

**NATIONAL ELECTRIC POWER REGULATORY AUTHORITY**  
**\*\*\*\*NEPRA\*\*\*\***

**NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (TECHNICAL STANDARDS FOR GRID  
CONNECTIVITY) REGULATIONS, 2025**

DRAFT FOR PUBLICATION UNDER SECTION 47(3) OF THE REGULATION OF GENERATION, TRANSMISSION  
AND DISTRIBUTION OF ELECTRIC POWER ACT, 1997 (XL OF 1997)

In exercise of powers conferred under section 47 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (Act No. XL of 1997); the National Electric Power Regulatory Authority (NEPRA) is pleased to make the National Electric Power Regulatory Authority (Technical Standards for Grid Connectivity) Regulations, 2025. In this regard, the following notification is hereby published for eliciting public opinion. The comments may be sent to the Registrar (NEPRA) on the address given below within 30 days of this publication.

**NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (TECHNICAL STANDARDS FOR GRID  
CONNECTIVITY) REGULATIONS, 2025**

**NOTIFICATION**

*Islamabad, \_\_\_\_ day of \_\_\_\_, 2025*

**S.R.O. \_\_\_\_\_(I)/2025.** In exercise of the powers conferred by section 14B(5) read with section 47 of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997 (Act No. XL of 1997) and all other enabling provisions thereof, the National Electric Power Regulatory Authority, is pleased to make the following regulations.—

**1. Short title, commencement and applicability.—** (1) These regulations shall be called the National Electric Power Regulatory Authority (Technical Standards for Grid Connectivity) Regulations, 2025.

(2) These regulations shall come into force at once.

(3) These regulations shall apply to all generation companies connected with grid except distributed generators.

**2. Definitions.—** (1) In these regulations, unless there is anything repugnant in the subject or context,—

- (a) "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997), as amended from time to time;
- (b) "applicable documents" means the rules, regulations, terms and conditions of any licence, registration, authorization, determination, any codes, manuals, directions,

guidelines, orders, notifications, agreement or document issued or approved under the Act;

- (c) "applicant" shall include a generation company who has filed an application before an appropriate transmission licensee or distribution licensee for grant of permission to interconnect and shall also include a generation company expanding its generation facilities.
- (d) "application" means an application filed in accordance with these regulations to the appropriate transmission licensee or the distribution licensee for grant of permission to interconnect and execution of connection agreement;
- (e) "appropriate transmission licensee" shall mean any person holding a transmission license and shall include National Grid Company, Special Purpose Transmission Licensee and a Provincial Grid Company.
- (f) "Connection Code" means a sub-code provided in the Grid Code;
- (g) "Distribution Code" means the code prepared by the distribution licensees and approved by the Authority that defines the technical and operational standards and procedures for distribution licensees and all those connected to the distribution system;
- (h) "distribution licensee" an entity holding a distribution licence under section 20 of the Act;
- (i) "generation company" means a person engaged in the generation of electric power;
- (j) "generation facility" means the electrical facility used for the production of electric power;
- (k) "Grid Code" means the code prepared by the system operator under section 23H of the Act and approved by the Authority; and
- (l) "site responsibility schedule" means a schedule for demarcating the ownership, responsibility for control, operation and maintenance of the equipment at the interconnection point;

(2) Words and expressions used but not defined in these regulations shall have the same meanings as assigned to them in the Act.

**3. General Principles.**— (1) The applicant shall ensure that interconnection of its generation facility will not cause any adverse effect on the safe operation, integrity and reliability of the grid.

(2) The equipment and machinery installed by the applicant shall meet the technical standards as specified in the Connection Code of the Grid Code or Distribution Code as the case may be.

(3) The applicant shall design, construct and operate its generation facility for the safe, reliable, non-discriminatory, economic despatch and operation of the national grid and connected facilities.

(4) The applicant will be required to demonstrate compliance with the Connection Code at the time of submitting application for permission for interconnection and execution of connection agreement and shall also undertake to comply with all requirements of Grid Code and Distribution Code at all times during the operations of the generation facility.

**4. Procedure for Interconnection.**— (1) The applicant shall submit an application to the appropriate transmission licensee or a distribution licensee for the intention of interconnection in accordance with the relevant provisions of the Grid Code or Distribution Code and execution of a connection agreement:

Provided that such application, inter alia, shall be accompanied by,

- (i) an undertaking regarding compliance with requirements of regulation 3;
- (ii) site responsibility schedule; and
- (iii) such information and data as required by the appropriate transmission licensee or a distribution licensee.

(2) The connection agreement shall contain general and specific technical conditions related to interconnection:

Provided that in case the interconnection is to the distribution facilities of a distribution licensee, a tripartite agreement will be executed between the applicant, distribution licensee and the appropriate transmission licensee.

**5. Site Responsibility Schedule.**— (1) Every applicant shall prepare a site responsibility schedule which shall include following information:

- (i) Schedule of electrical apparatus, services and supplies.
- (ii) Safety manual applicable to each plant and apparatus.
- (iii) Operation and maintenance manual.

(2) The site responsibility schedule shall be submitted to the appropriate transmission licensee or the distribution licensee as the case may be along with the application.

**6. Access at Generation Facility.**— The applicant shall provide reasonable access and other required facilities to the appropriate transmission licensee or distribution licensee, required for the purpose of onsite interconnection.

**7. Power of the Authority to give directions, instructions and guidelines.**— (1) For carrying out the purposes of these regulations, the Authority may issue directions, instructions and guidelines to the applicant and the appropriate transmission licensee or the distribution licensee in the form and manner determined by the Authority.

(2) The Authority may, on representation made to it or on its own motion modify or cancel any direction, instruction or guidelines issued under sub-regulation (1). and in so modifying or cancelling any direction, instruction or guidelines may impose such conditions as it may deems fit.

**8. Resolution of dispute.**— Any dispute or disagreement between the applicant and the appropriate transmission licensee or the distribution licensee relating to any matter arising out of, or in connection with, the activities covered under these regulations shall be submitted for decision of the Authority.

**9. Penalty for failure, refusal to comply with, or contravention with any provision of the Regulations.**— If any person fails or refuses to comply with, or contravenes any of the provisions of these regulations or any direction or order passed by the Authority under these regulations or knowingly or wilfully authorizes or permit such failure, refusal or contravention, it shall, be penalised in accordance with the relevant provisions of the Act and applicable documents.

**Registrar**