A. Environment

1. National requirements: INO

- 53. The AMDAL (Environment Impact Assessment) is required for the 275 kV TL but the Indonesian regulation does not require AMDAL for the 150 kV TL, instead only an Environmental Management Effort and Environmental Monitoring Effort (UKL UPL). The AMDAL has been issued by Ministry of Environment in November 2011.
- 54. The EMP implementation will be carried out by the PLN UIP Kalimantan Barat.
- 55. Public disclosure was held during the study of environmental impact assessment (EIA). The hard copies (in both Bahasa and English) are found at the West Kalimantan BAPEDALDA office.

2. ADB Requirements: SPS 2009

56. This project is classified as Category B for environment based on ADB's SPS which means that the project has no significant environmental impacts and any identified impacts can be mitigated. Hence, this requires only an Initial Environmental Examination (IEE) report for both West Kalimantan and Sarawak and not a full EIA. An integrated IEE report has been

prepared for both West Kalimantan and Sarawak. This unified IEE has been endorsed by PLN and uploaded to the ADB website in August 2011 for package 1-4 and in July 2016 for package 5-7.

B. Resettlement

- 57. The following institutions will be involved in the implementation of Land Acquisition and Resettlement Plan of this project:
 - PT. PLN (Persero) as the project proponent is an agency of the ministry of Energy and Mineral Resources, it is responsible of all the Transmission Project in Indonesia. The PLN unit responsible to coordinate daily implementation of the project is the PLN (Persero) UIP Kalimantan Barat (Unit Induk Pembangunan /Regional Transmission Construction Unit), which is located in Pontianak.
 - Bengkayang Land Acquisition Committee (LAC). This Institution is being requested to be formed by Head of Bengkayang District for land acquisition more than 1 Ha. Once LAC is formed, this institution together with PLN UPK Kalimantan 4 (Unit Pelaksana Konstruksi/Construction Implementation Unit) will focus on validating and updating information on APs and their affected land assets for final LARP update.
 - Non-governmental organizations (independent assessor), will be selected for conducting monitoring of LARP implementation for 275kV TL project and provide an external monitoring report to PLN Hq for any follow up actions required to minimize negative impacts of the project.
 - Internal monitoring will be provided every 6 month for 150kV TL project.

- 58. Procedures of resettlement activities as mentioned in the MOU (Point F. Assurances No.43) should also be mentioned clearly in the Loan Agreement and Legal Opinion.
- 59. The roles of these institutions are summarized in the Table below.

Summary of the Roles of Three Institutions

Institution/Organization	Responsibilities
Social Safeguards Unit within System Planning of PLN HQ Office as the Project Management Unit (PMU)	 Coordination of all LARP activities within the sector project Review of monitoring reports and remedial actions, where necessary Reporting to ADB
Project Office PLN UIP Kalimantan Barat (local PIU)	 Detailed censuses/surveys in association with respective levels of government Obtaining of authorization for land use and house/structure demolition Implementation of all LARP activities for the respective project Special measures for the income and livelihood rehabilitation of APs Public consultation and participation programs Direct negotiation for compensation with APs, if required, assisted by the Land Acquisition Committee (LAC) Witnessing of disbursements of compensation payments to the APs Internal monitoring Internal monitoring and appointment of Independent Institutes for external monitoring of resettlement activities
Independent Assessors	 External monitoring of compensation payments and implementation of resettlement plan Representation of AP interests, if required

VIII. GENDER AND SOCIAL DIMENSIONS

60. The Project has proved beneficial for poverty reduction and income generation. As rural areas usually fall behind in both access to social services and income opportunities, the grid expansion along with development of other infrastructure is expected to boost the local economy and provide additional health, educational and recreational related benefits.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

61. The following sections reflect the Project's specific monitoring, evaluation, reporting, and communications arrangements.

A. Project Design and Monitoring Framework

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
Impact	By 2020:		Assumptions
Sustainable power supply in West Kalimantan	Expanded distribution grid sustaining power supply. Carbon dioxide emission in	PLN's annual report	The oil price will not drop significantly from its current level of about \$110 per barrel in the
	Borneo generated from fossil fuel based power production is reduced by 400,000 tons each year.	Project monitoring reports prepared by consultants and PLN	medium term.
	roo,ooo tana saani year.	Based on PLN's annual report data: oil power generation installed in 2011 against actual in 2020.	
Outcome	By 2016:		Assumption
Cost of operating West Kalimantan power system reduced	In West Kalimantan, PLN's average cost of generation reduced to \$0.18/kWh (2009 baseline: \$0.25/kWh)	Electricity statistics published by PLN	PLN will use only some of the existing oil-based rented power generation as standby peak generation.
	Power interconnection capacity of 230 MW established	PLN's annual reports	Risk
			The oil price increases beyond \$150 per barrel, which may affect PLN's investment plans and counterpart funding.
Outputs			Risks
Construction of Sarawak-West Kalimantan interconnection network.	About 83 km of 275 kV double-circuit transmission line between Bengkayang and the Sarawak border completed by 2014	Project progress reports and consultant's reports ADB team's site inspection reports	Unforeseen delays related to land acquisition
	275/150/20 kV substation in Bengkayang completed by 2014		Consumers not accepting proposed business model for new connections despite
2. Construction of new transmission network in West Kalimantan (Bengkayang-	150/20 kV substation in Ngabang and four-line feeder extension in 150 kV Tayan substation and Bengkayang substation completed by 2015	Project progress reports and consultant's reports ADB team's site inspection reports	wide consultation
Ngabang- Tayan)	About 145 km of 150 kV double-circuit transmission line between Bengkayang–		

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	Ngabang–Tayan completed by 2015		
3. Construction of new transmission network in West Kalimantan (Tayan-Sanggau-Sekadau)	150/20 kV substation in Sanggau and Sekadau and extension of 150 kV Tayan substation completed by 2019 About 119.43 km of 150 kV double-circuit transmission line between Tayan- Sanggau-Sekadau	Project progress reports and consultant's reports ADB team's site inspection reports	
4 . New connections	completed by 2019.		
to households	About 8,000 new		
in West	households connected to		
Kalimantan	electricity network by 2016 (2010 baseline: 518,412)		

Activities with Milestones

Construction of Sarawak-West Kalimantan interconnection network

- 1.1 Tender out two turnkey packages for (i)
 Bengkawang substation, and (ii) 275 kV
 transmission link with bid evaluation report
 approved by March 2013
- 1.2 Have turnkey contract signed by June 2013
- 1.3 Have equipment delivered and transmission line installed by September 2014
- 1.4 Complete and commission transmission network with substation by December 2014

2. Construction of new transmission network in West Kalimantan (Bengkayang-Ngabang-Tayan)

- 2.1 Tender out two turnkey packages for (i) 150 kV transmission line and (ii) new 150/20 kV Ngabang substation and 150 kV Tayan substation (extension) with bid evaluation reports approved by March 2013
- 2.2 Have turnkey contract signed by June 2013
- 2.3 Have equipment delivered and transmission line installed by October 2014
- 2.4 Complete and commission transmission network and substations by March 2015

3. Construction of new transmission network in West Kalimantan (Tayan-Sanggau-Sekadau)

- 3.1 Tender out three turnkey packages for (i) 150 kV transmission line (Tayan-Sanggau); (ii) 150 kV transmission line (Sanggau-Sekadau) and (iii) new 150/20 kV Sanggau and Sekadau substations and 150 kV Tayan substation (extension) with bid evaluation reports approved by November 2016.
- 3.2 Have turnkey contract signed by November 2016.

Inputs

ADB: \$49.50 million Civil works: \$16.66 million

Equipment: \$31.98 million Consultants: \$0.86 million

Agence Française de Développement: \$38.76 million

Civil works: \$10.80 million Equipment: \$27.10 million Consultants: \$0.86 million

PLN: \$25.86 million

Environmental and social mitigation:

\$5.73 million

Civil works (Tayan-Sanggau-Sekadau):

\$5.66 million

Equipment (Tayan-Sanggau-Sekadau):

\$5.32 million

Increasing Access to Power: \$1.8 million

Contingencies: \$1.55 million Financial charges during implementation: \$4.50 million

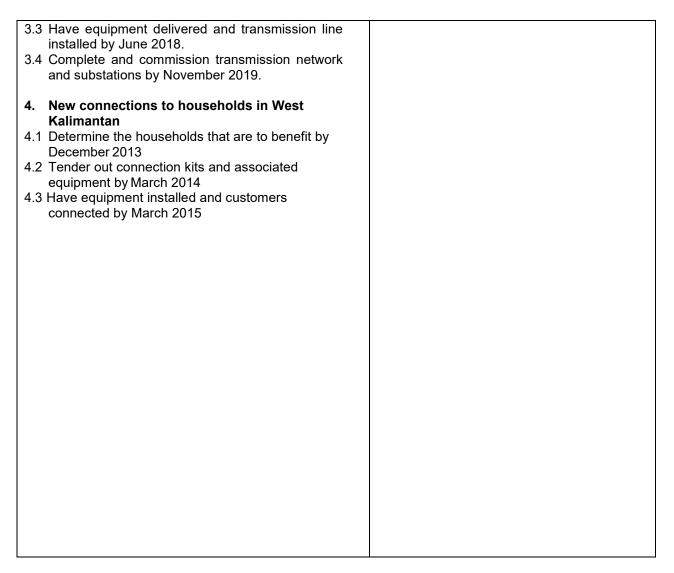
Tax: \$1.30 million

Government of Indonesia: \$10.20 million

Tax: \$10.20 million

Multi Donor Clean Energy Fund under the Clean Energy Financing Partnership Facility: \$2.00 million

Access to energy: \$2.00 million



ADB = Asian Development Bank, AFD = Agence Française de Développement, CDM = Clean Development Mechanism, CEF= Clean Energy Fund, CEFPF = Clean Energy Financing Partnership Facility, CER = certified emissions reductions, CFL = compact fluorescent lamp, GWh = gigawatt-hour, SAIFI = system average interruption frequency index, UNFCCC = United Nations Framework Convention on Climate Change. Source: Asian Development Bank estimates.

B. Monitoring

- 62. **Project performance monitoring:** EA will undertake overall monitoring of the Project in terms of progress. ADB, the government and EA/IAs will conduct semiannual reviews throughout the implementation of the Project. The review will monitor the (i) project output quality, (ii) implementation arrangements, (iii) implementation progress, and (iv) disbursements. Performance will be monitored based on indicators and targets stipulated in the design and monitoring framework. The EA and IAs will identify and maintain profiles of new project recipients as baseline data for the post project analysis.
- 63. **Compliance monitoring**: In addition to the standard assurances, compliance with the specific assurances will be monitored. They will be based on the Grant Agreement and Project Agreement as well as include Consulting Services, Procurement and Disbursement Guidelines. All consultants will be recruited according to ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). The procurement of goods, related services, and works financed by the grant will follow procedures outlined in the ADB's Procurement Guidelines (2010, as amended from time to time). The grant proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2012, as amended from time to time).
- 64. Safeguards monitoring (Environment): The Borrower and the Project Executing Agency shall ensure that:
 - (i) the implementation of the Project shall be conducted in a manner consistent with: (i) the Borrower's environmental laws and regulations; and (ii) ADB's *Safeguard Policy Statement (2009)*. In the event there is a conflict, then the provisions under the Safeguard Policy Statement (2009) shall prevail;
 - (ii) the environmental mitigating measures and the environmental management and monitoring plans specified in the IEE and EMP are implemented accordingly;
 - (iii) in the event that any unanticipated adverse environmental impact occurs or a mitigation measure under an IEE and EMP does not have the desired effect, such impact or measure shall be reported to ADB, and corrective actions are taken to mitigate the relevant impacts in consultation with the affected persons and ADB;
 - (iv) the IEE and EMP are updated, as necessary, during the course of Project implementation, and submitted to ADB for approval on timely basis;
 - (v) the Works contractors are contractually obliged to implement the mitigation, management and monitoring measures of environmental impacts as described in the IEE and EMP and report on their implementation on an semi-annual basis; and
 - (vi) reports on the implementation of the environmental mitigating measures and the environmental management and monitoring plans specified in the IEE and EMP are submitted to ADB on an semi-annual basis.
- 65. **Safeguards monitoring (Resettlement)**. The Borrower and the Project Executing Agency shall ensure that:

- (i) The Borrower through the Project Executing Agency shall ensure that the resettlement activities under the Project shall be carried out in accordance to (i) the relevant laws and regulations of the Borrower and ADB's Safeguard Policy Statement (2009). In the event of conflicting provisions, then the Safeguard Policy Statement (2009) shall prevail; and (ii) in particular, the resettlement plan agreed between the Project Executing Agency and ADB.
- (ii) The Borrower through the Project Executing Agreement shall ensure that all land and right-of-way required under the Project are made available in a timely manner. The Borrower through PLN shall (i) ensure that the approved draft resettlement plan is updated upon completion of detailed designs and detailed measurement survey, in consultation with the affected people; and (ii) endorse and disclose the updated resettlement plan to the public and submit them to ADB for approval.
- (iii) The Borrower through the Project Executing Agency shall ensure that the Works activities in a given construction site shall only commence after (i) the resettlement plan has been approved by ADB; (ii) the required land has been acquired; and (iii) the affected households have been compensated at full replacement cost.

The Borrower through the Project Executing Agency shall provide budgetarysupport on timely basis to cover the costs of land acquisition and resettlement under the Project.

C. Evaluation

66. Following loan signing a project inception mission will be fielded, to confirm the working relationship between ADB and EA and PMU staff involved in the implementation of the Project. Progress under the Project will be subject to a formal review every 6 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 for early 2015. Within 6 months of physical completion of the Project, the EA will submit a consolidated project completion report (PCR) to ADB. The EA and IAs will evaluate each subproject performance based on indicators 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 responsible and involved
Review Mission	Review the progress of the project and provide guidance to facilitate implementation	Site visit and meetings with EA officials, contractors, consultants twice a year	ADB/ EA/IAs
Project completion report	Evaluate the overall output of the project and its relevance and suitability	Site visit and meetings with EA officials, contractors, consultants	ADB/ EA/IAs

D. Reporting

- 67. The PLN 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 6 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. Within 6 months of physical completion of the Project, PLN will submit a project completion report to ADB.¹⁹
- 68. All agreements will be in English and Bahasa Indonesia. ADB recommends that all reports and supporting documents that required ADB's approval and review shall be submitted in English.

E. Stakeholder Communication Strategy

69. The Stakeholder Communications Strategy is summarized below. The EA will post all relevant information on its website. The website will include at minimum information regarding the bidding process, bidders, contract awards, use of funds disbursed under the Project and physical progress. The Project and Grant will also follow the ADB's Public Communication Policy 2011²⁰ and its guidelines on the disclosure and exchange of information.

Project Documents	Means of Communication	Responsible Party	Frequency
Project Administration Manual	ADB Website	ADB	Loan Approval
Social and Environmental Monitoring Reports	ADB Website	ADB	Routinely disclosed, bi- annually
3. Project Data Sheets	ADB Website	ADB	Bi-annually
Procurement Plan update	ADB Website	ADB	Annually
5. Change in Scope			Two weeks after Board/
(Major), if required			Management approval
Project and Grant	ADB Website	ADB	Two weeks after Board/
Completion Report			Management approval
7. Evaluation Reports	ADB Website	ADB	Routinely disclosed

¹⁹ Project completion report format available at: https://www.adb.org/sites/default/files/institutional-document/32516/guidelines-evaluation-public-sector.pdf

²⁰ ADB. 2011. Public Communications Policy 2011, *Disclosure and Exchange of Information*. Manila.

X. SPECIAL FEATURES

A. Potential Carbon Credit

70. The Kalimantan Transmission link project has the potential to reduce greenhouse gas (GHG) emissions and thereby may have prospects for carbon finance under the Clean Development Mechanism (CDM) of the UNFCCC. The CDM merit assessment is under progress together with PLN. Consultants appointed under this loan will also be exploring possibility to sell carbon credits under some other international GHG emission reduction scheme.

B. Grant: Increasing Access to Electricity

- 71. Indonesia's rate of electrification is only about 60%, one of the lowest in the region. Some 70 million people still do not have access to electricity. About two-thirds of the population without electricity lives in the rural areas and 65% of this is outside of Java- Bali. The Government's development agenda, supported by Asian Development Bank, places high priority on making service delivery responsive to the needs of the poor to alleviate poverty and improve standards of living and has launched Energy for All Initiative to increase access to modern forms of energy in Asia. In this context, the GOI has set a target to electrify 90% of the households by the year 2020. Over the past three decades, GOI has allocated considerable resources to its rural electrification programs mainly through the state owned power utility Perusahaan Listrik Negara (PLN). However, in a country with roughly 17,500 islands and a length and width of 5,000 and 1,800 kilometers, extending access is an increasingly difficult task and providing access to rural areas needs not only creative solutions but extra assistance as well.
- 72. Rural areas pose a challenge for expanding electrification. Since most of these areas are sparsely populated, the cost of connecting customers is likely to be higher. Furthermore, the levels of income of these customers may also be low that they cannot afford to be connected without outside assistance. Also PLN's supply capacity may not be enough to cover all the rural areas. Such is the situation in a community in West Kalimantan.
- 73. In 2008, more than 52,000 potential customers from this community applied for connections to PLN's supply system but due to insufficient energy supply, PLN could not carry out these connections. In 2009, this queue had grown to 56,000 customers. These customers, without additional capacity from PLN and without outside support will have little chance to be connected to the grid in the near future and will continue using the most inefficient source of lighting—kerosene or oil lamps affecting their health and will continue to be deprived of economic opportunities to improve their livelihood.
- 74. The proposed grant project of \$4 million (\$2 million from the multidonor Clean Energy Fund under Clean Energy Financing Partnership Facility and \$2 million from PLN) will provide access to electricity to about 8,000 households and other community centers such as hospitals and schools from the grid in the West Kalimantan area, especially in the area between Bengkayang and Sarawak border area. This will also support households to use low cost house wiring systems (or solar powered WLED systems kit if very far from the grid), energy efficient lamps, as well as electricity for income generating activities. The implementation will cover the 20 kV distribution lines, 20/0.4 kV distribution transformers, 0.4 distribution system, connection to the households. It will also support introduction of connection charge payment (around

\$50to100) to PLN in instalment especially for poor households who cannot pay full connection charge upfront at once. The appropriate level of household and community contribution will be determined during the implementation. ADB will implement the CEFPF financed component, while PLN will implement the low voltage distribution side of the component. The greater community involvement in the planning and construction of these electricity distribution systems will ensure greater ownership of the project and sustainability. It will be implemented over a period of 39 months from the start of the project.

Cost Estimates for the Grant Financed Component ^a

Item	Total	CEFPF	PLN
	Amount		
Equipment		1,500,000	
Installation		450,000	
Training, awareness to households		50,000	
Total (US\$)	3,800,000	2,000,000	1,800,000

^a multidonor Clean Energy Fund under Clean Energy Financing Partnership Facility Source: Asian Development Bank estimates.

XI. ANTICORRUPTION POLICY

- 75. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.²¹ 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.²²
- 76. To support these efforts, relevant provisions are included in the loan agreement/regulations and the bidding documents for the Project.

XII. ACCOUNTABILITY MECHANISM

77. People who are, or may in the future be, adversely affected by the project may address complaints to ADB, or request the review of ADB's compliance under the Accountability Mechanism.²³

XIII. RECORD OF PAM CHANGES

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

Changes in Scope and Implementation Arrangements

(as of June 2019)

Number	Changes	Date	Names of Documents
1	Updated paras and sections: a. Para. 10, Loan closing date b. Para. 37 Procurement plan for goods and works contracts estimated to cost more than \$1 million c. Para. 39 Procurement plan for Consulting Services Contracts Estimated to Cost More Than \$100,000 d. Para 40. Procurement plan for Goods and	June, 2019	

Number	Changes	Date	Names of Documents
	Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000		
2	Updated tables: a. Overall Project Implementation Plan b. Project Implementation Organizations – Roles and Responsibilities c. Key Persons Involved in Implementation d. Project Organization Structure e. Project Investment Plan f. Allocation and Withdrawal of ADB Loan Proceeds g. Allocation and Withdrawal of AFD Loan Proceeds h. Allocation and Withdrawal of Grant Proceeds i. Detailed Cost Estimates by Financier j. Detailed Cost Estimates by Outputs/Components k. Contract Award and Disbursement		

Changes in ADB Loan Allocation (as of October 2019)

Number	Changes	Date	Names of Documents
1	Updated tables: a. Project Organization Structure b.Table 1: Project Investment Plan c.ADB Loan Allocation and Withdrawal of Loan Proceeds d.Detailed Cost Estimates by Financier e.Detailed Cost Estimates by Outputs/Component f. Project Design and Monitoring Framework – Inputs to Activities with Milestones	October, 2019	

²¹ Available at: http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf
²² ADB's Integrity Office web site is available at: http://www.adb.org/integrity/unit.asp
²³ For further information see: http://compliance.adb.org/.

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