IOCL- Vishwe -15kWp(Vishwe Fuel Station on Ambala-Chandigarh road, NH-22(new NH-5), near Km stone No.- 12 at village Dangdehri District Ambala(HR).

				l			
	BOQ ITEM 03						
SI. No	Name of Work	s/ı/o	Unit	Qty	weightage in %	Rate/Unit	Total
	Part A						
1	Services related to Supplies made by BHEL						
	Material Handling and Safe Keeping upto Installation and Handing Over to customer. Complete details as per Technical spec.	0	KW	15	3.575%	₹0.24	₹3.57
2	Installation of items :						
(a)	PV Modules	ı	Nos	51	3.269%	₹0.06	₹3.27
(b)	Inverter (10-100KWp)	ı	Nos	1	1.954%	₹1.95	₹1.95
(c)	ACDB/ACCB (10-100KWp)	ı	Nos	2	1.965%	₹0.98	₹1.97
3	Civil Pedestal						
a	Foundation and Pedestal etc	S&I	M3	2	5.990%	₹3.00	₹5.99
4	Cable Laying						
 4a	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.						
4a1	16 Sq mm to 35 sq.mm AC	<u> </u>	RMT	10	0.069%	₹0.01	₹0.07
4a2	6x4 Sq mm DC to 8x4 Sq mm DC	ı	RMT	85	0.589%	₹0.01	₹0.59
4b	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.						
4b1	16 Sq mm to 35 sq.mm AC	ı	RMT	15	0.123%	₹0.01	₹0.12
4c	Cable Laying rates in case excavation to be done Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.						
4c1	16 Sq mm to 35 sq.mm AC	ı	RMT	30	1.053%	₹0.04	₹1.05
5	Supply & Installation of Conduits along with all accessories for Laying of Cable through it. Supplying and fixing of following sizes of medium class HDPE/uPVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.						
5a	50 mm	S&I	RMT	100	2.732%	₹0.03	₹2.73

Supply of National Earning	6	Supply of Tray for Cable Laying		1				
7 Supply and installation of Earthing Strip Sal RMT 100 4.329% 4.004 4.433			58.1	RMT	20	0.714%	₹0.04	₹0.71
25.5 mm Gi Strip		30 33 3q.mm	361	IXIVII	20	0.71470	10.04	(0.71
25.5 mm Gi Strip	7	Supply and installation of Earthing Strip						
Supply & Installation of Lightening Arrestor			S&I	RMT	100	4.329%	₹0.04	₹4.33
Supply of Earthing Material and Installation after making of Sultable pit as per standard. Substitute S								
9 Supply of Earthing Material and Installation after making of Suitable pit as per standard. 9a For chemical Earthing/Conductor Earthing (Pipe) S&U No. 10 11.155% ₹1.12 ₹11.15 10 Name Plates S&U No. 1 0.058% ₹0.06 ₹0.06 **Part B** 1 Installation of BHEL supplied items: (a) Isolation Transformer I No. 1 1.681% ₹1.68 ₹1.68 ₹1.68 2 Integration with existing DG supply (Synchronization with DG set) - Supply of required kit with data logger and Installation a Rating above 1KW - 15 KW S&U SEU SEU 1 11.159% ₹11.16 ₹11.16 3 Grid Integration & start of Net Metering of Solar PV System by after getting all approvals, calibration through state department details attached as per scope for 10-100KW. 4 Supply of Bidirectional Meter and Installation of the same. 4 Supply of Bidirectional Meter and Installation of the same. 5 Supply and Installation of Solar Meter Sulformer S&U No. 1 4.203% ₹4.20 ₹4.20 5 Supply and Installation of Solar Meter Sulformer S&U No. 1 4.203% ₹4.20 ₹4.20 6 Fire fighting equipment S&U No. 2 4.203% ₹4.20 ₹4.20 6 Fire fighting equipment S&U No. 1 4.474% ₹4.47 ₹4.47 2 Supply and Installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&U No. 1 4.474% ₹4.47 ₹4.47 2 Supply and installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&U No. 1 4.474% ₹4.47 ₹4.47 3 DC cable 1Cx4sqmm S RMT 50 0.329% ₹0.07 ₹0.34 4 AC Cables Cu	8	Supply & Installation of Lightening Arrestor	S&I	No.	2	2.270%	₹1.13	₹2.27
Suitable pit as per standard.								
Suitable pit as per standard.	0	Supply of Earthing Material and Installation after making of						
Name Plates		Suitable pit as per standard.						
Installation of BHEL supplied items :	9a	For chemical Earthing/ Conductor Earthing (Pipe)	S&I	No.	10	11.155%	₹1.12	₹11.15
Installation of BHEL supplied items :								
1	10	Name Plates	S&I	Nos.	1	0.058%	₹0.06	₹0.06
1		Deat B			<u> </u>			
Solation Transformer	1			ı			<u> </u>	
Integration with existing DG supply (Synchronization with DG set) - Supply of required kit with data logger and Installation				Nos	1	1 6010/	₹1.60	∓1 60
Set) - Supply of required kit with data logger and Installation S&I Set 1 11.159% ₹11.16 ₹11.16	(a)	Isolation transformer	-	INUS	1	1.061%	71.00	11.00
Set) - Supply of required kit with data logger and Installation S&I Set 1 11.159% ₹11.16 ₹11.16								
Set - Supply of required kit with data logger and Installation Set Set 1 11.159% ₹11.16 ₹11.16	2							
Grid Integration & start of Net Metering of Solar PV System by after getting all approvals, calibration through state department details attached as per scope for 10-100KW.	_	set) - Supply of required kit with data logger and Installation						
Grid Integration & start of Net Metering of Solar PV System by after getting all approvals, calibration through state department details attached as per scope for 10-100KW.	a	Rating above 1KW - 15 KW	S&I	Set	1	11.159%	₹11.16	₹11.16
3 after getting all approvals, calibration through state department details attached as per scope for 10-100KW.								
3 after getting all approvals, calibration through state department details attached as per scope for 10-100KW.								
3 after getting all approvals, calibration through state department details attached as per scope for 10-100KW.		Cuid lute quetien Q stant of Net Metaning of Colon DV Contons has						
department details attached as per scope for 10-100KW .	,		•	Cot		2.0429/	₹2.04	₹2.04
Supply of Bidirectional Meter and Installation of the same. S&I No 1 4.203% ₹4.20 ₹4.20	3		U	Set	1	2.942%	72.94	₹2.94
4a LTCT Meter (0.5s Class) Supply and Installation of Solar Meter 5a LTCT Meter (0.5s Class) S&I No 1 4.203% ₹4.20 ₹4.20 ₹4.20 LTCT Meter (0.5s Class) S&I No 1 4.203% ₹4.20 ₹4.20 ₹4.20 6 Fire fighting equipment 6a Portable Fire extinguisher S&I No 2 4.203% ₹2.10 ₹4.20 Part C 1 ACDB 1a 15 kWp S No 1 4.474% ₹4.47 ₹4.47 Supply and installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I Kw 15 22.127% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 50 3.265% ₹0.01 ₹3.26 4 AC Cables Cu 4 AC Cables Cu 5 AC Cables AL 6 AC Cables AL 7 AC Cables AL 7 AC Cables AL 7 AC Cables AL 8 AC Cables AL 8 AC Cables AL 9 AC Cables		department details attached as per scope for 10-100kW.						
4a LTCT Meter (0.5s Class) Supply and Installation of Solar Meter 5a LTCT Meter (0.5s Class) S&I No 1 4.203% ₹4.20 ₹4.20 ₹4.20 LTCT Meter (0.5s Class) S&I No 1 4.203% ₹4.20 ₹4.20 ₹4.20 6 Fire fighting equipment 6a Portable Fire extinguisher S&I No 2 4.203% ₹2.10 ₹4.20 Part C 1 ACDB 1a 15 kWp S No 1 4.474% ₹4.47 ₹4.47 Supply and installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I Kw 15 22.127% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 50 3.265% ₹0.01 ₹3.26 4 AC Cables Cu 4 AC Cables Cu 5 AC Cables AL 6 AC Cables AL 7 AC Cables AL 7 AC Cables AL 7 AC Cables AL 8 AC Cables AL 8 AC Cables AL 9 AC Cables								
4a LTCT Meter (0.5s Class) Supply and Installation of Solar Meter 5a LTCT Meter (0.5s Class) S&I No 1 4.203% ₹4.20 ₹4.20 ₹4.20 LTCT Meter (0.5s Class) S&I No 1 4.203% ₹4.20 ₹4.20 ₹4.20 6 Fire fighting equipment 6a Portable Fire extinguisher S&I No 2 4.203% ₹2.10 ₹4.20 Part C 1 ACDB 1a 15 kWp S No 1 4.474% ₹4.47 ₹4.47 Supply and installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I Kw 15 22.127% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 50 3.265% ₹0.01 ₹3.26 4 AC Cables Cu 4 AC Cables Cu 5 AC Cables AL 6 AC Cables AL 7 AC Cables AL 7 AC Cables AL 7 AC Cables AL 8 AC Cables AL 8 AC Cables AL 9 AC Cables	4	Supply of Bidirectional Meter and Installation of the same						
Supply and Installation of Solar Meter S&I No 1 4.203% ₹4.20 ₹4.20								
5a LTCT Meter (0.5s Class) S&I No 1 4.203% ₹4.20 ₹4.20 6 Fire fighting equipment S&I No 2 4.203% ₹2.10 ₹4.20 Part C 1 ACDB S No 1 4.474% ₹4.47 ₹4.47 2 Supply and installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I Kw 15 22.17% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 500 3.265% ₹0.01 ₹3.26 4 AC Cables Cu S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL S RMT 50 3.39% ₹0.07 ₹0.34 Total S RMT 50 1.560% ₹0.03 ₹1.56	4a	LTCT Meter (0.5s Class)	S&I	No	1	4.203%	₹4.20	₹4.20
5a LTCT Meter (0.5s Class) S&I No 1 4.203% ₹4.20 ₹4.20 6 Fire fighting equipment S&I No 2 4.203% ₹2.10 ₹4.20 Part C 1 ACDB S No 1 4.474% ₹4.47 ₹4.47 2 Supply and installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I Kw 15 22.17% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 500 3.265% ₹0.01 ₹3.26 4 AC Cables Cu S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL S RMT 50 3.39% ₹0.07 ₹0.34 Total S RMT 50 1.560% ₹0.03 ₹1.56								
6 Fire fighting equipment 6a Portable Fire extinguisher			601	N		4.2020/	= 4.20	= 4.20
S&I No 2 4.203% ₹2.10 ₹4.20	5a	LTCT Meter (U.5s Class)	5&I	NO	1	4.203%	₹4.20	₹4.20
S&I No 2 4.203% ₹2.10 ₹4.20		Eiro fighting aguinment						
Part C 1 ACDB 1a 15 kWp S No 1 4.474% ₹4.47 ₹4.47 2 Supply and installation of Module Mounting Structure- Galvanised/Alumunimum/POSMAC (for 51 Modules) 3 DC cable 1Cx4sqmm S RMT 500 3.265% ₹0.01 ₹3.26 4 AC Cables Cu 4a 4Cx10 sqmm S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL 5 a 3.5Cx25 sqmm S RMT 50 1.560% ₹0.03 ₹1.56 Total			S 2 .1	No	2	4 203%	₹2.10	₹4.20
1 ACDB S No 1 4.474% ₹4.47 ₹4.47 2 Supply and installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I Kw 15 22.127% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 500 3.265% ₹0.01 ₹3.26 4 AC Cables Cu S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL S RMT 50 1.560% ₹0.03 ₹1.56 Total S RMT 50 1.560% ₹0.03 ₹100.00		Totable the extinguisher	301	140		4.203/0	(2.10	(4.20
1a 15 kWp S No 1 4.474% ₹4.47 ₹4.47 2 Supply and installation of Module Mounting Structure-Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I Kw 15 22.127% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 500 3.265% ₹0.01 ₹3.26 4 AC Cables Cu S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL S RMT 50 1.560% ₹0.03 ₹1.56 Total S RMT 50 1.560% ₹0.03 ₹100.00		Part C						
2 Supply and installation of Module Mounting Structure- Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I Kw 15 22.127% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 500 3.265% ₹0.01 ₹3.26 4 AC Cables Cu 4a 4Cx10 sqmm S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL Sqmm S RMT 50 1.560% ₹0.03 ₹1.56 Total Total ₹100.00 ₹100.00	1	ACDB						
2 Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I RW 15 22.127% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 500 3.265% ₹0.01 ₹3.26 4 AC Cables Cu S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL S RMT 50 1.560% ₹0.03 ₹1.56 Total S RMT 50 1.560% ₹1.00.00 ₹100.00	1a	15 kWp	S	No	1	4.474%	₹4.47	₹4.47
2 Galvanised/Alumunimum/POSMAC (for 51 Modules) S&I RW 15 22.127% ₹1.48 ₹22.13 3 DC cable 1Cx4sqmm S RMT 500 3.265% ₹0.01 ₹3.26 4 AC Cables Cu S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL S RMT 50 1.560% ₹0.03 ₹1.56 Total S RMT 50 1.560% ₹1.00.00 ₹100.00								
Galvanised/Alumunimum/POSMAC (for 51 Modules)	2	Supply and installation of Module Mounting Structure-	COI	V	15	22 1270/	31 40	# 22.42
4 AC Cables Cu 4a 4Cx10 sqmm S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL 5a 3.5Cx25 sqmm S RMT 50 1.560% ₹0.03 ₹1.56 Total	2	Galvanised/Alumunimum/POSMAC (for 51 Modules)	261	KW	15	22.12/%	₹1.48	₹22.13
4 AC Cables Cu 4a 4Cx10 sqmm S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL 5a 3.5Cx25 sqmm S RMT 50 1.560% ₹0.03 ₹1.56 Total								
4a 4Cx10 sqmm S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL S RMT 50 1.560% ₹0.03 ₹1.56 Total Total Total ₹100.00 ₹1	3	DC cable 1Cx4sqmm	S	RMT	500	3.265%	₹0.01	₹3.26
4a 4Cx10 sqmm S RMT 5 0.339% ₹0.07 ₹0.34 5 AC Cables AL S RMT 50 1.560% ₹0.03 ₹1.56 Total Total Total ₹100.00 ₹1								
5 AC Cables AL 5a 3.5Cx25 sqmm S RMT 50 1.560% ₹0.03 ₹1.56 Total				<u> </u>				
5a 3.5Cx25 sqmm S RMT 50 1.560% ₹0.03 ₹1.56 Total Image: Control of the property of	4a	4Cx10 sqmm	S	RMT	5	0.339%	₹0.07	₹0.34
5a 3.5Cx25 sqmm S RMT 50 1.560% ₹0.03 ₹1.56 Total Image: Control of the property of	<u> </u>	AC Caldar Al						
Total				D1 47	-	4 5000/	30.00	34 FC
	5a	3.5CX25 sqmm	>	KIVI	50	1.560%	₹0.03	₹1.56
	Total							₹100.00
Offered Price ₹100.00	TOTAL							Z100.00
Offered Price 7100.00	Offered Price						#100.00	
	Offered Price							ZT00.00

Total Price of Bidder					₹100.00	
GST Rate as Follows						
5% on 70% of the total Value						₹3.50
18% on 30% of the total Value						₹5.40
Total Price Including GST						₹108.90

Note:

Quantity mentioned in BOQ is a lump sum quantity. Payment shall be made based on actual measurement done after completion of work. Variation of +10% change in BOQ Quantity (on overall value basis) is acceptable. Bidder to take prior approval from BHEL-CFP for this variation clause.