

## Section 5:

### Procedure

for integration of a new or modified power system elements and issue of certificate of successful trial operation by National Load Despatch Centre (NLDC)/ Regional Load Despatch Centres (RLDCs)

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**Procedure for integration of a new power system elements and issue of certificate of successful trial operation by National Load Despatch Centre (NLDC)/ Regional Load Despatch Centres (RLDCs)**

This procedure is applicable for following power system elements:

- Inter-Regional/Inter-State transmission lines irrespective of voltage level/ownership
- HVDC transmission elements irrespective of ownership
- Transnational lines/elements
- 400kV level and above transmission lines/ICT/Bus Reactor/Line Reactor/FACTS devices (TCSC /FSC /STATCOM /SVC)/Bus/Bay/Series Capacitor/Series Reactor/Generating Transformer/any other elements irrespective of ownership
- 220 kV level transmission lines/ICT/Bus Reactor/Line Reactor/FACTS devices (TCSC /FSC / STATCOM /SVC)/ Bus/ Bay/ Series Capacitor/ Series Reactor/ Generating Transformer/any other elements emanating from ISGS / ISTS substations
- Station Transformers (STs) at generating station those are regional entities.
- Generating station those are regional entities.
- Bulk Consumers or Load Serving Entities those are regional entities.
- Combined (Load & Captive) generation complex those are regional entities.
- Short Circuit Testing of power transformers at National High Power Test Laboratory Pvt. Ltd.(NHPTL)

Indian Electricity Grid Code provides for formulation of operating procedure by NLDC/RLDCs. The same is quoted below:

*"A set of detailed operating procedures for the National grid shall be developed and maintained by the NLDC in consultation with the RLDCs, for guidance of the staff of the NLDC and it shall be consistent with IEGC to enable compliance with the requirement of this IEGC.*

*A set of detailed operating procedures for each regional grid shall be developed and maintained by the respective RLDC in consultation with the regional entities for guidance of the staff of RLDC. and shall be consistent with IEGC to enable compliance with the requirement of this IEGC."*

In accordance with the above provisions and as a part of NLDC/RLDC operating procedure, procedure for energization of a new or modified power system elements belonging to any transmission licensee has been formulated to enable NLDC/RLDC for secure and reliable integration of new elements. This procedure specifies requirements for integration with the grid such as protection, telemetry and communication systems, metering, statutory clearances and modelling data requirements for system studies.

The details of the same are as follows:

1. **Compliance to the regulations:** All the transmission licensee shall be complied to the regulation & their amendments mentioned below-

- i) Central Electricity Authority (Technical Standards for Connectivity to the Grid Regulations, 2007
- ii) Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010
- iii) Central Electricity Authority (Measures Relating to Safety & Electric Supply) Regulations, 2010
- iv) Central Electricity Regulatory Commission (Communication System for Inter-State Transmission of Electricity) Regulations, 2017
- v) Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006
- vi) Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in Inter-State Transmission and related matters) Regulations, 2009
- vii) Central Electricity Regulatory Commission (Fees and Charges for Regional Load Despatch Centres) Regulations, 2019
- viii) Any other regulations and standards specified from time to time

2. **Intimation for energization to RLDCs-** All the Transmission Licensees including deemed transmission licensees or cross-border entity (Indian side) intending to energize a new or modified any power system elements, which is part of inter-state transmission system, shall intimate the concerned RLDC the details as per the formats given below, at least **(10) days** prior to the anticipated date of first test charging.

- a. **Annexure A1:** Intimation regarding anticipated charging of the power system elements along with the list of the desired documents being submitted.
- b. **Annexure A2 :** List of elements to be charged with their Rating
- c. **Annexure A3 :** Single line diagram of the concerned sub stations, along with status of completion of each dia/bus/breakers clearly indicating which elements are proposed to be charged.
- d. **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, DC side SCADA data in case of HVDC station, data for SVC/STATCOM as per RLDCS/NLDC requirement)
- e. **Annexure A5 :** Location of Energy meters as per relevant CEA regulations

- f. **Annexure A6:** Connection Agreement, wherever applicable along with all annexures.

Other than the documents mentioned above following documents needs to be submitted to RLDCs-

- CTU charging instructions to be provided which shall clearly mentioned about the assumption made in the studies for ex. Whether it is anti-theft charging or complete line is going to be charged, status of parallel line etc.
  - Details of approval of the transmission scheme from the Standing Committee / CTU and approval for changes in the approved scheme, if any.
  - Availability of line reactors with the switchable or non-switchable status as per approved scheme.
  - CEA approval for energization as per Central Electricity Authority (Measures Relating to Safety & Electric Supply) Regulations, 2010
  - PTCC clearance certificate
  - Technical parameters of the power system element required for network modeling shall be made available by CTU/STU
  - In case of HVDC transmission elements all desired modelling data, operational documents and telemetered data to be provided as per the procedure of integration of HVDC transmission elements.
  - In case of STATCOM/SVC all technical details to be provided as per procedure of STATCOM/SVC.
  - Short Circuit Testing of power transformers at National High Power Test Laboratory Pvt. Ltd.(NHPTL) is allowed as per the CERC approved procedure of testing enclosed as **Annexure-I**
  - Status of PMU installation
3. Within 3 days of submission of above information by the Transmission Licensee, concerned RLDC shall acknowledge the receipt of the same, as per Format II, and seek clarifications, if any. The transmission licensee shall submit the desired information/documents to the concerned RLDC within next three days.
4. **Request for trial operation**-The request for charging of new or modified power system element and towards start of the trial operation as per Format III shall be submitted by the Transmission Licensee to the concerned RLDC, **at least three (3) days** prior to the date of first-time charging. There could be a separate schedule for test charging and the final schedule for trial operation, which may be mentioned in the Format-I itself. The Transmission Licensee shall also submit the following documents in this regard:
- a. **Annexure B1:** Request for charging of the new or modified power system elements along with the summary of the undertakings being submitted as per **Format III**
  - b. **Annexure B2:** Undertaking in respect of Protective systems as per **Format III A**

c. **Annexure B3:** Undertaking in respect of Telemetry and communication as per Format III B

d. **Annexure B4:** Undertaking in respect of Energy metering as per **Format III C**

e. **Annexure B5:** Undertaking in respect of Statutory clearances as per **Format III D**

5. On satisfying itself with the submitted information as stated above under Para 3, the RLDC would issue a provisional approval for charging to the Transmission Licensee as per **Format IV** within two days of receipt of above documents. On the designated day, the transmission licensee shall charge the transmission line and do trial operation as per the timeline mentioned in Format III, after obtaining the real time code from RLDC. All attempts would be made by the real time operating personnel at the concerned RLDC to facilitate charging and commissioning of the new or modified power system elements at the earliest, subject to availability of real time data and favorable system conditions. Charging of any new elements will not be allowed after 18:00 hrs.

6. **Issuance of Trial Certificate**- Clause (5) of Regulation 6.3A of Indian Electricity Grid Code provides for certification of successful trial operation of new transmission assets by RLDC. The same is quoted below:

*"Trial run and Trial operation in relation to a transmission system or an element thereof shall mean successful charging of the transmission system or an element thereof for 24 hours at continuous flow of power, and communication signal from the sending end to the receiving end and with requisite metering system, telemetry and protection system in service enclosing certificate to that effect from concerned Regional Load Despatch Centre."*

After successful trial operation, following documents shall be submitted by the Transmission Licensee to concerned RLDC :

- a. **Annexure C1:** Request for issuance of successful trial operation certificate as per **Format V**
- b. **Annexure C2:** Values of the concerned line flows and related voltages as per local SCADA just before and after charging of the element.
- c. **Annexure C3:** Special Energy meter (SEM) Reading corresponding to the trial run
- d. **Annexure C4:** Output of Disturbance Recorders / Event Loggers including the graph and event list.

7. Within three (3) working days of submission of the information mentioned above, 289

N L D C / RLDC concerned shall issue the certificate for successful completion of trial run of the transmission lines as per **Format VI** subject to the correctness of information provided by the transmission licensee. If any clarification is required from transmission licensee then trial certificate will be issued after resolving all the issues.

8. Jurisdiction of Issuance of trial Certificate is as follows:

**NLDC**- Inter Regional transmission lines designated as ISTS irrespective of voltage level, inter regional HVDC link/Pole irrespective of ownership and all transnational lines.

**RLDC**- Transmission lines designated as ISTS irrespective of voltage level/ownership, Intra Regional HVDC link/pole connected as designated ISTS network, FACTS devices (TCSC/FSC/STATCOM/SVC) associated with designated ISTS;

X-----X-----X

**Procedure for approval of testing at NHPTL, Bina**

1. NHPTL shall register with WRLDC as its user before commencement of short circuit tests by filing an application in the Format I enclosed and payment of one time registration fee of INR ten lakh only in line with the provisions of the CERC (RLDC Fees and Charges) Regulations, 2015.
2. NHPTL shall apply to WRLDC at least seven (7) days in advance for approval of testing of any High Voltage Transformer (HVTR) test equipment in Format II enclosed. Only one application for the specified rating of the transformer for the desired period of testing time of maximum one day shall be submitted by NHPTL. Non-refundable Application Fees of Rs 5000/- only per application/testing would be payable by NHPTL to WRLDC. In case there is requirement of short circuit current for multiple times on the same equipment, then the same shall be clearly mentioned in the application format including any shots for calibration which shall be indicated separately.
3. WRLDC shall give its approval within three (3) days of receipt of the application in Format III enclosed considering the grid conditions, anticipated fault levels and/or any other event in the vicinity of the test laboratory with a copy to NLDC and MP SLDC. In case of any anticipated grid condition which requires deferment of the proposed testing, WRLDC shall intimate the revised date and time for testing for which no additional fee is required to be paid.
4. NHPTL shall give at least one day notice to revise the date of testing. In such case no additional application fee would be applicable. In case NHPTL is not able to conduct the test on the approved day and time window due to reasons not attributable to POSOCO, a fresh application shall be submitted by NHPTL at least 3 days in advance. Application fee as mentioned in S no 2 above would be applicable.
5. On the day of testing, POWERGRID (on the request from NHPTL) shall seek real time code from WRLDC for switching ON the 400/765 kV NHPTL feeder from Bina (PG) substation depending upon the feeder requirements for conducting test on a particular rating of transformer. NHPTL would then seek code from WRLDC just before applying short circuit to the test equipment only once for a maximum duration of 250 milliseconds with tolerance of + 10% as per IEC 60076-5. The real time code shall be issued by WRLDC, in consultation with NLDC and MP SLDC, considering the real time grid conditions and availability of real time data and PMU data which shall be valid for a maximum of 4 hours. NHPTL shall attempt to complete all shots of short circuit testing during this 4 hour window only. In case NHPTL is not able to complete the same with 4 hours, a fresh code shall be taken after indicating the reason for delay.



6. In case real time conditions do not permit testing or real time data / PMU data is not available due to any reason, WRLDC may defer the testing to some other time or date. In such scenario, no new application or application fees are required.
7. After the test is over, POWERGRID (on the request from NHPTL) shall seek real time code from WRLDC for switching OFF the 400 /765kV NHPTL feeder from Bina (PG). POWERGRID Bina would also forward the energy meter data for the NHPTL feeders every week by 1200 hours on Monday.
8. Within 24 hrs of testing of any HVTR test equipment, NHPTL shall submit output of Disturbance Recorder and Event Logger (EL) to WRLDC.
9. Based upon the operational experience, any modification may be incorporated in the procedure for better operation and coordination in the testing, after mutual consultation.

X—x—x

**Format I**

**Application for registration of entity with RLDC**

1. Name of the entity (in bold letters):
2. Registered office address:
3. Region in which registration is sought:
  - a. North-eastern
  - b. North
  - c. East
  - d. West
  - e. South
4. User category: Short Circuit Testing Laboratory
5. User details:

SI No	Point of Connection with ISTS	Voltage Level	Number of Special Energy Meters (Main) installed at this location	Max Short Circuit current likely to be drawn from the system	Time duration of short circuit current

6. Contact person(s) details for matters related to RLDC/NLDC:
  - a. Name:
  - b. Designation:
  - c. Landline Telephone No.:
  - d. Mobile No.:
  - e. E-mail address:
  - f. Postal address:

The above information is true to the best of my knowledge and belief.

Place:

Date:

Signature of Authorized Representative

Name;  
Designation:  
Contact  
number:

## APPLICATION FOR TESTING

To: WRLDC

1	Application No:		Date	
	Applicant Name		Registration Code	

3	Test Equipment Description	Expected Short Circuit Current to be drawn from the system	Expected fault current (In case of failure of transformer during testing)	Time duration of Short Circuit Current	Number of shots of short circuit current (excluding calibration shots)	Testing Window		
						Date	From Time	To Time

No of calibration shots and sequence

4 Declaration: The applicant undertakes to abide by the provisions of the various CERC and CEA Regulations/orders.

Signature (With Stamp)

Date:

Place:

Name:

Designation:

## ACCEPTANCE OF TESTING REQUEST

1	Application No:		Date	
	Applicant Name		Registration Code	

Testing Requested

3	Testing Equipment	Expected Short Circuit Current to be drawn	Time duration of Short Circuit Current	Testing Window		
				Date	From Time	To Time

Testing Approved

4	Testing Equipment	Anticipated fault level at 400 kV Bina (PG)	Time duration of Short Circuit Current	Testing Window		
				Date	From Time	To Time

Payment Schedule

5	Total Application Fee	
	Total Operating Charges	
	Grand Total	

This approval is subject to the applicant adhering to provisions of the relevant CEA and CERC Regulations/orders as amended from time to time.

This approval is further subject to real time conditions and availability of real time data including PMU data from Bina (PG).

In case any of the above condition is violated, this approval stands cancelled.

Signature

Place:

Date:

Name:

Designation:

**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	

**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/Station transformer/ Generator transformer/STATCOM/ HVDC Terminal /Converter Transformer/ HVDC Line / MSR / MSC / TCSC / FSC

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 :

**Schedule Date of Commercial Operation:**

(As per original scheme)

**Project Scheme** : TBCB / Other than TBCB**Associated elements of this project** :

(In case co-ordinated Transmission

/Generation evacuation project)

**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

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

## 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:

<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

**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

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

## 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 5.21 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) 305

## Format IIIC

&lt; Name and Address of Transmission Licensee&gt;

## 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)



**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)

## 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.