

## CENTRAL ELECTRICITY AUTHORITY

### Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations - 2007 Dated: 21<sup>st</sup> February, 2007 with Amendment Dated 15<sup>th</sup> October, 2013

Sl. No.	Description	Summary
1.	<b>Short Title and Commencement</b>	<ul style="list-style-type: none"> <li>Central Electricity Authority(Technical Standards for Connectivity to the Grid ) Regulations, 2007 Dated: 21<sup>st</sup> February, 2007 with Amendment Dated 15<sup>th</sup> October, 2013</li> <li>Regulations to come into force on the date of their publication in the Official Gazette of India.</li> </ul>
2.	<b>Definitions</b>	As per Regulations.
3.	<b>Applicability</b>	Regulations shall be applicable to all the users, requesters, Central Transmission Utility and State Transmission Utility
4.	<b>Objectives</b>	<ul style="list-style-type: none"> <li>The aim of these regulations is to ensure the safe operation, integrity and reliability of the grid.</li> <li>The new connection shall not cause any adverse effect on the grid. Grid shall continue to perform with specified reliability, security and quality as per the Central Electricity Authority (Grid Standards) Regulations, 2010. However, these regulations are not to be relied upon to protect the plant and equipment of the requester or user.</li> <li>A requester is required to be aware, in advance, of the standards and conditions his system has to meet for being integrated into the grid.</li> </ul>
5.	<b>Standards</b>	The equipment shall meet the requirements in accordance with the provisions of Technical Standards for Connectivity to the Grid as given in the Schedule of these regulations(Appended in the Regulations) and Central Electricity Authority (Grid Standards) Regulations, 2010, and Grid Code and the State Grid Code(s) as specified by the Commission
6.	<b>General Connectivity Conditions</b>	<ol style="list-style-type: none"> <li>(i) The requester to be responsible for the planning, design, construction, reliability, protection and safe operation of its own equipment subject to the regulations for construction operation and maintenance and connectivity and other statutory provisions.</li> <li>(ii) Requester and user to furnish data as required by the Transmission Utility/licensee/ generating station with whose system the interconnection is proposed, for inter-connection with the grid.</li> <li>(iii) Requester and user to provide necessary facilities for voice and data communication and transfer of on-line operational data and other parameters as prescribed by the Appropriate Load Despatch Centre.</li> <li>(iv) Requester and user to cooperate with the Regional Power Committee, and Appropriate Load Despatch Centres in respect of the matters listed below, but not limited to : <ol style="list-style-type: none"> <li>(a) protection coordination and setting's of its protective relays accordingly;</li> <li>(b) agree to maintain meters and communication system in its jurisdiction in good condition;</li> <li>(c) participate in contingency operations such as load shedding, increasing or reducing generation, islanding, black start, providing startup power and restoration as per the procedure decided by the Load Despatch Centre;</li> <li>(d) furnish data as required by Appropriate Transmission Utility or Transmission Licensee, Load Despatch Centre, Appropriate Regional Power Committee and any committee constituted by the Authority of appropriate Government for system studies/r facilitating analysis of tripping or disturbance in power system;</li> <li>(e) carry out modifications in his equipment with respect to short circuit level, protection coordination and other technical reasons considered necessary due to operational requirements;</li> </ol> </li> </ol>

		<p>(f) abide by the coordinated outage plan of the state and region in respect of generating units and transmission lines as approved by the Regional Power Committee: and</p> <p>(g) co-operate with the Regional Power Committee for tuning of Power System Stabilizer provided in the excitation system of the generating unit.</p> <p>(v) Requester and user shall make arrangements for integration of the controls and tele-metering features of his system into the Automatic Generation Control, Automatic Load Shedding, Special Protection System, Energy Management Systems and Supervisory Control and Data Acquisition System of the respective state or region,</p> <p>(vi) For inter-connection studies the requester shall make a request for connection in the planning stage to the Transmission Utility. In case a requester is seeking inter-connection to a distribution system, such a request to be made to the distribution licensee. Transmission Utility/licensee to carry out the inter-connection study to determine the point of inter-connection,          "Provided that in order to carry out the said study, the requester shall present the mathematical model of the equipment in accordance with the requirements as stipulated by the Appropriate Transmission Utility or distribution licensee, as the case may be."</p> <p>(vii) A. Every connection of a requester's system to the grid shall be covered by a connection agreement between the requester and</p> <p>(a) Appropriate Transmission Utility in case of connection to Inter-state transmission system or intra state transmission system as the case may be;</p> <p>(b) Distribution licensee in case of inter-connection to distribution licensee's system;</p> <p>(c) Transmission licensee and Transmission Utility, in case of inter-connection to a transmission licensee (tri-partite agreement).</p> <p>B. The connection agreement shall contain general and specific technical conditions, applicable to that connection</p> <p>(viii) State Transmission Utility shall inform the Central Transmission Utility and the Authority, within thirty days of acceptance of application for connectivity of a generating station to electricity system operating at 110 kV and above.</p>
7.	<b>Site Responsibility Schedule</b>	<p>(i) A Site Responsibility Schedule (SRS) for every connection point shall be prepared by generating company or licensee operating the electricity system to which connection is taking place,</p> <p>(ii) Following information shall be included in the Site Responsibility Schedule,</p> <p>(a) Schedule of electrical apparatus services and supplies;</p> <p>(b) Schedule of telecommunications and measurement apparatus; and</p> <p>(c) Safety rules applicable to each plant and apparatus.</p> <p>(iii) Following information shall also be furnished in the Site Responsibility Schedule for each item of equipment installed at the connection site, namely :—</p> <p>(a) Ownership of equipment;</p> <p>(b) Responsibility for control of equipment</p> <p>(c) Responsibility for maintenance of equipment;</p> <p>(d) Responsibility for operation of equipment;</p> <p>(e) Manager of the site;</p> <p>(f) Responsibility for all matters relating to safety of persons at site; and .</p> <p>(g) Responsibility for all matters relating to safety of equipment at site.</p>
8.	<b>Access to Connection Site</b>	Requester/user owning the electrical plant shall provide reasonable access and other required facilities to the licensee/transmission Utility/Load Despatch Centre, whose equipment is installed or proposed to be installed at the Connection Site for installation, operation and maintenance, etc. of the equipment.
9.	<b>Site Common Drawings</b>	Site Common Drawings shall be prepared for each connection point by the owner of the Sub-station where connection is taking place.