


Comparative Statement

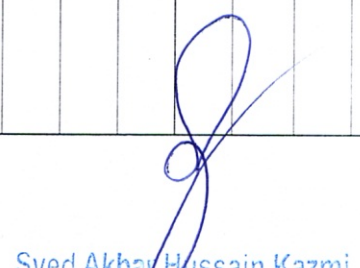
Design, Supply, Installation, Testing & Commissioning of 241.0 kWp Roof Mounted Grid Tied Utility Interactive Photo Voltaic Solar Power System at IBA City Campus

Tender # CW/11/24-25

| S.# | Items | Unit | Qty | M/s Misaam Energy | | | | M/s Ideal Power Solution | | | | M/s Besson Energy (Pvt) Ltd | | | | M/s Isoberg Industries | | | | M/s Creative Electronics | | | |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|-------------------|--------------------------|------------------|-----------------------|--------------------------|--------------------------|------------------|-----------------------|-----------------------------|--------------------------|------------------|-----------------------|------------------------|--------------------------|------------------|-----------------------|--------------------------|--------------------------|------------------|-----------------------|
| | | | | Unit Price (PKR) | Amount without Tax (PKR) | Tax Amount (PKR) | Amount with Tax (PKR) | Unit Price (PKR) | Amount without Tax (PKR) | Tax Amount (PKR) | Amount with Tax (PKR) | Unit Price (PKR) | Amount without Tax (PKR) | Tax Amount (PKR) | Amount with Tax (PKR) | Unit Price (PKR) | Amount without Tax (PKR) | Tax Amount (PKR) | Amount with Tax (PKR) | Unit Price (PKR) | Amount without Tax (PKR) | Tax Amount (PKR) | Amount with Tax (PKR) |
| <p>MODUL MOUNTING STRUCTURE</p> <p>FAYAL BANK ROOF MOUNTED</p> <p>Qty 155120</p> | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | Designing, Supplying, Fabrication & Installation of Elevated Mounting Structure (not Galvanized Iron (GDI)). The mounting structures must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc) minimum wind speed pressure 35m/s in harsh environment. The design submission must be as per ASTM-A36, ASTM-123 and ASCE 7-10. The mounting structure components are bonded together to guaranty potential equalization. The tilt angle shall be optimum as per site requirement. The work is to be carried out strictly as per approved structure drawings, design and specification and the rate quoted is inclusive of the following: | Watt | 149760.00 | 45.00 | 6,739,300.00 | 1,213,056.00 | 7,952,256.00 | 7,2409512 | 5,995,597.34 | 1,079,207.52 | 7,074,804.86 | 39.55 | 5,923,008.00 | 1,066,141.44 | 6,989,149.44 | 44,96450 | 6,733,883.52 | 1,212,099.03 | 7,945,982.55 | 70.00 | 10,483,200.00 | 1,572,480.00 | 12,055,680.00 |
| 1 | Designing of the structure as per design specification approved by IBA Engineer: • Column/Post Size: 4" x 4" in 12 gauge. Columns may be circular or square shape. • Base Plate Size: 10" x 10" with 10mm thickness. • Top Plate Dimension: 6" x 6" with 6mm thickness. • Bracing Angles: In 12 gauge. • Shoring Girder: Shoring of Girder not allowed in structure design. • Tilt Angle: Must be optimal for energy generation. • Cleaning Space: Adequate cleaning space must be incorporated. • Material: Hot Dip Galvanized (HDG). • Civil Pads: Civil concrete pads sizes shall be 6' x 6' x 12" x 12". • Gaskets: All gaskets will be assessed before galvanization. • Fasteners: All Allen bolts, Spring Washer, Nut, Washer & Plate Washer must be 30304. • Cleaning Platform: MS Moveable cleaning ladder in 1 gauge with proper cleaning platform of checker plate with epoxy paint. • Galvanization Coating Thickness: 100 to 120 microns for durability. • Mounting Accessories: includes brackets, | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Layout at Site approved by IBA Engineer | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Placing of Anchor Bolts & Base Plate as per design & length & Details approved by IBA Engineer. | | | | | | | | | | | | | | | | | | | | | | |
| 4 | The Contractor shall remove all the debris and clear the site as per direction. | | | | | | | | | | | | | | | | | | | | | | |
| 5 | The Contractor shall submit the detail technical shop drawing before execution of work. | | | | | | | | | | | | | | | | | | | | | | |
| 6 | After completion of the work the contractor shall submit the as built drawing. | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Minimum warranty period for structure 10 years. | | | | | | | | | | | | | | | | | | | | | | |
| <p>AUDITORIUM ROOF</p> <p>Qty 85410</p> | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | Designing, Supplying, Fabrication & Installation of Ballast type PV Mounting Structure in Aluminium. The mounting structure and the civil concrete pads must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc) minimum wind speed pressure 30m/s with base of gird pressure in harsh environment. The design submission must be as per ASTM-A36, ASTM-123 and ASCE 7-10, for anodized aluminium AL6005/6063. The mounting structure components are bonded together to guaranty potential equalization. The tilt angle shall be not more than 15 deg. The work is to be carried out strictly as per approved structure drawings, design and specification and the rate quoted is inclusive of the following: | Watt | 91260.00 | 15.00 | 1,368,900.00 | 246,402.00 | 1,615,302.00 | 14,039.30 | 928,022.20 | 167,044.00 | 1,095,066.20 | 14.54 | 1,326,920.40 | 238,945.67 | 1,565,866.07 | 15,68000 | 1,430,956.80 | 257,572.22 | 1,688,529.02 | 35.00 | 3,194,100.00 | 479,115.00 | 3,673,215.00 |
| 1 | Designing of the structure as per design specification approved by IBA Engineer: | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Layout at Site approved by IBA Engineer | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Civil work as per drawing and specification approved by IBA Engineer. | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Placing of Annel bolts, Nut bolts as per design & length & Details approved by IBA Engineer. | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Tilt angle is to be maintained as per recommendation. | | | | | | | | | | | | | | | | | | | | | | |
| 6 | The Contractor shall remove all the debris and clear the site as per direction. | | | | | | | | | | | | | | | | | | | | | | |
| 7 | The Contractor shall submit the detail technical shop drawing before execution of work. | | | | | | | | | | | | | | | | | | | | | | |
| 8 | After completion of the work the contractor shall submit the as built drawing. | | | | | | | | | | | | | | | | | | | | | | |
| 9 | All Allen bolts, nuts, bolts, washers, spring washers and screws for the project should be stainless steel (SS 304). | | | | | | | | | | | | | | | | | | | | | | |
| 10 | PV MODULES-241.02KWp: | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Supply, Installation, Testing & Commissioning (STC) DC/AC grid tie 3-phase Inverter with data communication unit with Ethernet connection. The inverter must be suited to any PV module configuration, and depending on the system design and installation proposed and for the future extended also. (Leading Market brand, having annual production greater than 10GW). The DC max power input rating should be at least 1.2 times of AC power at standard test condition (STC). The inverter unit shall be suitable for indoor and outdoor installations with IP65. The inverter must include the safety concepts such as (dipole protection with Opti protect, electronic strings fuses, self-learning string failure detection, DC surge arrester type (2) to ensure max availability. The inverter includes online monitoring with web Dongle. All works and materials must be according to the drawings, specifications and supervisor Engineer instructions and approval. Make: Sungrow/ Huawei/SMA or equivalent Power Rating: 110KW to 125KW | Watt | 241020.00 | 30.00 | 7,230,600.00 | - | 7,230,600.00 | 23,600.84 | 9,723,546.85 | - | 9,723,546.85 | 34.72 | 8,368,214.40 | - | 8,368,214.40 | 34,79922 | 8,387,308.00 | - | 8,387,308.00 | 37.00 | 8,917,740.00 | 1,337,641.00 | 10,255,401.00 |
| 2 | Grid-Tied Inverter (GDI) | Each | 1.00 | 1,550,000.00 | 3,100,000.00 | 558,000.00 | 3,658,000.00 | 1,398,305.08 | 2,796,610.16 | 503,809.80 | 3,299,999.96 | 1,755,127.50 | 3,510,255.00 | 631,845.90 | 4,142,100.90 | 1,423,728.970 | 2,847,457.94 | 512,542.43 | 3,360,000.37 | 1,947,000.00 | 3,894,000.00 | 584,100.00 | 4,478,100.00 |


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Comparative Statement

Design, Supply, Installation, Testing & Commissioning of 241.0 kWp Roof Mounted Grid Tied Utility Interactive Photo Voltaic Solar Power System at IBA City Campus

Tender # CW/11/24-25

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| a | Max Input DC Voltage: 1100V | | | | | | | | | | | | | | | | | | | | | | |
| b | MPPT Operating Voltage Range : 200V-1000V. | | | | | | | | | | | | | | | | | | | | | | |
| c | Min 10 Independent MPPT Trackers | | | | | | | | | | | | | | | | | | | | | | |
| d | Minimum Efficiency 98.0% | | | | | | | | | | | | | | | | | | | | | | |
| e | Warranty: 10 Years | | | | | | | | | | | | | | | | | | | | | | |
| f | Minimum IP rating should be IP65 | | | | | | | | | | | | | | | | | | | | | | |
| 4 | COMBINER BOXES | | | | | | | | | | | | | | | | | | | | | | |
| a | DC COMBINER BOX | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Supply, Installation, Testing & Commissioning (SITC) of DC Isolation/Array Junction Box with all accessories for outdoor usage, proper cable glands as per cable size. DC Combiner Box shall be provided One DC Breaker/ pole per string. | Each | 2.00 | 35,000.00 | 70,000.00 | 12,600.00 | 82,600.00 | 210,294.41 | 420,588.81 | 75,705.99 | 496,294.80 | 293,141.56 | 506,283.16 | 91,130.97 | 597,414.13 | 124,320.00 | 248,640.00 | 44,755.20 | 293,395.20 | 143,750.00 | 287,500.00 | 43,125.00 | 330,625.00 |
| | DC Breaker 4 Pole 25A/32A 1000VDC, C14 | | 28.00 | | | | | | | | | | | | | | | | | 22,425.00 | 627,900.00 | 94,185.00 | 722,085.00 |
| b | AC COMBINER BOX (LV PANEL) | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Supply, Installation, Testing & Commissioning (SITC) of AC Combiner Box (LV Panel) with pad floor standing/Wall mounted, Locally fabricated in 31 gauge, Colour Code: RAL7035, MS Powder Coated, Copper glands, and Lugs, Phase Indication lights, Tin Coated Copper Busbar for 3 Phases with colour coded heat insulable sleeves, Neutral & Earth with Polycarbonate cover sheet, Brass glands at bottom in & Out, CT's, Energy meter with all related accessories for outdoor usage minimum IP rating S4 with dust proof enclosure. | Each | 1.00 | 465,000.00 | 465,000.00 | 83,700.00 | 548,700.00 | 813,594.16 | 813,594.16 | 146,446.95 | 960,041.11 | 1,124,748.38 | 1,124,748.38 | 202,454.71 | 1,327,203.09 | 176,960.00 | 176,960.00 | 31,852.80 | 208,812.80 | 609,500.00 | 609,500.00 | 91,425.00 | 700,925.00 |
| | AC Breaker 250A 4P MCCB 400V/63kV | Each | 2.00 | | | | | | | | | | | | | | | | | 166,750.00 | 333,500.00 | 50,025.00 | 383,525.00 |
| | AC Breaker 630A 4P MCCB 400V/63kV | Each | 1.00 | | | | | | | | | | | | | | | | | 358,500.00 | 358,500.00 | 53,425.00 | 411,925.00 |
| | AC SPD 4Pole, 55kA with HRC Fuses Energy Meter: Janza or Equivalent CT's: Fico/Faci or Equivalent MCCB Make: ABB/Schneider or Equivalent SPD Make: ABB/Schneider or Equivalent HRC Fuses Make: Schneider/ABB/Vector or Equivalent | | | | | | | | | | | | | | | | | | | 360,000.00 | 360,000.00 | 54,000.00 | 414,000.00 |
| 6 | CABLES | | | | | | | | | | | | | | | | | | | | | | |
| a | Supply, Installation & Testing of DC Cable, 1 Core 4mm ² Cu/PVC/ALPO cable complete in all respect with accessories to connect the PV solar cells together and to the inverter directly to give a complete operational circuit, clamps, trays and cable end terminations which shall be DC plug and socket connection. The maximum voltage drop for DC cables between PV Arrays and inverter should be less than 2%. Minimum voltage capacity 1500VDC. Highest permissible voltage conductor/insulator should be 1.5kV DC, Standard Double Insulated: Cross link polyolefin, Tinned copper conductor. Cable should be Certified from TÜV Approved. Standard: EN50618 Make: Pakistan Cable/Fast Cable/Kuak/ Jikal or Equivalent as Engineer Approved | Meter | 5040.00 | 220.00 | 1,108,800.00 | 199,584.00 | 1,308,384.00 | 372.55 | 1,877,626.80 | 337,972.82 | 2,215,599.62 | 281.16 | 1,417,046.60 | 255,068.35 | 1,672,114.75 | 246.78 | 1,243,771.20 | 223,878.82 | 1,467,650.02 | 618.00 | 3,114,720.00 | 467,708.00 | 3,582,428.00 |
| b | AC Cables | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Supply, Installation & Testing of the AC power cables with all required works in different sizes of ducts/pipes, Cable lugs, Clamps and all needed fittings to connect cables terminals from source to destination. According to drawings, specifications, instructions, and demand of the supervising engineer as follow. Brand: Pakistan Cable/Fast Cable or Equivalent as Engineer Approved | | | | | | | | | | | | | | | | | | | | | | |
| 1 | AC 120mm ² 0.6/1kV Cu/PVC/PVC Pure Copper | Meter | 40.00 | 16,000.00 | 640,000.00 | 115,200.00 | 755,200.00 | 25,588.85 | 1,021,553.90 | 184,239.70 | 1,207,793.60 | 22,099.00 | 883,800.00 | 159,084.00 | 1,042,884.00 | 19,487.05 | 779,482.00 | 140,306.76 | 919,788.76 | 37,154.00 | 1,046,942.76 | 162,924.00 | 1,209,866.76 |
| 1 | 24x4 x 185mm ² 0.6/1kV Cu/PVC/PVC Pure Copper | Meter | 110.00 | 36,000.00 | 3,960,000.00 | 514,800.00 | 4,474,800.00 | 38,366.59 | 4,233,125.25 | 759,658.55 | 4,992,783.80 | 33,347.56 | 3,734,231.60 | 672,161.69 | 4,406,393.29 | 32,131.66 | 3,534,482.60 | 636,206.87 | 4,170,689.47 | 45,126.00 | 4,963,860.00 | 744,579.00 | 5,708,439.00 |
| c | Earthing Cables | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Supply, Installation & Testing of Earthing Cable, including PVC Pipe with related accessories. Brand: Pakistan Cable/Fast Cable or Equivalent as Engineer Approved | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 core 2.5 sqmm, CU/PVC/LEX (Green) | Meter | 630.00 | 120.00 | 75,600.00 | 13,608.00 | 89,208.00 | 170.59 | 109,473.73 | 19,345.27 | 126,819.00 | 192.05 | 120,991.90 | 21,778.47 | 142,769.97 | 11,147.80 | 7,023,111.86 | 1,264,160.14 | 8,287,272.00 | 586.00 | 169,180.00 | 55,377.00 | 424,557.00 |
| 1 | 1 core 4 sqmm, CU/PVC/LEX (Green) | Meter | 360.00 | 200.00 | 72,000.00 | 12,960.00 | 84,960.00 | 282.49 | 84,481.49 | 17,004.71 | 111,486.40 | 299.89 | 107,960.40 | 18,432.87 | 127,393.27 | 16,156.47 | 5,816,330.85 | 1,046,939.55 | 6,863,270.40 | 650.00 | 234,000.00 | 35,100.00 | 269,100.00 |
| 1 | 1 core, 70 sqmm, CU/PVC/STD (Green) | Meter | 40.00 | 2,500.00 | 100,000.00 | 18,000.00 | 118,000.00 | 4,231.67 | 122,231.67 | 30,452.42 | 152,684.09 | 3,870.19 | 154,807.60 | 27,865.37 | 182,672.97 | 2,682.31 | 107,292.20 | 19,312.60 | 126,604.80 | 4,280.00 | 171,200.00 | 25,840.00 | 197,040.00 |
| 1 | 1 core, 120 sqmm, CU/PVC/STD (Green) | Meter | 85.00 | 6,000.00 | 390,000.00 | 70,200.00 | 460,200.00 | 6,561.25 | 426,440.97 | 76,766.58 | 503,207.55 | 3,280.93 | 343,264.45 | 61,786.88 | 405,051.33 | 4,724.88 | 307,117.29 | 55,281.11 | 362,398.40 | 7,205.00 | 468,325.00 | 70,248.75 | 538,573.75 |
| 7 | Earthing SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Supply, Installation, testing and commissioning of Earth Electrodes (Rod Type) for Earthing System with 25mm dia 3 meters (10feet) long driven Pure copper Solid rod, complete with clamps lugs, washer/bolts, connected with 143mmms bare copper 50mm dia 3 pipe/PVC pipe class DFE to Earth chamber, job includes earthing of copper conductor to earth electrode rod at one end and provision/filing of cable lugs at other end, including all accessories and RCC inspection chamber, heavy duty G.I. Cover having earth symbol, etc as per the specifications and Drawings and to the entire satisfaction and approval of the Engineer. Earthing result should be less than 1 Ohm for AC/DCLA | Each | 4.00 | 145,000.00 | 580,000.00 | 104,400.00 | 684,400.00 | 98,418.65 | 393,674.41 | 70,861.43 | 464,535.84 | 198,801.57 | 795,206.28 | 143,137.13 | 938,343.41 | 76,406.78 | 305,627.12 | 55,012.88 | 360,640.00 | 85,000.00 | 340,000.00 | 51,000.00 | 391,000.00 |
| 8 | DATA LOGGER REMOTE MONITORING SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Supply, Installation, testing and commissioning of data Manager with Remote Monitoring System consists of the following parameter: a) Total energy generation of PV Plant b) Instantaneous Power being generated by solar PV plant c) Performance ratio of PV plant d) Current load of client e) Load profile v/s energy generation f) Daily Solar Plant report in PDF form Data should be store on server for not more than 10 min time interval. Data must be access through internet via user friendly GUI. | Each | 1.00 | 250,000.00 | 250,000.00 | 45,000.00 | 295,000.00 | 632,545.42 | 632,545.42 | 113,858.18 | 746,403.60 | 447,296.85 | 447,296.85 | 80,513.43 | 527,810.28 | 237,288.14 | 237,288.14 | 42,711.86 | 280,000.00 | 1,000,000.00 | 1,000,000.00 | 150,000.00 | 1,150,000.00 |
| 9 | CABLE TRAY | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Supply and Installation of following sizes 163SWG heavy duty HDGI Perforated Cable Tray 100mm x 75mm with 16 SWG HDGI. Complete with all installation material such as angle iron support of size, MS round bar, elbows, Tee, Nuts, Bolts, Washer, Hilli drop-in anchor, etc. Complete in all respect, as per the specification and drawings. | Meter | 100.00 | 4,500.00 | 450,000.00 | 81,000.00 | 531,000.00 | 2,230.82 | 223,082.20 | 40,154.80 | 263,237.00 | 4,474.00 | 447,400.00 | 80,532.00 | 527,932.00 | 3,360.00 | 336,000.00 | 60,480.00 | 396,480.00 | 3,455.50 | 345,550.00 | 51,832.50 | 397,382.50 |
| 1 | Supply and Installation of following sizes 163SWG heavy duty HDGI Perforated Cable Tray 150mm x 100mm with 16 SWG HDGI. Complete with all installation material such as angle iron support of size, MS round bar, elbows, Tee, Nuts, Bolts, Washer, Hilli drop-in anchor, etc. Complete in all respect, as per the specification and drawings. | Meter | 100.00 | 5,800.00 | 580,000.00 | 104,400.00 | 684,400.00 | 3,357.56 | 335,755.93 | 60,436.07 | 396,192.00 | 6,244.18 | 624,418.00 | 112,395.24 | 736,813.24 | 5,600.00 | 560,000.00 | 100,800.00 | 660,800.00 | 5,488.00 | 454,800.00 | 68,220.00 | 523,020.00 |
| 1 | Supply and Installation of following sizes 163SWG heavy duty G.I Cable Tray 300mm x 100mm with 16 SWG HDGI. Complete with all installation material such as angle iron support of size, MS round bar, elbows, Tee, Nuts, Bolts, Washer, Hilli drop-in anchor, etc. Complete in all respect, as per the specification and drawings. | Meter | 75.00 | 7,600.00 | 570,000.00 | 102,600.00 | 672,600.00 | 4,999.03 | 374,927.54 | 67,486.96 | 442,414.50 | 8,581.22 | 643,591.50 | 115,846.47 | 759,437.97 | 10,080.00 | 756,000.00 | 136,080.00 | 892,080.00 | 6,676.00 | 400,700.00 | 75,105.00 | 475,805.00 |

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External Member - PC
Procurement Specialist - HEJ
University of Karachi

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Member - PC
Manager Finance (Payable)
IBA Karachi

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| 10 | CIVIL & MISCELLANEOUS WORK | | | | | | | | | | | | | | | | | | | | | | |
| i) | Supply and installation of 3/4 inch UVC conduit/socket, Bends, Elbows, T-joints, Clamps, complete in all respects. | Meter | 140.00 | 500.00 | 70,000.00 | 12,600.00 | 82,600.00 | 358.14 | 50,138.98 | 9,025.02 | 59,164.00 | 936.84 | 131,128.60 | 23,603.33 | 154,732.93 | 2,800.00 | 392,000.00 | 70,560.00 | 462,560.00 | 1,150.00 | 161,000.00 | 24,150.00 | 185,150.00 |
| ii) | Supply and installation of 2 inch UVC conduit/socket, Bends, Elbows, T-joints, Clamps, complete in all respects. | Meter | 75.00 | 500.00 | 37,500.00 | 6,750.00 | 44,250.00 | 455.14 | 34,135.17 | 6,144.33 | 40,279.50 | 1,053.87 | 79,025.25 | 14,224.55 | 93,249.80 | 2,331.20 | 189,840.00 | 34,171.20 | 224,011.20 | 920.00 | 69,000.00 | 10,350.00 | 79,350.00 |
| iii) | Construct of concrete manholes/cable chambers (900mm x 900mm x 900mm deep) with heavy duty RCC covers with anti-rust paint, including all required sleeves for pulling underground power cables into in pipes. | Each | 2.00 | 95,000.00 | 190,000.00 | 34,200.00 | 224,200.00 | 73,712.43 | 147,424.86 | 26,536.48 | 173,961.34 | 28,962.50 | 37,925.00 | 10,426.50 | 48,351.50 | 392,000.00 | 784,000.00 | 141,120.00 | 925,120.00 | 50,000.00 | 100,000.00 | 15,000.00 | 115,000.00 |
| iv) | Re-fixing pavers/tiles as in position including providing and etc. Removal/cutting of tiles at designated places for avoiding shadow at Solar structure etc. | Job | 1.00 | 155,000.00 | 155,000.00 | 27,900.00 | 182,900.00 | 390,678.62 | 390,678.62 | 70,322.15 | 461,000.77 | 260,662.50 | 260,662.50 | 46,919.25 | 307,581.75 | 272,881.26 | 272,881.26 | 49,118.64 | 322,000.00 | 25,000.00 | 25,000.00 | 3,750.00 | 28,750.00 |
| v) | Supply and installation of Air Conditioner Type Split (Wall mounted) BTU Capacity: 1.5 Ton (18000 BTU) DC Inverter Type with complete accessories Warranty: 1 Year Parts & 3 Years compressor Brand: Gree/Karwood/Daewoo or equivalent | Each | 2.00 | 240,000.00 | 480,000.00 | 86,400.00 | 566,400.00 | 211,899.31 | 423,798.61 | 76,283.75 | 500,082.36 | 287,308.00 | 574,616.00 | 103,430.88 | 678,046.88 | 280,000.00 | 560,000.00 | 100,800.00 | 660,800.00 | 228,500.00 | 437,000.00 | 68,550.00 | 525,550.00 |
| 11 | INVERTER ROOM | | | | | | | | | | | | | | | | | | | | | | |
| i) | Design, Provide & Construct RCC Frame Structure Inverter Room Size 10'-0" x 12'-0", Height 10'-0" for installation of Grid Tied Inverters, DC Combiner Boxes & AC Combiner Boxes. The rate includes all types of masonry work with Aluminium Door & windows. The rate include all type of labour & material required. Max WT of the room 10'-0" from FL. Non-skid steel floor and Plastic Emulsion on walls internal & Weather Shield on external walls as per direction of Engineer incharge & approved design & drawing | Sq.ft. | 120.00 | 6,500.00 | 780,000.00 | 140,400.00 | 920,400.00 | 9,848.32 | 1,193,788.88 | 214,883.80 | 1,408,672.68 | 11,585.00 | 1,390,200.00 | 250,236.00 | 1,640,436.00 | 6,720.00 | 806,400.00 | 145,152.00 | 951,552.00 | 600,000.00 | 600,000.00 | 90,000.00 | 690,000.00 |
| 12 | NET METERING | | | | | | | | | | | | | | | | | | | | | | |
| i) | Service of Net metering application process & handling as per K.E approved criteria complete in all respects or directed by Engineer. This also include the services charges & fee for assessment of Grid load flow study if it required & service charges for Load Inspector etc. Only the cost of K.Electric/Pepra Chairman shall be paid by IBA | Job | 1.00 | 350,000.00 | 350,000.00 | 63,000.00 | 413,000.00 | 361,530.00 | 361,530.00 | 54,229.50 | 415,759.50 | 69,510.00 | 69,510.00 | 12,511.80 | 82,021.80 | 40,584.00 | 40,584.00 | 6,087.60 | 46,671.60 | 964,080.00 | 964,080.00 | 144,612.00 | 1,108,692.00 |
| Total Amount in PKR without Tax | | | | | | | 28,712,600.00 | | | | 33,156,738.49 | | | 33,042,508.27 | | | 43,877,414.68 | | | | | | 44,488,515.00 |
| Tax Amount | | | | | | | 3,866,760.00 | | | | 4,207,488.75 | | | 4,441,372.90 | | | 6,387,001.72 | | | | | | 6,473,272.25 |
| Grand Total Amount in PKR with Tax | | | | | | | 32,579,360.00 | | | | 37,364,227.24 | | | 37,483,881.17 | | | 50,264,416.40 | | | | | | 51,161,787.25 |


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