

CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

No. L-1/261/2021/CERC

Coram:

Shri Jishnu Barua, Chairperson

Shri Ramesh Babu V., Member

Shri Harish Dudani, Member

Shri Ravinder Singh Dhillon, Member

Date of Order: 04.05.2026

In the matter of:

Approval of “Detailed Procedure for metering, accounting and scheduling of the entities under Regulation 5.6, 17.3 and 39.2 of the GNA Regulations”

Order

Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 (hereinafter called ‘Principle Regulations’) were published on 19.07.2022 in Part III, Section 4 of the Gazette of India (Extraordinary) No 364, the first amendment, second amendment and third amendment to the Principal Regulations were published on 06.04.2023, 01.07.2024 and 09.09.2025, respectively, in Part III, Section 4 of the Gazette of India (Extraordinary) No 229, 469, and 622, respectively (hereinafter collectively referred to as “GNA Regulations”).

2. In accordance with Regulation 5.6, 17.3 and 39.2 of the GNA Regulations, NLDC was required to submit the Detailed Procedure for metering, accounting, and scheduling arrangements for approval of the Commission.

3. Accordingly, NLDC vide its letter dated 07.11.2025 has submitted the said Detailed Procedure after stakeholder consultation, for approval of the Commission.

4. The Commission has examined the Detailed Procedure submitted by NLDC and after incorporating suitable changes hereby approves the “Detailed Procedure for metering, accounting and scheduling of the entities under Regulation 5.6, 17.3 and 39.2 of the GNA Regulations” in terms of proviso to Regulation 39.2 of the GNA Regulations. The approved Detailed Procedure is enclosed as Annexure to this order.

Sd/-
(Ravinder Singh Dhillon)
Member

Sd/-
(Harish Dudani)
Member

Sd/-
(Ramesh Babu V.)
Member

Sd/-
(Jishnu Barua)
Chairperson

Detailed Procedure for scheduling, metering, accounting of the entities under Regulation 5.6, 17.3 and 39.2 of the GNA Regulations

1. Introduction:

This detailed procedure is issued in accordance with Regulations 5.6, 17.3 and 39.2 of the GNA Regulations.

2. Eligibility:

2.1. This procedure shall be applicable to the following entities who shall be called as “eligible entities” for the purpose of this Procedure:

- i. Entities covered under Regulation 4.1 of the GNA Regulations, seeking Connectivity at the terminal bay of the ISTS substation already allocated to or switchyard of an entity covered under Regulation 17.1(iii) of the GNA Regulations.
- ii. Entities covered under Regulation 17.1(iii) of the GNA Regulations, applied for grant of GNA by seeking interconnection at the terminal bay of the ISTS substation already allocated to an entity covered under Regulation 4.1 or switchyard of a generating station having Connectivity to ISTS.

2.2. GNA Regulations permit a generating station connected or planned to be connected to intra-State transmission system to seek Connectivity to ISTS. However, such dual connectivity to the entity covered under Regulation 17.1(iii) of the GNA Regulations is not permitted. The instant Procedure permits an entity covered under Regulation 17.1(iii) of the GNA Regulations to seek GNA at ISTS terminal bay allocated to a generating station. It is clarified that if such entity covered under Regulation 4.1 of the GNA Regulations is having dual Connectivity, i.e. entity is connected with the Inter-State as well as Intra-State transmission system both, in such case the entity covered under regulation 17.1(iii) shall not be allowed to seek Connectivity at such terminal bay of the ISTS substation. Similarly, if the entities covered under Regulation 4.1 seeks connectivity at the terminal bay of the ISTS substation already allocated to or switchyard of an entity covered under Regulation 17.1(iii), it shall not be eligible for seeking dual Connectivity to intra-State transmission system.

3. Roles:

3.1 CTUIL:

CTUIL shall communicate to the RLDCs/NLDC, the approved quantum of Connectivity or GNA, as applicable, of the eligible entities mentioned in this procedure.

3.2 Entities covered under Regulation 4.1 and Regulation 17.1(iii):

- i. The eligible entities mentioned in this procedure shall get themselves registered with the concerned host RLDC (as per CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2024) and shall pay the RLDC Fees and Charges as per extant Regulations.
- ii. Lead Generator or Lead ESS shall be as defined under the GNA regulations.
- iii. The eligible entities shall provide their schedule, directly or through a Lead ESS or Lead Generator or through a Qualified Coordinating Agency (QCA) to host RLDC as per the provisions of CERC (Indian Electricity Grid Code), Regulations 2023 (herein after referred as 'Grid Code').
- iv. A mutual agreement shall be entered among the original connectivity grantee or original GNA grantee and the incoming entity, as applicable, for sharing of common infrastructure (other than ISTS). The agreement shall also contain provision of congestion management below the ISTS point whenever there is congestion below the ISTS point.
- v. In case entity covered under Regulation 4.1 and Regulation 17.1(iii) decides to make one of the entities as 'Principal entity' responsible for scheduling and de-pooling of DSM charges among them, through a QCA or otherwise, the mutual agreement shall clearly assign responsibility of the Principal entity or QCA to undertake commercial settlement of different charges, in accordance with the extant Regulations. Such mutual agreement shall also cover the provisions for internal dispute resolution mechanism to mutually settle the issues arising out of de-pooling of charges
- vi. The original connectivity grantee or original GNA grantee shall submit a copy of the above agreement to the concerned RLDC and RPC.
- vii. The above entities shall indemnify the RLDCs for any act of commission or omission on the part of such entities, including compliance with the extant Regulations and settlement of its financial liability in the pooled account.
- viii. All the entities shall furnish the respective meter data to the Host RLDC installed as per the Grid Code and the CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 (hereinafter referred as 'DSM Regulations').
- ix. The eligible entities shall provide all the applicable PPA rate under Section 62 & Section 63 of the Electricity Act, along with supporting document, if any, to be taken

into account for DSM computation, in the form of an affidavit to the host RLDC and RPC.

- x. The Principal entity or entity under Regulation 4.1 or Regulation 17.1(iii) of the GNA Regulations or QCA, as applicable, as per the agreed mutual agreement between the co-located entities, shall furnish the net meter data to the host RLDC as per Grid Code and DSM Regulations.
- xi. Each entity granted Connectivity for injection to ISTS (under Regulation 4.1) or granted GNA for drawal from the ISTS (under Regulation 17.1(iii)), shall meet all the applicable compliances as provided under the CEA Grid Standards and Grid Code.

3.3 RLDC:

- i. RLDC shall facilitate the registration, scheduling and metering of the transactions performed by the above entities.
- ii. The registration of each connected entity is to be done separately in accordance with the CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2024.
- iii. RLDCs shall furnish the relevant scheduling and metering data to the concerned RPC.

3.4 RPC:

- i. RPC shall publish the DSM, RTDA, Reactive Energy Charges, Ancillary Service Account and Congestion charges account considering the exchanges at the ISTS interconnection point.
- ii. RPC shall publish the REA, RTA accounts for the above individual entities as per data submitted by the host RLDC and NLDC, as applicable.

4. Scheduling, Metering and Accounting:

- i. The scheduling and metering of the entities shall be done at point of interconnection with the inter-State transmission system (ISTS).
- ii. The individual schedules of the entities at the ISTS shall be restricted up to their individual connectivity quantum or GNA granted, as the case may be, as granted by CTUIL.
- iii. Co-located entities are considered as entities connected at same ISTS sub-station (at

the same sub-pooling station (includes connected at below the ISTS pooling station)).

- iv. There may be scheduling of power between an injecting entity and a drawee entity as co-located entities, connected at the same ISTS substation. In such case, internal schedule along with schedules outside the ISTS point shall be shared with the Host RLDC by the entities.
- v. For segregation of actual drawal and injection, interface energy meters shall be installed at all the entity end for accounting purpose, as finalised by concerned RPC & RLDC.
- vi. The metering scheme shall be prepared after consultation with the host RLDC, RPC and the concerned entities. The metering scheme shall be in accordance with CEA (Installation and Operation of Meters) Regulations, 2006, and the Grid Code.
- vii. The Principal entity or entity under Regulation 4.1 or Regulation 17.1(iii) of the GNA Regulations or QCA, as applicable, as per the agreed mutual agreement between the co-located entities, shall be responsible for the payment of deviation charges, transmission deviation charges, congestion charges and reactive energy charges.
- viii. The accounts for deviation charges, congestion charges, transmission deviation charges and reactive energy charges shall be calculated for the entities by the concerned RPC at the ISTS interconnection point. A sample calculation is elaborated in **Annexure**.

Provided that if scheduling is done through Principal entity or QCA then the de-pooling of the charges among the entities shall be done by the concerned Principal entity or QCA, as applicable. The de-pooling of charges amongst the individual entity may be carried out using above methodology or any other suitable methodology.

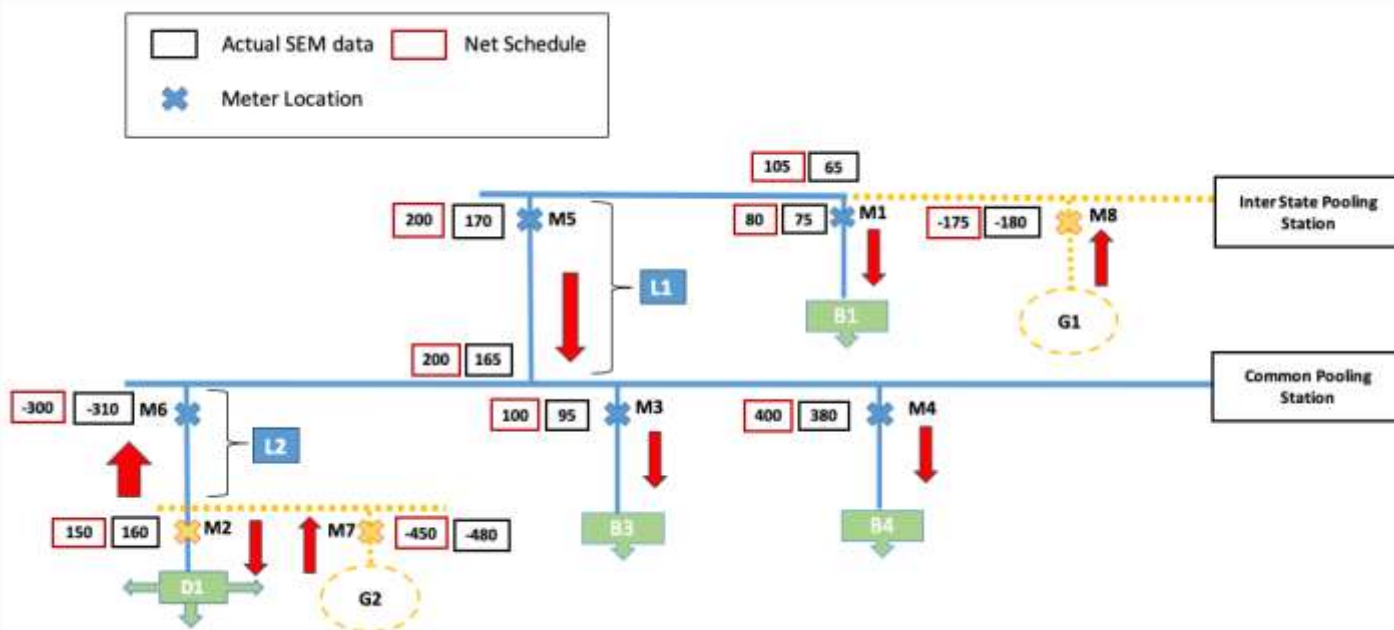
- ix. In case of congestion in the Inter-State Transmission System, if the entire power cannot be evacuated beyond the ISTS connectivity point, the scheduling of same power can be done to the co-located drawal entities, including ESS.
- x. The curtailment to handle the congestion due to transmission constraints or in the

interest of grid security, shall be done as per the Regulation 38 of the GNA Regulations above the ISTS connection point.

5. Loss Applicability:

- i. For schedule of power, among the co-located entities, below the ISTS interconnection point, no ISTS loss shall be applied.
- ii. For schedule of power, above the ISTS interconnection point, ISTS loss shall be applicable as per CERC (Sharing of inter-State Transmission Charges and Losses) Regulations, 2020.

Sample illustration:



- In the above arrangement of a sample ISTS Pooling Station, B1, B3, and B4 are Bulk Consumers, G1 and G2 are Generators, and D1 is a DISCOM. B1, D1, B3, and B4 are entities with GNA covered under Regulation 17.1(iii) of the GNA Regulations.
- G2 is the generator, covered under Regulation 4.1 of the GNA Regulations seeking connectivity at the terminal bay of the ISTS substation already allocated to GNA grantee (D1).

Calculation of Deviation Settlement Mechanism and Congestion Amount:

Sample calculation of Deviation Settlement Mechanism (DSM)

Entities	Connectivity/ GNA (MW) A1	Internal Schedule (MW) A	Schedule at ISTS point (MW) B	Schedule at Ex-bus (MW) C = A+B	Actual Meter Data		Line Loss of L1 (MW) L1=(M5)- (M3+M4+M 6)	Line Loss of L2 (MW) L2=(M6)- (M2+M7)	Calculated Actual at common pooling point F#	Calculated Actual at ISTS point (MW) G#	Calculated Deviation at ISTS point (MW) H = G-C
					Meter No.	Data E					
D1 DISCOM 1	200	50	100	150	M2	160	5	10	162.5	163.23	13.23
G2 Generator 2	-500	-100	-350	-450	M7	-480			-472.5	-470.37	-20.37
					M6	-310			-310	-307.14	
B3 Bulk Consumer 3	100	0	100	100	M3	95			95	95.43	-4.57
B4 Bulk Consumer 4	300	100	300	400	M4	380			380	381.71	-18.29
					M5	170			-	170	
B1 Bulk Consumer 1	200	0	80	80	M1	75			-	75	-5
G1 Generator 1	-125	-50	-125	-175	M8	-180	-	-180	-5		

For injection injection - (loss x injection)/(absolute (injection+drawal))
 For drawal drawal +(loss x drawal)/(absolute (injection + drawal))

Assumption:

Positive number shows drawal from ISTS, negative number shows injection into ISTS (except for 'H' column)

Column 'H'- -ve number shows over-injection for generator or under-drawal by drawee entity

+ve number shows under-injection for generator or over-drawal by drawee entity
 Generator 2 is providing 100 MW to bulk consumer 4
 Generator 1 is providing 50 MW to DISCOM 1
 Line loss for L1 calculated as 5 MW is shared among points M6, M3 and M4 on prorata basis

Calculation of Regional Transmission Deviation Account (RTDA):

Sample calculation of Regional Transmission Deviation Account (RTDA)									
Entities	Connectivity/GNA (MW) A1	Internal Schedule (MW)	Schedule at ISTS point (MW)	Schedule at Ex-bus (MW)	Calculated Actual at ISTS point (MW)	Calculated Actual for ISTS transaction (MW)	RTDA (MW)	RTDA for billing (MW)	
		A	B	C = A+B	G#	I = G-A	J = I- A1	K = max(J,0)	
D1	DISCOM 1	200	50	100	150	163.23	113.23	-86.77	-
G2	Generator 2	-500	-100	-350	-450	-470.37	-370.37	-129.63	-
					-307.14				
B3	Bulk Consumer 3	100	0	100	100	95.43	95.43	-4.57	-
B4	Bulk Consumer 4	300	100	300	400	381.71	281.71	-18.29	-
					170				
B1	Bulk Consumer 1	200	0	80	80	75	75.00	-125.00	-
G1	Generator 1	-125	-50	-125	-175	-180	-130.00	5.00	5.00

For injection injection - (loss x injection)/(absolute (injection+drawal))
 For drawal drawal +(loss x drawal)/(absolute (injection + drawal))

Calculation of Reactive Energy Account:

Sample calculation of Reactive Power									
Entities	Connectivity/GNA (MW) A1	Meter No.	Daily MVAR_HIGH	Daily MVAR_LOW	Daily MVARH_HIGH at common pooling station	Daily MVARH_LOW at common pooling station	Daily MVARH_HIGH at ISTS pooling station	Daily MVARH_LOW at ISTS pooling station	
			When bus voltage is more than 103% per unit	When bus voltage is less than 97% per unit	When bus voltage is more than 103% per unit	When bus voltage is less than 97% per unit	When bus voltage is more than 103% per unit	When bus voltage is less than 97% per unit	
			A	B	$C = A + \{(M6 - (M2 + M7)) * (A1 / (D1 + G2))\}$	$D = B + \{(M6 - (M2 + M7)) * (A1 / (D1 + G2))\}$	$E = C + \{(M5 - (M6 + M3 + M4)) * (A1 / (D1 + G2 + B3 + B4))\}$	$F = D + \{(M5 - (M6 + M3 + M4)) * (A1 / (D1 + G2 + B3 + B4))\}$	
D1	DISCOM 1	200	M2	100	90	68.57	65.71	32.21	30.26
G2	Generator 2	500	M7	120	80	41.43	19.29	-49.48	-69.35
			M6	110	85	-	-	-	-
B3	Bulk Consumer 3	100	M3	105	100	105.00	100.00	86.82	82.27
B4	Bulk Consumer 4	300	M4	95	110	95.00	110.00	40.45	56.82
			M5	110	100	-	-	-	-
B1	Bulk Consumer 1	200	M1	130	110	-	-	130	110
G1	Generator 1	125	M8	110	120	-	-	110	120

D1, G1, G2, B3, B4 are corresponding GNA quantum of the entity

