

F.No. 318/87/2024-GCRT -Part (1)
Government of India
Ministry of New and Renewable Energy
PMSG: MBY Division

Atal Akshay Urja Bhawan
Lodhi Road, New Delhi 110003,
Dated: 21st July 2025

OFFICE MEMORANDUM

Subject: Compliance requirements for inverters and communication devices used under PM Surya Ghar: Muft Bijli Yojana - reg.

The Ministry of New and Renewable Energy (MNRE) is implementing PM Surya Ghar: Muft Bijli Yojana (PMSG: MBY) targeting installation of Rooftop Solar (RTS) plants for one crore households across the country with a cumulative capacity of 30 GW. Simultaneously, the Ministry has been taking strides to strengthen the self-reliance in supply chain for RTS components, and ensure transparency, and effective monitoring under the scheme.

2. The integration of around one crore RTS plants under PMSG: MBY introduces significant grid stability and cybersecurity challenges. Inverter communication modules that transmit data to servers outside India not only pose risks of unauthorized control but also threaten national energy sovereignty by exposing sensitive consumption and generation

threaten national energy sovereignty by exposing sensitive consumption and generation data. Further, millions of inverters communicating with third party OEM servers can be exploited to manipulate inverter operations, potentially leading to coordinated disruptions in power generation and grid instability.

3. In this regard, multiple rounds of deliberation have been done with major stakeholders to implement a framework to track generation benefits of RTS installations as well as for the centralisation of RTS data on a National Software Platform hosted on servers located in India and managed by MNRE or any other Government Agency to ensure monitoring and control of millions of inverters aggregating GW of capacity remains with Government agencies considering Grid Security and Stability.

4. In view of the above, the undersigned has been directed to convey that:

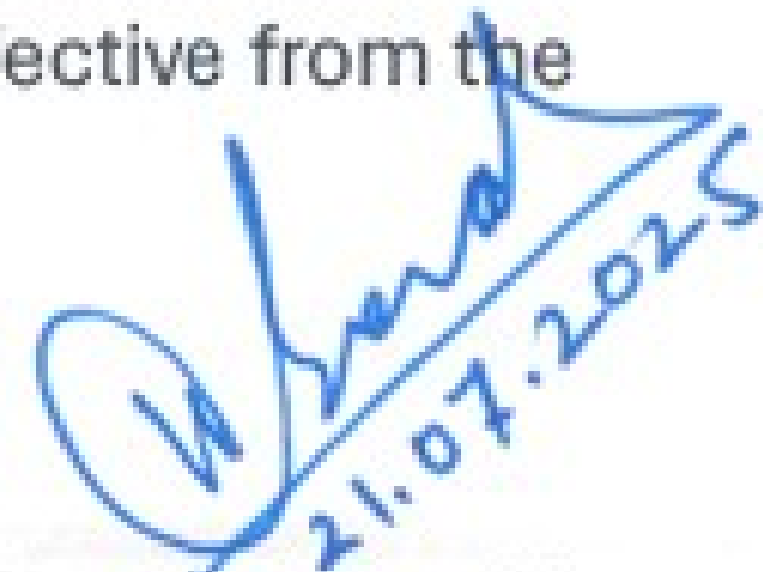
- i. All inverter communication devices/dongles/data loggers deployed under the scheme shall have Machine-to-Machine (M2M) SIM communication protocol to enable secure and reliable data transmission.
- ii. Ministry is in the process of finalising the detailed vendor neutral and open communication protocol based data communication and security guidelines for RTS monitoring and control through the National Portal which will be made available for



integration testing of Inverter communication devices from 1st September, 2025. A separate communication in this regard shall be issued shortly

- iii. All OEMs enlisted for supplying inverters under the PMSG: MBY scheme shall mandatorily connect their inverters directly to National Servers and Software managed by MNRE or any other agency designated by MNRE, with effective from the date to be notified by the MNRE.

5. This issues with the approval of Mission Director.



(Hiren Chandra Borah)
Scientist -E

To,

- All concerned stakeholders

Copy to

- CMD, REC Limited, the NPIA for PMSG: MBY for information and appropriate action.

