



# NEW TOWN KOLKATA DEVELOPMENT AUTHORITY

(A Statutory Authority Under Government of West Bengal)  
3, Major Arterial Road, New Town, Kolkata - 700 156

Memo No. 951 /NKDA/Engg-36/2010 (IV)

Date: 26 .02.2014

## CORRIGENDUM-V

**Sub:** Supplying, installation, commissioning with Ten years comprehensive maintenance of 500 kW (100kW×5) on Grid SPV Power Plants on Canal top (roof top category) at different zones beside Eco-Park, New Town, Kolkata.

**Ref :** Notice Inviting e-Tender No. WBNKDA / 10 / EE – I /NKDA of 2013 – 14 circulated vide this office memo no. 490 /NKDA /Engg-36 /2010 (IV) dated 03.02.2014, of New Town Kolkata Development Authority, 03, MAR, New Town, Kolkata-700156.

This is to notify that due to some unavoidable circumstances following corrigenda are made with reference to above NleT.

Sl No.	Description	As is	Would be
1.	<b>Tender Document, Section-C, TECHNICAL SPECIFICATIONS AND INFORMATION, Technical specification of electrical work, Clause no.2, Power Conditioning Unit (PCU).</b>	As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels before powering equipment designed for nominal mains AC supply. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the "Power Conditioning Unit" OR simply PCU. In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), to maximize Solar PV array energy input into the System. PCU should conform IEC 61683, IEC 60068 as per specifications. The nominal capacity of each PCU will be of 20kW and such 25nos. will be recurred for whole plant. The typical specification of PCU is given below:  <b>DC DATA</b> Recommended max.      22 PV power, kWp MPPT range, V            480 - 850  Max. DC voltage, V      1000	As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels before powering equipment designed for nominal mains AC supply. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the "Power Conditioning Unit" OR simply PCU. In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), to maximize Solar PV array energy input into the System. PCU should conform IEC 61683, IEC 60068 as per specifications. The nominal capacity of each PCU will be of 20kW and such 25nos. will be recurred for whole plant. The typical specification of PCU is given below:  <b>DC DATA</b> Recommended PV      20-24 (Approx) power, kWp MPPT range, V            460 – 800 (or better)  DC voltage, V            1000 (Max)

SI No.	Description	As is	Would be
		Max. DC current, A 45	DC current, A $\leq 60$ (Approx)
		MPP tracker 2	MPP tracker 1 or more
		Number of DC connections 6 x MC4	Number of DC connections 6 x MC4
		DC Isolator Yes	
		<b>AC DATA</b>	<b>AC DATA</b>
		Rated AC power, kW Approx. 20	Rated AC power, kW 17- 20 (Approx)
		Max. apparent power, kVA Approx. 20	
		AC power supply connection L1, L2, L3, NPE	AC power supply connection 3 Phase
		Rated power factor / range 1	Rated power factor / range 1/ 0.8i-0.8c (or better)
		Rated voltage AC, V 415 V	Rated voltage AC, V 400,+/-10% (or better)
		Voltage range AC,V 320 ... 460	
		Rated frequency / frequency range, Hz 50, 60 / 45-65	Rated frequency/Frequency range, Hz 50, +/- 3 (or better)
		Max. AC current, A 3 x 29	Rated AC current, A 3 x 25 (Approx)
		Max. distortion factor THD, % 2	Max. distortion factor THD, % $< 3$
		Max. efficiency, % 98	Max. efficiency, % Not less than 97
		Feed-in starting at, W 50	
		Internal consumption in sleep mode , W $< 0.5$	Internal consumption in sleep mode , W $< 2$
		<b>GENERAL DATA</b>	<b>GENERAL DATA</b>
		Interfaces Ethernet, RS485, isolation and temperature sensor	Interfaces Data Logging & Remote Monitoring should be available
		Protection class (IEC 60529) IP65	Protection class IP65(or higher)
		<b>Make:</b> REFUSOL/KACO/ABB/Equivalent/Platinum GMBH	<b>Make:</b> REFUSOL/KACO/ABB/Schneider or Equivalent.

Other terms and conditions of the NlET shall, however, remain unchanged.

  
**Executive Engineer – I**  
 New Town Kolkata Development Authority

**Memo No. 951 /1(8) /NKDA/Engg-36/2010 (IV)**

**Date: 26 .02.2014**

**Copy forwarded for information and necessary action to :-**

1. The Chief Executive Officer, New Town Kolkata Development Authority.
2. The Chief Engineer, New Town Kolkata Development Authority.
3. The Finance Office, New Town Kolkata Development Authority.
4. The Assistant Engineer, New Town Kolkata Development Authority.
5. The Estimator/ Sr. Accountant / Cashier, New Town Kolkata Development Authority.
6. P.A to the Chairman, New Town Kolkata Development Authority.
7. Office Notice Board.
8. Official Website of New Town Kolkata Development Authority ([www.nkdamar.org](http://www.nkdamar.org))

  
**Executive Engineer – I**

New Town Kolkata Development Authority

**Date:26 .02.2014**

**Memo No. 951 /2 /NKDA/Engg-36/2010 (IV)**

**Copy forwarded for information and circulation to :-**

1. Shri Sabyasachi Dutta, Member of Legislative Assembly.

  
**Executive Engineer – I**

New Town Kolkata Development Authority