

## Annexure:- 6.11

### Documents to be submitted by Transmission Licensee/Generating Stations to RLDCs

<b>Annexure</b>	<b>Subject</b>	<b>Remarks</b>
<b>Annexure A1</b>	Intimation regarding anticipated charging of the line along with other documents	As per Format I
<b>Annexure A2</b>	List of elements to be charged and Element Rating details	As per Format I A
<b>Annexure A3</b>	Single line diagram of the concerned sub stations, along with status of completion of each dia/bus/breakers	
<b>Annexure A4</b>	List of SCADA points to be made available (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)	
<b>Annexure A5</b>	Type and Location of Energy meters as per relevant CEA regulations	
<b>Annexure A6</b>	Connection Agreement, wherever applicable along with all annexures	
<b>Annexure B1</b>	Request for charging of the new transmission element along with the summary of the undertakings being submitted	As per Format III
<b>Annexure B2</b>	Undertaking in respect of Protective systems	As per Format III A
<b>Annexure B3</b>	Undertaking in respect of Telemetry and communication	As per Format III B
<b>Annexure B4</b>	Undertaking in respect of Energy metering	As per Format III C
<b>Annexure B5</b>	Undertaking in respect of Statutory clearances	As per Format III D
<b>Annexure C1</b>	Request for issuance of successful trial operation certificate	As per Format V
<b>Annexure C2</b>	Values of the concerned line flows and related voltages just before and after charging of the element	
<b>Annexure C3</b>	Special Energy meter (SEM) Reading for the trial	
<b>Annexure C4</b>	Output of Disturbance Recorders / Event Loggers	

**Format I**

**Intimation by Transmission Licensee/Generating Station regarding anticipated charging of new elements**

**<Name of Transmission Licensee /Generating Stations>**

Name of the transmission element :  
Type of Transmission Element : Transmission Line / ICT / Bus Reactor / Line Reactor / Bus / Bay/Series Capacitor/Series Reactor  
Voltage Level : AC/DC kV  
Owner of the Transmission Asset :  
Likely Date and time of Charging :  
Likely Date and time of start of Trial Operation :

**Details of Standing Committee / Scheme Approval -**

Date of Meeting	Standing Committee meeting Number	MOM Item no. / Point No. /Serial No	Page No

Copy to be essentially enclosed

Place:

Date:

(Name and Designation of the authorized person with official seal)

Encl: Please provide full details.

- Annexure A2** : Format IA: List of elements to be charged and Element Rating details
- Annexure A3** : Single line diagram of the concerned sub stations, alongwith status of completion of each dia/bus/breakers
- Annexure A4**: List of SCADA points to be made available
- Annexure A5**: Location of installation of Energy meters as per relevant CEA regulations
- Annexure A6**: Connection Agreement, if applicable along with all annexures
- Standing Committee / Scheme Approval** – Relevant pages

**Format I A**

**List of elements to be charged and Element Rating details**

**I. List of Elements to be charged:**

**II. Element Ratings**

**a. Transmission Line**

<b>1</b>	From Substation	
<b>2</b>	To Substation	
<b>3</b>	Voltage Level (kV)	
<b>4</b>	Line Length (km)	
<b>5</b>	Conductor Type	
<b>6</b>	No of sub Conductors	

**b. ICT / Station Transformer/Startup Transformer**

<b>1</b>	Voltage (HV kV / LV kV)	
<b>2</b>	Capacity (MVA)	
<b>3</b>	Transformer Vector group	
<b>4</b>	Total no of taps	
<b>5</b>	Nominal Tap Position	
<b>6</b>	Present Tap Position	
<b>9</b>	Tertiary Winding Rating and Ratio	
<b>10</b>	% Impedance	

**c. Shunt / Series Reactor**

<b>1</b>	Substation Name / Line Name	
<b>2</b>	Voltage	
<b>3</b>	MVAR Rating	
<b>4</b>	Switchable / Non Switchable	
<b>5</b>	In case of Line Reactor, whether it can be taken as bus reactor	

**d) Generator Transformer (GT)**

(Name and Designation of the authorized person with official seal)

**Annexure A4**

**List of SCADA points to be made available (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 element :

<b>SNo</b>	<b>List of SCADA Points to be made available</b>	<b>IEC Address</b>
1	Analog Point	
2	Digital Point	
3	SOE	

(Name and Designation of the authorized person with official seal)

**Annexure A5**

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

**<Name of Transmission Licensee/Generating Station>**

Name of transmission element:

<b>S no</b>	<b>Name of substation</b>	<b>Feeder name</b>	<b>Make of meter</b>	<b>Meter no</b>	<b>CT Ratio</b>	<b>PT/CVT Ratio</b>

(Name and Designation of the authorized person with official seal)

## Format II

<Name of RLDC>

### Acknowledgement of Receipt by RLDC

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, IIIA, IIIB, IIIC and IIID.

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

Signature

Name:

Designation:

RLDC

**Annexure B1**

Format III

**<Name of Transmission  
Licensee/Generating  
Station>**

**Request by Transmission Licensee/Generating Station for first  
time charging and start of Trial Operation**

Past references: :

Name of the transmission element :

Type of Transmission Element : Transmission Line / ICT / Bus Reactor / Line  
Reactor / Bus / Bay

Voltage Level :

Owner of the Transmission Asset :

Proposed Date and time of first time Charging :

Proposed Date and time of Trial Operation :

Details of Standing Committee / Scheme Approval -

Date of Meeting	Standing Committee meeting Number	MOM Item no. / Point No. / Serial No	Page No

Place:

Date:

(Name and Designation of the authorized person with official seal)

Encl:

**Annexure B2 : Undertaking in respect of Protective systems as per Format IIIA**

**Annexure B3 : Undertaking in respect of Telemetry and communication as per Format IIIB**

**Annexure B4: Undertaking in respect of Energy metering as per Format IIIC**

**Annexure B5: Undertaking in respect of Statutory clearances as per Format IIID**

**Format IIIA**

**< Name and Address of Transmission Licensee/Generating Station >**

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

The following transmission element is proposed to be charged on \_\_\_\_\_<date> tentatively around \_\_\_\_ hours.

**S no and Name of transmission element:**

- 1.0 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.
- 2.0 The protective relay settings have been done as per the guidelines of the Regional Power Committee (RPC) as per section 5.2 I 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:

Sl No:	Name of the substation	Name of Transmission Element

Place:  
Date:

(Name and Designation of the authorized person with official seal)



## Format IIIB

## &lt; Name and Address of Transmission Licensee/Generating Station&gt;

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

The following transmission element is proposed to be charged on \_\_\_\_\_<date> tentatively around \_\_\_\_ hours.

**S 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	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.

Place:

Date:

(Name and Designation of the authorized person with official seal)

**Annexure B4**

**Format IIIC**

**< Name and Address of Transmission Licensee/Generating Station>**

**Undertaking by Transmission Licensee/Generating Station in respect of Energy metering**

The following transmission element is proposed to be charged on \_\_\_\_\_<date> tentatively around \_\_\_\_ hours.

**S 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:

<b>S no</b>	<b>Name of substation</b>	<b>Feeder name</b>	<b>Make of meter</b>	<b>Meter no</b>	<b>CT Ratio</b>	<b>PT/CVT Ratio</b>
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).*

Place:

Date:

(Name and Designation of the authorized person with official seal)

**Format III D**

**< Name and Address of Transmission Licensee/Generating Station >**

**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.

Place:

Date:

(Name and Designation of the authorized person with official seal)

## **Format IV**

### **Provisional Approval for charging and trial run**

<Name of RLDC>

**Approval no:**

To,

The Transmission Licensee,

**Sub: Charging and trial run of <Name of Transmission element>\_\_\_\_Provisional approval**

**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, IIIA, IIIB IIIC and IIID**

Madam/Sir,

1) The above documents have been examined by RLDC and permission for charging of <Name of Transmission element> on or after     \_ 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 for each element switching as well as commencement of trial operation.

2) The following shortcomings have been observed in the documents at S 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,

(Name and designation of authorized personnel with seal)

**Annexure C1**

**Format\_V**

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

To,

<Name of RLDC>

**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 IIIA, IIIB IIIC and IIID**

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

**v) Real time codes from RLDC on .....**

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 1.
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-2
3. Event Logger and Numerical Relay or Disturbance Recorder outputs at Annexure\_3 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,

( )

<Name and Designation of authorized person with official seal>

Encl: Annexure C2: Plot of MW/MVAr flow during 24 hour trial operation.

Annexure C3: Energy Meter

Annexure\_C4: Reading Numerical relay or Disturbance Recorder (DR) output and Event Logger output.

