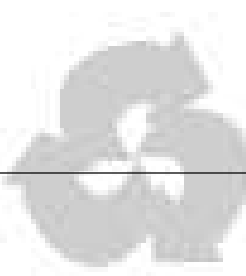
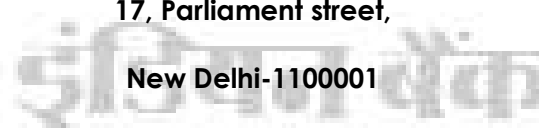


<p style="text-align: center;"> INDIAN BANK, Zonal Office- Central, Premises cell, 17, Parliament street New Delhi 1100001 <u>Ph: 011-23362516,23368604,23374632</u> <u>Fax: 23336770</u> <u>e-mail: zodelhicentral@indianbank.co.in</u> </p>
<p style="text-align: center;"> PRICE BID (PART – 2) </p>
<p style="text-align: center;"> Tender document for Roof Top Solar Power Installation At Indian Bank, Zonal office- Central, 17, Parliament street, New Delhi-1100001 </p>
<p style="text-align: center;">   Indian Bank ISSUED TO M/s. _____ </p>

CONSULTANT

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This document contains 6 pages

Sr No	Description	Qty	Unit	Supply		Installation		Total Amount (Supply + Installation) (Rs.)
				Rate (Rs.)	Amount (Rs.)	Rate (Rs.)	Amount (Rs.)	
1	Solar PV modules							
1.1	DESITC (Design, engineering, supply, installation, testing and commissioning) of 540-665 Wp Bi facial/single/ dual glass Monocrystalline solar PV modules as per technical specifications to generate 141 Kwp to be installed on the terrace floor with suitable GI channels fixed to the concrete blocks to be kept on the terrace. The same shall confirm to technical specifications given in the tender (261 modules for 540Wp and 212 modules for 665wp)	1	Lot					
1.2	Supply, fabrication and installation of 300mm wide 450mm high concrete blocks to be kept on the terrace without any chipping or grouting to support the GI channel frame	1	Lot					
1.3	Design, detailed engineering, fabrication of GI channels, angle etc including hot dip galvanizing the support frames for mounting the solar PV modules and to rest on the concrete blocks	1	Lot					
2	DESTIC of 80 KW solar inverter as per technical specifications	2	No					
3	DESTIC of IP-65 protected array junction boxes fully loaded with SPD, fuses, terminals etc as per technical specifications	6	No					
4	DESTIC of IP-42 protected cubicle type combiner panel, wall mounting fitted with following 250A, 25 Ka for 1 sec electrolytic quality copper bus bars supported on SMC 2 no Incomer feeders each fitted with 125A TP MCCB, 25 KA with built in thermal overload and magnetic short circuit releases and front operating handle with door interlock 3 nos LED type RYB indication lamps controlled by HRC fuses for both feeders 1 no outgoing feeder fitted with 1 no 250A TP MCCB, 25 ka with all accessories as mentioned above 3 no 250/5A copper wound CTs of ratio 250/5A class-0.5 10 Va 1 no electronic type KWH meter 1 set SPD of type 1+2 with suitable HRC fuse protection The panel shall confirm to technical specifications given in the tender	1	No					

Sr No	Description	Qty	Unit	Supply		Installation		Total Amount (Supply + Installation) (Rs.)
				Rate (Rs.)	Amount (Rs.)	Rate (Rs.)	Amount (Rs.)	
5.1	Supply and installation of 17.2mm dia 2 Mt long low carbon steel earth electrode bonded with 250-micron copper with GI clamp to be installed in a suitable bore and filled with 50 Lbs of carbon bond environment friendly back filling compound. An RCC trough of size 300x300mm shall be provided with RCC cover for protecting the electrode. (2 nos for DC, 2 nos for AC and 2 no for Lighting arrestor)	6	No					
5.2	DESTIC of 25x3mm GI strip to be clamped on wall, cable tray to solar panel frames and DCDB to earth stations for DC earthing	350	Mt					
5.3	DESTIC of 25x6mm GI strip to be clamped on wall, cable tray etc from earth electrodes to inverter body, combiner panel etc	150	Mt					
5.4	DESTIC of 16 SQMM copper PVC insulated wire for earthing of inverter and connecting to earth electrode	100	Mt					
6	DESTIC of AC and DC cabling with solar duty copper PVC insulated wires drawn in UPVC conduits to be neatly clamped on to the roof with suitable GI clamps for interconnection between solar modules, ARJ and inverter	1	Lot					
7	Power Cables							
7.1	DESTIC of 3.5x150 SQMM aluminium armoured XLPE cable from combiner panel to 250A TP MCCB fixed in the Main LT panel of the building to be routed through cable tray, vertical shaft etc as required including terminations at both ends with single compression gland and aluminium sockets. The gland earthing with 14 SWG copper wire and connecting same to earth grid is included in the scope	100	Mt					
7.2	DESTIC of 4C 70Sqmm copper PVC insulated unarmoured cable from inverters to ACDB including terminations at both ends	20	Mt					

Sr No	Description	Qty	Unit	Supply		Installation		Total Amount (Supply + Installation) (Rs.)
				Rate (Rs.)	Amount (Rs.)	Rate (Rs.)	Amount (Rs.)	
8	Supply and installation of safety items like dry powder fire extinguishers, fire buckets, danger boards, signages, identification stickers on modules, inverters, ARJs etc, first aid kit, rubber mat to be spread below the inverters and AC DB as per BIS, shock treatment chart in laminated form with writings in English, and Hindi and other items as required as per standards and as per CEA regulations	1	Lot					
9	Lightning protection							
9.1	DESITC of ESE(Early stream Emission) terminal mounted on lattice structure with anchoring to be mounted on one of the column extension as per technical specifications to cover the protection for entire roof area	1	No					
9.2	DESTIC of 70 Sqmm unarmoured copper conductor XLPE cable from lightning terminal to earth electrode through cable ducts, wall etc with proper clamping. The work includes termination of the same with copper crimping sockets	100	Mt					
9.3	DESTIC of Test link box fabricated out of MS sheet to route the earthing cable mentioned in item no 9.2. This will have a disconnecting link to disconnect the earthing cable for measurement purposes	1	No					
10	Liaison with government agencies (for project approval) and preparation of as- built drawing, SLD etc, liaisoning with CEA/ MNRE after arranging inspection and getting approval and arrange for subsidy after completion of work	1	Job					
11	Liaison with NDMC for installing Net metering (bi-directional meter) at point of supply (bi-directional Energy meter will be supplied by NDMC)	1	Job					
12	Sub - Total value of work* (A)	1	Job					

Sr No	Description	Qty	Unit	Supply		Installation		Total Amount (Supply + Installation) (Rs.)
				Rate (Rs.)	Amount (Rs.)	Rate (Rs.)	Amount (Rs.)	
	Operation and maintenance (O& M) of solar PV system (To be considered for tender evaluation purposes)							
13	O&M during DL period							
13.1	O&M for the first year after DLP	1	Year					
13.2	O&M for the second year after DLP	1	Year					
13.3	O&M for the third year after DLP	1	Year					
13.4	O&M for the fourth year after DLP	1	Year					
13.5	O&M for the fifth year after DLP	1	Year					
13.6	Sub - total for AMC for 5 years* (B)	1	Year					
	Grand total for supply and installation including AMC for 5 years* (A+B)							

* Exclusive of GST