ODISHA POWER TRANSMISSION CORPORATION LIMITED

NAME OF THE WORK:-Construction of 220 kV LILO Line from 220 KV Duburi-Meramandali Existing line to 220 /132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km) . in Odisha State of India under PACKAGE-2 Under Japan International Cooperation Agency (JICA)'s ODA Loan.

Loan Agreement No: [ID-P245] - FB No: [CPC/JICA/ICB/02/18-19/…….]- Reference Identification No: [OPTCL/JICA/PKG-2]

Schedule No. 1. Plant Supplied from Abroad (Transmission Line)

NAME OF THE BIDDER

Item	DESCRIPTION OF ITEMS(SCHEDULE-1-Line) SUPPLY OF FOLLOWING EQUIPMENT & MATERIALS (As per Technical Specification)	Code[1]	UNITS	Construction of 220 kV LILO Line from existing 220 KV Duburi-Meramandali line to 220 /132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km)	Unit Price[2]		Total Price[2]
					In Foreign Currency	CIP	
Sl. No.	**DESCRIPTION OF ITEMS(SCHEDULE-1-Line) SUPPLY OF FOLLOWING EQUIPMENT & MATERIALS (As per Technical Specification)**			**1**	***(2)***	***(3)***	***(1) x (3)***
1	**SUPPLY of Following type tested Lattice type Galvanized steel tangent / Angle tower with stubs and cleats , different type of G.I HT Nuts & Bolts, washer, spring washer for the towers ,hanger and all accessories, tower super structure complete including step bolts. Supply of black bituminous paint for three coats up to a height of 500mm above the cooping(legs & bracing members). All Supply should confirm to the Technical Specification**.						
1.1	OA TYPE (SUSPENSION) TOWERS (NOMINAL UNIT WEIGHT 4.473MT) - **86 NOS.**		Nos.	**86.00**			
1.1.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 0.748MT) **- 13 NOS.**		Nos.	13.00			
1.1.2	+6 EXTENSION (NOMINAL UNIT WEIGHT 1.495MT) **- 1 NOS.**		Nos.	1.00			
1.2	OB TYPE (30 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 6.784MT) **- 21 NOS.**		Nos.	**21.00**			
1.2.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 1.334MT) **- 3 NOS.**		Nos.	3.00			
1.2.2	+6 EXTENSION (NOMINAL UNIT WEIGHT 2.308MT**)- 0 NOS.**		Nos.	0.00			
1.3	OC TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 9.523MT) **- 16 NOS.**		Nos.	**16.00**			
1.3.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 1.436MT) **-4 NOS.**		Nos.	4.00			
1.3.2	+6 EXTENSION (NOMINAL UNIT WEIGHT 2.600MT) **- 2 NOS.**		Nos.	2.00			
1.3.3	+15 EXTENSION (NOMINAL UNIT WEIGHT 10.663MT) **-1 NOS.**		Nos.	1.00			
1.3.4	+24 EXTENSION (NOMINAL UNIT WEIGHT 17.830 MT) **- 0 NOS.**		Nos.	0.00			
1.4	UR TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 13.585 MT) - **3 NOS**		Nos.	**3.00**			
1.4.1	+6 EXTENSION TO UR TYPE (NOMINAL UNIT WEIGHT 4.249 MT) -**3 NOS**		Nos.	3.00			
1.5	MA TYPE (SUSPENSION) TOWERS (NOMINAL UNIT WEIGHT 15.859MT) - **5 NOS**		Nos.	**5.00**			
1.6	MB TYPE (30 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 25.303MT) **-5 NOS.**		Nos.	**5.00**			

1.7	MC TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 32.376MT) **-11 NOS.**		Nos.	**11.00**			
1.7.1	+9 EXTENSION to MC TYPE(NOMINAL UNIT WEIGHT 9.124MT) **- 2 NOS.**		Nos.	2.00			
1.7.2	+15 EXTENSION (NOMINAL UNIT WEIGHT Appx. 22.00MT) **- 2 NOS.**		Nos.	2.00			
1.8	**TEMPLATES**						
1.8.1	OA (NOMINAL UNIT WEIGHT 0.579MT) **-3 NOS.**		Nos.	3.00			
1.8.2	OB (NOMINAL UNIT WEIGHT 0.794MT) **-2 NOS.**		Nos.	2.00			
1.8.3	OC (NOMINAL UNIT WEIGHT 0.962 MT) **-1 NOS.**		Nos.	1.00			
1.8.4	OC+15 (NOMINAL UNIT WEIGHT 2.107 MT) **-1NOS.**		Nos.	1.00			
1.8.5	UR (NOMINAL UNIT WEIGHT[1.507+0.687]-1 **NOS**		Nos.	1.00			
1.8.6	MA (NOMINAL UNIT WEIGHT 1.061MT) **-1 NOS.**		Nos.	1.00			
1.8.7	MB (NOMINAL UNIT WEIGHT 1.914 MT) **-1 NOS.**		Nos.	1.00			
1.8.8	MC (NOMINAL UNIT WEIGHT 2.151 MT) **-2 NOS.**		Nos.	2.00			
1.8.9	MC+15 (NOMINAL UNIT WEIGHT 4.50 MT) **-1 NOS.**		Nos.	1.00			
1.9	WEIGHT OF THE STRUCTURES HT (including Tower stubs, & Foundation Nut and Bolts)		**MT**	**289.970**			
1.9.1	WEIGHT OF THE STRUCTURES MS (INCLUDING WEIGHT OF TEMPLATE)		**MT**	**1066.040**			
1.9.2	Weight of different type G.I Nuts and Bolts		MT	**67.800**			
2	**Supply of the following tower accessories as per technical specification and as directed by the engineer in charge.**						
2.1	EARTHING DEVICE		Nos.	171			
2.2	DANGER BOARD		Nos.	147			
2.3	NUMBER PLATE		Nos.	147			
2.4	PHASE PLATE		Nos.	1008			
2.5	BIRD GUARD		Nos.	576			
2.6	ANTICLIMBING DEVICE		Nos.	147			
2.7	CIRCUIT PLATE		Nos.	336			
3	**Supply of following POWER CONDUCTORS in the proposed 220KV line with 1.5% provision for sag and wastage as per the technical specification and as per the instruction of the engineer in charge.**						
3.1	LL-ACSR ZEBRA 490mm(Aluminium clad/Galvanise steel core type) power coductor		Kms.	258.95			
4	**POWER CONDUCTOR ACESSORIES**						
4.1	**LL-ACSR ZEBRA 490mm(Aluminium clad/Galvanise steel core type) power coductor**						
4.1.1	VIBRATION DAMPER		Nos.	1458			
4.1.2	MID SPAN JOINT		Nos.	260			
4.1.3	Repair Sleeve		Nos.	300			
5	**OPGW fibre Optic Cable & Hardwares**						
5.1	48 Fibre(DWSM)OPGW Fibre Optic Cable		Kms.	38.44			
5.2	OPGW Hardware set like Suspension Assembly,Tension Assembly(Dead end Assembly, Pass through Assembly) ,Vibration Damper,Down Lead Clamp Assembly for 24/48 Fibre(DWSM) OPGW,Joint Box etc.		Kms.	38.44			
6	**Supply of the following type Porcelain Long Rod Insulators as per the technical specification and as per the instruction of the engineer in charge.**						
6.2	90 KN Porcelain Long Rod Insulator for 220KV (2 Nos in 1 SET)		SET	643			
6.3	160 KN Long Rod Insulator for 220KV (2 Nos in 1 SET)		SET	1115			

7	**Supply of the following Hard ware fittings suitable for following conductor as per the technical specification.**						
7.1	FOR LL-ACSR ZEBRA 490mm POWER CONDUCTOR						
7.1.1	Single suspension Hard wares fittings (AGS type along with PA Rod) suitable for 90 KN Long Rod insulator.		Set	540			
7.1.2	Double suspension Hard wares fittings (AGS type along with PA Rod) suitable for 90 KN Long Rod insulator.		Set	36			
7.1.3	Single tension Hard wares fittings, suitable for 160 KN Long Rod insulator.		Set	702			
7.1.4	Double tension Hard wares fittings, suitable for 160 KN Log Rod insulator.		Set	180			
7.1.5	Hanger		Nos.	576			
7.1.6	U'-Bolt.		Nos	100			
7.1.7	Zebra-to-Zebra PG Clamp		Nos	130			
	TOTAL OF Schedule-1 Line To Schedule-6 Grand Summary						

Name of Bidder:_____

Signature of Bidder:_____

[1] Bidders shall enter a code repre*senting the country of origin of all* imported plant and equipment.

[2] Specify currency in accordance with specifications in Bid Data Sheet under ITB 19.1 in Single-Stage Bid, or ITB 34.1 in Two-Stage Bid. Create and use as many columns for Unit Price and Total Price as there are currencies.

Country of Origin Declaration Form

Item	Description	Code	Country

ODISHA POWER TRANSMISSION CORPORATION LIMITED

NAME OF THE WORK:-Construction of 220 kV LILO Line from 220 KV Duburi-Meramandali Existing line to 220 /132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km) . in Odisha State of India under PACKAGE-2 Under Japan International Cooperation Agency (JICA)'s ODA Loan.

Loan Agreement No: [ID-P245] - FB No: [CPC/JICA/ICB/02/18-19/…….]- Reference Identification No: [OPTCL/JICA/PKG-2]

Schedule No. 2. Plant Supplied from Within the Employer's Country (Transmission Line)

NAME OF THE BIDDER					
Sl. No.	**DESCRIPTION OF ITEMS(SCHEDULE-1-Line) SUPPLY OF FOLLOWING EQUIPMENT & MATERIALS (As per Technical Specification)**	**UNITS**	Construction of 220 kV LILO Line from existing 220 KV Duburi-Meramandali line to 220 /132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km)	**Unit Price[2]**	**Total Price[2]**
			1	**2**	**(1x2)**
1	**SUPPLY of Following type tested Lattice type Galvanized steel tangent / Angle tower with stubs and cleats , different type of G.I HT Nuts & Bolts, washer, spring washer for the towers ,hanger and all accessories, tower super structure complete including step bolts. Supply of black bituminous paint for three coats up to a height of 500mm above the cooping(legs & bracing members). All Supply should confirm to the Technical Specification**.	**UNITS**			
1.1	OA TYPE (SUSPENSION) TOWERS (NOMINAL UNIT WEIGHT 4.473MT) - **86 NOS.**	Nos.	**86.00**		
1.1.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 0.748MT) **- 13 NOS.**	Nos.	13.00		
1.1.2	+6 EXTENSION (NOMINAL UNIT WEIGHT 1.495MT) **- 1 NOS.**	Nos.	1.00		
1.2	OB TYPE (30 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 6.784MT) **- 21 NOS.**	Nos.	**21.00**		
1.2.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 1.334MT) **- 3 NOS.**	Nos.	3.00		
1.2.2	+6 EXTENSION **(**NOMINAL UNIT WEIGHT 2.308MT**)- 0 NOS.**	Nos.	0.00		
1.3	OC TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 9.523MT) **- 16 NOS.**	Nos.	**16.00**		
1.3.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 1.436MT) **-4 NOS.**	Nos.	4.00		
1.3.2	+6 EXTENSION (NOMINAL UNIT WEIGHT 2.600MT) **- 2 NOS.**	Nos.	2.00		
1.3.3	+15 EXTENSION (NOMINAL UNIT WEIGHT 10.663MT) **-1 NOS.**	Nos.	1.00		
1.3.4	+24 EXTENSION (NOMINAL UNIT WEIGHT 17.830 MT) **- 0 NOS.**	Nos.	0.00		
1.4	UR TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 13.585 MT) - **3 NOS**	Nos.	**3.00**		
1.4.1	+6 EXTENSION TO UR TYPE (NOMINAL UNIT WEIGHT 4.249 MT) -**3 NOS**	Nos.	3.00		
1.5	MA TYPE (SUSPENSION) TOWERS (NOMINAL UNIT WEIGHT 15.859MT) - **5 NOS**	Nos.	**5.00**		
1.6	MB TYPE (30 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 25.303MT) **-5 NOS.**	Nos.	**5.00**		
1.7	MC TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 32.376MT) **-11 NOS.**	Nos.	**11.00**		
1.7.1	+9 EXTENSION to MC TYPE(NOMINAL UNIT WEIGHT 9.124MT) **- 2 NOS.**	Nos.	2.00		
1.7.2	+15 EXTENSION (NOMINAL UNIT WEIGHT Appx. 22.00MT) **- 2 NOS.**	Nos.	2.00		
1.8	**TEMPLATES**				
1.8.1	OA (NOMINAL UNIT WEIGHT 0.579MT) **-3 NOS.**	Nos.	3.00		
1.8.2	OB (NOMINAL UNIT WEIGHT 0.794MT) **-2 NOS.**	Nos.	2.00		
1.8.3	OC (NOMINAL UNIT WEIGHT 0.962 MT) **-1 NOS.**	Nos.	1.00		

1.8.4	OC+15 (NOMINAL UNIT WEIGHT 2.107 MT) **-1NOS.**	Nos.	1.00		
1.8.5	UR (NOMINAL UNIT WEIGHT[1.507+0.687]-1 **NOS**	Nos.	1.00		
1.8.6	MA (NOMINAL UNIT WEIGHT 1.061MT) **-1 NOS.**	Nos.	1.00		
1.8.7	MB (NOMINAL UNIT WEIGHT 1.914 MT) **-1 NOS.**	Nos.	1.00		
1.8.8	MC (NOMINAL UNIT WEIGHT 2.151 MT) **-2 NOS.**	Nos.	2.00		
1.8.9	MC+15 (NOMINAL UNIT WEIGHT 4.50 MT) **-1 NOS.**	Nos.	1.00		
1.9	WEIGHT OF THE STRUCTURES HT (including Tower stubs, & Foundation Nut and Bolts)	**MT**	**289.970**		
1.9.1	WEIGHT OF THE STRUCTURES MS (INCLUDING WEIGHT OF TEMPLATE)	**MT**	**1066.040**		
1.9.2	Weight of different type G.I Nuts and Bolts	MT	**67.800**		
2	**Supply of the following tower accessories as per technical specification and as directed by the engineer in charge.**				
2.1	EARTHING DEVICE	Nos.	171		
2.2	DANGER BOARD	Nos.	147		
2.3	NUMBER PLATE	Nos.	147		
2.4	PHASE PLATE	Nos.	1008		
2.5	BIRD GUARD	Nos.	576		
2.6	ANTICLIMBING DEVICE	Nos.	147		
2.7	CIRCUIT PLATE	Nos.	336		
3	**Supply of following POWER CONDUCTORS in the proposed 220KV line with 1.5% provision for sag and wastage as per the technical specification and as per the instruction of the engineer in charge.**				
3.1	LL-ACSR ZEBRA 490mm(Aluminium clad/Galvanise steel core type) power coductor	Kms.	258.95		
4	**POWER CONDUCTOR ACESSORIES**				
4.1	**LL-ACSR ZEBRA 490mm(Aluminium clad/Galvanise steel core type) power coductor**				
4.1.1	VIBRATION DAMPER	Nos.	1458		
4.1.2	MID SPAN JOINT	Nos.	260		
4.1.3	Repair Sleeve	Nos.	300		
5	**OPGW fibre Optic Cable & Hardwares**				
5.1	48 Fibre(DWSM)OPGW Fibre Optic Cable	Kms.	38.44		
5.2	OPGW Hardware set like Suspension Assembly,Tension Assembly(Dead end Assembly, Pass through Assembly) ,Vibration Damper,Down Lead Clamp Assembly for 24/48 Fibre(DWSM) OPGW,Joint Box etc.	Kms.	38.44		
6	**Supply of the following type Porcelain Long Rod Insulators as per the technical specification and as per the instruction of the engineer in charge.**				
6.2	90 KN Porcelain Long Rod Insulator for 220KV (2 Nos in 1 SET)	SET	643		
6.3	160 KN Long Rod Insulator for 220KV (2 Nos in 1 SET)	SET	1115		
7	**Supply of the following Hard ware fittings suitable for following conductor as per the technical specification.**				
7.1	FOR LL-ACSR ZEBRA 490mm POWER CONDUCTOR				
7.1.1	Single suspension Hard wares fittings (AGS type along with PA Rod) suitable for 90 KN Long Rod insulator.	Set	540		
7.1.2	Double suspension Hard wares fittings (AGS type along with PA Rod) suitable for 90 KN Long Rod insulator.	Set	36		
7.1.3	Single tension Hard wares fittings, suitable for 160 KN Long Rod insulator.	Set	702		
7.1.4	Double tension Hard wares fittings, suitable for 160 KN Log Rod insulator.	Set	180		

7.1.5	Hanger	Nos.	576		
7.1.6	U'-Bolt.	Nos	100		
7.1.7	Zebra-to-Zebra PG Clamp	Nos	130		
TOTAL OF Schedule-2 Line To Schedule-6 Grand Summary					
		Name of Bidder:_____ Signature of Bidder:_____			

[1] Prices of Items quoted in Schedule No.1 shall not be quoted again in Schedule No. 2 and shall have a remark against the said row "Quoted in Schedule No.-1".

ODISHA POWER TRANSMISSION CORPORATION LIMITED

NAME OF THE WORK:-Construction of 220 kV LILO Line from existing 220 KV Duburi-Meramandali line to 220 /132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km) . in Odisha State of India under PACKAGE-2 Under Japan International Cooperation Agency (JICA)'s ODA Loan.

Loan Agreement No: [ID-P245] - FB No: [CPC/JICA/ICB/02/18-19/…….]- Reference Identification No: [OPTCL/JICA/PKG-2]

Schedule No. 4. Installation and Other Services (Transmission line)

NAME OF THE BIDDER

Sl. No.	DESCRIPTION OF ITEMS(SCHEDULE-4-line) ERECTION,TESTING & COMMISSIONING OF FOLLOWING EQUIPMENTS ALONG WITH CIVIL WORKS (As per Technical Specification)	UNIT	Construction of 220 kV LILO Line from existing 220 KV Duburi-Meramandali line to 220 /132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km)	Unit Price[1]		Total Price[1]	
				Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion	Local Currency Portion
			1	**2**	3	(1x2)	(1x3)
PART A	**ELECTRICAL WORKS**						
1.0	**ERECTION,TESTING & COMMISSIONING** of Following tested Lattice type Galvanized steel tangent / Angle tower without stubs and cleats including different type of G.I HT Nuts & Bolts, washer, spring washer for the above type towers ,hanger and all accessories, tower super structure complete with tightening, punching of bolts including step bolts. All other left out portion of the bolts above bottom cross arm shall be riveted by using suitable hammer. Painting of black bituminous paints three coats shall be provided up to a height of 500mm above the cooping legs & bracing members. All Erection should confirm to the Technical Specification laid there in the Tender Specification.						
1.1	OA TYPE (SUSPENSION) TOWERS (NOMINAL UNIT WEIGHT 4.473MT) -**86 NOS.**	Nos.	**86.00**				
1.1.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 0.748MT) **-13 NOS.**	Nos.	13.00				
1.1.2	+6 EXTENSION (NOMINAL UNIT WEIGHT 1.495MT) **-1 NOS.**	Nos.	1.00				
1.2	OB TYPE (30 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 6.784MT) **- 21 NOS.**	Nos.	**21.00**				
1.2.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 1.334MT) **- 3 NOS.**	Nos.	3.00				
1.2.2	+6 EXTENSION **(**NOMINAL UNIT WEIGHT 2.308MT**)- 0 NOS.**	Nos.	0.00				
1.3	OC TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 9.523MT) **-16 NOS.**	Nos.	**16.00**				
1.3.1	+3 EXTENSION (NOMINAL UNIT WEIGHT 1.436MT) **-5 NOS.**	Nos.	4.00				
1.3.2	+6 EXTENSION (NOMINAL UNIT WEIGHT 2.600MT) **-2 NOS.**	Nos.	2.00				
1.3.3	+15 EXTENSION (NOMINAL UNIT WEIGHT 10.663MT) **-1 NOS.**	Nos.	1.00				
1.3.4	+24 EXTENSION (NOMINAL UNIT WEIGHT 17.830MT) **-0 NOS.**	Nos.	0.00				
1.3.4	UR TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 13.585 MT) -3 **NOS**	Nos.	**3.00**				
1.3.5	+6 EXTENSION TO UR TYPE (NOMINAL UNIT WEIGHT 4.249 MT) -3 **NOS**	Nos.	3.00				
1.4	MA TYPE (SUSPENSION) TOWERS (NOMINAL UNIT WEIGHT 15.859MT) - **5 NOS**	Nos.	**5.00**				
1.5	MB TYPE (30 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 25.303MT) **-5 NOS.**	Nos.	**5.00**				
1.6	MC TYPE (60 deg ANGLE) TOWERS (NOMINAL UNIT WEIGHT 32.376MT) **-11 NOS.**	Nos.	**11.00**				
1.6.1	+9 EXTENSION to MC TYPE(NOMINAL UNIT WEIGHT 9.124MT) **- 2 NOS.**	Nos.	2.00				
1.6.2	+15 EXTENSION (NOMINAL UNIT WEIGHT Appx. 22.00MT) **- 2 NOS.**	Nos.	2.00				
1.7	**WEIGHT OF THE STRUCTURES**	**MT**	**1335.68**				
1.8	**Weight of different type G.I Nuts and Bolts for above structures**	**MT**	**66.78**				
1.9	**Fixing of of Templates & setting of Stubs including G.I Nuts & Bolts**						
1.9.1	OA (NOMINAL UNIT WEIGHT 0.830 MT) **-86 NOS.**	MT	71.38				

1.9.2	OB (NOMINAL UNIT WEIGHT 1.276 MT) **-21 NOS.**	MT	26.80				
1.9.3	OC (NOMINAL UNIT WEIGHT 1.764 MT) **-16 NOS.**	MT	28.22				
1.9.4	OC+15 (NOMINAL UNIT WEIGHT 2.107MT) **-1 NOS.**	MT	2.11				
1.9.5	OC+24 (NOMINAL UNIT WEIGHT 2.107MT) **-0 NOS.**	MT	0.00				
1.9.6	UR+6 (NOMINAL UNIT WEIGHT[1.507+0.687]-**3 NOS**	MT	6.58				
1.9.7	MA (NOMINAL UNIT WEIGHT 1.061 MT) **-5 NOS.**	MT	5.31				
1.9.8	MB (NOMINAL UNIT WEIGHT 1.914 MT) **-5 NOS.**	MT	9.57				
1.9.9	MC (NOMINAL UNIT WEIGHT 2.151 MT) **-11 NO.**	MT	23.66				
1.9.10	MC +9 (NOMINAL UNIT WEIGHT 4.50 MT) -2 NO.	MT	9.00				
1.9.11	MC +15 (NOMINAL UNIT WEIGHT 4.50 MT) -2 NO.	MT	9.00				
1.9.12	TOTAL WEIGHT	MT	**191.63**				
2	**Erection of the following tower accessories as per technical specification and as directed by the engineer in charge.**						
2.1	EARTHING DEVICE	Nos.	171				
2.2	DANGER BOARD	Nos.	147				
2.3	NUMBER PLATE	Nos.	147				
2.4	PHASE PLATE	Nos.	1008				
2.5	BIRD GUARD	Nos.	576				
2.6	ANTICLIMBING DEVICE	Nos.	147				
2.7	CIRCUIT PLATE	Nos.	336				
3	Hoisting and fixing of insulators with required accessories, paying out of conductor ,jointing, stringing, sagging & Jumpering etc. of power conductor with G.I. Earth wire in the proposed lines and without earth wire with all required accessories including scaffolding for 33 KV,11 KV, LT , P&T lines, roads and using own required T&P and compression jointing machines etc. with 1.5% provision for Sag & Wastage and as per the direction of Engineer in charge.						
3.1	LL-ACSR ZEBRA 490mm(Aluminium clad/Galvanise steel core type) power coductor	RKM	34.004				
3.1.1	Additional charges for stringing of EHT line crossing	RKM	0.720				
3.1.2	Additional charges for stringing of River crossing	RKM	1.770				
3.2	Multi Circuit ACSR ZEBRA 54/7/3.18 POWER CONDUCTOR (Stringing of 4 Nos. Circuits)	RKM	4.440				
3.2.1	Additional charges for stringing of Railway line crossing(4 track Rly.Line)(Amount considered twice the cost of Normal cost)	RKM	0.220				
4	**Erection of OPGW fibre Optic Cable for speech, data & protection**						
4.1	Erection of 48Fibre(DWSM) OPGW fibre Optic along with hardware and approach cables	Kms.	38.440				
	TOTAL OF ELECTRICAL WORKS (PART-A)						
PART B	**CIVIL WORKS**						
1	**SURVEY OF LINE & PREPARATION LAND SCHEDULE: Supply of required T&P's, Technical personnel's, labours for conducting**						
1.1	Preliminary survey- Making walk over survey asceretaing feasible roue and marking on topo sheet,preparation of route alignment map	Route KM	38.444				
1.2	Detail survey and resurvey (required for avoiding ROW problem) including but not limited to taking of levels, profile plotting, tower spotting ,marking of towers locations at site including showing P&T line, power line, Railway line, river crossing, roads and submission of route map and survey report etc. The P&T lines and railway lines for a minimum distance of 8 kms on either side of alignment shall be clearly indicated.	Route KM	38.444				
1.3	Check survey including supply of all labour, T&P as per instruction of Engineer in Charge and as per the approved profile.	Route KM	38.444				

1.4	Preparation of land schedule on revenue (if required)maps indicating alignment therein duly authenticated by Revenue Inspector & Tahasildar, enumeration of trees with the help of Forest officer and other prominent features required for alignment of the proposed 220 KV line. Final route to be plotted on 1:50000 topo sheet for approval.	Route KM	38.444				
1.5	Soil Testing in complete shape along with submission of report etc. up to the depth of 15 Mtrs.	Per Loc.	35				
2	**EXCAVATION WORKS FOR OPEN CAST/SHALLOW TYPE FOUNDATIONS**						
2.1	**Excavation for following type of soil and rocks and back filling (back filling shall be done in layers of 500mm sprinkling of water and compaction thereafter and disposed of excess quantity of excavated soil at suitable place after back filling), & if required for filling the foundation, borrowed earth/morrum/sand shall be brought for filling and compaction, including supply of sand, all T&P, labour as required.**						
2.1.1	Soft/Loose soil	CUM	5000				
2.1.2	Dense/Compact soil	CUM	13200				
2.1.3	Partial Submerged soil	CUM	2500				
2.1.4	Fully submerged soil	CUM	1500				
2.1.5	Soft/Disintegrated rock(Not requiring Blasting)	CUM	4500				
2.1.6	Hard Rock(Requiring Blasting/Using breaker machinery)	CUM	1850				
3	**FOUNDATION MATERIALS: Supply of all materials like cement, steel, all coarse aggregates, fine aggregates and making foundations of the required above mentioned type towers as per the direction laid down in the technical specification and the direction of the site- in charge**						
3.1	Design, Engineering, Providing and laying of plain cement concrete (PCC 1:3:6) of grade M10 with approved quality coarse aggregates (Nominal size 12mm to 20mm) , fine aggregates, cement in tower foundation as blind layer inclusive of labour charges for concrete mixing & curing. This includes supply of all labourers, T&P and dewatering wherever required as per Technical specification and instruction of Engineer In charge.	CUM	690.00				
3.2	Design, Engineering and laying of reinforced cement concrete (RCC1:1.5:3) of grade M20 for open cast foundation with supply of approved quality coarse aggregates(Nominal size 12mm to 20mm), fine aggregates, cement and inclusive of labour charges for concrete mixing, supply and fixing of form boxes, curing, shoring, shuttering, testing of sample cement concrete cubes as per IS. The height of the coping shall be 350mm above the finished concrete level. The surrounding area shall be clear from materials. Damage of land if any by the contractor shall be repaired before measurement. This includes supply of all labourers, T&P and dewatering wherever required as per Technical specification and instruction of Engineer In charge.	CUM	3345.00				
3.3	Design, Engineering and laying of reinforced cement concrete (RCC1:1:2) of grade M25 for open cast foundation with supply of approved quality coarse aggregates(Nominal size 12mm to 20mm), fine aggregates, cement and inclusive of labour charges for concrete mixing, supply and fixing of form boxes, curing, shoring, shuttering, testing of sample cement concrete cubes as per IS. The height of the coping shall be 350mm above the finished concrete level. The surrounding area shall be clear from materials. Damage of land if any by the contractor shall be repaired before measurement. This includes supply of all labourers, T&P and dewatering wherever required as per Technical specification and instruction of Engineer In charge.	CUM	1650.00				
3.4	Supply and Cutting bending hooking ,fixing and binding in position of MS bars for reinforcement of foundation concrete of towers including supply of wire for binding (With supply of steel rod(TATA/RINL/SAIL Make).	MT	238.27				
3.5	**PILE FOUNDATION (UNDER-REEMED)**						
3.5.1	Boring for under reemed cast-in situ piling with bentonite showing for stabilisation of bore pile diameter(500mm) and approximate length of bore is 10 metre with under reemed.	Mtr.	320.00				
3.5.2	Supply of all materials like cement, all coarse aggregates,labours,T&P & making pile foundations as per specifications in RCC 1:1.5:3(Grade M-20)(without cost of steel)	Cum	105.00				
3.5.3	Steel of different size (as per design) with cutting,bending,binding in position of MS Rod for reinforcement of foundation concrete of towers(under-reemed pile) including supply of binding wire(with supply of steel rod TATA/RINL/SAIL make)	MT	8.00				

3.5.4	Pile riser (if required),cap,tie beam with RCC 1:1.5:3(Grade M-20), including supply of all materials like cement,coarse,fine aggregates,shuttering T&P,labours,de-watering,proper curin of foundations/concrete as per technicals specifications(Without cost of steel)	CUM	30.00				
3.5.5	Steel of different size (as per design) with cutting,bending,binding in position of MS Rod for reinforcement of foundation concrete of towers(pile riser & capping) including supply of binding wire(with supply of steel rod TATA/RINL/SAIL make)	MT	2.00				
3.6	**PILE FOUNDATION IN THE RIVER BED**						
3.6.1	Supply of materials like cement,steel,all coarse aggregates,fine aggregates and making 1000mm dia pile foundaions(after pile boring as per required depth,basing on design by DMC method or motor driven machinery etc.) of the required above mentioned type towers and as per requirement including supply of all equipments with labours,proper curing of the foundation and T&P as per specification in the concrete grade M-25 including supply of bentonite required for stabilisation bore of required diameters bore holes applicable for piles upto the required depth.						
3.6.1.1	Boring for river bed cast-in situ piling	Mtr.	200.00				
3.5.1.2	Concrete ratio 1:1:2(Grade M-25) without supply of steel for river bed piling	CUM	250.00				
3.5.1.3	Cutting,bending,hooking,fixing and binding in position of MS bar for reinforcement of foundation concrete of towers including supply of steel and binding wire.	MT	24.00				
3.5.1.4	Fixing charges for MS liner including the supply of material like MS sheet of adequate thickness,fabrication,cuttin,bending,binding,putting the liner in appropriate position and other related works.	MT	49.00				
3.6.2	PILE RISER, CAPPING, PEDESTAL & TIE BEAM CONCRETE WORKS OF RIVER BED PILES						
3.6.2.1	P.C.C.(Lean concrete) in ratio 1:3:6(Grade M-10)	CUM	13.00				
3.6.2.2	Pile riser(If required),cap,tie beam with RCC 1:1.5:3(Grade M-20) including supply of all materials like cement,coarse,fine aggregates,shuttering T&P,labours,dewatering,proper curing of the foundation/concrete as per the techinical specification(without cost of steel)	CUM	238.00				
3.6.2.3	Steel of different size (as per design) with cutting,bending,binding in position of MS Rod for reinforcement of foundation concrete of towers(pile riser & capping) including supply of binding wire(with supply of steel rod TATA/RINL/SAIL make)	MT	12.00				
4	**DE-WATERING(FOR OPEN CAST LOCATION)**						
4.1	With Supply of all T&P, Fuel, Lubricant & electricity on HP Hour basis.	HP Hour	994.00				
5	**Supply of borrowed earth/morrum for back filling for foundation/revetment works**						
5.1	beyond 30mtr &up to 100 mtr lead	CUM	2500.00				
5.1	beyond 100 mtr lead	CUM	2700.00				
6	**SHORING & SHUTTERING-Required in wet/submerged or special locations of open cast/shallow type foundations with supply of all materials,T&P and Labour.**	SQ.MTR.	4500.00				
7	Head-Loading of all types of foundation-materials, towers, structures, conductors, Insulators, Hard-wares for inaccessible Locations beyond 400 mtrs from the nearest approach road as per the recommendation of site Engineer-In- Charge and approval of the General Manager of Concerned circle.	Per MT/ Per Mtr.	50000.00				
8	**WELDING OF TOWER MEMBERS**						
8.1	Supply of all materials for continuous welding of bolts & nuts (around the bolts) up to top of tower without cross arm, including welding rods, welding generator machine (diesel engine operator.), application of required zinc rich paints around the welding portion after welding (two coats),fuel,lubricants,T&P and labours and other arrangements etc.	Nos.	174007.00				
9	**REVETMENT: (including Benching) Supply of all materials like cement, Late-rite stone (stone masonry) all type aggregates, labours, & T&P for construction of revetment walls as per requirement to protect the towers, where felt unsafe and as per approved drawing and the direction of Engineer in charge.**						
9.1	**Excavation in all type of soil including rock & back filling including supply of sand with back filling.**	CUM	1353				
9.1.5	PCC in the ratio1:3:6 .	CUM	73				

9.1.6	PCC in the ratio 1:2:4 .	CUM	82				
9.1.7	RR/Laterite Stone Masonry work in the ratio 1:5.	CUM	1800				
10	PTCC approval, railway crossing has to be obtained by submitting the required documents to the concerned department through OPTCL. The documents for PTCC clearance & Railway clearance including required drawings etc. has to be submitted by the contractor within 5 months of award of contract. Beyond the above period L.D as applicable & the amount shall be deducted as specified in the specification.	Set	1.00				
	TOTAL OF Line (Civil Work)						
	TOTAL OF ERECTION LINE (Electrical Work) & (Civil Work) -Schedule-4-line (to Schedule No. 6 Grand Summary)						

Name of Bidder:_____

Signature of Bidder:_____

1 Specify currency in accordance with specifications in Bid Data Sheet under ITB 19.1 in Single-Stage Bid, or ITB 34.1 in Two-Stage Bid.

ODISHA POWER TRANSMISSION CORPORATION LIMITED

NAME OF THE WORK:-Construction of 220 kV LILO Line from existing 220 KV Duburi-Meramandali line to 220 /132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km) . in Odisha State of India under PACKAGE-2 Under Japan International Cooperation Agency (JICA)'s ODA Loan.

Loan Agreement No: [ID-P245] - FB No: [CPC/JICA/ICB/02/18-19/…….]- Reference Identification No: [OPTCL/JICA/PKG-2]

Schedule No. 6. Grand Summary

NAME OF THE BIDDER

Item	Description	Total Price[1]	
		Foreign	Local
1	Total Schedule No. 1. Plant, Supplied from Abroad (Substation+Line)		
2	Total Schedule No. 2. Plant, Supplied from Within the Employer's Country (substation+Line)		
3	Total Schedule No. 3. Design Services (Not Applicable)		
4	Total Schedule No. 4. Installation and Other Services (substation+Line)		
5	Total Schedule No. 5. Provisional Sums (Not to be considered for Evaluation)		
Total(to Bid Form)			

Name of Bidder:_____

Signature of Bidder:_____

[1] Specify currency in accordance with specifications in Bid Data Sheet under ITB 19.1 in Single-Stage Bidding, or ITB 34.1 in Two-Stage Bidding. Create and use as many columns for Foreign Currency requirement as there are foreign currencies.

ODISHA POWER TRANSMISSION CORPORATION LIMITED

NAME OF THE WORK:-Construction of 220 kV LILO Line from existing 220 KV Duburi-Meramandali line to 220/132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km) . in Odisha State of India under PACKAGE-2 Under Japan International Cooperation Agency (JICA)'s ODA Loan.

Loan Agreement No: [ID-P245] - FB No: [CPC/JICA/ICB/02/18-19/…….]- Reference Identification No: [OPTCL/JICA/PKG-2]

Schedule No. 7. Recommended Spare Parts

NAME OF THE BIDDER

Sl. No.	DESCRIPTION OF ITEMS SUPPLY OF SPARES FOR THE FOLLOWING EQUIPMENTS. (As per Technical Specification)	Unit	Quantity	Unit Price		Total Price in INR
				CIP (foreign parts)	Ex-Works Price Local Parts	
		(1)	*(1)*	*(2)*	*(3)*	*(1) x (2) or (3)*
	TOTAL					

Name of Bidder:_____

Signature of Bidder:_____

Note: Recommended Spares shall not be taken in to consideration for evaluation purpose.

ODISHA POWER TRANSMISSION CORPORATION LIMITED

NAME OF THE WORK:-Construction of 220 kV LILO Line from existing 220 KV Duburi-Meramandali line to 220 /132 KV Out Door type GIS S/S, Dhenkanal. (Approx. Line length-38.44 Km) . in Odisha State of India under PACKAGE-2 Under Japan International Cooperation Agency (JICA)'s ODA Loan.

Loan Agreement No: [ID-P245] - FB No: [CPC/JICA/ICB/02/18-19/…….]- Reference Identification No: [OPTCL/JICA/PKG-2]

Schedule No. 8. Details of Taxes & Duties

	NAME OF THE BIDDER			
Sl No	Description of Applicable Tax/Levy		Tax @ __%	Total Amount of Taxes /Duty/ Levies
1	Details of Taxes and levies on the direct / bought out transactions between Bidder and ODISHA POWER TRANSMISSION CORPORATION LTD included in the Bid Price above but as may be payable by ODISHA POWER TRANSMISSION CORPORATION LTD (Schedue-1 & 2)			
(i)	TOTAL IGST			
(ii)	TOTAL CGST			
(III)	TOTAL OGST			
(iv)	TOTAL Any other tax			
	TOTAL OF TAXES AND DUTIES [Sum (i) to (iv)			
2	Details of Taxes and levies on the direct / bought out transactions between Bidder and ODISHA POWER TRANSMISSION CORPORATION LTD included in the Bid Price above but as may be payable by ODISHA POWER TRANSMISSION CORPORATION LTD (Schedue- 4)			
(i)	TOTAL IGST			
(ii)	TOTAL CGST			
(III)	TOTAL OGST			
(iv)	TOTAL Any other tax			
	TOTAL OF TAXES AND DUTIES [Sum (i) to (iv)			
4	F. Total Bid Price: (including Taxes & Duties and other levies)			

Name of Bidder:_____

Signature of Bidder:_____