

**ODISHA ELECTRICITY REGULATORY COMMISSION
PLOT NO.4, CHUNOKOLI, SHAILASHREE VIHAR,
BHUBANESWAR – 751021**

ORDER

No. OERC-Engg. 02/2022/ 1448

Dated: 27.11.2025

The Commission had issued an order on 19.08.2016 on Net Metering / Bi-directional Metering and their connectivity with respect to Rooftop Solar PV Projects which was subsequently amended up to 17.01.2018 and 05.05.2022. Now, several issues such as usage of hybrid inverters by prosumers and their applicable standards have been brought before the Commission by various stakeholders which necessitates for further amendment of the said Order. In the meantime, the Ministry of New and Renewable Energy, Government of India vide its OM dated 20.09.2024 has also permitted use of different types of inverters including hybrid inverters. However, in the present Order of the Commission on net metering, only grid tied inverters are allowed. Further, the Ministry of New and Renewable Energy, Government of India vide its OM dated 21.07.2025 has mandated use of SIM based data loggers with M2M SIM communication protocol for real time generation monitoring and data transmission. Again, some of the provisions of Schemes on Government of India such as PMSGY are inconsistent to the provisions of the Order and requires to be incorporated in the Order to harmonize it to the schemes. After considering the Notification of the Ministry of Renewable Energy as well as suggestions from various stakeholders, the Commission hereby makes the following amendments to the previous Order which will be known as Amendment to the Order on Net Metering/Bi-Directional Metering & their Connectivity with respect to Solar PV Projects 2016 (as amended up to 27.11.2025).

Amendment to the Order on Net Metering/Bi-Directional Metering & their Connectivity with respect to Solar PV Projects 2016 (as amended upto 05.05.2022)

After Clause 2(e), the following new clause 2(f) shall be inserted:

*“(f) **“Hybrid Inverter”** is a bi-directional inverter capable of interfacing with both solar photovoltaic (PV) modules and an energy storage system, and designed to manage the flow of electricity between the renewable energy generating system, the battery storage, the consumer’s load, and the distribution licensee’s grid. It enables both grid-interactive and stand-alone operation, ensuring optimal utilization of renewable energy and maintaining system reliability.”*

In Clause 7, the words,

“.. An overview of basic grid interactive photovoltaic system is placed at Annexure-I.” shall be substituted with:

“...The consumer shall have the option to install either Grid tied inverters or hybrid inverters, the line diagram of which are provided in Annexure-I & Annexure-II respectively.”

In Clause 8, after the words “...per Regulations in force.” the following provisio shall be inserted:

“Notwithstanding anything contained in our existing Order on Net metering, for Central/ State Government Schemes, the conditions as mentioned in the Schemes shall be applicable to the consumer while installing the Photovoltaic system.”

In Clause 10 first para, after the words “... for Import/Export measurement.” the following

sentence shall be inserted:

“Inverter communication devices/dongles/data loggers having Machine-to-Machine (M2M) SIM communication protocol can also be relied upon for real-time measurement and transmission of generation data in lieu of generation meter.”

After Clause 10(c), the following new clause 10(d) shall be inserted:

“(d) The cost of meters, cost of connectivity and all other related cost for setting up the meters etc. have to be borne by the eligible consumers under guidance of the concerned distribution licensee. Either consumer or distribution licensee shall procure the meter. The distribution licensee shall test and install the same in line with the provisions of the Central Electricity Authority’s Metering Regulations/ OERC Supply Code as amended from time to time.”

In Clause 14(f), the words, “... the inverter shall...” shall be substituted with the words “...the grid tied inverter/ hybrid inverter shall...”

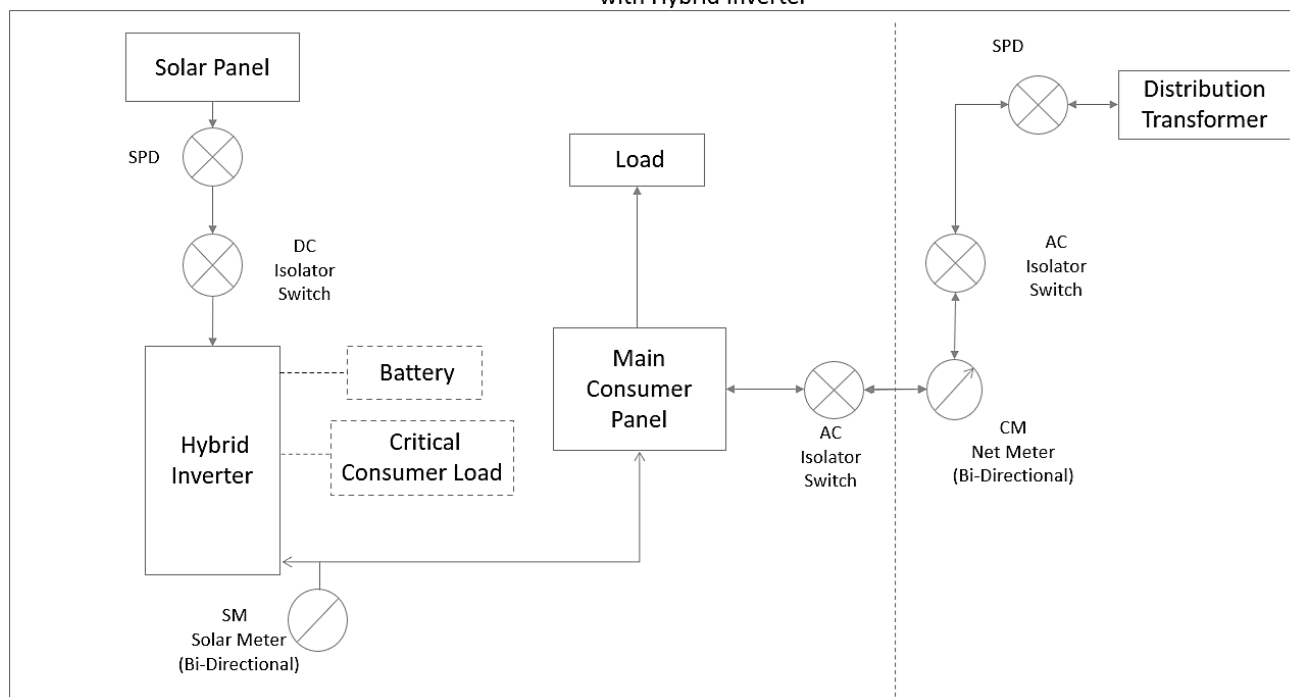
The existing Clause 14(h), shall be replaced with:

“(h) The inverter should be a sine wave inverter. Harmonic standards shall be as per IEEE 519. The inverter should also comply to the mandatory standards stated by MNRE: IS 16221 (Part 2).2015/IEC 62109-2.2011 Safety of Power Converters for use in Photovoltaic Power Systems Part 2 (Particular Requirements for Inverters) and IS 16169.2019/IEC 62116.2014 Test Procedure of Islanding Prevention Measures for Utility – Interconnected Photovoltaic Inverters.”

After Annexure-I, the following Annexure-II shall be inserted:

Annexure-II

Overview of a basic grid interactive Photo Voltaic system
with Hybrid Inverter



The existing “Annexure-II” shall be renamed as “Annexure-III” and the existing “Annexure-III” shall be renamed as “Annexure-IV”.

The above amendment shall come into force prospectively from the date of its Notification. This amendment Order is issued with the approval of the Commission.

-Sd/-
SECRETARY