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## PART - 2: PRICE BID

Tender document for "Design, Engineering, Supply, Installation, Testing and Commissioning of 15 kWp Grid interactive Solar Photo Voltaic system" at Indian Bank, own premises SELIMPORE RESIDENTIAL BUILDING COMPLEX (BLOCK B)

## **ISSUED TO**

M/s.

(This document contains 06 pages)





Sr No	Description	Qty	Unit	Su	pply	Insta	llation	Total Amount S+I
140				Rate	Amount	Supply	Amount	(excluding tax)

	LOCATION: SELIMPORE RESIDENTIAL COMPELX (BLOCK B)								
1	DESITC of 540 Wp Monocrystalline solar PV panels as per technical specifications given in the Tender (If higher wattage capacity panels are used, the power output of 15 kWp to be maintained).	28	No						
2	DESITC of 15 KW (or higher) solar inverter as per technical specifications and safety mat for operating personnel etc.	1	No						
3	DESITC of Weather proof IP-65 array junction box with SPD, Fuse and as per technical specifications (minimum 02 nos )	2	No						
4	DESITC of IP-42 protected cubicle type panel (ACDB) wall mounting fitted with the with all accessories (with AC surge arrestor, fuse etc) and suitable rating 63A, 25 KA 4 Pole MCCB (Current rating to be adjustable in the range from 80 % - 100%) to evacuate power (near to the invertor), with all necessary accessories and supply & installation of 1 no. 63A,25 KA 4P, MCCB (Current rating to be adjustable in the range from 80 % - 100%) (near to the mains of the Branch) with suitable enclosure to terminate the solar power supply to the mains of the Branch, as per technical specifications and safety mat shall be provided for operating personnel etc.	1	set						





Sr No	Description	Qty	ty Unit	Su	pply	Installation		Total Amount S+I
140				Rate	Amount	Supply	Amount	(excluding tax)
5	Earthing of solar panel structures and AC DB							
5.1	Supply and fixing GI pipe earth station conforming fully to IS 3043 with latest amendments, complete with <b>3m long 50mm dia GI pipe (3mm Thickness)</b> with Funnel on Top with holes drilled for tapping connection. The rate includes making 300 mm diameter pit and after excavation pit to be filled with to surface with alternate layer of salt/charcoal mixture. Brick work masonry shall be constructed of size 450x450x300 mm with MS plate (6 mm thick with painting) cover.  Note: Test report of resistance of the new earth pit to be submitted.  (2 nos for DC, 2 nos for AC and 2nos for Lighting arrestor).	6	No					
5.2	DESITC of 25 x 3 MM GI Strip to be clamped on wall, cable tray, buried in ground to interconnect the earth electrodes mentioned above (5.1) to the solar panel structures and power evacuation panel / combiner panel , lighting arrestor separately (The GI strip shall be painted with green paint as per electrical inspectorate norms)	400	Mt					





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NO				Rate	Amount	Supply	Amount	(excluding tax)
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5.3	DESITC of 4 core 10 Sq mm Dia multi-stranded Cu wire, FRPVC	200	Mt					
	insulated cable to be drawn in 20 MM Dia PVC conduit, 1.5MM							
	thick to be clamped on wall, cable tray, buried in ground to							
	interconnect the earth electrode with inverter neutral point, AC							
	DB to Invertor including terminations at both the ends etc.							
6	DESITC of AC & DC cabling between panels and inverter with	1	Lot					
	heat resistant insulated copper wires drawn in UPVC Conduit							
	properly fixed properly on pedestals on the floor for							
	interconnection between solar modules, ARJ and invertor.							
7	DESITC of 4C x 35 Sqmm aluminum armored cable from AC	100	Mt					
	Distribution Board to spare feeder of Main LT panel situated							
	at the ground floor including terminations at both ends. The							
	gland earthing with 14 SWG copper wire and connecting the							
	same to earth grid to be included in the rate quoted by the							
	contractor.							
8	Design, fabrication, supply and installation of concrete	1	Lot					
	pedestals of minimum M20 grade [(1:11/2:3) and the same							
	shall be plastered with 12mm thick cement sand mortar of							
	ratio 1:4 of 300mm wide x 450mm high to be fixed on terrace							
	floor for supporting solar panel structures. And the pedestals							
	shall be painted with exterior emulsion paint							





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NO				Rate	Amount	Supply	Amount	(excluding tax)
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9	Design & Supply, Installation of GI structures for supporting	1	Lot					
	the solar panels as per technical specifications							
10	Supply & Installation of safety items like fire extinguishers,	1	Lot					
	fire buckets and danger boards / Signages / Identification							
	stickers on modules / inverters / Array junction box etc., / first							
	aid kit etc., and safety mat at the location of inverters /							
	combiner panel etc., Shock treatment chart both in Hindi &							
	English, as required and which found necessary as per							
	electrical inspectorate norms.							
11	Supply and installation of 3 prong copper spike lightning	2	nos					
	terminal on 3 Mt high GI pipe with anchoring to be mounted							
	on the parapet wall with proper clamping arrangement.							
	Lightning protection terminals as required to protect the							
	entire building including the solar installation with GI strip /							
	copper down conductors and earth pit as per IS standard							
	each for Lightning terminal / mast							
12	Liaison with respective State Electricity Board and Electrical	1	Job					
	Inspectorate for installation of bi directional net meter (to							
	measure import and export of energy) (bi directional Energy							
	meter will be supplied by respective Electricity Board).							





Sr No	Description	Qty	Unit	Su	Supply		Illation	Total Amount S+I
140				Rate	Amount	Supply	Amount	(excluding tax)
	I				T			1
13	Liasoning with Govt agencies (for project approval)	1	Job					
	and Preparation of as-built drawings, SLD etc.,							
	Liasoning with CEA / Government agencies (respective							
	State Electricity Board / MNRE/other govt agencies)							
	after, arranging inspection and getting approval and							
	arrange for , subsidy etc. after completion.							
	Sub Total							
	Grand total for Supply and Installation – (A)							
14	Operation & Maintenance (O&M) of Solar PV System (	To be o	consider	ed for Tender ev	aluation purpose	e)		
14.a	O&M During DL period	01	Year					
14.b	O&M for the 1st year after DLP	01	Year					
14.c	O&M for the 2nd year after DLP	01	Year					
14.d	O&M for the 3rd year after DLP	01	Year					
14.e	O&M for the 4th year after DLP	01	Year					
14.f	O&M for the 5th year after DLP	01	Year					
	O&M - SUB TOTAL(B)							
	GRAND TOTAL ( A+ B ) – (Exclusive of all taxes )							