**ANNEXURE A-1**

**Format: I**

**Intimation by Transmission Licensee regarding anticipated charging of new elements**

Name of Transmission Licensee: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of the Transmission Element: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type of Transmission Element: *(Please tick appropriate)*

***Transmission Line / ICT / Bus Reactor / Line Reactor / Bus / Bay***

***/ Series Capacitor / Series Reactor***

Voltage Level: \_\_\_\_\_\_\_ kV

Owner of the Transmission Asset: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Likely Date and time of Charging: Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Likely Date and time of start of Trial Operation: Date: \_\_\_\_\_\_\_\_\_\_\_\_\_; Time: \_\_\_\_\_\_\_\_\_\_\_\_\_

Details of Standing Committee / Scheme Approval:

|  |  |  |  |
| --- | --- | --- | --- |
| Date of Meeting | Standing Committee Meeting Number | MoM Item No / Point No / Serial No | Page Number |
|  |  |  |  |

Place: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**List of enclosures:**

ANNEXURE A-2: Format IA: List of elements to be charged and Element Rating details

ANNEXURE A-3: Single line diagram of the concerned sub stations, along with status

of completion of each dia/bus/breakers

ANNEXURE A-4: List of SCADA points

ANNEXURE A-5: Location of installation of Energy meters as per relevant CEA

regulations

ANNEXURE A-6: Connection Agreement, if applicable, along with all annexures

Standing Committee / Scheme Approval – relevant Pages

**ANNEXURE A-2**

**Format: I-A**

**List of Elements to be Charged and Element Rating Details**

1. List of Elements to be charged:
2. Element Rating Details:
3. Transmission Line:

|  |  |  |
| --- | --- | --- |
| 1 | From Sub-Station |  |
| 2 | To Sub-Station |  |
| 3 | Voltage Level (kV) |  |
| 4 | Line Length (km) |  |
| 5 | Conductor Type |  |
| 6 | No. of sub conductors per phase |  |

1. ICT / Power Transformer / Station Transformer / Start-up Transformer:

|  |  |  |
| --- | --- | --- |
| 1 | Voltage Level (*HV* kV/*LV* kV) |  |
| 2 | Capacity (MVA) |  |
| 3 | Transformer Vector Group |  |
| 4 | Total No. of Taps |  |
| 5 | Nominal Tap Position |  |
| 6 | Present Tap Position |  |
| 7 | Tertiary Winding Rating and Ratio |  |
| 8 | % Impedance |  |

1. Shunt / Series Reactor:

|  |  |  |
| --- | --- | --- |
| 1 | Sub-Station /Line Name |  |
| 2 | Voltage (kV) |  |
| 3 | MVAR Rating |  |
| 4 | Switchable/Non-Switchable |  |
| 5 | In case of Line Reactor, whether it can be taken as Bus Reactor |  |

1. Generating Transformer (GT):

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE A-4**

**List of SCADA points**

*(as per standard requirement, RLDC would need all MW and MVAr data, voltage and frequency of all the buses, all the breaker and isolator positions, OLTC tap positions, Main‐1/Main‐2 protection operated signals)*

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of the Transmission Elements:

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **List of SCADA Points** | **IEC Address** |
| 1 | Analog Point | |
|  |  |  |
|  |  |  |
| 2 | Digital Point | |
|  |  |  |
|  |  |  |
| 3 | SOE | |
|  |  |  |
|  |  |  |

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE A-5**

**Type and Location of Energy meters as per relevant CEA regulations**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of the Transmission Elements:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of Sub-Station** | **Feeder Name** | **Make of Meter** | **Meter No.** | **CT Ratio** | **PT/CVT Ratio** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**Format: II**

**Acknowledgment of Receipt of intimation towards FTC of new elements**

Name of SLDC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This is to acknowledge that the intimation of likely charging of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(*Name of the transmission element*) has been received from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(*Name of the owner of the transmission asset*) on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*Date*).

Kindly complete the technical formalities in connection with energy metering, protection and real time data and communication facilities and inform us of the same three (3) days before charging of the above transmission element as per Formats III, III-A, III-B, III-C and III-D.

*Or*

The intimation is incomplete and the following information may be submitted within three (3) days of issue of this acknowledgment receipt:

1.

2.

3.

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal of SLDC:

**ANNEXURE B-1**

**Format: III**

**Intimation by Transmission Licensee/Generating Station regarding First Time Charging and start of Trial Operation**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Past Reference: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of the Transmission Element: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type of Transmission Element: *(Please tick appropriate)*

***Transmission Line / ICT / Bus Reactor / Line Reactor / Bus / Bay***

***/ Series Capacitor / Series Reactor***

Voltage Level: \_\_\_\_\_\_\_ kV

Owner of the Transmission Asset: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Proposed Date and time of Charging: Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Proposed Date and time of start of Trial Operation: Date: \_\_\_\_\_\_\_\_\_\_\_\_; Time: \_\_\_\_\_\_\_\_\_\_\_

Details of Standing Committee / Scheme Approval:

|  |  |  |  |
| --- | --- | --- | --- |
| Date of Meeting | Standing Committee Meeting Number | MoM Item No / Point No / Serial No | Page Number |
|  |  |  |  |

Place: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**List of enclosures:**

ANNEXURE B-2: Undertaking in respect of Protective systems as per Format III-A

ANNEXURE B-3: Undertaking in respect of Telemetry and communication as per

Format III-B

ANNEXURE B-4: Undertaking in respect of Energy metering as per Format III-C

ANNEXURE B-5: Undertaking in respect of Statutory clearances as per Format III-D

**ANNEXURE B-2**

**Format: III-A**

**Undertaking by Transmission Licensee/Generating Station in respect of Protective systems**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The following transmission element is proposed to be charged on \_\_\_\_\_\_\_(*date*) tentatively

at around \_\_\_\_\_ hours.

Sr. No. and Name of Transmission Element:

1. It is certified that all the systems as stipulated in Part-III of the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 (as amended from time to time) have been tested and commissioned and would be in position when the element is taken into service.
2. The protective relay settings have been done as per the guidelines of the Regional Power Committee (RPC) as per section 5.2 (l) of the Indian Electricity Grid Code (IEGC). The necessary changes have also been made/would be made appropriately for the following lines at the following substations:

|  |  |  |
| --- | --- | --- |
| Sr. No. | Name of Sub-Station | Name of Transmission Element |
|  |  |  |
|  |  |  |
|  |  |  |

Place: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE B-3**

**Format: III-B**

**Undertaking by Transmission Licensee/Generating station in respect of Telemetry and communication**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The following transmission element is proposed to be charged on \_\_\_\_\_\_\_(*date*) tentatively

at around \_\_\_\_\_ hours.

Sr. No. and Name of Transmission Element:

The list of data points that would be made available to RLDC in real time had been indicated vide communication dated \_\_\_\_\_\_\_\_\_\_\_. It is certified that the following data points have been mapped and real time data would flow to RLDC immediately as the element is charged and commissioned.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Name of  substation | Data point (Analog as well as digital) identified in earlier Communication dated | Point to  point checking  done jointly  with RLDC (Y/N) | Data would  be available at RLDC (Y/N) | Remarks (path may be  specified) |
| 1 | Sending End | Analog |  |  |  |
|  |  | Digital |  |  |  |
|  |  | SOE |  |  |  |
|  |  | Main Channel |  |  |  |
|  |  | Standby Channel |  |  |  |
|  |  | Voice Communication  (Specify:(Mobile No /Landline No) |  |  |  |
| 2 | Receiving End | Analog |  |  |  |
|  |  | Digital |  |  |  |
|  |  | SOE |  |  |  |
|  |  | Main Channel |  |  |  |
|  |  | Standby Channel |  |  |  |
|  |  | Voice Communication  (Specify:(Mobile No /Landline No) |  |  |  |

It is also certified that the data through main channel is made available to RLDC as well as alternate communication channel is available for data transfer to RLDC to ensure reliable and redundant data as per IEGC (as amended from time to time). Also, Voice communication is established as per IEGC. The arrangements are of permanent nature. In case of any interruption in data in real time, the undersigned undertakes to get the same restored at the earliest.

Date: \_\_\_\_\_\_\_\_\_\_ Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE B-4**

**Format: III-C**

**Undertaking by Transmission Licensee/Generating station in respect of Energy Metering**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The following transmission element is proposed to be charged on \_\_\_\_\_\_\_(*date*) tentatively

at around \_\_\_\_\_ hours.

Sr. No. and Name of Transmission Element:

Special Energy Meters (SEMs) conforming to CEA (Installation and Operation of Meters) Regulations, 2006 have been installed and commissioned. The SEMs are calibrated in compliance of regulation 9 of Part-I of CEA (Technical Standard for Grid Connectivity) Regulations 2007 as per the following details:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sr. No. | Name of Sub-Station | Feeder Name | Make of Meter | Meter No. | CT Ratio | PT/CVT Ratio |
| 1 | Sending End |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 2 | Receiving End |  |  |  |  |  |
|  |  |  |  |  |  |  |

Data Format Conformity : Yes / No

Polarity as per Convention : Yes / No

Time Drift Correction carried out : Yes/No

The data from the above meters would be forwarded on weekly basis to the RLDC as per section 6.4.21 of the Indian Electricity Grid Code (IEGC) (as amended from time to time) and also as and when requested by the RLDC.

*(RLDC to indicate the email ids where the data has to be forwarded).*

Date: \_\_\_\_\_\_\_\_\_\_ Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE B-5**

**Format: III-D**

**Undertaking by Transmission Licensee/Generating station in respect of Statutory Clearances**

It is hereby certified that all statutory clearances in accordance with relevant CERC Regulations / CEA standards / CEA regulations and PTCC route approval for charging of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ have been obtained from the concerned authorities.

Date: \_\_\_\_\_\_\_\_\_\_ Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**Format: IV**

**Provisional Approval for Charging and Trial Run**

Name of SLDC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Approval No. \_\_\_\_\_\_\_\_\_\_\_\_

To,

The Transmission Licensee,

Sub: Charging and trial run of \_\_\_\_\_\_\_\_\_\_(*Name of Transmission element*.

Provisional approval there of…

Ref: 1) Your application dated \_\_\_\_\_\_\_\_ in Format I

2) RLDC response dated \_\_\_\_\_\_\_\_\_ in Format II

3) Your request and details forwarded on dated \_\_\_ in Format III, III-A, III-B III-C and III-D

Dear Madam/Sir,

The above documents have been examined by RLDC/SLDC and permission for charging of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*Name of Transmission element*) on or after \_\_\_\_\_ (date) is hereby accorded. This approval is provisional and in the intervening period, if any of the conditions given in the undertakings submitted by you are found to be violated, the approval stands cancelled. Kindly obtain a real time code from the appropriate RLDC/SLDC for each element switching as well as commencement of trial operation.

The following shortcomings have been observed in the documents at Sr. No. (3) above.

a.

b.

c.

Please rectify the above shortcomings at the earliest to enable RLDC to issue the provisional approval for test charging, commissioning and trial operation of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*Name of transmission element*).

Thanking you.

Yours faithfully,

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal of SLDC:

**ANNEXURE C-1**

**Format: V**

**Transmission Licensee request for issuance of successful trial operation certificate**

To,

<Name of RLDC/SLDC>

Sub: Successful trial operation of \_\_\_\_\_\_\_\_\_\_\_\_ (*Name of Transmission element*).

Request for issue of certificate.

Ref: i) Our application dated \_\_\_\_\_\_\_\_\_\_ in Format I.

ii) Your acknowledgement dated \_\_\_\_\_\_\_\_\_\_\_ in Format II.

iii) Our application dated \_\_\_\_ in Format III, along with Format III-A, III-B III-C and III-D

iv) Provisional approval dated \_\_\_\_ issued by your office.

v) Real time codes from RLDC/SLDC on dated \_\_\_\_\_\_\_\_.

Madam/Sir,

Referring to the above correspondence, this is to inform you the successful charging and trial operation of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*Name of Transmission element*) from \_\_\_\_\_ to \_\_\_\_\_ (time & date).

Please find enclosed the following:

1. A plot of the MW/MVAr power flow during the 24-hour trial operation based on the substation SCADA is enclosed at **Annexure C-2**.
2. The Energy Meter readings have already been mailed to your office on \_\_\_\_\_\_\_\_. The 15-minute time block wise readings for the trial operation period is enclosed at **Annexure C-3**.
3. Event Logger and Numerical Relay or Disturbance Recorder outputs at **Annexure C-4** indicating all the switching operations related to the element. It is further to certify that the time synchronization of numerical relay, event logger and Disturbance recorder has been established.

It is requested that a certificate of successful trial operation may kindly be issued at

the earliest.

Thanking you,

Yours faithfully,

Date: \_\_\_\_\_\_\_\_\_\_ Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

Encl:

Annexure C-2: Plot of MW/MVAr flow during 24-hour trial operation.

Annexure C-3: Energy Meter.

Annexure C-4: Reading Numerical relay or Disturbance Recorder (DR) output and Event

Logger output.

**ANNEXURE D-1**

**Intimation by Transmission Licensee/Generator regarding anticipated charging of new elements (SLDC)**

Name of Zone : \_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Circle : \_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Division : \_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Transmission Licensee /

Generator : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of the Element: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type of Transmission Element: *(Please tick appropriate)*

***Generator / Transmission Line / ICT / Transformer / Bus / Bay / Reactor / Capacitors***

Voltage Level: \_\_\_\_\_\_\_ kV

Owner of the Asset: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Likely Date and time of Charging: Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: Superintending Engineer

EHV O&M Circle, MSETCL: \_\_\_\_\_\_\_\_\_\_\_

Seal:

**List of enclosures:**

ANNEXURE D-2: List of elements to be charged and Element Rating details

ANNEXURE D-3: Single line diagram of the concerned sub stations, along with status

of completion of each dia/bus/breakers

ANNEXURE D-4: List of SCADA points

ANNEXURE D-5: Location of installation of Energy meters as per relevant CEA

regulations

ANNEXURE D-6: Connection Agreement, if applicable, along with all annexures

**ANNEXURE D-2**

**List of Elements to be Charged and Element Rating Details**

1. List of Elements to be charged:
2. Element Rating Details:
3. **Generator:**

|  |  |  |
| --- | --- | --- |
| 1 | Generation Capacity (MW / MVA) |  |
| 2 | Technical Minimum Capacity (MW) |  |
| 3 | Capability of absorption/injection of Reactive Power (MVAr) |  |
| 4 | Attach Capability Curve |  |
| 5 | Voltage Level (LV/HV) |  |
| 6 | Droop Setting |  |
| 7 | Status of RGMO installation  *(If applicable)* |  |

1. **Sub-Station / Bus / Bay:**

|  |  |  |
| --- | --- | --- |
| 1 | Name of Sub-Station |  |
| 2 | Details of the Bus to be charged |  |
| 3 | Bus Voltage Level (kV) |  |
| 4 | Configuration of Bus |  |
| 5 | Type of Bus Conductor |  |
| 6 | Bay Number |  |
| 7 | Bay Voltage Level (kV) |  |

1. **ICT / Power Transformer:**

|  |  |  |
| --- | --- | --- |
| 1 | Name of ICT/Transformer |  |
| 2 | Voltage Level (*HV* kV/*LV* kV) |  |
| 3 | Capacity (MVA) |  |
| 4 | Existing Capacity of Sub-Station (MVA) *(Excluding capacity of proposed ICT/PTR)* |  |
| 5 | Transformer Vector Group |  |
| 6 | Total No. of Taps |  |
| 7 | Nominal Tap Position |  |
| 8 | Present Tap Position |  |
| 9 | Tertiary Winding Rating and Ratio |  |
| 10 | % Impedance |  |
| 11 | Capacity Augmentation or Replacement |  |
| 12 | If Replacement, date of failure at existing location |  |
| 13 | Any Bay modifications carried out? Please mention details. |  |

1. **Transmission Line:**

|  |  |  |
| --- | --- | --- |
| 1 | From Sub-Station |  |
| 2 | To Sub-Station |  |
| 3 | Voltage Level (kV) |  |
| 4 | Line Length (km) |  |
| 5 | Conductor Type |  |
| 6 | No. of sub conductors per phase |  |
| 7 | Whether newly constructed or Re-oriented |  |
| 8 | Whether Radial or Grid line |  |
| 9 | Tower Configuration (SC/DC/MC) |  |
| In case of M/C, specify circuit position *(bottom, middle, upper, etc)* |  |

1. **Reactors / Capacitors:**

|  |  |  |
| --- | --- | --- |
| 1 | Whether Line Reactor or Bus Reactor |  |
| 2 | If Line Reactor, Name of the line |  |
| 3 | Name of Sub-Station where Reactor/Capacitor is installed |  |
| 4 | MVAr Capacity |  |

1. **Attachments:**

|  |  |  |
| --- | --- | --- |
| 1 | Details of meters (in case of Evacuation/EHV Consumer) | Please attach Soft copy |
| 2 | Permission from Electrical Inspector. (*Please mention Permission Letter No.*) | Please attach Soft copy |
| 3 | SLD of Sub-Station & Sketch of inter-connected lines to nearest next higher voltage level Sub-Station | Please attach Soft copy of Sketch with distances |
| 4 | Capability Curve of Generator | Please attached Scanned Copy |
| 5 | Remarks, If any |  |

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: Superintending Engineer

EHV O&M Circle, MSETCL: \_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE D-4**

**List of SCADA points**

*(as per standard requirement, SLDC would need all MW and MVAr data, voltage and frequency of all the buses, all the breaker and isolator positions, OLTC tap positions, Main‐1/Main‐2 protection operated signals)*

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of the Transmission Elements:

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **List of SCADA Points** | **IEC Address** |
| 1 | Analog Point | |
|  |  |  |
|  |  |  |
| 2 | Digital Point | |
|  |  |  |
|  |  |  |
| 3 | SOE | |
|  |  |  |
|  |  |  |

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: Superintending Engineer

EHV O&M Circle, MSETCL: \_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE D-5**

**Type and Location of Energy meters as per relevant CEA regulations**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of the Transmission Elements:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Name of Sub-Station** | **Feeder Name** | **Make of Meter** | **Meter No.** | **CT Ratio** | **PT/CVT Ratio** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: Superintending Engineer

EHV O&M Circle, MSETCL: \_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE D-7**

**Format: II-A**

**Undertaking by Transmission Licensee/Generating Station in respect of Protective systems**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The following transmission element is proposed to be charged on \_\_\_\_\_\_\_(*date*) tentatively

at around \_\_\_\_\_ hours.

Sr. No. and Name of Transmission Element:

1. It is certified that all the systems as stipulated in Part-III of the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 (as amended from time to time) have been tested and commissioned and would be in position when the element is taken into service.
2. The protective relay settings have been done as per the guidelines of the Regional Power Committee (RPC) as per section 5.2 (l) of the Indian Electricity Grid Code (IEGC). The necessary changes have also been made/would be made appropriately for the following lines at the following substations:

|  |  |  |
| --- | --- | --- |
| Sr. No. | Name of Sub-Station | Name of Transmission Element |
|  |  |  |
|  |  |  |
|  |  |  |

Place: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE D-8**

**Format: II-B**

**Undertaking by Transmission Licensee/Generating station in respect of Telemetry and communication**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The following transmission element is proposed to be charged on \_\_\_\_\_\_\_(*date*) tentatively

at around \_\_\_\_\_ hours.

Sr. No. and Name of Transmission Element:

The list of data points that would be made available to SLDC in real time had been indicated vide communication dated \_\_\_\_\_\_\_\_\_\_\_. It is certified that the following data points have been mapped and real time data would flow to SLDC immediately as the element is charged and commissioned.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Name of  substation | Data point (Analog as well as digital) identified in earlier Communication dated | Point to  point checking  done jointly  with SLDC (Y/N) | Data would  be available at SLDC (Y/N) | Remarks (path may be  specified) |
| 1 | Sending End | Analog |  |  |  |
|  |  | Digital |  |  |  |
|  |  | SOE |  |  |  |
|  |  | Main Channel |  |  |  |
|  |  | Standby Channel |  |  |  |
|  |  | Voice Communication  (Specify:(Mobile No /Landline No) |  |  |  |
| 2 | Receiving End | Analog |  |  |  |
|  |  | Digital |  |  |  |
|  |  | SOE |  |  |  |
|  |  | Main Channel |  |  |  |
|  |  | Standby Channel |  |  |  |
|  |  | Voice Communication  (Specify:(Mobile No /Landline No) |  |  |  |

It is also certified that the data through main channel is made available to SLDC as well as alternate communication channel is available for data transfer to SLDC to ensure reliable and redundant data as per IEGC (as amended from time to time). Also, Voice communication is established as per IEGC. The arrangements are of permanent nature. In case of any interruption in data in real time, the undersigned undertakes to get the same restored at the earliest.

Date: \_\_\_\_\_\_\_\_\_\_ Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE D-9**

**Format: II-C**

**Undertaking by Transmission Licensee/Generating station in respect of Energy Metering**

Name of Transmission Licensee /

Generating Station : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The following transmission element is proposed to be charged on \_\_\_\_\_\_\_(*date*) tentatively

at around \_\_\_\_\_ hours.

Sr. No. and Name of Transmission Element:

Special Energy Meters (SEMs) conforming to CEA (Installation and Operation of Meters) Regulations, 2006 have been installed and commissioned. The SEMs are calibrated in compliance of regulation 9 of Part-I of CEA (Technical Standard for Grid Connectivity) Regulations 2007 as per the following details:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sr. No. | Name of Sub-Station | Feeder Name | Make of Meter | Meter No. | CT Ratio | PT/CVT Ratio |
| 1 | Sending End |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 2 | Receiving End |  |  |  |  |  |
|  |  |  |  |  |  |  |

Data Format Conformity : Yes / No

Polarity as per Convention : Yes / No

Time Drift Correction carried out : Yes/No

The data from the above meters would be forwarded on weekly basis to the SLDC as per section 6.4.21 of the Indian Electricity Grid Code (IEGC) (as amended from time to time) and also as and when requested by the SLDC.

*(SLDC to indicate the email ids where the data has to be forwarded).*

Date: \_\_\_\_\_\_\_\_\_\_ Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**ANNEXURE D-10**

**Format: II-D**

**Undertaking by Transmission Licensee/Generating station in respect of Statutory Clearances**

It is hereby certified that all statutory clearances in accordance with relevant CERC Regulations / CEA standards / CEA regulations and PTCC route approval for charging of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ have been obtained from the concerned authorities.

Date: \_\_\_\_\_\_\_\_\_\_ Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Place: \_\_\_\_\_\_\_\_\_\_ Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal:

**Format: VI**

**Acknowledgment of Receipt of intimation towards FTC of new elements (SLDC)**

Name of SLDC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This is to acknowledge that the intimation of likely charging of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*Name of the transmission element*) has been received from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(*Name of the owner of the transmission asset*) on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*Date*).

Kindly complete the technical formalities in connection with energy metering, protection and real time data and communication facilities and inform us of the same three (3) days before charging of the above transmission element.

*Or*

The intimation is incomplete and the following information may be submitted within three (3) days of issue of this acknowledgment receipt:

1.

2.

3.

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sign: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Designation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seal of SLDC: