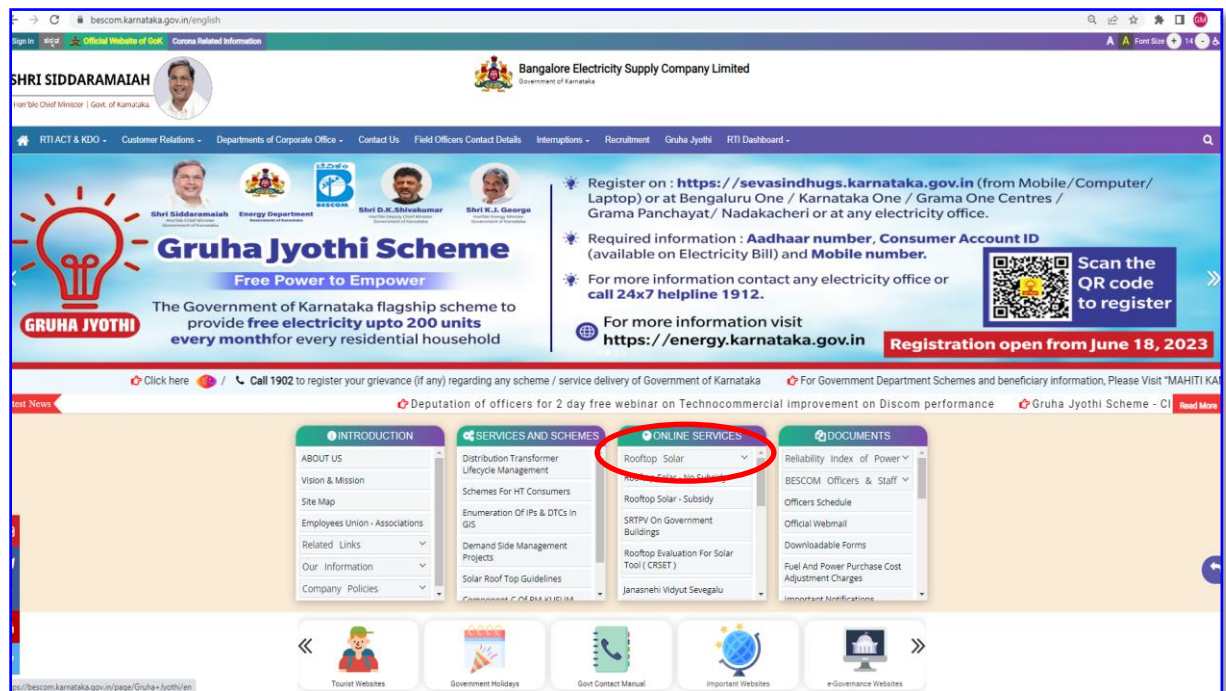
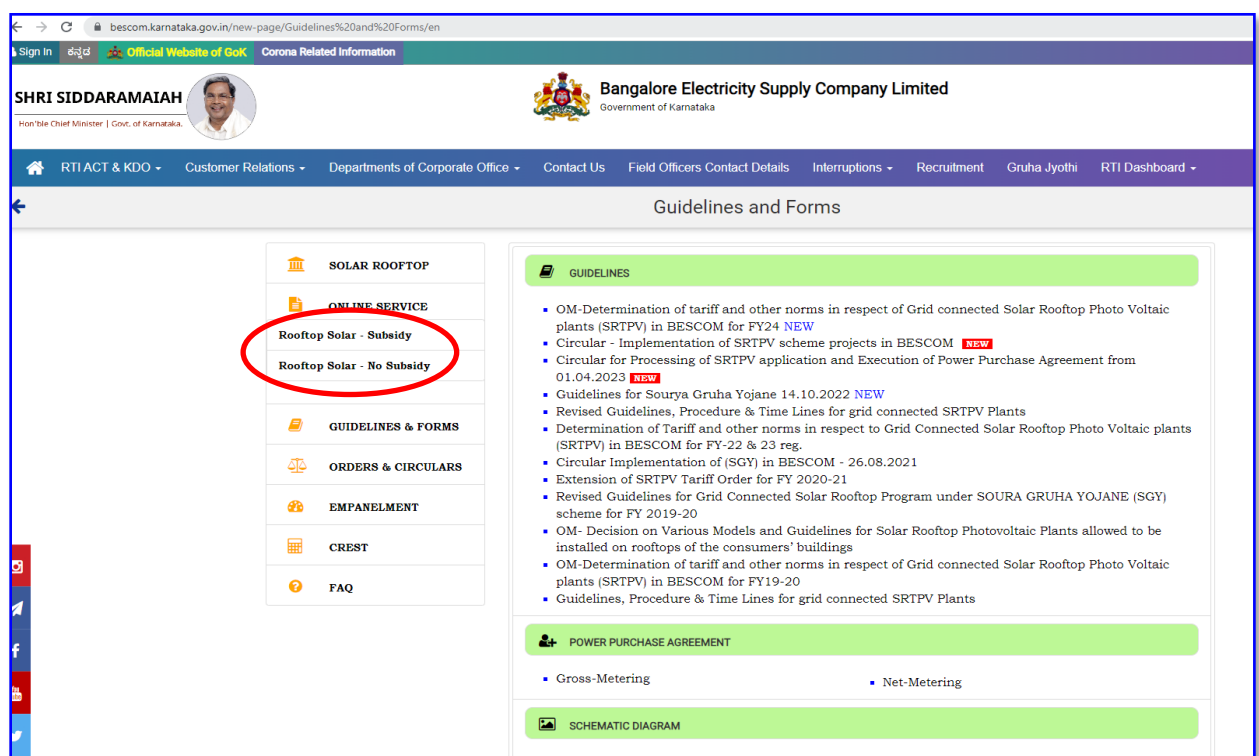


Manual for Online SRTPV application for capacity 1 to 10kW for BESCOM Officers

1. Log on to BESCOM website <https://bescom.karnataka.gov.in/>



2. Click on -> Rooftop Solar – non subsidy or Subsidy



3. To View / Process the Applications submitted by the Applicant, the AEE sub-division has to **Click on -> Officers Login**, enter his official Mobile Number and OTP sent to official Mobile no. & **Click on -> Verify & Login**

SRTPV ONLINE SERVICES

APPLY ONLINE APPLY ONLINE (SOURA GRUHA YOJANE) VIEW STATISTICS **OFFICERS' LOGIN**

Official Login

Enter Mobile Number

Enter OTP

Send OTP

Verify & Login

@ 2020 - Design By BESCOM 080 2234 0816 solar_helpdesk@bescom.co.in

4. The AEE Sub-division can view the Applications submitted by Applicant along with the status of each Application.

SRTPV Applications Registered

Show Applications registered under SOURA GRUHA scheme

Create a Ticket View pending tickets View resolved tickets Enter Ticket ID View Ticket

Search Here..

Number of Applications registered: 39

Application Id	Account ID	Subdivision Code	Subdivision Name	RR Number	Registered Date	Status
1000308843	5571196	5130102		BD28958	08 Aug 2023	PPA Approved and Work Approval Intimated. 08 Aug 2023
1000296561	5564045	5130102		BD28909	24 Jun 2023	MT inspection completed. Pending synchronization 25 Jul 2023
1000277356	56955	5130102		BDHT44	21 Mar 2023	Synchronized 20 Apr 2023

5. After receipt of Application, AEE S/d has to download the PPA and verify the signature. **Click on -> Application Id**

SRTPV Applications Registered

Show Applications registered under SOURA GRUHA scheme

Create a Ticket

View pending tickets

View resolved tickets

Enter Ticket ID

View Ticket

Search Here..

Number of Applications registered: 39

Application Id	Account Id	Subdivision Code	Subdivision Name	RR Number	Registered Date	Status
1000308843	5571196	5130102		BD28958	08 Aug 2023	PPA Approved and Work Approval Intimated. 08 Aug 2023
1000296561	5564045	5130102		BD28909	24 Jun 2023	MT inspection completed. Pending synchronization 25 Jul 2023
1000277356	56955	5130102		BDHT44	21 Mar 2023	Synchronized 20 Apr 2023

6. Click on -> Esign the PPA & Click on-> Download PPA

Application Info

Work Completion

Commissioning

Application No. 1000005668

Application Registration,Payment & Esign is Successfully Completed

1 Application Details

2 Payment Details

3 Esign the PPA

E-sign PPA Details

PPA Date: 07 Aug 2023

PPA Rate: Rs. 4.5/-

Esign PPA Document:

Download PPA

Work Approval Document:

Download Work Approval Letter

Your Application is successfully registered with us. Please download the Auto-generated Approval letter for SRTPV Installation Work. Complete the SRTPV Installation work with in 150 days and submit the work completion report, along with declaration letter signed by system intsailler. (declaration : download)

E-sign SPPA Details

SPPA TYPE	PPA DATE	PPA RATE	PPA DOCUMENT
Capacity Variation	2023-08-07 18:12:52.0	Rs. 4.5	Click Here

7. Click on -> Esign the PPA & Click on-> Download PPA

**POWER PURCHASE AGREEMENT(PPA) FOR ROOFTOP SOLAR PV PLANTS
WITH NET METERING**

(Standard format Approved by KERC)

For Capacities 1kw to 10kw as per KERC Order Dated: 01.06.2023

This Power Purchase agreement is entered into at K1 Subdivision on this 07-08-2023 Day of SATHYA T #25,6TH CROSS,K GARDEN,MYLASANDRA.KENGERI between Bangalore Electricity Supply Company Limited (BESCOM), a Government of Karnataka undertaking, being a Company formed and incorporated in India under the Companies Act-1956, with its registered office located at Bangalore, Karnataka State, represented by BESCOM AEE K1 Subdivision hereinafter referred to as the "BESCOM", (which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns), as party of the first part

AND

SATHYA T the consumer of BESCOM residing at (address) #25,6TH CROSS,K GARDEN,MYLASANDRA.KENGERI, hereinafter, referred to as the "Seller" (which expression shall, unless repugnant to the context or meaning thereof, include his successors and permitted assigns) as party of the second part.

Whereas,

a. The Seller intends to connect and operate the Solar Roof Top Photo Voltaic (SRTPV) system with BESCOM's HT/LT Distribution system for sale of Solar Power to BESCOM, in terms of the Karnataka Electricity Regulatory Commission (KERC) Order dated: 01.06.2023.

b. The Seller intends to install a SRTPV system of 1.0 kWp capacity on the existing roof top of the premises, situated at #25,6TH CROSS,K GARDEN,MYLASANDRA.KENGERI and bearing number RR. No K1D31340 in the same premises, under K1 Subdivision of BESCOM.

c. The Seller intends to sell the energy, generated from the SRTPV system to BESCOM on net metering basis, from the date of commissioning of the SRTPV system.

Explanation: the 'Commissioning' means the stage at which the SRTPV system starts generating the power for the use by the Seller and injects surplus power if any, into the grid.

d. BESCOM intends to purchase the energy, generated by such SRTPV system, on Net-metering basis, at the tariff determined by the KERC. Now therefore, in consideration of the foregoing premises, the parties, hereto, intending to be legally bound, hereby agree as under:

1. Technical and Interconnection Requirements:

Seller shall ensure his SRTPV system complies with the following technical and interconnection requirement and shall:

8. Verify the E-Signature in the last page of PPA pdf which has to be e-Signed by the RR account holder only. If the Signature is not verified. Please follow the below steps.

9.4 Upon termination of this Agreement, Seller shall cease to supply power to the distribution system and any injection of power shall not be paid for by the BESCOM.

10. Dispute Resolution:

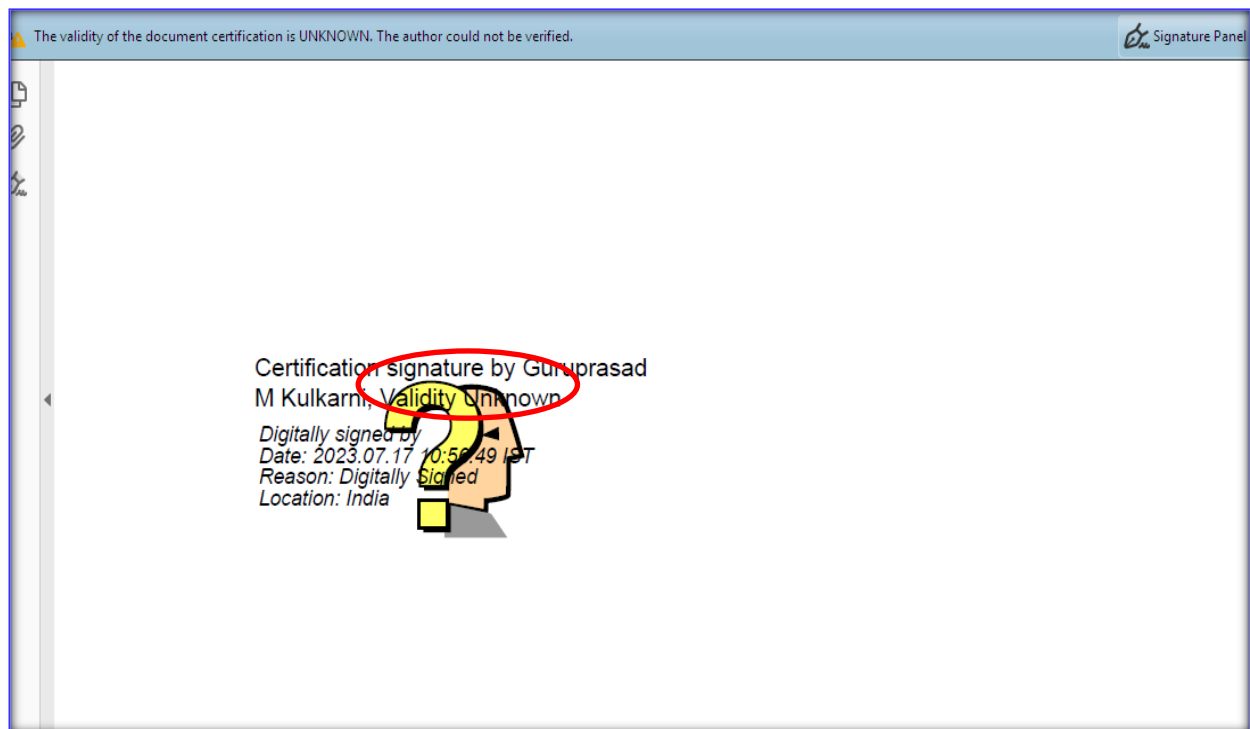
All the disputes between the parties arising out of or in connection with this agreement shall be first tried to be settled through mutual negotiation.

The parties shall resolve the dispute in good faith and in equitable manner.

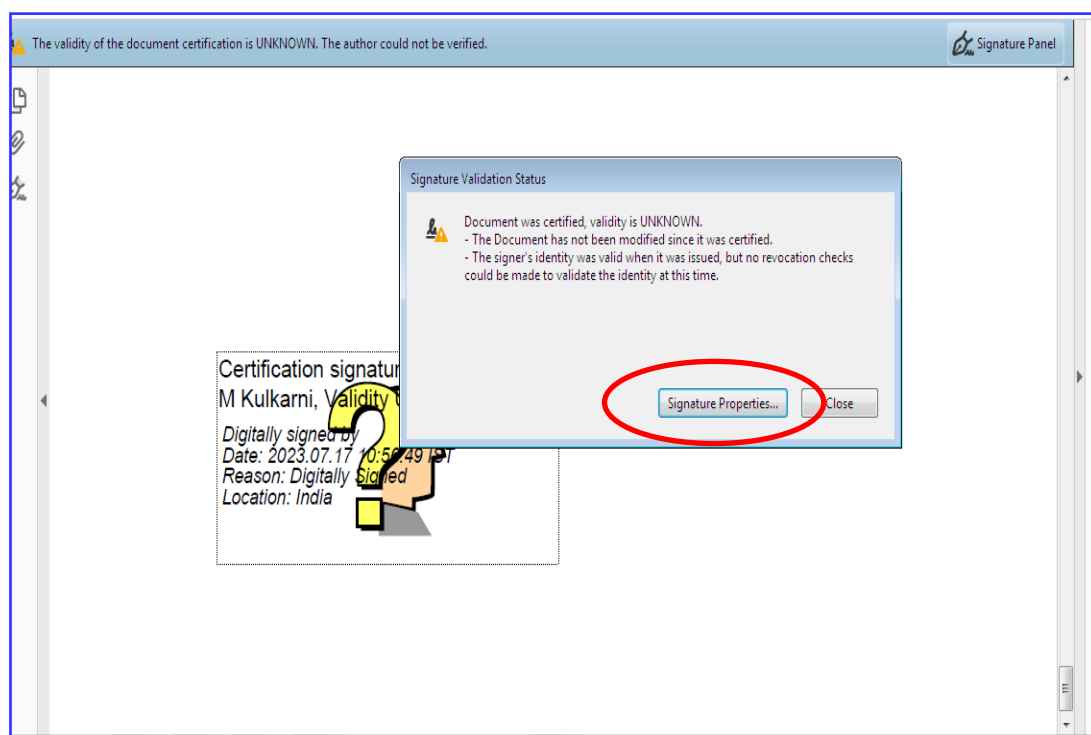
In case of failure to resolve the dispute, either of the parties may approach the appropriate Forum.



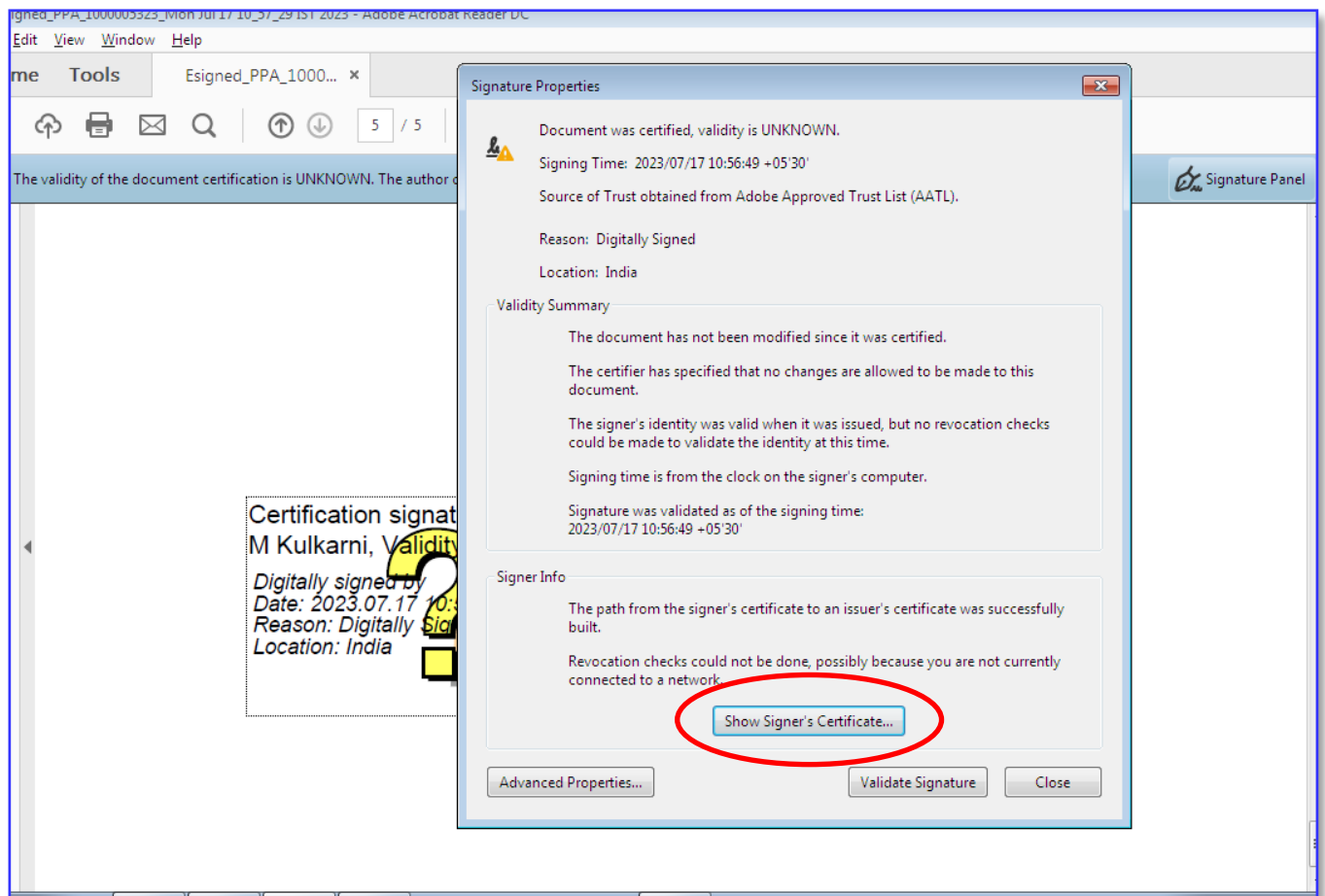
9. **Right click on "VALIDITY UNKNOWN",** to set the certificate properties in system



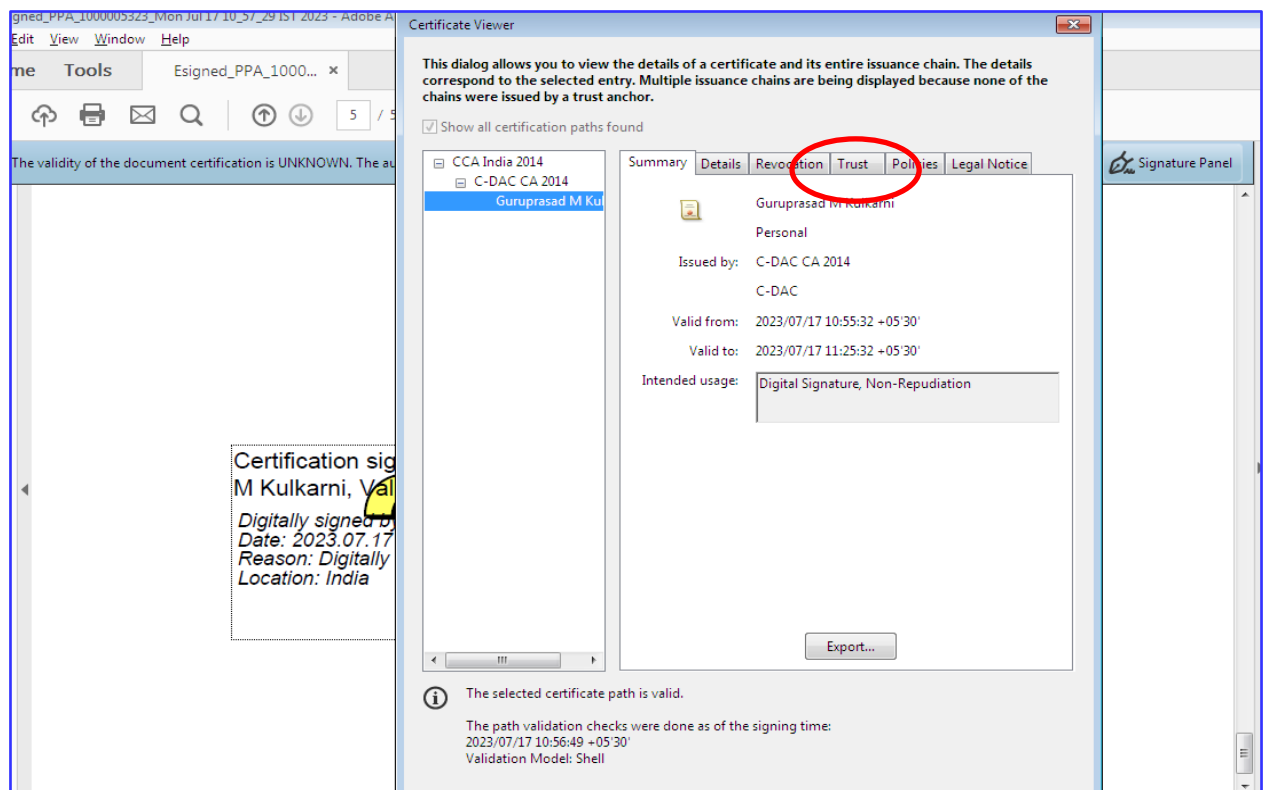
10. Click on -> Signature Properties.



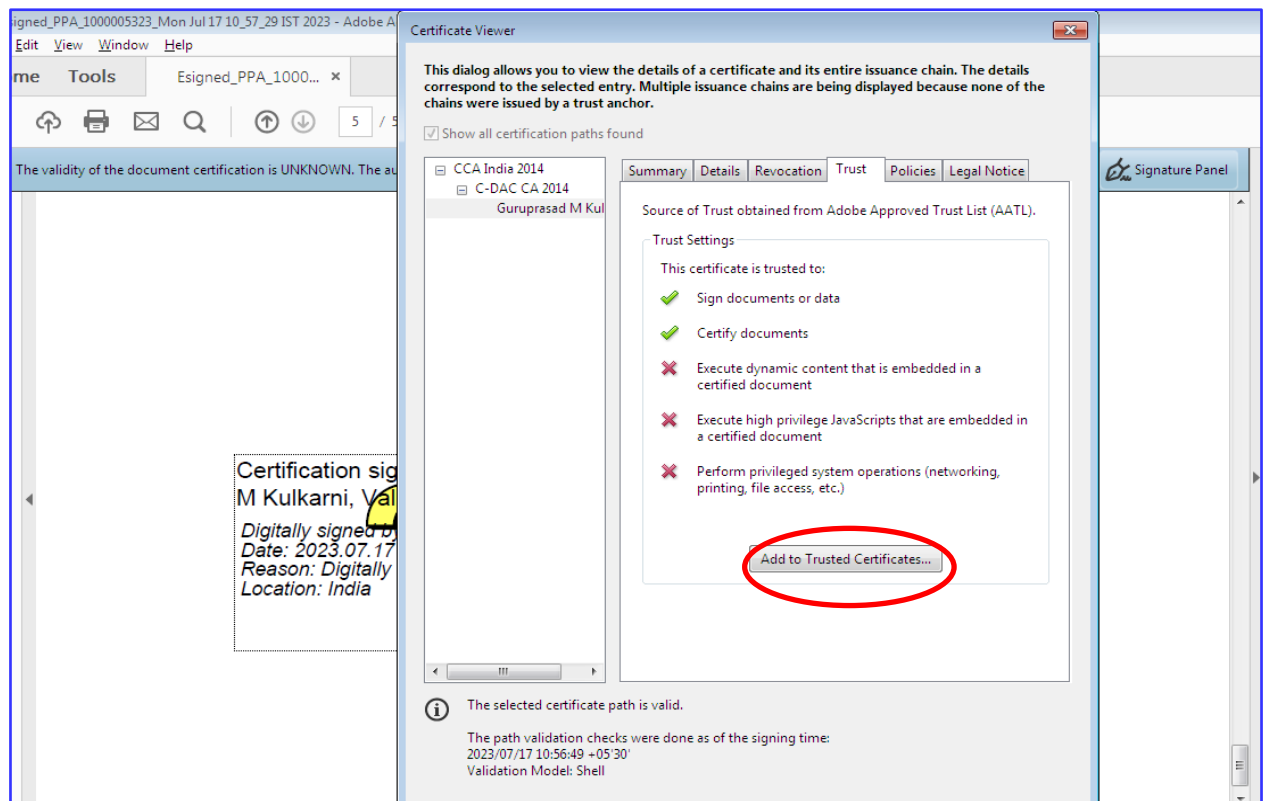
11. Click on -> Show Signature Properties



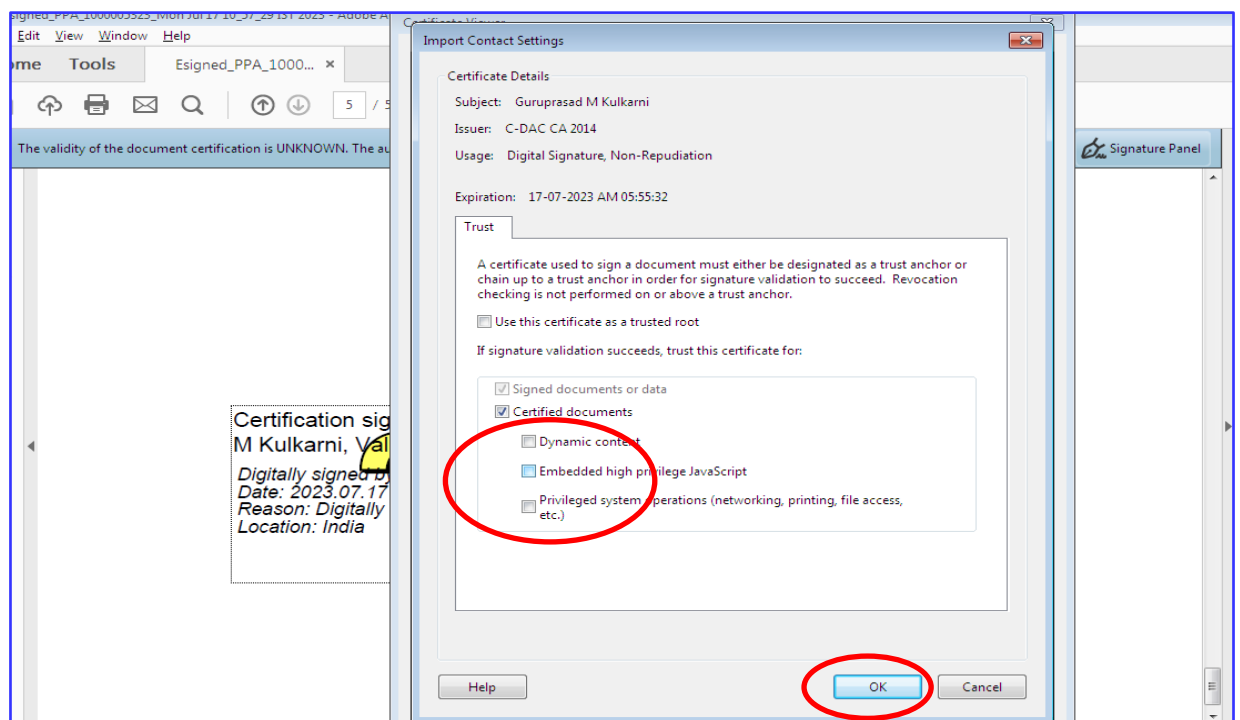
12. Click on -> Trust Tab

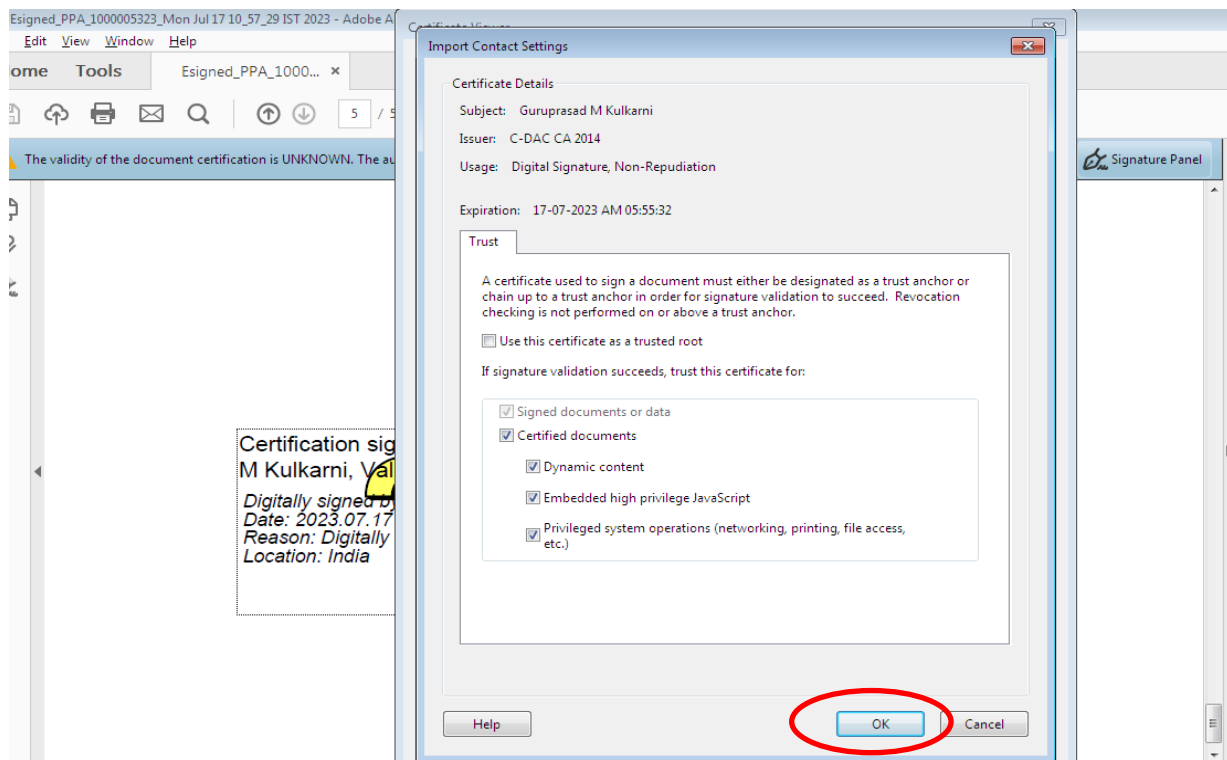


13. Click on -> Add Trusted Certificate

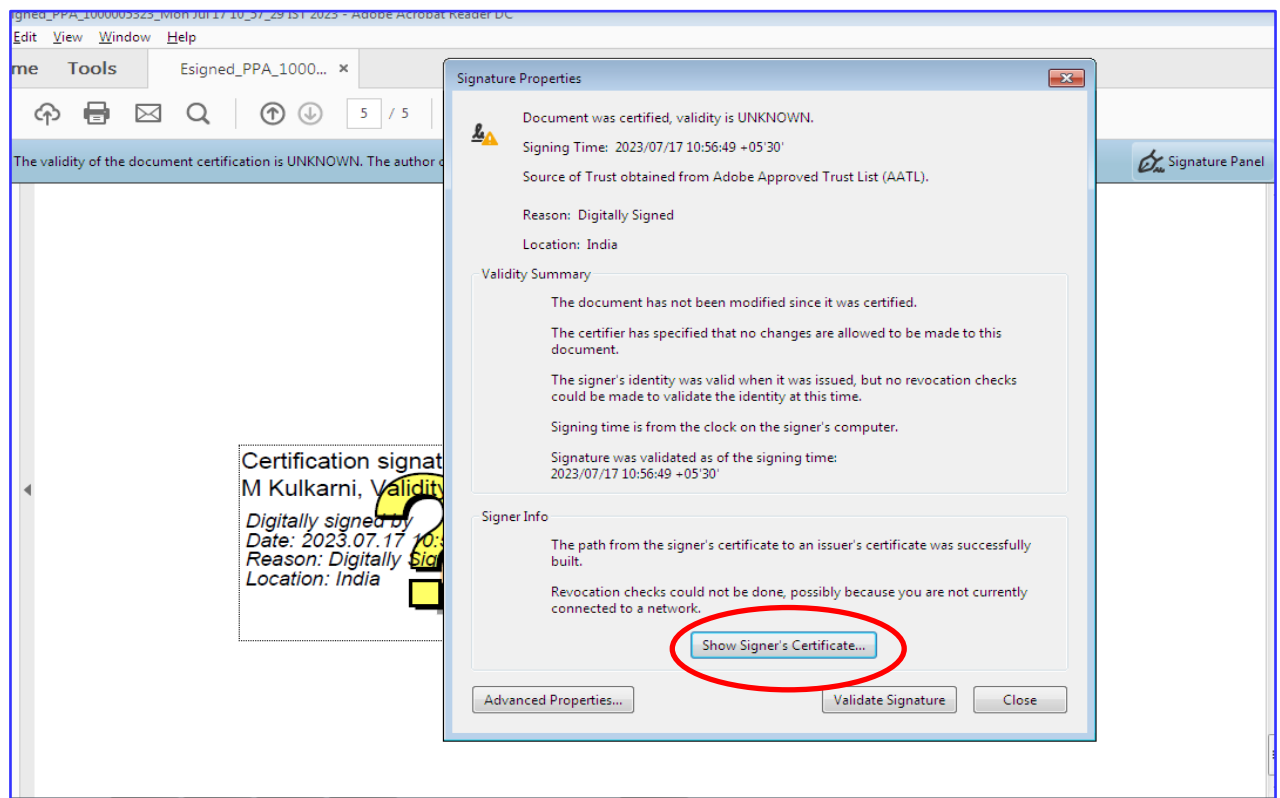


14. **Select -> dynamic content, Embedded high privilege JavaScript & privileged system operation. Click on -> OK**

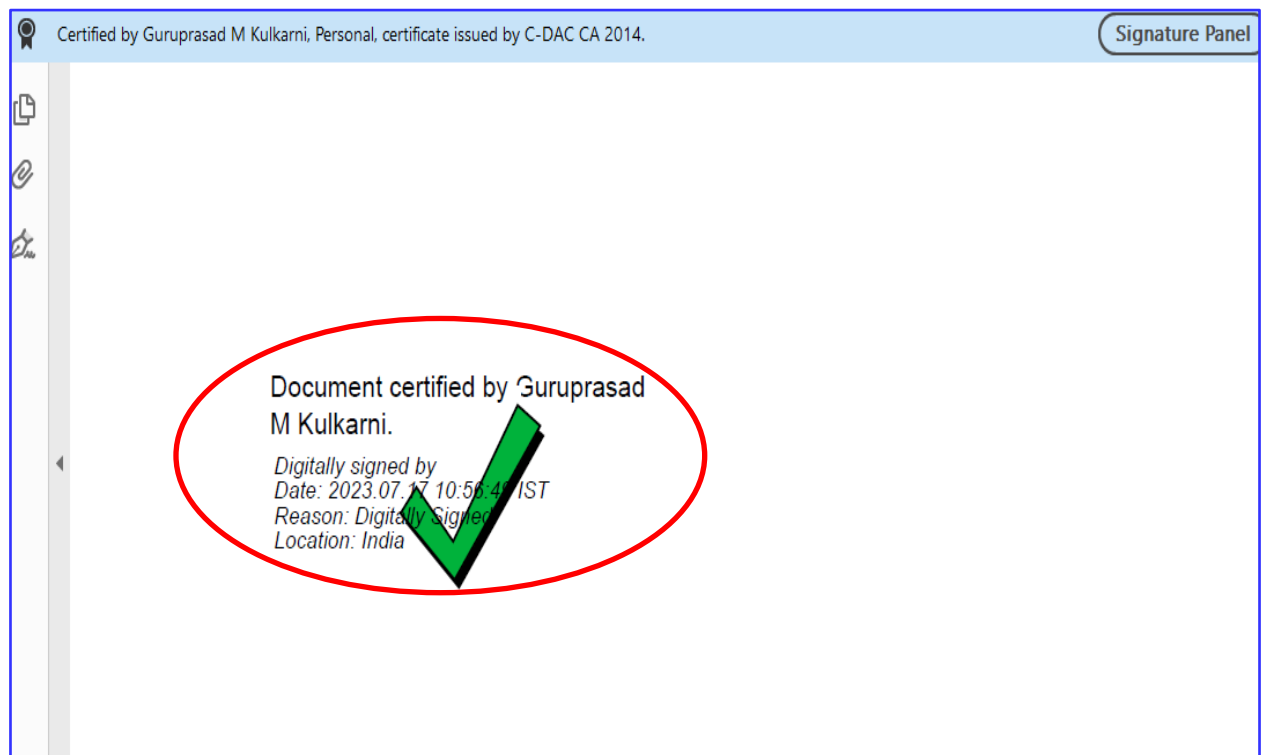




15. Click on -> Validate Signature



16. The Signature set valid



17. In case the Signature is made by other than RR no. holder the Application shall be liable for rejection.

18. After the Applicant submits the Work Completion report, an SMS & Email sent to AEE, S/D for commissioning & Synronization. The AEE S/D shall log in to his credential for synchronization process, follow the step of sl no. 4, 5, & 6. **Click on -> Work Completion & download work execution details submitted.** The work completion report submitted by the Applicant contains details of Panels, grid tied inverter & Meter details, etc

Application Info	Work Completion	Commissioning
Application No. 1000005668 Feasible Solar capacity in kWp : 1.0		
The PPA Date : 07-08-2023 Remaining days for Complete the Work Completion: 147		
Download Work Execution Details Submitted		Download System Installer Declaration Letter

19. **Click on -> Work Completion & download system installer declaration letter. OR**

Application Info	Work Completion	Commissioning
Application No. 1000005668 Feasible Solar capacity in kWp : 1.0		
The PPA Date : 07-08-2023 Remaining days for Complete the Work Completion: 147		
Download Work Execution Details Submitted		Download System Installer Declaration Letter

20. The sample declaration letter of the System installer is as below:
The AEE S/d has to verify the BIS Registration no. of the grid tied inverter.

Declaration letter by the System installer

I declare that the SRTPV system is designed, engineered and constructed by me. All the equipment's of SRTPV system such as Solar Panel, Grid tied inverters, DC / AC cables, AJB etc is compliant with relevant International (IEEE/IEC) and Indian standards (BIS) and safety standards issued by IEEE/ BIS/ MNRE/ CEA/ KERC/ BESCO issued from time to time. The SRTPV plant details are:

RR no.:

Location:

SRTPV plant capacity:

Sign with Seal:

Name:

GST No.:

I certify that the PV modules of below serial are installed at the plant locations:
(Please mention the Serial nos of all the PV modules):

PV modules		
Make		
Capacity of each PV module in Wp		
Nos.		
Total capacity in kWp		
Serial no	From	To

+ Grid tied inverter

BIS Registration no.	71010499
Model no.	
Make	
Capacity of each Inverter	
Nos.	
Total capacity in kW	
INVERTERS	SERIAL NO
1 st inverter	
2 nd inverter	
3 rd inverter	
4 th inverter	

Sign with Seal:

Name:

GST No.:

21. To verify the grid tied inverter model certified by Bureau of Indian Standards (BIS), follow the below procedure: **Click On ->**
<https://www.crsbis.in/BIS/publicdashAction.do>



BUREAU OF INDIAN STANDARDS
The National Standards Body of India



MONTH: August - 2023

[Home](#) | [About CRS](#) | [Lab](#) | [Documents](#) | [FAQ](#) | [Contact Us](#)

Integration of LIMS with CRS website



NEWS AND EVENTS

- Guidelines for parallel testing of products- Reg
- Guidelines for refund of fee submitted for various services under Scheme-II of Schedule-II of BIS (Conformity Assessment) Regulations, 2018

NOTIFICATIONS

- Extension of Concurrent Running Period - Amendment to IS and Revised IS
- No. 1 to IS 16102 (P1) : 2012

Operative licence(s) 22232

Product Category 83

Standards Covered 48

New Application(s)Received 620

Granted 517

Rejected 0

Licence expired/cancelled 17785

Search by R-number

22. Click On-> Search by R- Number

The screenshot shows the BIS eBIS website dashboard. The top navigation bar includes links for Home, About CRS, Lab, Documents, FAQ, and Contact Us. The main content area features a large banner image of various electronic products. Below the banner, there are several statistics cards: Operative licence(s) (22232), Product Category (83), Standards Covered (48), New Application(s) Received (620), Granted (517), Rejected (0), Licence expired/cancelled (1775), and Search by R-number (circled in red). The right sidebar contains sections for News and Events, and Notifications.

23. Enter the Registration Number (R-) as declared by system installer in declaration letter i.e **BIS Registration no. 41199583** & Click on -> Search.

The screenshot shows the BIS search results page. The top section is titled 'List of Registered Manufacturers'. Below this, there is a search form with the following fields: Registration Number (R-), Product Name, Model, and Brand. The 'Registration Number (R-)' field is circled in red and contains the value '41199583'. The 'Product Name' field contains 'photovoltaic inverters'. The 'Model' and 'Brand' fields are set to 'ALL'. There are 'Search' and 'Reset/Clear' buttons. Below the search form, there is a table showing the search results. The table has columns for S No, Registration Number, Name of manufacturer, Address of manufacturer, Country, Product name, IS number, Date of grant of licence, Status, Validity, and Scope of licence. The table shows one entry for SMA Solar Technology AG.

S No	Registration Number	Name of manufacturer	Address of manufacturer	Country	Product name	IS number	Date of grant of licence	Status	Validity	Scope of licence
1	R-41199583	SMA Solar Technology AG	SONNENALLEE 1, 34266 NIESTETAL	Germany	Utility-Interconnected Photovoltaic inverters	IS 16221 (Part 2):2015/IEC 62109-2 :2011 & IS 16169 :2014/IEC 62116 :2008	16-08-2021	Registered	15-08-2023	click here to view

Showing 1 to 1 of 1 entries

Previous 1 Next

24. Click on -> Click here to view to verify the grid tied inverter model.

List of Registered Manufacturers

Kindly enter one or more fields(s) for searching

Registration Number (R-)

OR

Product Name :

OR

Model :

OR

Brand :

Show 10 entries

Search:

S No	Registration Number	Name of manufacturer	Address of manufacturer	Country	Product name	IS number	Date of grant of licence	Status	Validity	Scope of licence
S No	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
1	R-41199583	SMA Solar Technology AG	SONNENALLEE 1, 34266 NIESTETAL	Germany	Utility-Interconnected Photovoltaic inverters	IS 16221 (Part 2):2015/IEC 62109-2 :2011 & IS 16169 :2014/IEC 62116 :2008	16-08-2021	Registered	15-08-2021	click here to view

Showing 1 to 1 of 1 entriesPrevious 1 Next

25. Verify the grid tied inverter model & validity

R-Number R-41199583

Name of manufacturer SMA SOLAR TECHNOLOGY AG

Address of manufacturer SONNENALLEE 1, 34266 NIESTETAL

Product Name UTILITY-INTERCONNECTED PHOTOVOLTAIC INVERTERS

IS Number IS 16221 (PART 2):2015/IEC 62109-2 :2011 & IS 16169 :2014/IEC 62116 :2008

Show 10 entries

S.No.	Brand	Corresponding models	Date of grant/ inclusion
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
1	SMA	STP15000TL-30, STP20000TL-30, STP25000TL-30	2021-08-16

Showing 1 to 1 of 1 entries

26. Before Commissioning of the SRTPV plant verify the Panel, grid tied inverter, bi-directional meters details & wiring, safety aspects as per the norms. In case of any observations the same shall be recorded in the remarks column and return the work completion

Application Info

Work Completion

Commissioning

Application No. 1000005668 Feasible Solar capacity in kWp : 0.9

Feasibility

Commissioning

Note:

1. The Bi-directional meter records solar generation and existing meter records installation consumption in case of Gross metering.
2. The Bi-directional meter records export of solar energy to grid and Import of energy by the installation. Existing meter records the total solar energy generated.

Note: The following verification has to be done scrupulously during field inspection:

1. Verify the sl no. nos of modules and capacity of each panel with agreed capacity in the Power purchase agreement. In case of any variation SPPA shall be made.
2. Verify the details of grid tied inverters and meters.
3. In case any changes / modifications or observations to be made/ attended by the consumer the same shall be returned back to consumer to attend the same (by clicking the return button along with reasons).
4. The SPPA shall be made in case of delay in commissioning.
5. The SRTPV plant shall be synchronized with 5 days from the date of submission of work completion or after attending the observations whichever is later.
6. The other norms of the SRTPV tariff order / Regulation issued from time to time is applicable.

Work Declaration Details [Download](#)

Meter Information

Bi-Direction Meter (Main)*		Existing Meter*
Meter make:	M/s Genus Power Infrastruct	
Meter phase:	Three Phase	Three Phase
Meter Type	ELECTRO TRIVECTOR METER	
Serial number	123	
Meter constant	1.0	
Initial reading (Tri vector parameters) Import		
Initial reading (Tri vector parameters) Export		

Solar PV Module

Sl No.	Make of the PV Module	Type of the PV Module	Capacity of each module in kWp	No. of Modules	Sl. No of Modules (Comma separated)	Total capacity of this make, type & capacity	Add	Delete
1	gfdgdf	Mono	0.9	1	gdf	0.9	+	-

Total PV Panel capacity (in kWp) 0.9

Grid Tied Inverter

Sl No.	Make of the Inverter	Type of the Inverter	Input voltage (volts)	Output voltage (volts)	Capacity of the Inverter (VA)	No. of Inverters	Sl. No of Inverters (Comma separated)	Total capacity of this make, type & capacity	Add	Delete
1	fgfd	Micro			1.0	1	dfgdf	1.0	+	-

Total Inverter capacity (in VA) 1.0

Inspection Details

Pincode

560001

District of the installation

525,BENGALURU URBAN

Latitude of the installation*

12.971533

Longitude of the installation*

77.59906

Locate Latitude & Longitude on Google Map

OR Use my current location

Whether Anti-islanding feature is in working condition ?*

☐ Yes ☐ No

Is DC earthing verified?*

☐ Yes ☐ No

Is AC earthing verified?*

☐ Yes ☐ No

Is LA earthing verified?*

☐ Yes ☐ No

Is AC & DC DB available?*

☐ Yes ☐ No

Is Manual Switch on solar side available?*

☐ Yes ☐ No

Is Relay operated automatic switch at net-meter side available?*

☐ Yes ☐ No

Date of Inspection

Photo of the plant along with the Prosumer (JPEG file < 2 MB)

[Choose File](#) [No file chosen](#)

Date of synchronizing with BESCOM grid

Synchronization Voltage Level

Remarks not exceeding 1000 characters

[Return to Work Completion](#)

[Submit](#)

27. After attending the observations made by the consumer, the AEE, S/d has to enter the Distribution transformer details & line details. **Click On -> Submit.**

The screenshot shows the 'Commissioning' tab of a software interface. At the top, there are three tabs: 'Application Info' (orange), 'Work Completion' (orange), and 'Commissioning' (red). Below the tabs, the text 'Application No. 1000005668 Feasible Solar capacity in kWp : 1.0' is displayed. The main content area has a blue header with 'Feasibility' and a green checkmark icon, and 'Commissioning' text. Below this, there are two columns of input fields. The left column is titled 'Distribution Transformer Information' and contains fields for 'DTC location*', 'DT Code*', 'DT Capacity in kVA*', 'Connected Load on DT in kW*', 'SRTPV capacity already connected in kWp*', and 'SRTPV capacity under progress in kWp*'. The right column is titled 'Feeder Information' and contains fields for 'Substation Name*', 'Feeder Name*', 'Feeder MDM Code', 'Feeder conductor size in sq mm*', 'Rated current carrying capacity in Amps*', 'SRTPV capacity already connected in Amps*', 'SRTPV capacity under progress in Amps*', and 'SRTPV capacity proposed in Amps*'. At the bottom center, there is a blue 'Submit' button circled in red. In the bottom left corner, there is a link 'Download Feasibility'.

28. The Distribution transformer details & line details can be downloaded.

This screenshot shows the same 'Commissioning' tab as the previous one. The 'Download Feasibility' link in the bottom left corner is circled in red. The 'Submit' button is no longer visible in this view.

29. The AEE S/D shall re-verify the details of Panels, inverters, meters. After ensuring the safety & technical norms shall synchronize the SRTPV plant and update the date of synchronization and voltage level in synchronization report. **Click On -> Submit.**

Application No. 1000005668 Feasible Solar capacity in kWp : 0.9

Feasibility ☒ Commissioning

Note:
1. The Bi-directional meter records solar generation and existing meter records installation consumption in case of Gross metering.
2. The Bi-directional meter records export of solar energy to grid and Import of energy by the installation. Existing meter records the total solar energy generated.

Note: The following verification has to be done scrupulously during field inspection:
1. Verify the sl no. nos of modules and capacity of each panel with agreed capacity in the Power purchase agreement. In case of any variation SPPA shall be made.
2. Verify the details of grid tied inverters and meters.
3. In case any changes / modifications or observations to be made/ attended by the consumer the same shall be returned back to consumer to attend the same (by clicking the return button along with reasons).
4. The SPPA shall be made in case of delay in commissioning.
5. The SRTPV plant shall be synchronized with 5 days from the date of submission of work completion or after attending the observations whichever is later.
6. The other norms of the SRTPV tariff order / Regulation issued from time to time is applicable.

Work Declaration Details [Download](#)

Meter Information

Meter make:	M/s Genus Power Infrastructu	Existing Meter*	
Meter phase:	Three Phase	Existing Meter*	Three Phase
Meter Type	ELECTRO TRIVECTOR METER		
Serial number	123		
Meter constant	1.0		
Initial reading (Tri vector parameters) Import			
Initial reading (Tri vector parameters) Export			

Solar PV Module

Sl No.	Make of the PV Module	Type of the PV Module	Capacity of each module in kWp	No. of Modules	Sl. No of Modules (Comma separated)	Total capacity of this make, type & capacity	Add	Delete
1	gfdgdf	Mono	0.9	1	gdf	0.9	+	-

Total PV Panel capacity (in kWp) 0.9

Grid Tied Inverter

Sl No.	Make of the Inverter	Type of the Inverter	Input voltage (volts)	Output voltage (volts)	Capacity of the Inverter (VA)	No. of Inverters	Sl. No of Inverters (Comma separated)	Total capacity of this make, type & capacity	Add	Delete
1	fgfd	Micro			1.0	1	dfgdf	1.0	+	-

Total Inverter capacity (in VA) 1.0

Inspection Details

Pincode 560001

District of the installation 525,BENGALURU URBAN

Latitude of the installation* 12.971533

Longitude of the installation* 77.59906

[Locate Latitude & Longitude on Google Map](#)
OR [Use my current location](#)

Whether Anti-islanding feature is in working condition ?* ☐ Yes ☐ No

Is DC earthing verified?* ☐ Yes ☐ No

Is AC earthing verified?* ☐ Yes ☐ No

Is LA earthing verified?* ☐ Yes ☐ No

Is AC & DC DB available?* ☐ Yes ☐ No

Is Manual Switch on solar side available?* ☐ Yes ☐ No

Is Relay operated automatic switch at net-meter side available?* ☐ Yes ☐ No

Date of Inspection

Photo of the plant along with the Prosumer (JPEG file < 2 MB) [Choose File](#) No file chosen

Date of synchronizing with BESCOM grid

Synchronization Voltage Level

Remarks not exceeding 1000 characters

[Return to Work Completion](#) [Submit](#)