



सत्यमेव जयते

भारत सरकार/ Government of India

विद्युत मंत्रालय/ Ministry of Power

केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority

ग्रिड प्रबंधन प्रभाग/ Grid Management Division

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सं.: CEA-GO-12-22/4/2023-GM Division/

दिनांक: 12.05.2023

**विषय: Compliance of Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations by RE Developers-regd.**

It is to bring notice that that there were 28 incidents involving loss of more than 1000 MW RE generation in the grid since January 2022. These grid events may be categorized into three main categories:

- (i) Overvoltage during switching operation.
- (ii) Fault in vicinity of RE complex.
- (iii) Low frequency Oscillations in RE complex.

2. The analysis of these grid events revealed that both under the steady and dynamic state condition, inadequate reactive support from VRE was found to be one of the contributing factors.

3. Clause B2. (1) of the Central Electricity Authority (Technical Standards for Connectivity to the Grid) amendment Regulations, 2019 provides as under:

*"The generating station shall be capable of supplying dynamically varying reactive power support so as to maintain power factor within the limits of 0.95 lagging to 0.95 leading."*

4. It may also be mentioned that the above provisions of the CEA Connectivity Regulations are not being complied in totality. There is necessity for dynamically varying reactive support during Low Voltage Ride Through (LVRT), High Voltage Ride Through (HVRT), etc., as the fixed capacitor banks can provide reactive support only during steady state and also the support is delivered in steps after time delay. Therefore, the requisite dynamically varying reactive power support is a necessity for grid stability and security.

5. Further, it was decided in the meeting held on 14<sup>th</sup> March, 2023 under Chairmanship of Secretary (Power) regarding "Review frequent grid events in RE complexes and measures being taken" that compliance of CEA Connectivity Regulations at level of connectivity is necessary for all RE developers.

6. In view of the above, it has been decided that the RE developers who have applied for connectivity till 30<sup>th</sup> April, 2023 shall comply with above provisions by 30<sup>th</sup> September, 2023 else, these RE plants would be dis-connected.

7. Further, RE developers who have applied for connectivity after 30<sup>th</sup> April, 2023, they must comply with requirements stipulated in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and their subsequent amendments.

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(चन्द्र प्रकाश) 24/5/2023

मुख्य अभियंता (ग्रिड प्रबंधन प्रभाग)

To,  
All RE Developers

Copy to:-

1. CMD, Grid-India.
2. COO, CTUIL.
3. Chairman, SECI.

Copy for kind information to:-

1. PPS to Secretary (Power)
2. PPS to Secretary (MNRE)
3. SA to Chairperson, CEA
4. SA to Member (GO &D), CEA
5. PS to Chief Engineer (GM), CEA