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

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

Annexure A1

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

Annexure A2

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

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

b. ICT / Station Transformer/Startup Transformer

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

c. Shunt / Series Reactor

1	Substation Name / Line Name	
2	Voltage	
3	MVAR Rating	
4	Switchable / Non Switchable	
5	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 :

SNo	List of SCADA Points to be made available	IEC Address
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:

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

(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

Annexure B2

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 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:

Sl No:	Name of the substation	Name of Transmission Element

Place:
Date:

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

Annexure B3

Format IIIB

< Name and Address of Transmission Licensee/Generating Station>

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>

Undertaking by Transmission Licensee 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:

S no	**Name of substation**	**Feeder name**	**Make of meter**	**Meter no**	**CT Ratio**	**PT/CVT Ratio**
1	Sending end					
2	Receiving end					

Data Format Conformity: Yes / No

S no	**Meter no**	**Meter Time (T1)**	**GPS Time (T2)**	**Time Drift (T2-T1) shall be less than 1 minute**	**CT shorting removed (Y/N)**	**CT polarity as per convention checked (Y/N)**	**CVT/PT supply to the SEM checked Y/N)**
1	Sending end						
2	Receiving end						

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)

Annexure B5

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 N u m e r i c a l Relay or D i s t u r b a n c e 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.