

**CONNECTION PROCEDURES OF SOLAR PV
GENERATING SYSTEM UNDER NET
METERING AND NET BILLING
ARRANGEMENT**

UNDER

WBSEDCL PROCEDURES-C (2021)

IN TERMS OF

**WEST BENGAL ELECTRICITY REGULATORY COMMISSION
(COGENERATION AND GENERATION OF ELECTRICITY
FROM RENEWABLE SOURCES OF ENERGY) REGULATIONS
AS AMENDED.**



WBSEDCL

West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)

1.0 Preamble:

- 1.1 These procedures for effecting connection of solar PV generating system under net metering/ net billing system by WBSEDCL named as WBSEDCL PROCEDURES-C (2021) has been prepared in accordance with regulation 16.9 of the West Bengal Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations as amended (hereinafter referred to as 'RE Regulation') in order to facilitate the renewable energy journey of the State of West Bengal considering the guidelines of Tariff Policy 2016 and declining price trend of Grid Connected Rooftop Solar PV (GRPv) system. Hon'ble West Bengal Electricity Regulatory Commission approved the procedure vide order dated
- 1.2 Accordingly the effective date of coming into force of these WBSEDCL PROCEDURES-C (2021) shall be 01/01/2022. Under these WBSEDCL PROCEDURES-C (2021) henceforth all connection of solar PV generating system under net metering/ net billing system shall be effected.

Provided solar PV generating system installed and notified to WBSEDCL within 31/12/2021 subject to verification by WBSEDCL shall be considered under net metering as per provision of West Bengal Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, 2013.

2.0 Salient Stipulation:

- 1) Installed capacity of Solar PV Generating System shall be 1 kWp and above.
- 2) Installed capacity of Solar PV Generating System shall not exceed the Consumer's Contract Demand (in kVA) or Sanctioned Load (in kW) except Govt. funded project or project under different scheme.
- 3) All type of consumers consumer having Sanctioned Load/Contract demand upto 5KW except Agriculture may avail Net Metering.
- 4) All type of consumers having Sanctioned Load/Contract demand above 5KW except Agriculture consumer shall only under Net Billing arrangement.
- 5) All Agriculture consumers may avail Net Metering.
- 6) Solar-PV generating system, that are already connected to the distribution network under Net-Metering Arrangement shall continue with the existing accounting and settlement mechanism. However, in case of any roof-top solar capacity addition by existing net-metered consumers, they would be treated freshly for eligibility under net-metering or net-billing as per RE Regulations
- 7) **AC Voltage level of Solar Injection shall be as below :**
 - i) **For Net metering arrangement :** 230 / 240 V (single-phase) or 400 / 415 V (three-phase) at which the consumer has been given supply.
 - ii) **For Net billing Arrangement :**
 - a) Sanctioned Load/Contract demand upto 170 KW (200 KVA) : 230 / 240 V (single-phase) or 400 / 415 V (three-phase) at which the consumer has been given supply.
 - b) Sanctioned Load/Contract demand above 170 KW (200 KVA): 11 kV and above at which the consumer has been given supply.

Consumer may be allowed connectivity at any other voltage of the distribution system of WBSEDCL based on capacity of solar-PV generating system as considered technically and financially suitable by WBSEDCL.

- 8) Cumulative capacity of solar-PV generating systems allowed to be interconnected with the distribution network (feeder/distribution transformer) shall not exceed 100% of the feeder and/or distribution transformer capacity, as applicable.
- 9) Net Metering Arrangement or Net Billing Arrangement, as the case may be, shall be permitted in a non-discriminatory basis and distribution transformer-wise or feeder-wise on 'first come first serve' basis.
- 10) Solar-PV generating system shall be equipped with an automatic inverter having synchronization device.

3.0 Responsibility:

- 3.1 The consumer shall develop the solar-PV generating system up to the point of metering as per specification approved by WBSEDCL.
- 3.2 The consumer shall be responsible for safe installation, operation, maintenance and rectification of any defect of the solar-PV generating system up to the point of metering.
- 3.3 Beyond the net meter responsibility of safe operation, maintenance and rectification of any defect in the system, including the net meter, shall be that of the WBSEDCL as per the provisions specified in the Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2010 and subsequent amendments thereof.
- 3.4 If the consumer prefers setting up of solar-PV generating system with battery backup (full load backup/partial load backup), the inverter shall have appropriate arrangement to automatically prevent the battery power to flow into the grid in the absence of grid supply in addition to manual isolation switch shall also have to be provided.
- 3.5 WBSEDCL shall be responsible for the testing, installation and maintenance of the metering equipment, and adhere to the applicable standards and specifications.

4.0 Codes and Standards

- 4.1 WBSEDCL shall ensure the interconnection of the solar-PV generating system of eligible consumer with its network conforming to the specifications, standard and other provisions specified in the Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013 and subsequent amendments thereof.
- 4.2 The solar-PV generating system must be capable of detecting an unintended islanding condition. The system must have anti-islanding protection to prevent any feeding into the grid in case of failure of supply or grid. Applicable IEC/IEEE technical standards shall be followed to test islanding prevention measure for grid connected inverters.
- 4.3 The inverter shall have the features of filtering out harmonics and other distortions before injecting the energy into the system of WBSEDCL. The Total Voltage Harmonic Distortion (THD) shall be within the limits specified in the Technical Standards for Connectivity of the Distributed Generation Resources (Amendments), 2019 of CEA and subsequent amendments thereof and Indian Electricity Grid Code (IEGC)/ IEEE technical standards.

- 4.4 All meters shall comply with the CEA (Installation and Operation of Meters) Regulations, 2006 and subsequent amendments thereof.

5.0 Connection Diagram

Connection diagram of Net Metering Arrangement or Net Billing Arrangement, as the case may be in respect of the consumers of WBSEDCL in whose premises solar PV generating system will be installed as per RE Regulations:

- i) Connection Diagram for net metering arrangement-Diagram-A. [connectivity at same voltage level at which the consumer has been given supply]
- ii) Connection Diagram for net billing arrangement:
 - a) Sanctioned Load/Contract demand upto 170 KW (200 KVA) : Diagram-B. [connectivity at same voltage level at which the consumer has been given supply]
 - b) Sanctioned Load/Contract demand above 170 KW (200 KVA): Diagram-C [connectivity at same voltage level at which the consumer has been given supply]
Or Diagram-D if Consumer is allowed connectivity at any other lower voltage of the distribution system of WBSEDCL based on capacity of solar-PV generating system as considered technically and financially suitable by WBSEDCL.

6.0 Application Procedures:

- 6.1 Application form '**Form-S1**' (in duplicate) of these procedures along with the following formats shall be downloaded from the website of WBSEDCL free of cost.
 - i) Agreement in '**Form-S2**'
 - ii) Format of Work completion in '**Form-S3**'
 - iii) Format for self certification in **Form-S4** (for supply voltage below notified voltage)
- 6.2 The consumer desiring installation of grid-connected solar-PV generating system shall have to submit application in '**Form-S1**' along with other forms duly filled in **at the concerned office of WBSEDCL** (for off-line submission of application, the concerned office will be the office from where energy bill for consumer connection is delivered) or online with the application fees as follows:
 - i) For LV& MV -Rs 500/- + GST as applicable
 - ii) For HV& EHV - Rs 2000/- + GST as applicable

Govt. funded project or project under different scheme are exempted from application fees

- 6.3 The person(s) authorized on behalf of WBSEDCL to receive the application form duly filled up with other duly filled up documents as stated above shall handover a signed and dated receipt to the applicant with proper office seal. System generated receipt shall be provided to the applicant for application submitted through online.
- 6.4 After complying with above instruction as stated at procedure 6.2 above, an inspection at the premises to which net metering/ net billing arrangement is required shall have to be carried out within stipulated time frame as mentioned in procedure 7.0. Notice for inspection of premises shall be intimated to the applicant atleast three (03) days in advance prior to the date of inspection.
- 6.5 During inspection following points are to be checked and recorded in the inspection report:

- i) Whether there is any DTR capacity constraint
 - ii) Whether alteration of service is required
- 6.6 After Inspection as per procedure 6.6, WBSEDCL shall either issue a quotation and intimation for go ahead clearance or issue a letter to the consumer informing inability of WBSEDCL to provide Net Metering or Net Billing Arrangement due to non-feasibility as per time schedule specified in procedure 7.0. In case of issuing a quotation, the quotation shall include the matters as specified below including GST as applicable:
- i) Cost of Net Meter/Consumer meter and modem as applicable as per procedure 9.6
 - ii) Cost of Generation Meter and modem (01 no for net metering and 2 no for net billing arrangement) as applicable as per procedure 9.6
 - iii) Cost of Alteration of service if applicable as per procedure 11.0
 - iv) Cost of testing regarding fitness test as per procedure 8.3 (b)
- 6.7 The quotation shall remain valid for Ninety (90) days from the date of issue of the quotation, if not extended based on application of the consumer. On request of applicant validity of such quotation may be extended maximum for Thirty (30) days. The application shall be cancelled if quotation amount and Agreement in '**Form-S2**' is not submitted within the validity period of the quotation and application fee shall be forfeited and that should be intimated to him/her indicating the application/registration number.
- 6.8 On receiving the quotation the consumer shall submit the quotation amount and agreement form in **Form S2** duly signed along with the other necessary documents as required under these procedures. WBSEDCL shall issue an acknowledgement receipt of the quotation amount. On acceptance of the quotation amount and the agreement form in **Form S2**, a work order will be issued by WBSEDCL.
- 6.9 Consumer shall submit following before grid synchronization.
- a) Work completion report of Installation of Solar Plant as per **Form S3**.
 - b) Certificate of Fitness
 - c) Clearance from Office of the Chief Electrical Inspector, Govt of West Bengal or self certification (for supply voltage below notified voltage) through **Form S4** as per Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 as amended time to time.
- 6.10 On receiving the work completion report of Installation of Solar Plant, Inspection shall have to be carried out within stipulated time frame as mentioned in procedure 7.0. Notice for fitness test of premises shall be intimated to the applicant atleast three (03) days in advance prior to the date of inspection. WBSEDCL shall provide a copy of fitness certificate (if fitness test is done through authorized agencies of WBSEDCL) to the applicant within stipulated time frame as mentioned in procedure 7.0. If fitness test is done by the applicant in presence of authorized representative of WBSEDCL, applicant shall submit such fitness certificate to WBSEDCL within stipulated time frame as mentioned in procedure 7.0
- 6.11 In case the applicant fails to submit the work completion report within stipulated time frame as mentioned in procedure 7.0, the application shall be cancelled after giving a notice period of Thirty (30) days. In terms of the above notice applicant may request for one-time extension of time for a maximum period of Ninety (90) days. In case the application is cancelled even after such extended period, if any, the application fee shall be forfeited. The quotation amount

after adjusting any expenditure already incurred by WBSEDCL shall be refunded without any interest.

- 6.12 Installation of meter and grid Synchronization shall be done within stipulated time frame as mentioned in procedure 7.0.
- 6.13 During Connectivity inspection if installation in all respect is found not proper for grid synchronization, a letter for connectivity failure shall be issued to the consumer within stipulated time frame as mentioned in procedure 7.0.

7.0 Time schedule:

Sl No	Activity	Time Schedule
1	Inspection of technical feasibility/eligibility	Within 20 days from date of receipt of application
2	Quotation for Meter cost, Testing Fees, alteration of service, if any and Intimation for go ahead clearance	
3	Intimation for non feasibility to provide Net Metering or Net Billing Arrangement	Within 07 days from date of Tech. feasibility/Eligibility inspection.
4	Payment of quotation amount by consumer	Within 90 days from the date of quotation
5	Installation of Solar Plant by the consumer and Clearance from Office of the Chief Electrical Inspector,GoWB	Within 180 days from date of go ahead clearance.
6	Connectivity Inspection and testing of consumer installation if consumer desires	Within 10 days from date of receipt of work completion report from consumer
7	Copy of fitness certificate to be provided by authorized agencies of WBSEDCL if the applicant opts before WBSEDCL for such certification	Within Five (05) days from date of testing
8	Copy of fitness certificate to be submitted by applicant to WBSEDCL if it is done by applicant itself.	Within Five (05) days from date of testing
9	Intimation for connectivity failure	Within 07 days from date of connectivity Inspection
10	Installation of meter and grid Synchronization	Within 15 days from date of successful connectivity inspection and submission of fitness certificate.

8.0 Testing:

- 8.1 The consumers who have installed grid-connected roof-top solar PV module under net-metering / net-billing arrangement shall have to furnish certificate of fitness conforming to correct operation of islanding, generation of harmonics and other Power Quality parameters as per limits mentioned in procedure 4.3 above. Consumer can arrange such testing by their own in presence of representative of distribution licensee or request the connected distribution licensee for arranging such tests on cost basis through authorized agencies, whose details will be available on the website of WBSEDCL

8.2 Periodicity of Testing of consumers installations:

Consumers shall have to furnish certificate of fitness with the following periodicity:

- i) Every two years for PV output above 170 KW (200 KVA)
- ii) Every three years for PV output upto 170 KW (200 KVA)

If the solar installation remains out of operation for more than six (06) months, consumers shall have to furnish certificate of fitness afresh from the authorized agencies of WBSEDCL along with clearance from Office of the Chief Electrical Inspector, Govt of West Bengal as per Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 as amended time to time.

8.3 (a) Testing fees of Solar generation meter procured by consumer: Rs 1200 / Meter

(b) Testing fees for fitness certificate.:

To be Notified (Vendor List and Fee for the purpose under process).

8.4 Testing parameters:

- i) Harmonic Report
- ii) Voltage fluctuation and flicker
- iii) DC current injection
- iv) Fault current contribution
- v) Voltage and Frequency protection : As per CEA Guidelines
- vi) Reconnection time settings : As per CEA Guidelines
- vii) Reactive Support test

At 240 volt (Nominal Voltage) to 245 Volt it should operate at unity power factor. However, grid voltage reduces, inverter should operate in leading power factor with linearly increasing trend up to 230 Volt, and then it becomes fixed with 0.95 lead (i.e. 30% capacitive). Similarly, for voltage range from 245 to 255 Volt the Inverter should absorb reactive power gradually with maximum power factor 0.95 (i.e. Inductive 30%).

9.0 Metering and Meter Cost :

- 9.1 The Net Metering Arrangement shall include a single-phase or a three-phase Net Meter, as per the existing supply arrangement of the eligible consumer, located at the point of inter-connection as would be ascertained by WBSEDCL.
- 9.2 The Solar generation meter and net meter along-with allied accessories shall be procured and installed by WBSEDCL against the cost to be borne by the consumer.
- 9.3 **In case of Net Billing arrangement, a check meter of appropriate class shall be installed by the WBSEDCL for the solar-PV generation meter against the cost to be borne by the consumer.**
- 9.4 In case meter procured by WBSEDCL becomes defective within 07 years (useful life as per Regulation) from the date of installation where the meter is found not tampered/ damaged on the fault of the consumers, WBSEDCL will replace the meter and cost of such replaced meter shall not be claimed from the consumer.

Beyond the above stated stipulated time frame when the meter become defective, WBSEDCL will replace the said defective meter (s) and meter cost will be claimed through energy bill.

9.5 Meter Reading:

- i) Meter reading of all the meters for the consumers having Sanctioned load/ contract demand below 50 KVA under net metering or net billing arrangement as the case may be will be taken physically by the meter reader or online (where possible) according to regular meter reading cycle.
- ii) Meter reading of all the meters for the consumers having Sanctioned load/ contract demand 50 KVA and above under net billing arrangement as the case may be will be taken through Meter Data Acquisition Systems (MDAS) according to regular meter reading cycle.

9.6 Cost of Net Meter/ Solar Generation meter/ Modem:

The cost of meters and modem will be as per cost data of WBSEDCL published time to time

10.0 Energy Accounting and Settlement :

10.1 For net metering arrangement as per Schedule-1 of RE Regulation. For this purpose, accounting of Solar Generation is also mandatory.

10.2 For net billing arrangement as per Schedule-2 of RE Regulation.

10.3 In case of in accessibility of meter Reading of Consumer meter/ Solar Generation meter:

- i) Assessment of drawal energy in consumer mode including energy export (net metering arrangement) shall be computed based on the provision as laid down in the West Bengal Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2013 as amended.
- ii) Assessment of Solar generation energy shall be computed on the basis of average generation and other parameters for the preceding months or during any previous period that may be reasonably comparable.

Provided where the actual Solar generation of previous months/period is not available, adjustment of Solar generation will be done on availability of actual generation during meter reading.

- iii) Inaccessibility of meter Reading normally shall not be allowed for more than one (01) consecutive billing cycle beyond which net metering / net billing arrangement shall be withdrawn.

10.4 In case of defective /defunct / defect in metering circuit of Consumer meter/ Solar Generation meter:

- i) Assessment of drawal energy in consumer mode including energy export (net metering arrangement) shall be computed based on the provision as laid down in the West Bengal Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2013 as amended.

- ii) Assessment of Solar generation energy shall be computed based on Check meter. If both main and check meter / metering circuit are found defective, assessment of generation energy shall be computed on the basis of average generation and other parameters for the preceding three months or during any previous period that may be reasonably comparable before the meter has been found to be defective or defunct.
- iii) If the Solar generation of previous months/period is not available, adjustment of Solar generation will be done on availability of actual generation during meter reading by taking average of actual electricity generated during the succeeding period (s) / month (s) after installation of a correct meter.

11.0 Alteration of service

If any consumer requires any alteration of service under net metering or net billing arrangement the charges for alteration of services will be as follows:

- i) For Sanctioned Load/Contract demand upto 170 KW (200 KVA): Charges will be as per procedure 8.0 of WBSEDCL PROCEDURES-A(2010)
- ii) For Sanctioned Load/Contract demand above 170 KW (200 KVA) : On actual basis based on inspection

12.0 Disconnection of solar-PV generating system / Discontinuation of Net metering / Net Billing Agreement:

- 12.1 WBSEDCL shall have the right to disconnect the solar-PV generating system at any time in 'the event of threat/damage' from such renewable energy system to its distribution system to prevent any accident or damage, without any notice. WBSEDCL shall call upon the consumer to rectify the defect within a reasonable time.
- 12.2 If the presence of harmonics is beyond the limits specified in procedure 4.3 above, it may be treated as "the event of threat/damage" under regulation 7.2 (d) of RE Regulations, and the utility shall have the right to disconnect the solar PV generating system.
- 12.3 On disconnection of consumer mode of supply due to any reason whatsoever the net billing/net metering arrangement will also be discontinued till reconnection of consumer mode of supply.

13.0 Termination of Agreement

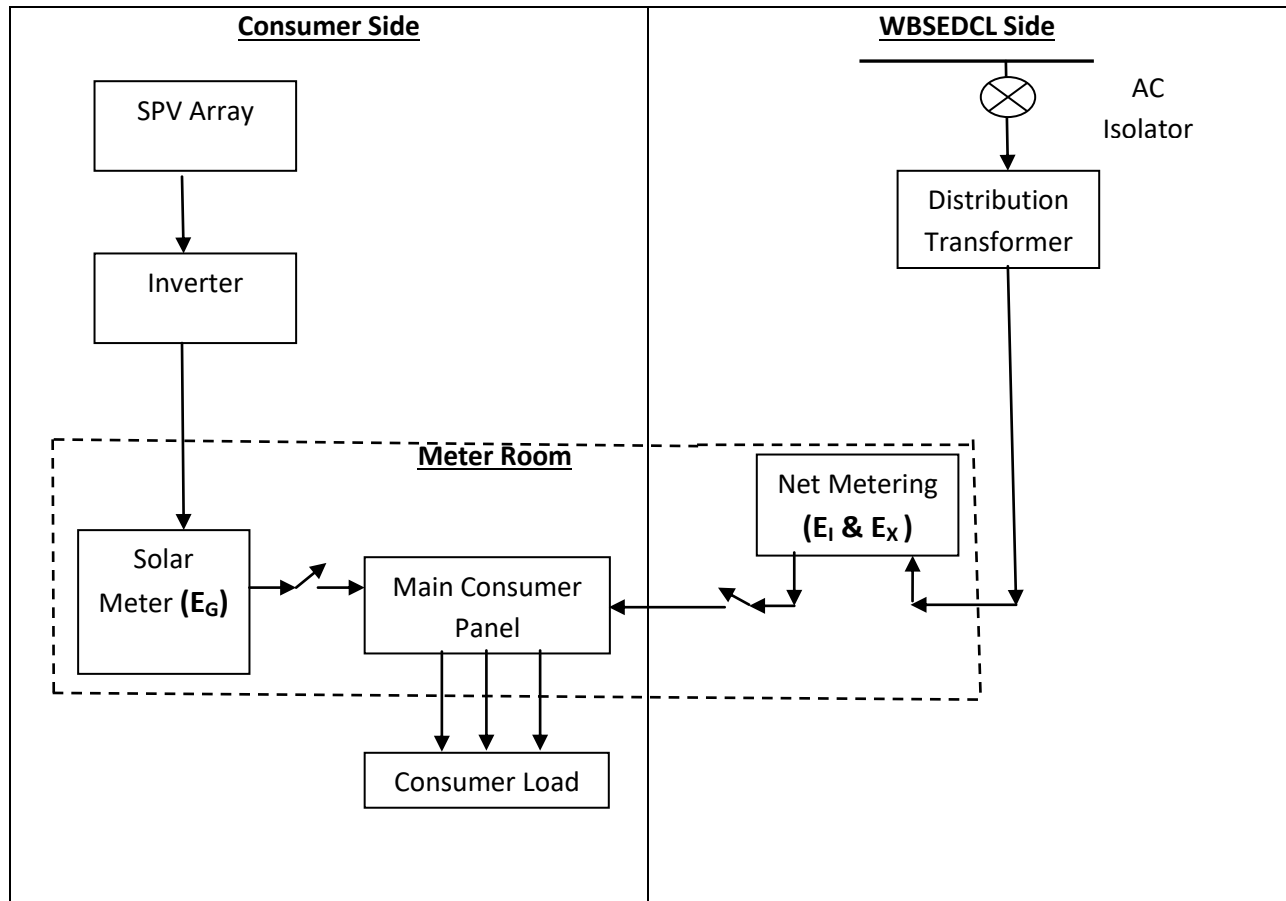
- 13.1 In case consumers under Net Billing system resorts to unlawful drawal of solar power directly from solar panel before capturing of entire solar generation, then net billing facility will be withdrawn immediately for violation of agreement and agreement under net billing facility will be terminated.
- 13.2 On termination of Consumer mode of supply agreement under net metering/ net billing will also be terminated from date of termination of Consumer mode of supply agreement.
- 13.3 If consumer fails to supply Solar Generation to WBSEDCL within one year from the date of supply as agreed in the Power Purchase Agreement (PPA) or discontinue the supply for more than one year for any reason(s) whatsoever then such PPA shall be automatically cancelled.
- 13.4 In case of violation of grid discipline, agreement under net billing facility will be terminated as per order of Hon'ble Commission.

14.0 Treatment of existing consumer under net metering arrangement and solar PV generating system installed and notified to WBSEDCL within 31/12/2021

- 14.1 Solar-PV generating systems, which are already connected with the distribution network under Net-Metering Arrangement and solar PV generating system installed and notified to WBSEDCL within 31/12/2021, shall continue with the existing accounting and settlement mechanism.
- 14.2 In case of any roof-top solar capacity addition by existing net-metered consumers, they will be treated freshly for eligibility under net-metering or net-billing as per these procedures except Govt. funded projects / projects under different Govt. scheme.
- 14.3 The Solar generation meter and allied accessories shall be procured /supplied and installed by WBSEDCL at its own cost.
- 14.4 Alteration of service if required during installation of Solar generation meter shall be borne by WBSEDCL.

DIAGRAM-A

Connection Diagram for net metering Arrangement

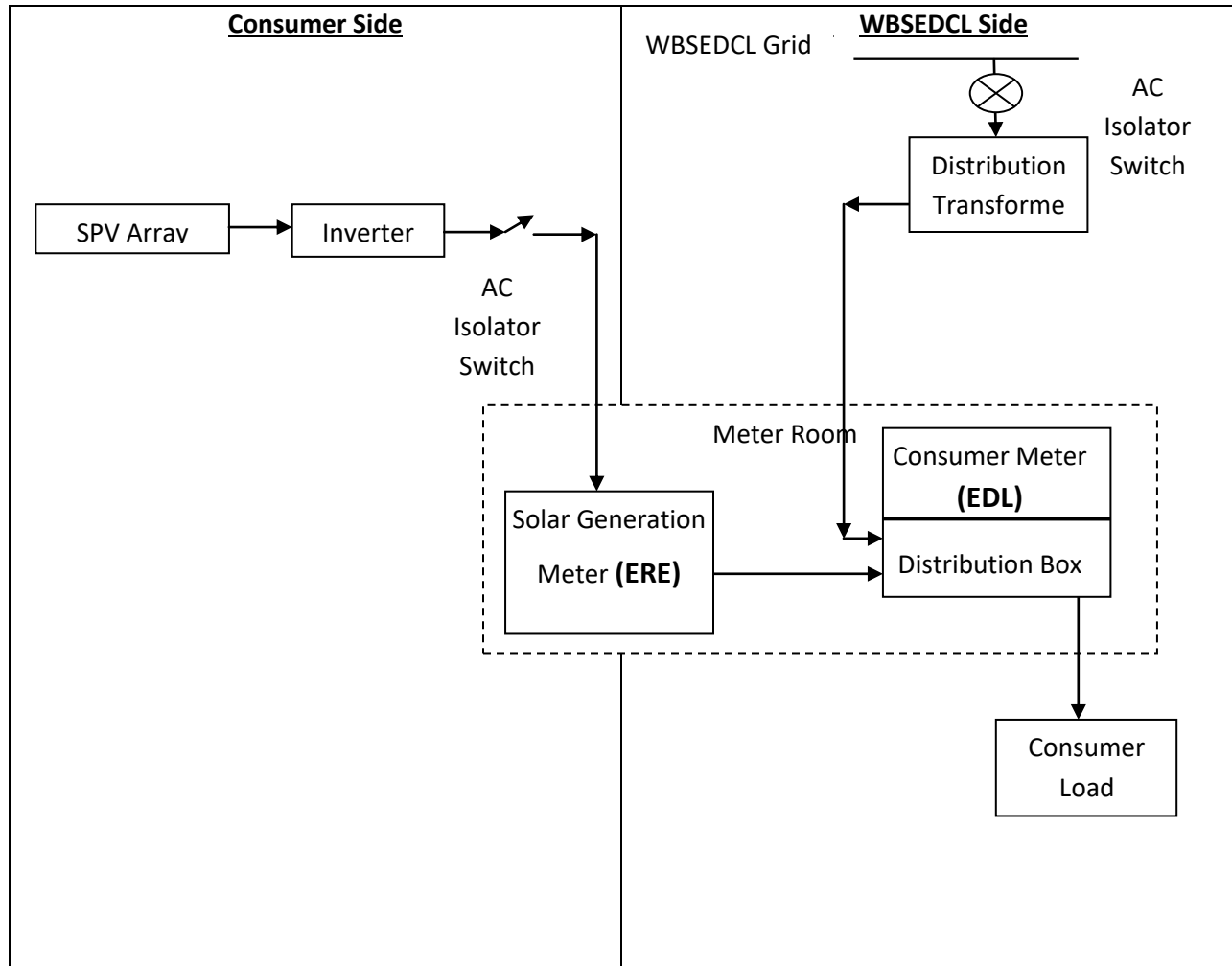


For net metering arrangement billing will be done as per Schedule-1 of Renewable Regulation

DIAGRAM-B

Connection Diagram for Net billing Arrangement having sanction load/contractual demand upto 200 KVA/ 170 KW except Agriculture consumer

[Solar injection at same voltage level at which the consumer has been given supply]

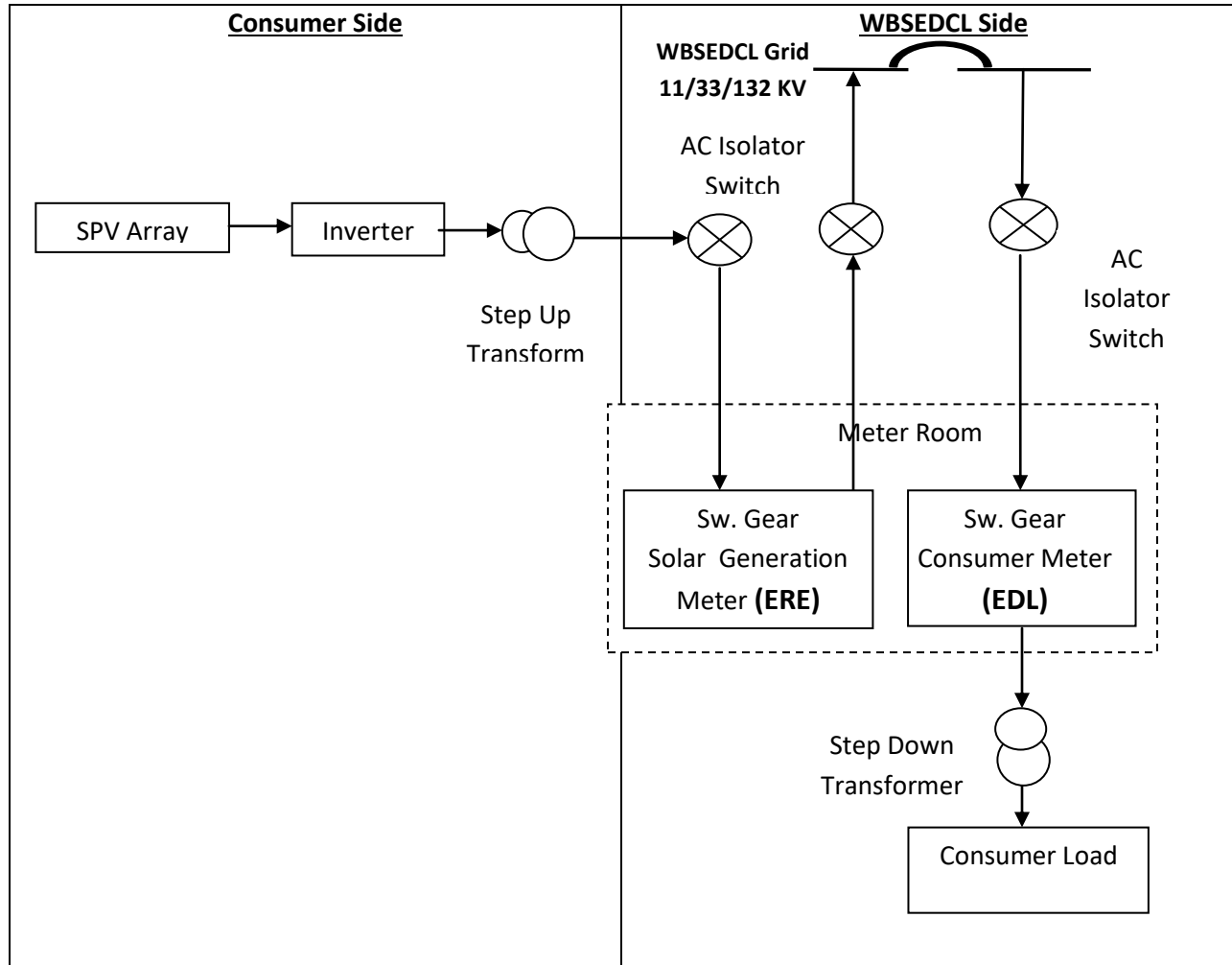


For net billing arrangement billing will be done as per Schedule-2 of Renewable Regulation

DIAGRAM-C

Connection Diagram for Net billing Arrangement having sanction load/contractual demand above 200 KVA/ 170 KW except Agriculture consumer

[Solar injection at same voltage level at which the consumer has been given supply]



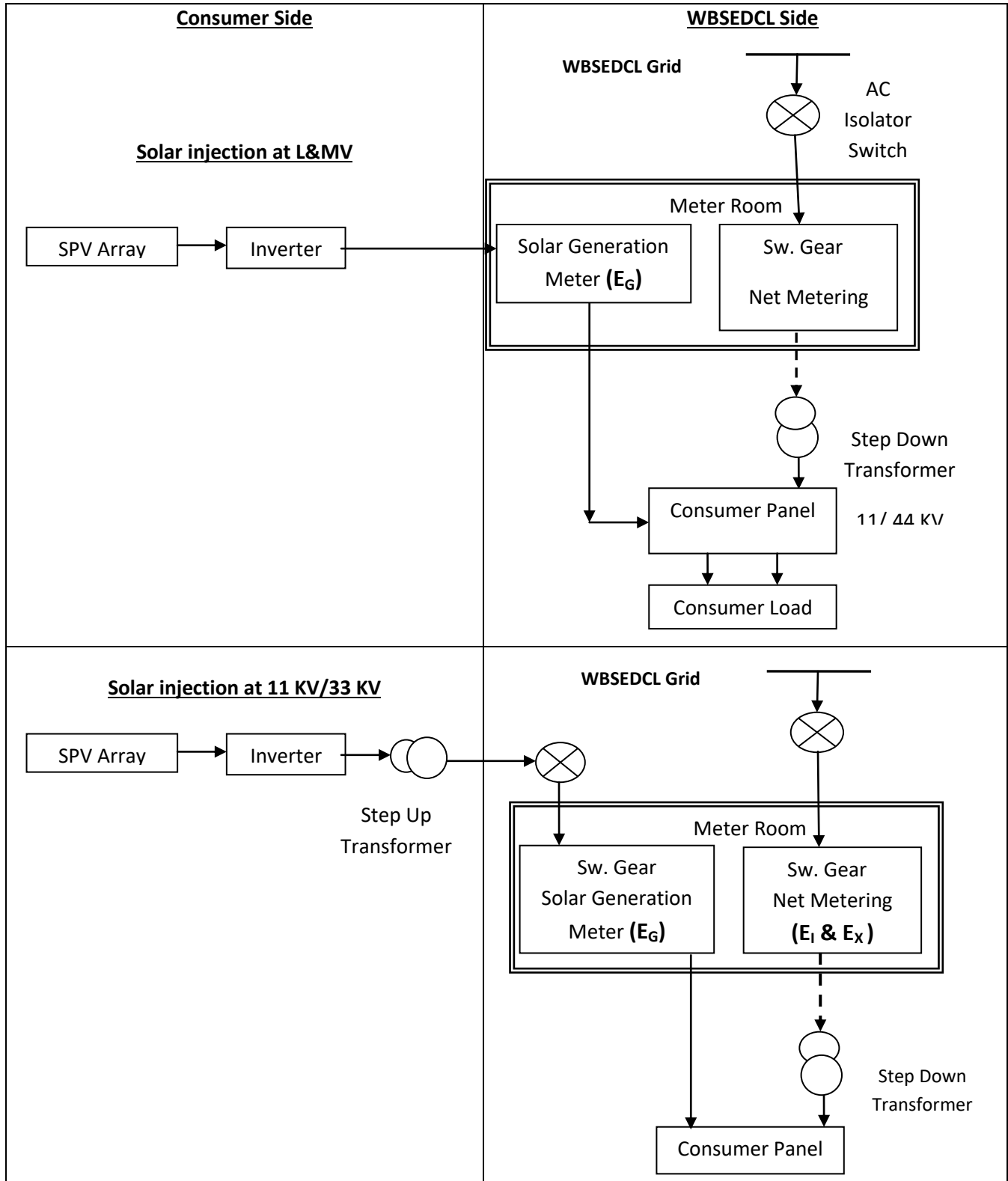
For net billing arrangement billing will be done as per Schedule-2 of RE Regulation

DIAGRAM-D

Connection Diagram for Net billing Arrangement having sanction load/contractual demand above 200

KVA/ 170 KW except Agriculture consumer

[Solar injection at any other lower voltage at which the consumer has been given supply]



For net billing arrangement billing will be done as per Schedule-2 of RE Regulation, where $ERE = E_G / (1.03)^n$, $EDL = (E_G / (1.03)^n + E_I - E_X)$ and n is no of step down of voltage in between consumer supply point of WBSEDCL and solar generation injection points.

FORM S1

(Application form for connectivity of Solar PV generating system under net metering/ net billing arrangement)

WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED.
(IVRS Number: 1800-345-5221)

Website: <https://www.wbsedcl.in>)

Name of The Office (Same as consumer connection)

Application Number:.....

Consumer Id	:	
Application Date	:	
Name of Applicant	:	
Address	:	
	:	
	:	
Mobile No.	:	
Email Id (mandatory)		
Aadhar No (optional)		
Consumer Class	:	
Phase	:	
Contractual Load (in KW) (≥ 1 KW)	:	
Installed Capacity of the proposed Solar Plant (in KWp)	:	
Billing Type (#)	:	(Net-Metering/Net-Billing)
Generation Meter	:	(Self-Owned / Purchase from WBSEDCL)
Installation Testing required by WBSEDCL	:	(Yes/No)

Declaration: I agree to bear the cost of alteration of Service if required.

Place.....

Signature of the Applicant

(#) (1) Net metering: (a) All consumer except Agriculture Consumer having contractual load upto 5 KW

(b) All agriculture consumers.

(2) Net Billing : All consumer having contractual load above 5 KW Except Agriculture Consumer.

Work Completion Report
(To be submitted by the applicant)

To**The, (Same as consumer connection)**

.....

Sub: Submission of work completion report**Ref:** Application No.: dated

Dear Sir / Madam,

This is in reference to my above application for installation of RTSPV system I / We hereby confirm you that I / we have completed the work of installation of the RTSPV system of capacity and submit the following basic information for your perusal and request you to inspect and commission the system.

Sl. No.	Particulars	Information
A.	Details of the Solar PV Module	
1.	Type of Module	Polycrystalline/ Monocrystalline
2.	Name and address of manufacturer	
3.	Capacity of each Module (Wp)	
4.	No. of Modules (attach Serial Nos.)	
5.	Total Capacity (kWp)	
6.	Date of Installation	
7.	Applicable Standard (BIS/IEC)	IEC 61215 / IS 14286, IEC 61730(Part I & II), IEC 62804
B.	Details of the Inverter	
8.	Name and address of the Inverter manufacturer	
9.	Brand Name of the Inverter	
10.	Serial Nos. of inverters installed	
11.	AC Capacity of individual Inverter (kW)	
12.	Cumulative AC capacity of Inverters (kW)	
13.	Current THD at full load & Voltage THD-less than 3%	YES/NO

14.	Ingress Protection Limit	
15.	Date of Installation	
16.	Applicable Standard (BIS/IEC)	IEC-62109(Part I & II), IEC- 60068, IEC-61683, IEC 61000, IEC 62116, IEC 61727
C.	Details of the DC Cables	
17.	Make / Name of manufacturer	
18.	Size & Type	
19.	Applicable Standard (IEC)	TUV 2 Pfg 1169/08.2007
D.	Details of the AC Cables	
20.	Make / Name of manufacturer	
21.	Size & Type	
22.	Applicable Standard (IS/IEC)	
E.	Details of the Array Junction Box(AJB)	
23.	Make / Name of manufacturer	
24.	Serial No.	
25.	DC Surge Protection Device	
26.	MCB / Isolator quantity & capacity	
27.	Size & Type	
28.	Applicable Standard (IEC)	
F.	Details of the AC Distribution Box/Inverter Interfacing Panel	
29.	Make / Name of manufacturer	
30.	Serial No.	
31.	AC Surge Protection Device	
32.	MCB / MCCB quantity & capacity	
33.	Size & Type	
34.	Applicable Standard (IEC)	
G.	Details of the Earthing*	
35.	Earth resistance (shall be less than 2 ohms)	
36.	Size of the Earth wire / flat*	
37.	Two separate Earthing points: Module Mounting Structure & DC Surge Protection Device	Yes / No

	Inverter, AC Surge Protection Device & Lightning Arrester	Yes / No
38.	Size & Type	
39.	Applicable Standard (BIS / IEC)	
	Note: * Earthing shall be done in accordance IS 3043-1986, provided that Earthing conductors shall have a minimum size of 6 mm ² copper wire or 10 mm ² aluminum wire or 3 mm ² X 70 mm ² hot dip galvanized steel flat.	
H.	Details of the Caution signage	
40.	Caution Signage	
I.	Provision of manual and automatic switches: Yes / No	
41.	Manual / Automatic Switches	
J.	G.P.S. Co-ordinates of the RTSPV System Installation	
42.	Latitude / Longitude	
K.	Operation and Maintenance	
43.	Whether Operation and Maintenance Manual provided to the consumer: Yes / No	

Standards Certificate / Standard Number BIS / IEC / etc. to be mentioned, wherever applicable.

Certification:

I / We certify that the above said RTSPV system is installed and the equipment used in the system comply the Technical and Safety Standards as specified in the regulations notified by the MNRE / CEA / WBERC.

Signature of the Applicant

Name and Signature of the System Installer

Name and Address with Seal

Name of the firm and Address

Name:

.....

Date:

Date:

Enclosures:

1. Copy of test report of PV modules, Inverter, Cable etc.
2. Data sheets / Drawing for the array mounting System.
3. Actual Single line wiring diagram (SLD) of the SPV System.
4. Signed Agreement in duplicate.

West Bengal State Electricity Distribution Company Limited

Self Certification by the Applicant

(for supply voltage below notified voltage)

It is certified that:

I/ We declare that electrical installation installed at my /our premises is required to be supplied at notified voltage or below and it does not include installations of mines, oil fields and railways. I/We confirm that I/we have submitted the report of self-certification in respect of the electrical installation, installed at my/our premises to the Electrical Inspector in the formats, as framed and the same has duly been received by the Office of the Electrical Inspector. I/We, also enclose the receipted copy/ copy of system generated acknowledgment of the self-certification in respect of the electrical installation, installed at my/our premises.

Address of the premises :

Permanent address of the applicant/authorized signatory:

Signature of the applicant/authorized signatory

Name of the applicant/authorized signatory