

**Undertaking to be submitted by the Stage-II connectivity grantee towards fulfilment of terms and conditions as specified in the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 as amended (to be provided on applicant's company letter head)**

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**Stage-II Connectivity Application No:** .....

**Date:** .....

I..... (Name).....S/o Shri ..... (Father's name) working as ..... (designation) in ..... (Name of the Applicant organization / entity) ....., having its registered office at ..... (Address of the Applicant organization / entity) ....., do solemnly affirm that ..... (name of generating station along with Installed capacity & location of connectivity granted by CTU) complies with the following conditions as laid out in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 as amended and CERC (Grant of Connectivity, LTA & MTOA) Regulations, 2009 & its amendments and directions through various orders:

1. Harmonic current injections from the generating station does not exceed the limits specified in Institute of Electrical and Electronics Engineers (IEEE) Standard 519.
2. The Generating station does not inject DC current greater than 0.5 % of the full rated output at the interconnection point
3. The generating station does not introduce flicker beyond the limits specified in IEC 61000.
4. The Items 1, 2 and 3 shall be tested with calibrated meters once a year and indicative month for the same is .....
5. The generating station is 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.
6. The generating unit is capable of operating in the frequency range 47.5 to 52 Hz and is able to deliver rated output in the frequency range of 49.5 Hz to 50.5 Hz.  
Further, in the frequency range below 49.90 Hz and above 50.05 Hz, or, as prescribed by the Central Commission, from time to time, it is possible to activate the control system to regulate the output of the generating unit as per frequency response requirement as provided in sub-clause (4) of clause B2 of the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 as amended.  
The generating unit is able to maintain its performance contained in this subclause even with voltage variation of up to  $\pm 5\%$  subject to availability of commensurate wind speed in case of wind generating stations and solar insolation in case of solar generating stations.
7. The generating station shall remain connected to the grid when voltage at the interconnection point on any or all phases dips up to the level depicted by the thick lines in the curve at Annexure-I. During the voltage dip, the supply of reactive power has first priority, while the supply of active power has second priority and the active power shall preferably be maintained during voltage drops, provided, a reduction in active power within the plant's design specifications is acceptable and active power be restored to at least 90% of the pre-fault level within 1 sec of restoration of voltage.
8. The generating station shall remain connected to the grid when voltage at the interconnection point, on any or all phases (symmetrical or asymmetrical overvoltage conditions) rises above the specified values given below for specified time

Over voltage (pu)	Minimum time to remain connected (Seconds)
$1.30 < V$	0 Sec (Instantaneous trip)
$1.30 \geq V > 1.20$	0.2 Sec
$1.20 \geq V > 1.10$	2 Sec
$V \leq 1.10$	Continuous

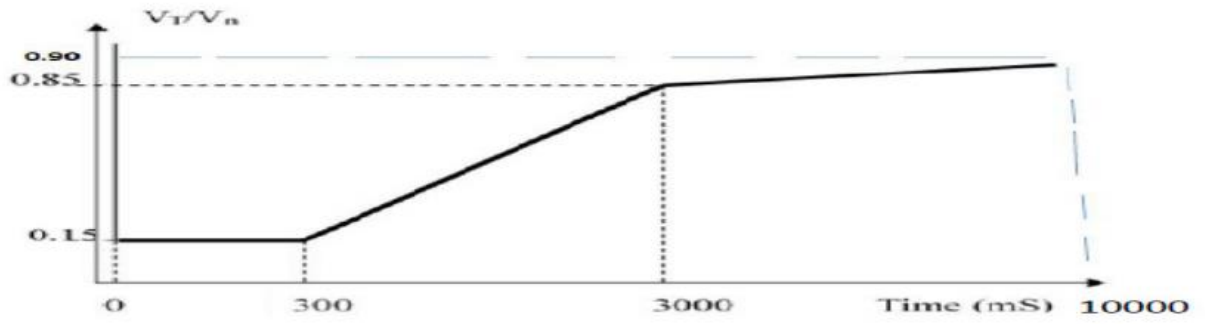
9. The generating station shall be equipped with facilities to control active power injection in accordance with a set point, frequency controller, rate of change of power output etc in accordance with sub-clause 4 of clause B2 of the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 as amended.

*I am submitting the test reports along-with compliance certificate for all applicable provisions under the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 (as amended) including each of the above requirements from labs accredited by Govt./NABL/other recognized agencies along with detailed modelling data for RE generation units as available on CTU website. I am aware that in case any discrepancies / incompleteness are found in the documents / test reports submitted to CTU, the connection offer (CON-5) / connection agreement (CON-6) shall not be processed further. I am also aware that if at any stage any falsity / inaccuracy / incorrectness is detected in the documents / statements ..... (name of generator) shall be liable for disconnection from the Grid along with all associated liabilities / consequences in this regard.*

Name of the Authorised Signatory:

Signature:

Company Stamp (mandatory):



$V_T$  : Actual Voltage;  $V_n$ : Nominal Voltage

**Compliance Certificate to be submitted by the Inverter / WTG / other control equipment manufacturer towards fulfilment of terms and conditions as specified in the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 as amended (to be provided on manufacturer's company letter head)**

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**Certificate No:** .....

**Name of Manufacturer:** .....

**Date:** .....

**Generation Capacity supplied for (in MW):** .....

**Name of Generation Developer (to whom supplied):** ..... **for** ..... **(location) Generating station**

..... (Name of the Manufacturer)....., having its registered office at ..... (Address of the Manufacturer)....., do solemnly affirm that the inverters / WTG / other control equipment supplied to .....(Name of the renewable generating station) complies with the various conditions as laid out in the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007 as amended.

Name of the Authorised Signatory:

Signature:

Company Stamp (mandatory):