



# Bangalore Electricity Supply Company Limited

(Wholly Owned by Government of Karnataka)

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Office of the:  
Asst. Executive Engineer (EI)  
H.T. Rating Sub-Division, Tumkur

No. AEE(Ele)/AE(Ele)/HTR/2025-26/2144-47

Date: 16.10.2025

To,  
Asst. Executive Engineer (EI),  
O&M Rural Sub-Division-1  
BESCOM, Tumkur.

Sir,

**Subject:** Pre-Commission Test report of R.R.No- **RHT-177** Solar Installation

- Ref:** 1) EE(Ele)/AEE(Ele)/AE-1/2025-26/1507/09.10.2025  
2) EE/BMANZ/AEE/AE/MTLAB/2025-26/2541/22.03.2025  
2) AEE/AE/MTLAB/NEL/2025-26/275-276/30.07.2025  
3) PPA executed date: 14.07.2025

The Pre-Commission Test for **2000.9kWp** Solar Power under Net metering is conducted on **15.10.2025** to the HT installation with the following details.

1. **DETAILS OF H.T. INSTALLATION:**

Previously rated on: 05.08.2024

R.R No: SRTPVRHT-177	CD: 3000KVA	MC: 15000	Tariff: HT-2AII	Activity: - Industry
<b>Solar Gen Cap: 2000.9kWp</b>				

1. MULTIPLYING CONSTANT FOR BILLING:

$$\frac{\text{PT Ratio} \times \text{CT ratio} \times \text{Dial constant}}{\text{Meter PT ratio} \times \text{Meter CT ratio}}$$
$$11\text{KV} / \sqrt{3} / 110\text{V} / \sqrt{3} \times 150/1\text{A} = 15000$$

2. Name & Address of the consumer: **M/S HAVELLS INDIA LDT, plot no: 685 & 686 3<sup>rd</sup> phase  
KIADB V.N.Pura Industrial area kora**

**3. Observation & Advice on Technical Matter:**

- The Installation is visited on 15.10.2025 as per request of AEE, RSD-1 vide Ref (1) for Calibration and synchronizing **2000.9kWp** Solar power of the installation RHT-177 under Net Metering.
- The installation is rated and calibrated before & after solar synchronization, and wiring is verified & found ok after installing of new main and check bidirectional meters.

**Yours faithfully**

**Asst. Executive Engineer (EI),  
HT Rating S/D, Bescom, Tumkur.**

**1. Details of Seals provided:**

Sl. No		Old Meter	New Main Meter		New Check Meter		New Solar Meter
	Seals Provided to	Seals Found	Seals Left		Seals Left		Seals Left
1	M.C. Of Meter	BMJ67852 PBC37206	BRM0462529 KAE43883	MT111755	BRM0462530 KAE43816	MT111756	BRM1135347 SDH51870
2	T.C. of Meter	CTAZ248711	CTAZ235640		CTAZ235642		MT235637
3	M.D. Reset Knob	CTAZ248712	CTAZ235641		CTAZ235643		235637
4	Optical port	PCS	PCS		PCS		
5	T.T.B.	CTAZ236147	CTAZ235645				
6	Meter chamber Main Door	CTAZ236148	CTAZ235644				
7	Meter Reading window	PCS	PCS				
8	C.T./P.T. Chamber	CTAZ248715	Retained				235638
9	Cable entry	CTAZ248716	Retained				

**2. DETAILS OF THE EQUIPMENTS:**

- Cubicle type: *Cable Entry*
- Cubical Condition & Location: *GOOD*
- Supply side: *GOS In service*

Lightning Arrester- *Provided*  
Load side isolation- *VCB*

**3. Details of CTs/PTs:**

Sl.No.		CT Details	PT Details
1.	Make	Vyoma	Vyoma
2.	Type	In Door	In Door
3.	Class	0.2s	0.2
4.	Insulation level	15/38/95Kv	15/38/95kV
5.	Burden	2.5VA	25VA
6.	Ratio Connected	150/1A	11KV/110V
7.	Sl.No., 'R'ph	VYC-P3535	VYP-P492
	'Y'Ph	VYC-P3536	VYP-P493
	'B'ph	VYC-P3537	VYP-P494

**4. Details of Electronic Trivector Meter.**

		Released Meter	New Main Meter	New Check Meter
a.	Make	L&T	L&T	L&T
b.	Type	WR300BB11K4RS, Unidirection, DLMS, CAT- C1, TOD ABT	WR300BB11BEDLMS2,ABT, Bidirectional, DLMS,TOD,ABT	WR300BB11BEDLMS2,ABT, Bidirectional, DLMS,TOD,ABT
c.	Class	0.2s	0.2S	0.2S
d.	Voltage	3X63.5V	3X63.5V	3X63.5V
e.	Ampere	1A	1A	1A
f.	Pulse/unit	50,000	50,000	50,000
g.	Dial/constant	1	1	1
h.	Sl.No./Year	24003549/2024-Feb	25008682/2025-July	25008710/2025-July

i.	Modem Sl.no	NSGW713670
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**5.A. Calibration Details (Before SRTPV).**

	<b>CALIBERATOR</b>	<b>METER</b>
A. Voltage (V)	63.76/64.20/63.97	63.99/64.36/64.14
B. Current (A)	0.3671/0.3321/0.3475	0.514/0.469/0.468
C. kW/kVAr/kVA/PF	0.0663/0.0069/0.0667/0.994	0.0895/0.0007/0.0845/1.000
D. Sequence	Forward	Forward

	Wh	VARh lg/lđ	Vah	Pf
a. MRI	Error Measurement is done using Zera			
b. Accucheck				
c. % loss				

**5.B. Calibration Details (After SRTPV)**

<b>Main Meter</b>	<b>CALIBERATOR</b>	<b>METER</b>
A. Voltage (V)	64.36/64.81/64.61	64.34/64.88/64.63
B. Current (A)	0.1501/0.1551/0.1731	0.148/0.153/0.172
C. kW/kVAr/kVA/PF	0.0336/0.0089/0.0367/0.910	0.0330/0.0086/0.0364/0.974
D. Sequence	Forward	Forward

	Wh	VARh lg/lđ	Vah	Pf
a. MRI	Error Measurement is done using Zera			
b. Accucheck				
c. % loss				

**5.C. Calibration Details (After SRTPV)**

<b>Check Meter</b>	<b>CALIBERATOR</b>	<b>METER</b>
A. Voltage (V)	64.52/64.81/64.72	64.54/64.86/64.70
B. Current (A)	0.1831/0.1856/0.1781	0.181/0.185/0.178
C. kW/kVAr/kVA/PF	0.0345/0.0079/0.0306/0.910	0.0344/0.0078/0.0306/0.980
D. Sequence	Forward	Forward

	Wh	VARh lg/lđ	Vah	Pf
a. MRI	Error Measurement is done using Zera			
b. Accucheck				
c. % loss				

<b>6. A. METER READING</b>	<b>Final Values of Released</b>	<b>TOD (kwh) Values</b>
a. Meter Serial No.	24003549/2024-Feb	
b. Time, Date, Month, Year	16:25 Hrs	
c. Present KVA	<b>0.1330</b>	1C1: 71.183
d. Present PF	<b>0.998</b>	1C2: 233.334
<b>e. Cumulative Values</b>		1C3: 111.781
1.CkVA	1.944	1C4: 208.293
2.CkWh	<b>624.591</b>	
3.CkVARh lag	21.225	
4.CkVARh lead	36.110	
5.CkVAh	625.822	
<b>e. Billing values</b>		
1. B kwh	601.188	1B1: 68.515
2. B kVA	0.1377	1B2: 224.671
3. B PF	0.998	1B3: 108.006
4.R/C	25	1B4: 199.996

<b>6.B. Meter Reading</b>	<b>Initial Values for Fixed Bi-Directional Main Meters and Check Meter</b>	
	<b>After solar</b>	
f. Meter Serial No.	<b>25008682/2025-July</b>	<b>25008710/2025-July</b>
g.	<b>Main Meter (IMP/EXP)</b>	<b>Check Meter (IMP/EXP)</b>
h. Time, Date, Month, Year	16:38 Hrs	16:58 Hrs
i. Present kVA	<b>0.0000/0.0000</b>	<b>0.0000/0.0000</b>
j. Present PF	<b>0.000/0.000</b>	<b>0.000/0.000</b>
<b>k. Cumulative Values</b>		
1.CkVA	0.345/0.107	0.400/0.092
2.CkWh	<b>0.344/0.067</b>	<b>0.271/0.069</b>
3.CkVARh lag	0.147/0.032	0.087/0.032
4.CkVARhlead	0.055/0.184	0.054/0.033
5.CkVAh	0.432/0.084	0.322/0.085
<b>e. Billing values</b>		
1. B Kwh	0.344/0.067	0.271/0.069
2. B kVA	0.0000/0.0000	0.0000/0.0000
3. B PF	0.000/0.000	0.000/0.000
4.R/C	06	06

Meter Reading	Main Meter		Check Meter	
<b>TOD (kWh) Values</b>	1B1: 0.000	1C1: 0.000	1B1: 0.000	1C1: 0.000
	1B2: 0.249	1C2: 0.249	1B2: 0.155	1C2: 0.155
	1B3: 0.057	1C3: 0.057	1B3: 0.105	1C3: 0.105
	1B4: 0.037	1C4: 0.037	1B4: 0.010	1C4: 0.010

**7. Details of Solar meter & LT CTs:**

		Solar meter		LT CT Details
a.	Make	Kalpa	Make	Kalpa
b.	Type	Uni-directional, CAT-C1 DLMS	Type	(Indoor)
c.	Class	0.5s	Class	0.5s
d.	Voltage	3X240V	Insulation level	ILV:0.66/3KV Class: B
e.	Ampere	5A	Burden	3.75VA
f.	Pulse/unit	16,000	Ratio Connected	
g.	Dial/constant	1	Sl.No. 'R' ph	<b>9601</b>
h.	Sl.No./Year	<b>25282042</b>	'Y' ph	<b>9602</b>
			'B' ph	<b>9603</b>
			'N' ph	<b>9604</b>

**8. Solar LT Meter Readings.**

LT Solar Meter Sl No.	CTR	MC	CkWh	BkWh	B Kw
<b>25282042</b>	<b>3000/5A</b>	<b>600</b>	<b>2.24</b>	0.000	0.00
<b>Voltage (Time/19:30)</b>			<b>Current (Time/19:30)</b>		
<b>R- 0.00V</b>	<b>Y- 0.00V</b>	<b>B- 0.00V</b>	<b>R- 0.00A</b>	<b>Y- 0.00A</b>	<b>B- 0.00A</b>

**9. Inverter Details:**

Make	Capacity	Sl.No
Havells	20X80kw	SH1021080KB246140174 /173/016/018/020/021/079/105/118/130/132/137/138/150/161 SH1021080KB246150050/027/022/015

**Asst. Engineer(Ele)**  
**H.T. Rating Sub-Division**  
**BESCOM, Tumkur**

**Asst. Executive Engineer(Ele)**  
**H.T. Rating Sub-Division**  
**BESCOM, Tumkur**

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Consumer/ Representative  
Signature with Seal

**Copy for kind information to:**

A. The Executive Engineer (Ele), MT division, CTZ, Chithradurga

**Copy to:**

B. Office copy to A.E.E. (Ele) H.T. Sub-Division, BESCOM, Tumkur.

C. The Accounts Officer, I/A Circle office, BESCOM, Tumkur for information.