

FINAL BOQ (BILL OF QUANTITY).

[illegible]REN EM
UIP VIIREN SIP
UIP VII

FINAL BOQ (BILL OF QUANTITY).

REN SIP
UIP VIIREN EM
UIP VII

FINAL BOQ (BILL OF QUANTITY).

SUBTOTAL 1.5REN SIP
UIP VII

FINAL BOQ (BILL OF QUANTITY).

REN SIP
UIP VII

REN EM
VIP VII

**FINAL BOQ (BILL OF QUANTITY).
PENGANTIAN DAN PEMASANGAN PERALATAN GITET 500 KV KESUGIHAN (NEW RAWALO)**

ITEM	DESKRIPSI	VOLUME	SATUAN	PROCUREMENT		INLAND TRANSPORT		ERECTION		GRAND TOTAL	KETERANGAN
				SATUAN	TOTAL	SATUAN	TOTAL	SATUAN	TOTAL		
1	2	3	4	5	6 = 3 X 5	7	8 = 3 X 7	9	10 = 3 X 9	11 = 6 + 8 + 10	
3	150 KV OUTLET IBT 500/150 KV : 1 BAYS										
3.1	150 KV SINGLE SUSPENSION STRING INSULATOR SET FOR 1 X LUPINE COMPLETE WITH FITTINGS FOR INSTALLATION OF THE LINE BAY AS SPECIFIED.	6	Sets								
3.2	150KV POST INSULATOR 5270 mm CREEPAGE DISTANCE COMPLETE WITH CLAMPS AND SUPPORTING STRUCTURE FOR DROPPER TO BUS DISCONNECTOR	2	Sets								
3.3	SET OF CLAMPS, CONNECTORS AND ACCESSORIES FOR THE INSTALLATION OF THE TRAFU BAY AS SPECIFIED.	1	Bay								
3.4	SET OF CONDUCTOR FOR SHIELD WIRE AND ACCESSORIES FOR INSTALLATION OF THE OUTLET IBT SHIELD WIRE AS SPECIFIED.	1	Lot								
3.5	150 KV 3 PHASE DISCONNECTING SWITCH MOTOR OPERATED, 40 KA 3150 A WITHOUT EARTHING SWITCH, COMPLETE WITH CLAMPS AND SUPPORTING STRUCTURE FOR TRANSFORMER BAY.	2	Sets		EKS CELUKAN BAWANG	NA	NA				
3.6	150 KV 3 PHASE SF6 CIRCUIT BREAKER 50 KA 3150 A, COMPLETE WITH CLAMPS AND SUPPORTING STRUCTURE FOR TRANSFORMER BAY, WITH SF6 GAS MONITORING	1	Sets		EKS GRATI	NA	NA				
3.7	150 KV CURRENT TRANSFORMER FOR 500 MVA INTERBUS TRANSFORMER BAY COMPLETE WITH CLAMPS AND SUPPORTING STRUCTURE COMPRISING : Core 1 : 2000-4000/1A, class 5P20 for Main Transformer Protection Core 2 : 2000-4000/1A, class 5P20+0.2 for Main Transformer Protection Core 3 : 2000-4000/1A, class X for Back Up Protection Core 4 : 2000-4000/1A, class X for Main Busbar Protection	3	Units		EKS CELUKAN BAWANG	NA	NA				
3.8	150 KV LIGHTNING ARRESTER, 20 kA, COMPLETE WITH CLAMP, SUPPORTING STRUCTURE AND SURGE COUNTER.	3	Units		EKS CELUKAN BAWANG	NA	NA				
3.9	PROTECTION & CONTROL CUBICLE FOR IBT ON 150KV SIDE COMPRISING: - Ethernet Switch for Inter-bay system-1 - IED Bay Control INCLUDING MISCELLANEOUS EQUIPMENT AND MATERIAL, RACK CABINET, CABLES, CLAMPS, CONNECTORS, COMPRESSION TERMINAL, CONNECTION TO INDIVIDUAL ITEMS OF EQUIPMENT, TEST TERMINAL, AUXILIARY RELAY, INTERIOR LAMP, HEATER..... ETC, TO COMPLETE THE SCOPE OF WORKS.	1	Sets								
3.10	MARSHALLING KIOSK FOR TRAFU BAY	1	Sets								
3.11	150 KV 3 PHASE DISCONNECTING SWITCH MOTOR OPERATED, 40 KA 3150 A WITH EARTHING SWITCH, COMPLETE WITH CLAMPS AND SUPPORTING STRUCTURE FOR LINE BAY. FOR IBT 1 (GENERAL LAYOUT, BAY 2)	1	Sets		EKS CELUKAN BAWANG	NA	NA				
3.12	150 KV CAPACITOR VOLTAGE TRANSFORMER WITH 2 SECONDARY WINDING, RATIO 150000V/V3 / 100V/V3, BURDEN 100 VA CL 0.2, 150 VA CL 3P, MIN. CAPACITANCE 5000 PF, COMPLETE WITH CLAMPS, SUPPORTING STRUCTURE.	3	Units		EKS CELUKAN BAWANG	NA	NA				
3.13	LV POWER CABLE, CONTROL CABLE AND ACCESSORIES AND NECESSARY EQUIPMENT (cable ladder, clamp, cable lug, terminal, etc.) for transformer bay to complete the specified scope of work.	1	Lot								
									SUBTOTAL II.3		

REN EM
UIP VII

REN SIP
UIP VII

FINAL BOQ (BILL OF QUANTITY).

REN SIP
UIP VII

REN SIP
UIP VIIREN EM
UIP VII

**FINAL BOQ (BILL OF QUANTITY).
PENGANTIAN DAN PEMASANGAN PERALATAN GITET 500 KV KESUGIHAN (NEW RAWALO)**

ITEM	DESKRIPSI	VOLUME	SATUAN	PROCUREMENT		INLAND TRANSPORT		ERECTION		GRAND TOTAL	KETERANGAN
				SATUAN	TOTAL	SATUAN	TOTAL	SATUAN	TOTAL		
				5	6 = 3 X 5	7	8 = 3 X 7	9	10 = 3 X 9		
1	2	3	4							11 = 6 + 8 + 10	
V.	FOUNDATION WORK										
1.	Interbus Transformer 166 MVA (Single Phase)	3	Unit	NA	NA	NA	NA	NA	NA		
2.	Fire Prevention	3	Unit	NA	NA	NA	NA	NA	NA		
3.	Fire Wall for transformer	4	Unit	NA	NA	NA	NA	NA	NA		
4.	Lightning Arrester	3	Unit	NA	NA	NA	NA	NA	NA		
5	FOUNDATION MODIFICATION OF 150 KV 3 PHASE DISCONNECTING SWITCH WITHOUT EARTHING SWITCH	4	Set	NA	NA	NA	NA	NA	NA		
6	FOUNDATION MODIFICATION OF 150 KV 3 PHASE DISCONNECTING SWITCH WITH EARTHING SWITCH	2	Set	NA	NA	NA	NA	NA	NA		
7	ADAPTERING FOUNDATION OF 150 KV CURRENT TRANSFORMER FOR LINE BAY INCLUDE BOLT & FOUNDATION OF LINE TRAP COMPLETE WITH SUPPORTING POST INSULATORS	6	Unit	NA	NA	NA	NA	NA	NA		
8	ADAPTERING FOUNDATION OF 150 KV LIGHTNING ARRESTER INCLUDE BOLT & NUTS (Adapting	1	Unit	NA	NA	NA	NA	NA	NA		
9	FOUNDATION MODIFICATION OF 150 KV 3 PHASE SF6 CIRCUIT BREAKER (1 Set = 3 Unit)	1	Set	NA	NA	NA	NA	NA	NA		
10	NUTS (Adapting with steel ST 37 @ 40 Kg/Unit)	3	Unit	NA	NA	NA	NA	NA	NA		
11	Cable trench type 1 (Large width > 80 cm, K225, U24 include Cover Galvanised, Cable	75	meter	NA	NA	NA	NA	NA	NA		
12	Tray L: 50.50.5 and PVC Pipe)										
13	Compacted gravel (tebal 20 Cm)	1024	m2	NA	NA	NA	NA	NA	NA		
14	Oil Pit	3	Unit	NA	NA	NA	NA	NA	NA		
	SUBTOTAL IV FOUNDATION WORK										
	TOTAL 500 KV SUBSTATION + 150 KV SUBSTATION (I-IV)										0

REN EM
UIP VII

REN SIP
UIP VII