Stakeholders Comments on Draft SOP for supply, installation & replacement of ISTS IEM as per IEGC 2023 and CEA metering regulations 2006 and its amendment thereafter

Date: 30-04-2024

As per IEGC 2023, CTUIL shall be responsible for procurement & installation of Interface Energy Meters and replacement of faulty meters. Further as per CEA, all interface meters installed at the points of interconnection with Inter-State Transmission System (ISTS) for the purpose of electricity accounting and billing shall be owned by CTU.

Accordingly, CTUIL has prepared a draft SOP for supply, installation & replacement of ISTS IEM/SEMs which is put up for stakeholders' comments by 31<sup>st</sup> May, 2024 in compliance to IEGC 2023 and CEA metering regulations.

Stakeholders (Generators, Bulk consumers, STUs, RLDCs, SLDC and other ISTS users) may give their observations, if any, latest by 31.05.2024 at mail ids; <a href="mailto:rshakya@powergrid.in">rshakya@powergrid.in</a> & <a href="mailto:tanay@powergrid.in">tanay@powergrid.in</a>

# **Standard Operating Procedure (SOP)**

# **Procurement & Installation of ISTS Interface Energy Meter (IEM/SEM)**

### **Introduction:**

This Standard Operating Procedure (SOP) for Procurement and Installation of Interface Energy Meter (IEM/SEM) will be applicable only for the IEM/SEM falling under the purview of CTU as per the provisions under Regulations 49.12 (a) of CERC (Indian Electricity Grid Code), Regulations, 2023 and amendments thereof. The Regulation 49.12(a) is re-produced below:

## "49.12 Energy Metering and Accounting:

(a) The CTU shall be responsible for procurement and installation of Interface Energy Meters (IEM/SEM), at the cost of respective entity, at all the ISTS interface points, points of connections between the regional entities, cross border entities and other identified points for recording of actual active and reactive energy interchanged in each time-block through those points, and its operation and periodic calibration shall be done by the respective entity. CTU shall be responsible for replacement of faulty meters."

The objective of this procedure is to ensure timely installation of IEM/SEM in the new ISTS system and timely replacement of the defective IEM/SEM.

Presently, POWERGRID is an authorized agency for procurement of IEM/SEM, installation of new IEM/SEM and replacement of defective IEM/SEM. Any mention of POWERGRID in this procedure shall also mean any other agency authorized by CTUIL to carry to aforesaid functions. CTUIL may authorize any other agency to carry to aforesaid functions in future. Replacement/Installation of IEM/SEM shall mean all the activities including supply of new meter and its installation, testing and commissioning.

The complete cycle of installation/replacement of IEM/SEM has been divided in various steps as described in Part A & B. Since timely procurement and availability of sufficient no. IEM/SEM is the key a critical requirement, Part C of this procedure deals with timely estimation of requirement & procurement of IEM/SEM.

# A. Procedure for replacement of Faulty ISTS IEM/SEM

### 1. Identification of faulty IEM/SEM and communication to CTU:

- 1.1 Based on the inputs from respective RLDC & its observations, the Entity in whose premises the said IEM/SEM for ISTS is installed, shall identify the defective IEM/SEM. The RLDC shall send a communication to the entity within 5 working days from the detection of defective IEM/SEM.
- 1.2 Within 7 working days from receipt of above communication from RLDC, the Entity shall send a communication (through letter or e-mail) to CTUIL requesting replacement of the defective IEM/SEM. The said communication shall include the followings:
  - a. The location, serial no, and make of the defective IEM/SEM
  - b. The date of installation of the above IEM/SEM
  - c. The observations wrt the said defective IEM/SEM

A copy of this communication shall be sent to respective RLDC and regional nodal officer of POWERGRID. The contact details of POWERGRID Nodal officers shall be made available on CTUIL's website.

1.3 In line with applicable Regulations, the replacement of IEM/SEM shall be on a chargeable basis. The Entity shall undertake in the said communication that they will make payment for supply & installation of the IEM/SEM as per the invoice raised by POWERGRID within 45 working days from the date of installation/replacement of IEM/SEM.

#### 2. Communication to POWERGRID:

2.1 On receipt of the above communication from the Entity, CTUIL shall advise POWERGRID to replace the defective IEM/SEM within 5 working days from receipt of the said communication.

A copy of the advice shall also be sent to the respective Entity.

## 3. Replacement of Faulty IEM/SEM:

- 3.1 The POWERGRID shall raise the invoice on the Entity within 7 working days from the receipt of the advice from CTUIL and shall replace the defective IEM/SEM within 10 working days from date of issuance of invoice. POWERGRID shall inform CTUIL after replacement of the defective IEM/SEM.
- 3.2 After replacement of faulty IEM/SEM, the entity shall inform respective RLDC & CTUIL about the same.
- 3.3 The Entity shall make payment to POWERGRID within 45 working days from the date of replacement of IEM/SEM.

### 4. Payment and Warranty:

- 4.1 The payment towards supply & replacement of IEM/SEM by POWERGRID shall be made by entity within 45 (Forty-Five) working days from its, failing which late payment surcharge @ 0.04% of the invoice amount per day shall be payable for the delayed period.
- 4.2 IEM/SEM once replaced, shall be under the warranty of 1 year from the date of installation. During this period, the entity shall take up the matter pertaining to the replaced IEM/SEM directly with POWERGRID's nodal officers with copy to CTUIL. POWERGRID's nodal officers shall arrange to replace such IEM/SEM within 15 working days from the date of intimation by the entity.

### B. Procedure for Installation of ISTS IEM/SEM for new systems

1. The Entity shall request for installation of new IEM/SEM to CTUIL along with the metering scheme issued by respective RLDC (Suggestive format for metering scheme is attached with this SOP). Entity shall send its request to CTUIL for supply & installation of IEM/SEM at least three months in advance.

- 2. CTUIL shall communicate, within 5 working days from receipt of communication from entity to POWERGRID for installation of new IEM/SEM.
- 3. The POWERGRID shall raise the invoice on the Entity within 7 working days from the receipt of the advice from CTUIL and shall install the IEM/SEM within 10 working days from date of issuance of invoice. POWERGRID shall inform CTUIL after installation of IEM/SEM.
- 4. After installation of IEM/SEM, the entity shall inform respective RLDC & CTUIL about the same.
- 5. The Entity shall make payment to POWERGRID within 45 working days from the date of installation of IEM/SEM.
- 6. Payment and Warranty:
  - 6.1 The payment towards supply & installation of IEM/SEM by POWERGRID shall be made by entity within 45 (Forty-Five) working days from its, failing which late payment surcharge @ 0.04% of the invoice amount per day shall be payable for the delayed period.
  - 6.2 IEM/SEM once installed, shall be under the warranty of 1 year from the date of installation. During this period, the entity shall take up the matter pertaining to the installed IEM/SEM directly with POWERGRID's nodal officers with copy to CTUIL. POWERGRID's nodal officers shall arrange to replace such IEM/SEM within 15 working days from the date of intimation by the entity.

### C. Bulk Procurement of ISTS IEM/SEM

- 1. By the end of September of each year, CTUIL/STU shall provide the details of ISTS projects coming up in the next 2 years to respective RLDC.
- 2. RLDC shall work out the metering scheme for total requirement of IEM/SEM under the following heads:
  - i. For new ISTS system
  - ii. Spares @10% of the IEM/SEM population in the region
  - iii. Projected requirement towards replacement of defective IEM/SEM based on past 2-year trend.

RLDC will get the total IEM/SEM quantity approved by respective RPCs and inform to CTUIL by November end.

- 3. On receive of the IEM/SEM quantity from RLDCs, CTUIL shall aggregate the requirement on PAN India basis and issue procurement advice to POWERGRID by December end.
- 4. Thereafter, POWERGRID shall initiate procurement process so as to get IEM/SEM within 6 months from receipt of procurement advice from CTUIL.