

## **STANDARD OPERATING PROCEDURE (SOP) FOR NEW CONNECTION TO THE EXISTING GRID**

Grid Code Regulation, 2008, **Chapter 5 - Connection Conditions** spells the requirement to be complied by the users seeking new connection to existing system. The new system or modified system shall not affect the existing system. This is to ensure the safety, security and reliability of power system.

Clause 5.2.1:

*“The power system shall expand with the addition of new transmission lines and Users and it shall continue to perform with reliability, security and quality standards at any point of time. A new connection to the Transmission System shall not adversely affect the Transmission System nor shall the Transmission System adversely affect the new connection”.*

Clause 5.2.2:

*“Procedures are required to be laid down in order to ensure that:*

*(i) a prospective User is well informed, in advance, of the Standards and Conditions he has to meet for being integrated into the existing power system, the Standards and Parameters of the existing system with which its system has to be interfaced and the electrical environment in which his system has to operate; and*

*(ii) There is no discrimination to any player in regard to connectivity”.*

**Standard Procedures for integration of new network elements into the grid and issuance of certificate by Bhutan Power System Operator (BPSO) for successful operation with existing power system elements.**

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### **Procedures:**

1. All the Licensees intending to commission any elements shall intimate BPSO with the details as given below, **generally Fourteen (14) days** prior to the anticipated date of first test charging:
  - a. Intimation regarding anticipated charging of the line/elements along with the list of the desired documents being submitted as per ***Format***.
  - b. Submission of Checklist for the test and inspection carried out.
  - c. Test report(s) for the elements (*ex: Meggar values for transmission lines*)

- d. Submission of lists of SCADA points/signal list to be integrated with BPSO control room, failing which the approval may be not given.
  - e. List of SCADA points shall be finalized in consultation with BPSO **Three (3) months** prior to test charging (*format attached*).
  - f. Location of energy meters.
2. BPSO shall carry out necessary system studies and will issue the approval for charging the element, accordingly.
  3. On satisfying with the submitted information, BPSO would issue approval for charging the elements to concerned licensee.