


## Work Completion Report for Solar Power Plant

Sr.No	Component	Observation
1	Name	MR. KAMLAKAR KASHIRAM URKUDE
2	Consumer number	<u>464120176168</u>
3	Site/Location with Complete Address	NEAR GRAM PANCHAYAT, PANJAREPNAGBHID CHANDRAPUR, NAGBHID S/DN, GADCHIROLI CIRCLE
4	Category: Govt/Private Sector	RESIDENCIAL
5	Sanction number	4336 / NAGBHID S/DN. / 65670148
6	Sanctioned Capacity of solar PV system (KW) Installed	3.3 KW Single PH
	Capacity of solar PV system (KW)	3.3 KW Single PH
7	<b>Specification of the Modules</b>	
	Make of Module	TATA POWER SOLAR
	ALMM Model Number	TP585LG10B
	Wattage per module	585
	No. of Module	06
	Total Capacity (KWP)	3, 510
	Warrantee Details (Product + Performance)	10 + 15 years
8	<b>PCU</b>	
	Make & Model number of Inverter	GOODWE / 53000SSA257LW616
	Rating	3 kw
	Type of charge controller/ MPPT	MPPT
	Capacity of Inverter	3 KW
	HPD	YES
	Year of manufacturing	2025
9	<b>Earthing and Protections</b>	
	No of Separate Earthings with earth Resistance	3
	It is certified that the Earth Resistance measure in presence of Licensed Electrical Contractor/Supervisor and found in order i.e. $\leq 5$ Ohms as per MNRE OM Dtd. 03.11.25 for CFA Component.	
	Lightening Arrester	YES

We **SPAN PRO SOLAR ENERGY SOLUTION** [Vendor]& **MR. KAMLAKAR KASHIRAM URKUDE** [Consumer] bearing Consumer Number 464120176168 Ensured structural stability of installed solar power plant and obtained requisite permissions from the concerned authority. If in future, by virtue of any means due to collapsing or damage to installed solar power plant, MSEDCL will not be held responsible for any loss to property or human life, if any.

This is to Certified above Installed Solar PV System is working properly with electrical safety & Islanding switch in case of any presence of backup inverter an arrangement should be made in such way the backup inverter supply should never be synchronized with solar inverter to avoid any electrical accident due to back feeding. We will be held responsible for non-working of islanding mechanism and back feed to the de-energized grid.

  
 Signature [Vendor]

  
 Signature [Consumer]

**Guarantee Certificate Undertaking to be submitted by VENDOR**

The undersigned will provide the services to the consumers for repairs/maintenance of the RTS plant free of cost for 5 years of the comprehensive Maintenance Contract (CMC) period from the date of commissioning of the plant. Non performing/under-performing system component will be replaced/repared free of cost in the CMC period

Signature of Vendor

Stamp & Seal

Identity Details of Consumer: -

Aadhar Number: 9871 2395 2910

कमलकर

 भारत सरकार  
Government of India

 आधार

Aadhar no. issued: 27092013



कमलकर काशीराम उरकुडे  
Kamlakar Kashiram Urkude  
जन्म तिथि/DOB: 01/01/1963  
पुरुष/ MALE

आधार पहचान का प्रमाण है, नागरिकता या जन्मतिथि का नहीं।  
इसका उपयोग सत्यापन (ऑनलाइन प्रमाणीकरण, या क्यूआर कोड/  
ऑफलाइन एक्सएम्पल की स्कैनिंग) के साथ किया जाना चाहिए।  
Aadhaar is proof of identity, not of citizenship  
or date of birth. It should be used with verification (online  
authentication, or scanning of QR code / offline XML).

**9871 2395 2910**

मेरा आधार, मेरी पहचान



# Renewable Energy Generating System

## Annexure-I

(Commissioning Report for RE System)

### SNo. Particulars

1 Name of the Consumer

2 Consumer Number

3 Mobile Number

4 E-mail

5 Address of Installation

6 RE Arrangement Type

7 RE Source

8 Sanctioned Capacity(KW)

9 Capacity Type

10 Project Model

11 RE Installed Capacity(Rooftop)(KW)

12 RE installed Capacity(Rooftop + Ground)(KW)

13 RE installed Capacity(Ground)(KW)

14 Installation date

15 SolarPV Details

Inverter Capacity(KW)

Inverter Make

No. of PV Modules

Module Capacity (KW)

As Commissioned

MR. KAMLAKAR KASHIRAM URKUDE

464120176168

911249243{

maheshurkude309@gmail.co

NEAR GRAM PANCHAYAT, PANJAREPNAGBHID  
CHANDRAPUR, NAGBHID S/DN, GADCHIROLI CIRCLE,

Net Metering Arrangement

SOLAR

3.3 KW

CAPEX

ROOFTOP

3.3 KW

NA

NA

5-November-2025

3 KW

GOODWE

6 NOS

585

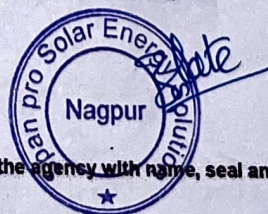
### Proforma-A

COMMISSIONING REPORT (PROVISIONAL) FOR GRID CONNECTED SOLAR  
PHOTOVOLTAIC POWER PLANT (with Net-metering facility)

Certified that a Grid Connected SPV Power Plant of 3.3 KWp capacity has been installed at the site NEAR GRAM  
PANCHAYAT PANJAREPNAGBHID CHANDRAPUR, NAGBHID S/DN, GADCHIROLI CIRCLE-441205  
District NAGPUR of MAHARASHTRA which has been installed by M/S SPAN PRO SOLAR on  
5-11-2025. The system is as per BIS/MNRE specifications. The system has been checked for its  
performance and found in order for further commissioning.

Signature of the beneficiary

Signature of the agency with name, seal and date





The above RTS installation has been inspected by me for Pre-Commissioning Testing of Roof Top Solar Connection on dt..... as per guidelines issued by the office of The Chief Engineer vide letter no 21653 on dt. 18.08.2022 and found in order for commissioning.

**Signature of the MSEDCL Officer**

**Name,**

**Designation**

**Date and seal**



**Annexure -A**

**Undertaking/Self- Declaration for Domestic Content Requirement fulfillment**

(On a plain Paper)

1. This is to certify that M/S Span Pro Solar Energy Solution has Installed 3.3 KW Grid Connected Rooftop Solar Plant for MR. KAMLAKAR KASHIRAM URKUDE at NEAR GRAM PANCHAYAT, PANJAREPNAGBHID CHANDRAPUR, NAGBHID S/DN, GADCHIROLI CIRCLE- 441205 under application number NP-MHSED25-7781062 dated 06-06-2025 under MSEDCL.

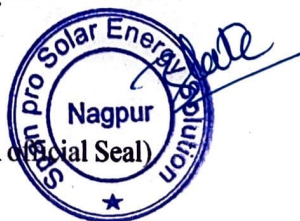
2. It is hereby undertaken that the PV modules installed for the above-mentioned project are domestically manufactured using domestic manufactured solar cells. The details of installed PV Modules are follows:

1. PV Module Capacity :- 3.3 KW
2. Number of PV Modules :- 06 NOS  $585 \times 6 = 3,510$
3. Sr No of PV Module :- T3251006T-079E36D, T3251006T-079E33D, T3251006T-079E694, T3251006T-079E15C, T3251006T-079E691, T3251006T-079E686.
4. PV Module Make :- TATA POWER SOLAR
5. Cell manufacturer's name :- TATA POWER SOLAR
6. Cell GST invoice No :-

3. The above undertaking is based on the certificate issued by PV Module manufacturer/supplier while supplying the above-mentioned order.

4. I, PRASHANT HANWATE on behalf of M/S SPAN PRO SOLAR ENERGY SOLUTION further declare that the information given above is true and correct and nothing has been concealed therein. If anything is found incorrect at any stage, then REC/ MNRE may take any appropriate action against my company for wrong declaration. Supporting documents and proof of the above information will be provided as and when requested by MNRE.

(Signature With official Seal)



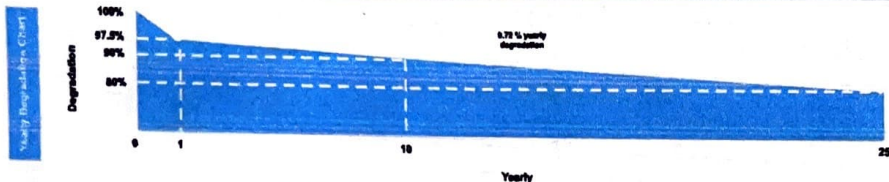
For M/S, SPAN PRO SOLAR ENERGY SOLUTION  
Name: - PRASHANT HANWATE  
Designation: - OWNER  
Phone: 9260090900  
Email: spanpro.ngp@gmail.com



**21.54%**  
Max Module Efficiency

**600Wp**  
Max Power Output

**0 ~ +5**  
Power Tolerance



Electrical Parameters at Standard Test Conditions (STC)\*

Nominal power output (W)**	570	575	580	585	590	595	600
Power tolerance (W)	0 ~ +5	0 ~ +5	0 ~ +5	0 ~ +5	0 ~ +5	0 ~ +5	0 ~ +5
Module efficiency (%)	20.47	20.65	20.83	21.00	21.18	21.36	21.54
Voltage at Pmax VMPP (V)	45.71	45.87	45.97	46.10	46.18	46.28	46.41
Current at Pmax IMPP (A)	12.47	12.54	12.62	12.68	12.78	12.86	12.93
Open-circuit voltage VOC (V)	63.41	63.52	63.63	63.73	63.90	64.01	64.12
Short-circuit current ISC (A)	13.04	13.10	13.12	13.20	13.29	13.37	13.45

Electrical Parameters at 10% Solar Irradiance Ratio

Nominal power output @STC (W)	610	615	621	626	631	637	642
Voltage at Pmax VMPP (V)	48.56	48.69	48.80	48.92	49.04	49.16	49.28
Current at Pmax IMPP (A)	13.10	13.18	13.26	13.34	13.42	13.50	13.58
Open-circuit voltage VOC (V)	64.28	64.40	64.52	64.64	64.76	64.88	65.00
Short-circuit current ISC (A)	13.74	13.79	13.83	13.88	13.93	13.97	14.01

Electrical Parameters at NOCT

Power output Pmax (W)	410	414	418	421	425	428	432
Voltage at Pmax VMPP (V)	40.2	40.4	40.5	40.6	40.8	40.7	40.8
Current at Pmax IMPP (A)	10.20	10.26	10.32	10.38	10.45	10.52	10.58
Open-circuit voltage VOC (V)	47.0	47.1	47.2	47.3	47.4	47.5	47.6
Short-circuit current ISC (A)	10.67	10.73	10.75	10.81	10.89	10.95	11.01

Temperature Coefficient Characteristics

NOCT(°C)	45±1
Module efficiency (% / °C)	-0.06 ± 0.01
Temperature Coefficient of Pmax (% / °C)	-0.36
Temperature coefficient of Voc (% / °C)	-0.28
Temperature coefficient of Isc (% / °C)	0.05

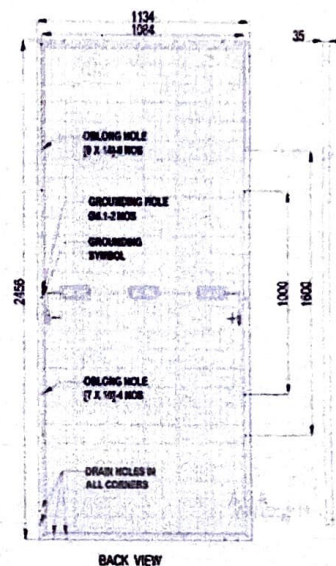
Operating Conditions

Maximum system voltage (V)	1500
Application class	A
Maximum series fuse rating (A)	25
Limited reverse current (A)	25
Operating temperature range (°C)	-40 to 85
Maximum static load (Wind/Snow) Pa	2400 / 5400

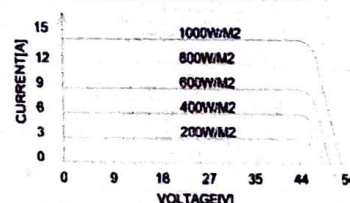
Module General Characteristics

Module dimensions L X W X H (mm)	2456 x 1134 x 35
Module weight (approx.) (Kg)	31±1
No of cells & size	156 Nos / (182 x 91) mm
Frame materials	Anodized Aluminium
Glass/Transparent back sheet	3.2mm AR Coated
Junction box	IP68
Cable connector	MC4/MC4 Compatible

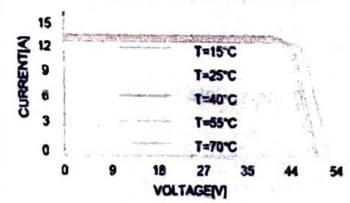
Dimensions (mm)



IV CURVE AT MULTIPLE IRRADIANCE



IV CURVE AT MULTIPLE TEMPERATURE



Packaging Details

No of modules per pallet	31
No of Boxes per 40ft Container	20
Box weight (Kg)	1050
Box dimensions L X W X H (mm)	2520 x 1145 x 1290

Testing and Tolerances

- \*Irradiance of 1000w/m<sup>2</sup>, Spectrum of AM 1.5 and Cell temperature of 25 °C.
- \*\* Measurement tolerance on Pmax±3%
- a) Tolerance for dimensions±2mm and Tolerance for cable length 0~30mm.
- b) Bifacial factor (70±10%)
- c) STC: Bifacial power gain depends on the plant design and location
- d) Frame : Lock Type-30mm/38mm
- e) Box dimensions are subject to change
- Listed specifications are subject to change without prior notice.



Technical Data		GW700-XS-30	GW1000-XS-30	GW1500-XS-30	GW2000-XS-30	GW2500-XS-30	GW3000-XS-30	GW3300-XS-30
Input								
Max. Input Voltage (V) <sup>1</sup>					600			
MPPT Operating Voltage Range (V) <sup>2</sup>	40 ~ 450	40 ~ 450	40 ~ 450	40 ~ 450	40 ~ 450	40 ~ 550	40 ~ 550	40 ~ 550
Start-up Voltage (V)					50			
Nominal Input Voltage (V)					360			
Max. Input Current per MPPT (A)					16			
Max. Short Circuit Current per MPPT (A)					25			
Number of MPP Trackers					1			
Number of Strings per MPPT					1			
Output								
Nominal Output Power (W)	700	1000	1500	2000	2500	3000	3300	
Nominal Output Apparent Power (VA)	700	1000	1500	2000	2500	3000	3300	
Max. AC Active Power (W)	700	1000	1500	2000	2500	3000	3300	
Max. AC Apparent Power (VA)	700	1000	1500	2000	2500	3000	3300	
Nominal Output Voltage (V)				220 / 230 / 240, L / N / PE				
Output Voltage Range (V)				154 ~ 288 (according to local standard)				
Nominal AC Grid Frequency (Hz)				50 / 60				
AC Grid Frequency Range (Hz)				45 ~ 55 / 57 ~ 63				
Max. Output Current (A)	3.2	4.6	6.9	9.1	11.4	13.7	15.0	
Power Factor			~1 (Adjustable from 0.8 leading to 0.8 lagging)					
Max. Total Harmonic Distortion			<3%					
Efficiency								
Max. Efficiency	97.0%	97.1%	97.2%	97.6%	97.6%	97.6%	97.6%	
European Efficiency	93.2%	95.0%	96.0%	96.8%	97.0%	97.1%	97.1%	
Protection								
PV String Current Monitoring				Integrated				
PV Insulation Resistance Detection				Integrated				
Residual Current Monitoring				Integrated				
PV Reverse Polarity Protection				Integrated				
Anti-islanding Protection				Integrated				
AC Overcurrent Protection				Integrated				
AC Short Circuit Protection				Integrated				
AC Overvoltage Protection				Integrated				
DC Switch				Type III (Type II Optional)				
DC Surge Protection				Type III (Type II Optional)				
AC Surge Protection				Optional				
AFCI				Optional				
Remote Shutdown				Optional				
Power Supply at Night				Integrated				
PV Power Supply								
General Data								
Operating Temperature Range (°C)				-25 ~ +60				
Relative Humidity				0 ~ 100%				
Max. Operating Altitude (m)				4000				
Cooling Method				Natural Convection				
User Interface				LCD, WLAN + APP				
Communication				RS485, WiFi, LAN or 4G or Bluetooth (Optional)				
Communication Protocols				Modbus RTU, Modbus TCP				
Weight (kg)				4.6				
Dimension (W x H x D mm)				306 x 218 x 119				
Noise Emission (dB)				<20				
Topology				Non-isolated				
Self-consumption at Night (W)				<3				
Ingress Protection Rating				IP66				
DC Connector				MC4 (4 ~ 6mm <sup>2</sup> )				
AC Connector				Plug and Play Connector				
Enter standby mode, and the voltage returns to 550V to enter the normal operation state.								

\*1: When the input voltage is 550-600V, the inverter will enter standby mode, and the voltage returns to 550V to enter the normal operation state.  
 \*2: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.  
 \*: Please visit GoodWe website for the latest certificates.  
 \*: All pictures shown are for reference only. Actual appearance may vary.





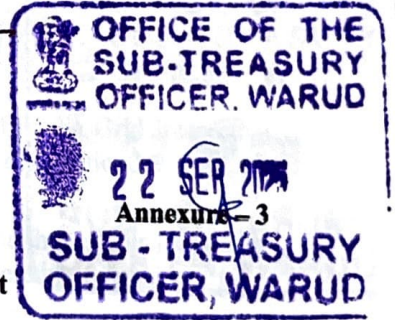
महाराष्ट्र MAHARASHTRA

2024

21AB 651594

22695 900 26 SEP 2025

व. संपेन प्रो. सोलर एनर्जी सोल्युशंस. नागपुर  
अनिल शं. शकुल  
मारांक विवेका, काड, प.क्र. ५/१७  
अ



Model Net Metering Connection Agreement

This Agreement is made and entered into at (location) Nagpur on this (date) 7 days of (month) NOV (year) 2025 between the Eligible Consumer (Name) MR. KAMLAKAR KASHIRAM JRKUDE having premises at (address) NEAR GRAM PANCHAYAT, PANJAREPNAGBHID CHANDRAPUR, NAGBHID S/DN, GADCHIROLI CIRCLE-141205 and Consumer No. 464120176168 as the first Party,

AND

the Distribution Licensee MSEDCL (hereinafter referred to as 'the Licensee') and having its Registered Office at (address) NAGBHID Sub-Division Nagpur as second Party of this Agreement.

Whereas the Eligible Consumer has applied to the Licensee for approval of a Net Metering Arrangement under the provisions of the Maharashtra Electricity Regulatory Commission (Grid

क. क. ३२५३







Energy Generating System to the Network of the Licensee, an isolation device (both automatic and in-built within inverter and external manual relays); and the Licensee shall have access to it if required for the repair and maintenance of the distribution Network.

The Licensee shall specify the interface/inter-connection point and metering point.

The Eligible Consumer shall furnish all relevant data, such as voltage, frequency, circuit breaker, isolator position in his System, as and when required by the Licensee.

### **3 Safety**

The equipment connected to the Licensee's distribution System shall be compliant with relevant International (IEEE/IEC) or Indian standards (BIS), as the case may be, and the installation of electrical equipment shall comply with the requirements specified by the Central Electricity Authority regarding safety and electricity supply.

The design, installation, maintenance and operation of the Renewable Energy Generating System shall be undertaken in a manner conducive to the safety of the Renewable Energy Generating System as well as the Licensee's Network.

If, at any time, the Licensee determines that the Eligible Consumer's Renewable Energy Generating System is causing or may cause damage to and/or results in the Licensee's other consumers or its assets, the Eligible Consumer shall disconnect the Renewable Energy Generating System from the distribution Network upon direction from the Licensee, and shall undertake corrective measures at his own expense prior to re-connection.

The Licensee shall not be responsible for any accident resulting in injury to human beings or animals or damage to property that may occur due to back-feeding from the Renewable Energy Generating System when the grid supply is off. The Licensee may disconnect the installation at any time in the event of such exigencies to prevent such accident.

### **4 Other Clearances and Approvals**

The Eligible Consumer shall obtain any statutory approvals and clearances that may be required, such as from the Electrical Inspector or the municipal or other authorities, before connecting the Renewable Energy Generating System to the distribution Network.

### **5 Period of Agreement, and Termination**

This Agreement shall be for a period for 20 years, but may be terminated prematurely

- a) By mutual consent; or





- b) By the Eligible Consumer, by giving 90 days' notice to the Licensee;
- c) By the Licensee, by giving 30 days' notice, if the Eligible Consumer breaches any terms of this Agreement or the provisions of the Grid Interactive Rooftop Renewable Energy Generating Systems Regulations and does not remedy such breach within 30 days, or such other reasonable period as may be provided, of receiving notice of such breach, or for any other valid reason communicated by the Licensee in writing;
- d) By the Licensee, by giving 30 days' notice, if the Eligible Consumer fails to pay his dues in a timely manner or indulges in any malpractices.

## **6 Access and Disconnection**

The Eligible Consumer shall provide access to the Licensee to the metering equipment and disconnecting devices of Renewable Energy Generating System, both automatic and manual, by the Eligible Consumer.

If, in an emergent or outage situation, the Licensee cannot access the disconnecting devices of the Renewable Energy Generating System, both automatic and manual, it may disconnect power supply to the premises.

Upon termination of this Agreement under Clause 5, the Eligible Consumer shall disconnect the Renewable Energy Generating System forthwith from the Network of the Licensee.

## **7 Liabilities**

The Parties shall indemnify each other for damages or adverse effects of either Party's negligence or misconduct during the installation of the Renewable Energy Generating System, connectivity with the distribution Network and operation of the System.

The Parties shall not be liable to each other for any loss of profits or revenues, business interruption losses, loss of contract or goodwill, or for indirect, consequential, incidental or special damages including, but not limited to, punitive or exemplary damages, whether any of these liabilities, losses or damages arise in contract, or otherwise.

## **8 Commercial Settlement**

The commercial settlements under this Agreement shall be in accordance with the Grid Interactive Renewable Regulations.

The Licensee shall not be liable to compensate the Eligible Consumer if his Renewable Energy Generating System is unable to inject surplus power generated into the Licensee's Network on account of failure of power supply in the grid/Network.

*Handwritten signature*



The existing metering System, if not in accordance with the Grid Interactive Renewable Regulations, shall be replaced by a bi-directional meter (whole current/CT operated) and a separate Renewable Energy Generation Meter shall be provided to measure Renewable Energy generation. The bi-directional meter (whole current/CT operated) shall be installed at the inter-connection point to the Licensee's Network for recording export and import of energy.

The uni-directional and bi-directional meters shall be fixed in separate meter boxes in the same proximity.

The energy generated by the Renewable Energy Generating Station shall be offset against the energy consumption of the consumer from the Distribution Licensee in the following manner:

- a) If the quantum of electricity exported exceeds the quantum imported during the Billing Period, the excess quantum shall be carried forward to the next Billing Period as credited Units of electricity;
- b) If the quantum of electricity Units imported by the Eligible Consumer during any Billing Period exceeds the quantum exported, the Distribution Licensee shall raise its invoice for the net electricity consumption after adjusting the credited Units;
- c) The unadjusted net credited Units of electricity as at the end of each financial year shall be purchased by the Distribution Licensee at the Generic Tariff approved by the Commission for that year, within the first month of the following year: Provided that, at the beginning of each Settlement Period, the cumulative quantum of injected electricity carried forward will be re-set to zero;
- d) In case the Eligible Consumer is within the ambit of Time of Day (ToD) tariff, the electricity consumption in any time block, i.e. peak hours, off-peak hours, etc., shall be first compensated with the quantum of electricity injected in the same time block; any excess injection over and above the consumption in any other time block in a Billing Cycle shall be accounted as if the excess injection had occurred during off-peak hours;
- e) The Distribution Licensee shall compute the amount payable to the Eligible Consumer for the excess Renewable Energy purchased by it as specified in Clause 8.5 (c), and shall provide credit equivalent to the amount payable in the immediately succeeding Billing Cycle.

## 9 Connection Costs

The Eligible Consumer shall bear all costs related to the setting up of the Renewable Energy Generating System, including the cost of the Renewable Energy Generation Meter.

*F. B. B. J.*

## 10 Dispute Resolution

Any dispute arising under this Agreement shall be resolved promptly, in good faith and in an equitable manner by both the Parties.

The Eligible Consumer shall have recourse to the concerned Consumer Grievance Redressal Forum constituted under the relevant Regulations in respect of any grievance regarding billing, which has not been redressed by the Licensee.

In the witness, where of (Name) **MR. KAMLAKAR KASHIRAM URKUDE** for and on behalf of Eligible Consumer) and (Name) **MSEDCL** for and on behalf of (Licensee) agree to this agreement.

MR. KAMLAKAR KASHIRAM URKUDE

**MR. KAMLAKAR KASHIRAM URKUDE**

Shri \_\_\_\_\_

For and on behalf of **MSEDCL**

1. MR. KAMLAKAR KASHIRAM URKUDE

2. MSEDCL