

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.246/MP/2024**

**Coram:**

**Shri Jishnu Barua, Chairperson  
Shri Ramesh Babu V., Member  
Shri Harish Dudani, Member  
Shri Ravinder Singh Dhillon, Member**

**Date of Order: 29.05.2025**

**In the Matter Of:**

Petition under Section 79 of the Electricity Act, 2003, read with Section 38 and Regulations 4.1, 5.6 and 17.1(iii) of the General Network Access Regulations, 2022, thereby imploring this Hon'ble Commission to exercise its regulatory powers, for the purpose of facilitating the Petitioner to obtain General Network Access for the Petitioner's Petrochemical Plant located at Dahej, Gujarat at the DGEN Switchyard and DGEN dedicated Transmission Line of Torrent Power Limited.

**AND**

**In the Matter Of:**

**M/s. Reliance Industries Limited,**  
PO Motikhavadi, Meghpar  
Padana Gagva,  
Jamnagar-361140, Gujarat

**..... Petitioner**

**Versus**

**1. Central Transmission Utility of India Limited,**

Floor No.5-10, Tower 1, Plot No. 16,  
IRCON International Tower,  
Institutional Area, Sector 32,  
Gurugram- 122001, Haryana.

**2. Western Region Load Dispatch Centre,**

MIDC Area, Marol, Andheri East,  
Mumbai – 4000093

**3. Torrent Power Limited**

Sugen Mega Power Project, Off National Highway No.8,  
Taluka Kamrej,  
Surat – 394155 (Gujarat).

**4. Chhattisgarh State Power Transmission Company Limited,**

P.O. Sunder Nagar, Danganiya, Raipur- 492013,



Chhattisgarh

**5.Chhattisgarh State Power Generation Company Limited (CSPGCL)**

P.O. Sunder Nagar, Danganiya, Raipur- 492013,  
Chhattisgarh

**6.Chhattisgarh State Power Distribution Company Limited,**

P.O. Sunder Nagar, Danganiya, Raipur- 492013,  
Chhattisgarh

**7.Gujarat Power Corporation Limited,**

Block No. 8, Sixth Floor,  
Udhyog Bhavan, Sector 11,  
Gandhinagar – 382011

**8.Gujarat Energy Transmission Company Limited,**9<sup>th</sup> floor, Sardar Patel Vidyut Bhawan,  
Race Course, Vadodara- 390 007,  
Gujarat

**9.Dakshin Gujarat Vij Company Limited (Gujarat Discom)**

"Urja Sadan", Nana Varachha Road,  
Kapodara, Surat-395 006, Gujarat

**10.Gujarat Urja Vikas Nigam Ltd,**

Sardar Patel Vidyut Bhawan,  
Race Course,  
Vadodara 390 007

**11.Madhya Pradesh Power Transmission Company Limited,**

Shakti Bhavan, Rampur, Jabalpur- 482 008  
Madhya Pradesh

**12.Madhya Pradesh Power Generation Company Limited,**

Shakti Bhavan, Vidyut Nagar, Rampur, Jabalpur- 482 008,  
Madhya Pradesh

**13.Madhya Pradesh Poorva Kshetra Vidyut Vitran Company Limited,**

Block No.-7, Shakti Bhavan  
PO: Vidyut Nagar, Rampur  
Jabalpur - 482008 (M.P)

**14.Maharashtra State Electricity Transmission Company Limited,**

Prakashganga, Plot No.C-19,  
E-Block, Bandra Kurla Complex, Bandra (East),  
Mumbai – 400051

**15.Maharashtra State Power Generation Company Limited,**

Prakashgad, 2nd Floor, Plot No G-9, Bandra (East),  
Mumbai- 400 051

**16.Maharashtra State Electricity Distribution Company Limited,**



Prakashgad, 6th Floor, Plot No G-9, Bandra (East),  
Mumbai: 400 051

**17.Electricity Department Goa,**

Vidyut Bhawan, 3rd floor,  
Panaji 403 001 Goa

**18.Dadra And Nagar Haveli And Daman And Diu Power Distribution Corporation Limited,**

Vidyut Bhavan, Near 66 kV Sub-Station, Kachigam,  
Daman 396 215

**19.Powergrid Corporation of India Limited,**

"Saudamini", Plot No.2, Sector – 29, Near Iffco Chowk,  
Gurgaon- 122 001 (Haryana).

**20.TATA Power Company Limited,**

Bombay House, 24 Homi Modi Street,  
Mumbai- 400 001

**21.Ratnagiri Gas & Power Pvt.Ltd,**

Jubilee Tower, 5<sup>th</sup> Floor, B35-B36,  
Sector -1, Noida- 201 301(U.P)

**22.NHDC Limited**

NHDC Parisar, Shyamala Hills,  
Bhopal – 462 013(M.P.)

**23.Adani Power (Mundra) Limited**

1st Floor, South Wing, Adani Corporate House,  
Shantigram, S.G.Highway,  
Ahmedabad – 382421 (Gujarat).

**24.JSW Energy Limited,**

4th Floor,NTH Complex, A-2,Shaheed Jeet Singh Marg,  
Qutab Institutional Area, New Delhi – 110016.

**25.Jindal Power Limited,**

P.O. Tamnar, District: Raigarh– 496 107,  
Chhattisgarh.

**26.Coastal Gujarat Power Limited,**

4000 MW UMPP, At & Post: Tunda, Mundra,  
Kutch-370435, Gujarat

**27.Rattan India Power Limited,**

Plot No. D2 & D2, Part Additional Industrial Area,  
Nandgaonpeth, Amravati

**28.D.B.Power Limited,**

Village: Badadhra, Block & Tehsil: Dabhra, Dist: Janjgir, Champa,  
Chhattisgarh- 495695.



**29.Adani Power Limited,**

1<sup>st</sup> Floor, South Wing, Adani Corporate House,  
Shantigram, S.G. Highway, Ahmedabad – 384 421

**30.KSK Mahanadi Power Compnay Limited,**

Akaltara (Nariyara) TPP, Bilaspur,  
Chhattisgarh – 495552.

**31.MB Power (Madhya Pradesh) Limited,**

239, Okhla Industrial Estate,  
Phase III, New Delhi -110020

**32.Sasan UMPP, Sasan Power Limited,**

Vill: Siddikhurd, P.O. Tiyra, Sasan, Waidhan, Singroli,  
Madhya Pradesh – 486 886.

**33.R.K.M. Powergen Pvt. Limited,**

No.14, Dr. Giriappa Road, T. Nagar,  
Chennai 600 017

**34.Bhopal Dhule Transmission Company Limited,**

101, Windsor, CST Road, Santacruz East,  
Mumbai-400098

.....Respondent(s)

**Parties Present:**

Shri Buddy Ranganadhan, Sr. Advocate, RIL  
Shri Hemant Singh, Advocate, RIL  
Ms. Supriya Rastogi, Advocate, RIL  
Ms. Lavanya Panwar, Advocate, RIL  
Shri Jay Lal, Advocate, RIL  
Shri Arun Lal, Advocate, RIL  
Ms. Suparna Srivastava, Advocate, CTUIL  
Ms. Divya Sharma, Advocate, CTUIL  
Shri Nitai Aggrawal, Advocate, CTUIL  
Shri Swapnil Verma, CTUIL  
Ms. Kavya Bhardwaj, CTUIL  
Shri Parth Desai, TPL  
Shri Ashok Rajan, WRLDC  
Shri Alok Mishra, WRLDC

**ORDER**

The instant Petition is filed by the Petitioner imploring this Commission to exercise its regulatory powers, for the purpose of facilitating the Petitioner to obtain General Network Access as per Regulations 4.1, 5.6 and 17.1(iii) of the GNA



Regulations for the Petitioner's petrochemical plant located at Dahej, Gujarat at the DGEN Switchyard of Torrent Power Limited.

2. The Petitioner has made the following prayers:

*“(a) Issue appropriate directions upon the Central Transmission Utility of India Limited/ Respondent No. 1, to take steps for providing GNA to the Petrochemical Plant of the Petitioner at the DGEN switchyard and the DGEN DTL of Respondent No. 3/ TPL, including specifying protocol for the same, in terms stated in the present petition.”*

*“(b) Pass any other orders, as this Commission deem fit and proper in light of the facts and circumstances of the instant case.”*

**Submissions of Petitioner:**

3. The Petitioner has made the following submissions:

(a) M/s Reliance Industries Ltd. (“RIL/ Petitioner”), having the largest Petrochemical Plant located in Dahej, Gujarat, is in the process of expanding the manufacturing units of the said Petrochemical Plant at the Dahej site, which will require additional power of ~600 MW.

(b) The Petitioner is seeking General Network Access (GNA) for its Petrochemical Plant located at Dahej (as a *bulk consumer*), to meet its power requirement using the CTU network for setting up additional manufacturing units. Accordingly, the Petitioner is seeking to connect its Petrochemical Plant to the Inter-state Transmission System (“ISTS”) Network as a bulk consumer, through the DGEN-Navsari dedicated transmission Line (“DGEN DTL”), which is owned and operated by the Respondent No. 3, viz. M/s Torrent Pvt. Ltd. (“Respondent No. 3/ TPL”).

(a) The Petitioner has also applied for the 200MW GNA vide an application dated 29.03.2024 under Regulation 17.1(iii), as a bulk consumer, wherein the nearest substation was reflected as 400 kV South Olpad (GIS) sub-station. However, during the 28<sup>th</sup> CMETS-WR held on 30.04.2024, the representatives of the Petitioner submitted that the said Petitioner is exploring the possibilities of the grant of GNA through LILO of one circuit of DGEN-Navsari 400 kV dedicated transmission line (DGEN DTL). TPL is the owner of the DGEN Generating Station, which is connected to the Navsari Old CTU Sub-station with a 120 KM

double circuit, 400 kV dedicated transmission line of 1200 MW capacity (each circuit). The Petitioner intends to lay a dedicated transmission line of 15 km from the DGEN to its Petrochemical Plant/ DMD Plant.

(b) As per Regulation 5.6 of the GNA Regulations, 2022, an applicant may apply for connectivity to ISTS at (i) a terminal bay of an ISTS sub-station already allocated to another Connectivity grantee or (ii) switchyard of a generating station having Connectivity to ISTS, with an agreement duly signed between the Applicant and the said Connectivity grantee or the generating station having Connectivity to ISTS, as the case may be, for sharing the terminal bay or the switchyard and the dedicated transmission lines, if any.

(a) Accordingly, the Petitioner (applicant herein) is seeking connectivity/GNA (as Bulk Consumer) for its Petrochemical Plant at the DGEN switchyard and the DGEN DTL ISTS of the Respondent No. 3 which in turn is connected to Old Navsari CTU Sub-Station, since TPL is a Connectivity grantee, and as per the above Regulations, connectivity can be granted to an applicant (*the Petitioner in the present case*) through switchyard of a connectivity grantee connected to ISTS.

(b) The alternate possible connectivity option is proposed at Olpad CTUIL ISTS substation, which is ~100 kms from the Petitioner's Dahej Plant as against a 15 Km distance between the Petitioner's plant and DGEN. Hence, the proposed CTUIL connectivity will prevent the utilization of additional natural resources, in terms of additional land, and hence is the most optimal proposal. However, the existing ISTS connectivity is provided to DGEN as a generating station. Since the Petitioner has proposed to connect to the DGEN substation as a Bulk Consumer, this will result in optimum utilization of the transmission system, as the power generated at DGEN will be consumed locally.

(c) During the 28<sup>th</sup> (CMETS-WR) held on 30.04.2024, the representatives of the Petitioner submitted that the said Petitioner is exploring the possibilities of grant of GNA through LILO of one circuit of DGEN- Navsari 400 kV dedicated transmission line (DGEN DTL). CTUIL stated that under the extant Regulations, the sharing of terminal bays of ISTS substation/ switchyard/ line connecting to

ISTS, amongst drawee entities [*Under Regulation 17.1(iii)*] and the injecting entity (*Under Regulation 4.1*) is not covered.

(d) The Petitioner has filed another Petition before this Commission i.e., Petition No. 132/MP/2024 seeking connectivity to ISTS, for its RE generating station (as a generator) at the receiving sub-station located at the Jamnagar Oil Refinery (a Bulk Consumer) of the said Petitioner, which, in turn, is connected to the ISTS Jam Nagar Sub-station. Hence, by way of the aforesaid Petition, the said Petitioner is seeking connectivity of a generator to the transmission asset of a Bulk Consumer. From the above, it can be seen that the present petition and the aforesaid petition essentially involve a similar issue.

(e) CTUIL, while principally agreeing to both the scenarios of the Petitioner, vide a Letter dated 24.01.2024 to the Commission, highlighted certain issues which need clarification while allowing sharing of transmission assets by a Generator and Bulk Consumer:

- A. Control Area for Scheduling, Accounting, and deviation settlement;
- B. Pooling and De-pooling of energy interchanges;
- C. Compliance of CEA Technical Standards; and
- D. Compliance of N-1 criteria for reliable grid operations.

(f) It is the case of Respondent No. 1/ CTUIL that the sharing of the terminal bay of an ISTS substation/ switchyard/ line connecting to ISTS among injecting entities under Regulation 4.1 of the GNA Regulations 2022 is covered under Regulation 5.6 of the said Regulations. Similarly, sharing of the terminal bay of an ISTS substation/ switchyard/ line connecting to ISTS, among drawee entities covered under Regulation 17.1(iii) of the GNA Regulations 2022, is covered under Regulation 17.3 of the said Regulations. However, there are no enabling provisions for the sharing of the terminal bay of an ISTS sub-station/ switchyard/ line connecting ISTS between the injecting and drawee entities.

(g) As per Regulation 17.1(iii), a Bulk consumer, seeking to connect to ISTS directly, with a load of 50 MW and above, is eligible for the grant of GNA. Since the Petitioner squarely falls under Regulation 17.1(iii), it can be an Applicant under Regulation 5.6, since an applicant under the said Regulation

can be any entity eligible for the grant of connectivity/GNA. As such, the Petitioner is eligible for the grant of connectivity at the switchyard of a generating station having Connectivity to ISTS, in terms of the aforesaid Regulation. Thus, the Petrochemical Project of the Petitioner can be granted ISTS connectivity in terms of Regulation 5.6 of the GNA Regulations, at the DGEN switchyard and the DGEN DTL of Respondent No. 3/ TPL. As such, there is no legal impediment to the sharing of the terminal bay of an ISTS substation/ switchyard/ line connecting to ISTS by injecting entities under Regulation 4.1 and drawee entities covered under Regulation 17.1(iii) of the GNA Regulations 2022.

(h) Hence, the Petitioner is approaching this Commission in terms of Regulations 41 and 42 of the GNA Regulations, 2022, seeking a direction upon CTUIL to take steps for granting connectivity/GNA (as *Bulk Consumer*) for its Petrochemical plant at the DGEN switchyard and the DGEN DTL of TPL. In addition to the above, this Commission may also specify the protocol for such sharing of the switchyard and the dedicated transmission line.

**Hearing dated 07.10.2024:**

4. At the outset, the learned counsel for the Petitioner submitted that the present Petition had been filed *inter alia* seeking directions upon the Respondent No.1, CTUIL, to take adequate measures for providing the connectivity / GNA to the Petrochemical Plant of the Petitioner located at Dahej through DGEN-Navsari dedicated transmission line, which is operated by the Respondent No. 3, Torrent Power Limited. Learned counsel submitted that the issue essentially involved in the instant case is of sharing of the terminal bay of the ISTS substation/ switchyard/ line connection ISTS between the injecting (DGEN Station) and drawee entity (Petitioner's Petrochemical Plant). Learned counsel further submitted that similar issue already came up for the consideration of the Commission in Petition No. 132/MP/2024 (RIL v. CTUIL and Ors.) wherein pursuant to the direction of the Commission, a meeting was convened under the aegis of the CEA to resolve the various technical concerns raised by GCIL/ WRLDC and after the detailed deliberations amongst the parties, certain recommendations were made, which were agreed to by all the sides. Learned counsel further added that the said case is presently reserved for the Order, and the Commission's decision therein will also address the issue involved in the present case.

5. CTUIL submitted that in the proceedings of Petition No.132/MP/2024, CTUIL had already pointed out that there are no enabling provisions in the GNA Regulations for allowing the request of the Petitioner and accordingly, vide Record of Proceedings for the hearing dated 5.6.2024 therein, the Commission had asked CEA to convene a meeting with the participation of the Petitioner, CTUIL, GCIL, and other concerned stakeholders to resolve/propose the solutions to the concerns raised by GCIL/ WRLDC and the minutes of the said meeting incorporating the certain recommendations have already been placed on record of the said case.

6. Considering the submissions made by the learned counsels for the Petitioner and CTUIL, the Petition was admitted, and Respondents were directed to file their reply.

**Hearing dated 30.12.2024:**

7. The Petitioner was directed to file the details of the agreement of Torrent Power Limited (TPL) for the sharing of the Dedicated Transmission Line (DTL) and terminal bay.

**Hearing dated 06.02.2025:**

8. The contentions of the parties were reiterated. In response to the specific query of the Commission regarding an agreement of TPL for sharing the dedicated transmission line and terminal bay, the learned senior counsel for the Petitioner submitted that the parties are yet to enter into a formal agreement.

**Submissions of CTUIL:**

9. Respondent No.1, CTUIL vide Affidavit dated 10.02.2025 submitted as follows:

- (a) The Petitioner is in the process of expanding its manufacturing units at the petrochemical plant for which it requires an additional 600 MW of power. The Petitioner intends to schedule the above power by using the inter-State transmission system (ISTS) for which it has applied (through its subsidiary company, M/s. Reliance Chemicals and Materials Ltd.) for the grant of GNA for the 200 MW vide an application dated 29.3.2024 with connectivity at the 400 kV South Olpad GIS sub-station (upcoming);

- (b) The Petitioner has proposed for the grant of the above connectivity/ GNA as a bulk consumer at the DGEN switchyard of Respondent No.3 through the DGEN DTL, which is connected to the old Navsari ISTS sub-station;
- (c) Respondent No.1, CTUIL has principally agreed that there is no issue from the point of view of flow of power in sharing of terminal bays at the ISTS sub-station/switchyard between injecting entities and drawee entities as has been proposed by the Petitioner. However, it has been stated that there are no enabling provisions in that regard under the GNA Regulations.
- (d) Therefore, the Petitioner has approached this Commission seeking suitable directions with regard to the proposed connectivity and grant of the GNA.
- (e) Regulation 5.6 of the GNA Regulations contemplates the grant of connectivity based on the sharing of transmission assets, which is in line with the mandate of Section 38(2)(c) of the Electricity Act, 2003, for economical/ optimum usage of resources, including land. As such, there is no legal impediment to the sharing of the terminal bay of an ISTS sub-station/switchyard/line connecting to the ISTS by injecting entities under Regulation 4.1 and drawee entities covered under Regulation 17.1(iii) of the GNA Regulations.
- (f) The Petitioner had originally applied for the 374 MW, which was withdrawn, and a fresh application was filed for 200 MW on 29.03.2024 as a bulk consumer at the 400 kV South Olpad (GIS) sub-station (upcoming).
- (g) The issue in the present Petition i.e. *sharing of the terminal bay and DTL among injecting entities covered under Regulation 4.1 and drawal entities covered under Regulation 17.1(iii) in order to plan optimized transmission system in the absence of enabling provision in the GNA Regulations*, is identical to the issue that came up for consideration before this Commission in Petition No.132/MP/2024. In its reply filed to the said Petition as also during the hearing dated 13.08.2024, Respondent No.1 submitted that it did not have any objection to the proposal of the Petitioner with regard to sharing of the terminal bay and DTL among injecting entities covered under Regulation 4.1 and drawal entities covered under Regulation 17.1(iii) but pointed out that there was no enabling provision in the GNA Regulations to accommodate such connectivity as proposed by the Petitioner.
- (h) Grid Controller of India Ltd. (GRID India) had highlighted certain issues in the 23<sup>rd</sup> CMETS-WR held on 29.11.2023. Grid-India highlighted the nature of the two different categories of regional entities being connected at the same ISTS

pooling station i.e. the drawee utility as the bulk consumer and the injecting entity as the hybrid/ RE generating station, which required clear delineation of their control area boundaries for scheduling, accounting and monitoring actual interchanges in real time and also shifting of the ISTS interface point, pooling and de-pooling of energy interchanges for working out regional accounting and ensuring compliance of CEA technical standards. Commission directed the matter to be discussed in a Meeting under the aegis of the Central Electricity Authority (CEA) with the participation of the stakeholders. The said Meeting was convened on 01.07.2024, wherein detailed modalities were decided among CEA, Grid India, CTUIL, and RIL, for interconnection of drawl and injecting entities at a single ISTS point.

- (i) In view of the above, issuance of appropriate directions therein regarding the enabling provision for sharing of bay and DTL among injecting entities covered under Regulation 4.1 and drawal entities covered under Regulation 17.1 (iii) of the GNA Regulations, may be considered.

**Hearing dated 27.02.2025:**

10. During the course of the hearing the learned counsel for the Petitioner submitted that pursuant to the liberty granted by the Commission vide Record of Proceedings for the hearing dated 6.2.2025, CTUIL has filed its reply wherein it has also placed on record the Minutes of Meeting held under the aegis of the Central Electricity Authority on 1.7.2024. It was submitted that the meeting was convened in terms of the direction issued by this Commission vide Record of Proceedings for the hearing dated 5.6.2024 in Petition No. 132/MP/2024, which also involved a similar issue, and in the said meeting, a consensus was reached by all the stakeholders with respect to the manner in which metering, accounting, and scheduling were to be done, in a scenario where sharing of switchyard/terminal bays for connectivity to ISTS is required by injecting entities under Regulation 4.1 and drawee entities covered under Regulation 17.1(iii) of the GNA Regulations and the same may also be considered for the purpose of the present Petition.

11. On a specific query of the Commission regarding agreement with TPL, learned counsel for the Petitioner submitted that an in-principle agreement is there, and the

parties are in the process of finalizing the Agreement. He further submitted that the representative of TPL is also present, and he will confirm it.

12. The representative of the CTUIL submitted that it has no objection to the prayer(s) made by the Petitioner. However, there are no enabling provisions in the GNA Regulations to this effect.

13. Considering the submissions made by the parties, the Commission reserved the matter for Order.

### **Analysis and Decision:**

14. The Petitioner, Reliance Industries Limited (RIL) has a Petrochemical Plant located in Dahej, Gujarat, which is under an expansion process, and therefore, to meet its additional power demand of about 600MW, it had applied for 200 MW GNA vide an application dated 29.03.2024 at 400kV South Olpad (GIS) Substation (~100KMs) as a Bulk Consumer.

15. Subsequently, the Petitioner, during the 28<sup>th</sup> CMETS-WR dated 30.04.2024, submitted that it is exploring the possibilities of grant of the GNA through DGEN switchyard and DGEN-Navsari 400 kV dedicated transmission line (DGEN DTL). Torrent Power Limited (TPL) is the owner of the DGEN Generating Station and switchyard, which is connected to the Navsari Old CTUIL Sub-station with a 120 KM double circuit, through a 400kV dedicated transmission line of 1200 MW capacity (each circuit). The Petitioner has submitted that it intends to lay a dedicated transmission line of 15 km from the DGEN to its Petrochemical Plant/ DMD Plant.

16. The DGEN switchyard and DGEN dedicated transmission line (DTL) are being maintained and operated by Torrent Power Limited (TPL). The Petitioner has submitted that both parties are yet to enter into a formal agreement for the utilisation of DGEN DTL.

17. CTUIL has submitted that for sharing of the terminal bay of an ISTS sub-station/ switchyard/ line connecting to ISTS amongst injecting and drawee entities, there are no enabling provisions in the GNA Regulations, 2022. However, CTUIL has no objection if the prayer(s) made by the Petitioner are allowed.

18. We have considered the submissions made by the Petitioner and Respondents and perused the Regulatory provisions and the facts available on the record. The issue for our consideration is: **whether any directions are required to be issued to CTUIL to allow GNA to connect the Petrochemical Plant of the Petitioner seeking to connect at the DGEN switchyard and the DGEN Dedicated Transmission Line of Respondent No. 3/ TPL? What shall be the procedure for compliance with the Grid Code?**

19. We have perused the relevant provisions of the GNA Regulations quoted as follows:

***“4. Eligibility for Connectivity to ISTS***

*4.1. The following entities shall be eligible as Applicants to apply for grant of Connectivity or for enhancement of the quantum of Connectivity:*

*(a) Generating station(s), including REGS(s), with or without ESS, with an installed capacity of 50 MW and above individually or with an aggregate installed capacity of 50 MW and above through a Lead Generator or a Lead ESS;*

*(b) Captive generating plant with capacity for injection to ISTS of 50 MW and above;*

*(c) Standalone ESS with an installed capacity of 50 MW and above individually or with an aggregate installed capacity of 50 MW and above through a Lead ESS or Lead Generator;*

*(d) Renewable Power Park Developer;*

*(e) REGS or standalone ESS with an installed capacity of 5 MW and above applying for grant of Connectivity to ISTS through the electrical system of a generating station already having Connectivity to ISTS:*

*Provided that such an entity applying for grant of Connectivity to ISTS has an agreement with the said generating station to share its electrical system and dedicated transmission lines, if any.*

.....

*5.6. An Applicant may apply for grant of Connectivity at (i) a terminal bay of an ISTS sub-station already allocated to another Connectivity grantee or (ii) switchyard of a generating station having Connectivity to ISTS, with an agreement duly signed between the Applicant and the said Connectivity grantee or the generating station having Connectivity to ISTS, as the case may be, for sharing the terminal bay or the switchyard and the dedicated transmission lines, if any. The applicable Connectivity Bank Guarantee as per Regulation 8 of these regulations shall be submitted by such Applicant.*

*5.7. Two or more Applicants may apply for grant of Connectivity at a common terminal bay with an agreement duly signed by such Applicants for sharing the dedicated transmission lines and the terminal bay(s). The applicable Connectivity Bank Guarantee as per Regulation 8 of these regulations shall be submitted by each such Applicant.*

....

***17. Eligibility for GNA***

*17.1. The following entities shall be eligible as Applicants to apply for grant of GNA or for enhancement of the quantum of GNA:*

.....

(iii) A distribution licensee or a Bulk consumer, seeking to connect to ISTS, directly, with a load of 50 MW and above;

.....

17.3. The Applicant covered under Regulation 17.1(iii) of these regulations, may seek to connect at a terminal bay of an ISTS sub-station already allocated to another such entity under regulation 17.1(iii), with an agreement duly signed between the Applicant and the said entity for sharing the terminal bay.”

As per the above, sharing of the terminal bay or the switchyard and the dedicated transmission line among the injecting entities is permitted under Regulation 5.6. Further, bulk consumers or distribution licensees seeking to connect to ISTS while seeking GNA under Regulation 17.1(iii) are permitted to share a common terminal bay at the ISTS substation with an agreement for sharing the terminal bay. The above-quoted Regulations do not explicitly permit sharing of terminal bay/switchyard/ dedicated transmission line amongst the injecting and drawee entities.

20. We note that the Petitioner has made an application seeking the GNA for 200 MW seeking connection to ISTS through the Dedicated transmission system of generating station DGEN (of Torrent Power Limited) vide Application dated 29.03.2024. The Application was discussed in the 28<sup>th</sup> CMETS held on 30.04.2024, whereby the following has been noted:

“

| No. |                                      | Applicant                   | Date       |    | applicant                                | Region (MW) | Region | (MW) of GNA | GNA        | GNA        |
|-----|--------------------------------------|-----------------------------|------------|----|------------------------------------------|-------------|--------|-------------|------------|------------|
|     |                                      |                             |            |    |                                          |             | (MW)   | Required    |            |            |
| 4.  | 2200000675<br>(Original Application) | Reliance Industries Limited | 29-03-2024 | WR | Bulk consumer seeking to connect to ISTS | 200.0       | 0.0    | 200.0       | 01-12-2025 | 30-11-2030 |

- *Applied for GNARE: Yes*
- *Nearest ISTS sub-stations: South Olpad (GIS)*

*In the last meeting, while discussing earlier application no. 2200000367 for GNA for 374MW, M/s RIL had informed that another application has been made by them in name of RIL in this area in month of Mar-24 and hence, matter may be discussed in next meeting by which time they would have more clarity as to whether they will be sharing DTL of TPL's DGEN project or they will come on standalone basis at South Olpad S/s.*

*M/s RIL informed that they are still contemplating sharing DTL of TPL's DGEN project. However, there is no sharing agreement format available for sharing of line between bulk consumer and generating station. It was deliberated that Model Sharing Agreement (for sharing of line amongst generating stations) may be followed with minor*



*modifications as required, which may be modified later based on any specific agreement format as per CERC directions / procedures, if any.*

*M/s RIL further informed that Petition No. 132/MP/2024 has been filed before Hon'ble CERC for sharing DTL of a bulk consumer (Jamnagar Project) with a Generator (Jamjodhpur RE Project).*

*It was suggested that the present case of sharing of Generating Stations's DTL by a bulk consumer may also be referred in the subject petition so that a holistic view is obtained from CERC.*

*CTU further informed that the matter of Enabling provisions for sharing of the terminal bay / switchyard / connecting line to ISTS among injecting entities covered under Reg. 4.1 and drawal entities covered under Reg. 17.1(iii) has also been taken up with CERC vide letter dated 24.01.2024. Suitable directions from CERC have been sought in this regard.*

***It was decided to discuss the application after clarity is received from RIL regarding sharing of DGEN's DTL or requirement of direct interconnection with South Olpad ISTS substation."***

As per the above, the application for the Petitioner has been kept pending in light of clarifications sought by CTUIL vide letter dated 24.1.2024 to CERC and ongoing Petition No. 132/MP/2024 (then) sharing DTL of the bulk consumer with a generator.

21. CTUIL, vide its reply, has submitted that with regard to the issue of sharing of the transmission assets, the Grid Controller of India Ltd. (GRID India) had highlighted certain issues in the 23rd CMETS-WR held on 29.11.2023 as under:

*"1. Control Area for Scheduling, Accounting, and deviation settlement:*

*Under the extant regulations, "RHGS" and "Bulk consumer" are two distinct entities. CEA Technical Standards for connectivity defines 'Bulk consumer' as a consumer who avails supply at 33 kV or above. RHGS is defined in the CERC(GNA)-Regulations 2022 as a generating station based on hybrid of two or more renewable sources of energy with or without energy storage systems.*

*The proposed connectivity to one 800 MW bulk consumer (RIL) and a 1250 MW (Hybrid RE plant) at a single ISTS point, would lead to creation of two different categories of regional entities (one load entity and one injecting entity or RHGS generator). For scheduling, energy accounting and monitoring actual interchanges in real time, their control area boundaries must be clearly defined.*

*As per the grid code, regional entity boundaries for scheduling and energy accounting are established by placement of energy meters which report to RLDCs. Such energy meters are placed on ISTS interface points only which ensures compliance of extant regulations for scheduling and loss administration. For this case, upon grant of connectivity to RIL-RHGS, the ISTS inter-face point has to be shifted behind the 400 kV Jam-Khambalia bus (i.e. below the existing ISTS point) to another location inside the switch-yard of the 220 kV JMD (Reliance) s/s. This is an exception to the established practice followed for interface energy metering at ISTS level wherein the metering jurisdiction of RLDC is likely to be extended to an internal system of RIL. Hence this would require a direction from CERC to facilitate the proposed connectivity.*

## **2. Pooling and De-pooling of energy interchanges:**

*With the proposed connectivity, the energy interchanged by two regional entities (load and RHGS generation) must be pooled and de-pooled at ISTS interface. Deviation accounting shall be segregated as per the DSM Regulations which have different provisions for a Buyer (bulk consumer) and a WS seller (viz. RE or RHGS plant). At present, such pooling and de-pooling at an ISTS RE pooling station is done by a "Lead Generator" whose role is clearly defined in the Grid Code. However, the present Grid Code has no such provision which recognizes any such entity for pooling and de-pooling of energy interchanged at the same ISTS point by a Generator and a Load. Thus, in absence of a clear mandate in the regulations, we might require directions from the Hon'ble CERC specifying modalities for such pooling and de-pooling for avoiding any future dispute w.r.t. deviation accounting and settlement.*

## **3. Compliance to CEA Technical Standards:**

*With the proposed connectivity, both the entities shall be connected at a single ISTS point which would be the point of interconnection (POI) for the RHGS plant as well as the Bulk Consumer. The Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations have mandated different compliance requirements for these two entities. Methodology to verify the compliance to these standards at the POI needs to be devised for facilitating monitoring such compliances in real time operation as both the RIL bulk consumer & RHGS are sharing same transmission system.*

## **4. Compliance to N-1 criteria for reliable grid operation:**

*a. Phase-1 (250 MW) and Phase-2 (1000 MW) of RIL RHGS are planned to evacuate with 220 kV double circuit lines. It calls for reviewing of N-1 compliance as in case of contingency (of one circuit outage), the 1250 MW of generation may not be able evacuate through other single 220 kV line and may result in sudden loss of entire generation complex.*

*b. As per the provided SLD, around 250 MW of generation is sub-divided into five clusters and generation in each cluster is being evacuated through 220 kV double circuit lines up to 220 kV Switching S/s in Jamnagar. It is necessary to study the adequacy of reactive compensation and necessary compliance of CEA standards at the POI since the total EHV line length from generating station to POI is more than 120 km.*

*c. RMS & EMT study models and CEA connectivity compliance reports are required to be submitted in due time by applicant for carrying out detailed simulation study."*

As per the above, Grid-India had highlighted that two different categories of regional entities were being connected at the same ISTS pooling station, i.e., the drawee utility as the bulk consumer and the injecting entity as the hybrid/RE generating station, which requires:

- a) clear delineation of their control area boundaries for scheduling, accounting, and monitoring actual interchanges in real time
- b) shifting of the ISTS interface point
- c) pooling and de-pooling of energy interchanges for working out regional accounting
- d) methodology to verify the compliance with the CEA technical standards at POI.

22. We note that in Petition No. 132/MP/2024, the Commission vide RoP for the hearing dated 05.06.2024 in Petition No. 132/MP/2024 referred the matter to the CEA to convene a meeting with all stakeholders, including CTUIL, GRID-India, and the Petitioner to resolve/propose solutions to the concerns raised by GCIL/ WRLDC. The relevant portion of the ROP is extracted as under:

*“4. The representative of Respondent, GCIL, while pointing out their concerns to the proposal of the Petitioner, mainly submitted as under:*

*(a) The Petitioner intends to connect a Bulk Consumer and Wind-Solar Hybrid RE Generating Station at the same ISTS interface point, i.e., Jam Khambhaliya Pooling Station, which is not permitted under the extant Regulations.*

*(b) Two Regional Entities, namely, Bulk Consumer and RE Hybrid Generating Station, shall have two distinct control areas with separate scheduling, metering, energy accounting, and metering at the Point of Interconnection (Pol). The Petitioner's proposal to connect these two different categories of the Regional Entities (Bulk Consumer-drawee entity and RE Hybrid Generating Station- injecting entity) at single Pol would lead to scheduling, metering, energy accounting, and monitoring of actual interchange in real time for these two separate Regional Entities at same Pol and real time reconciliation of such data would not be possible.*

*(c) IEGC Regulations, 2023 do not have any provisions that facilitate segregation of energy interchanged by a Bulk Consumer and RE Hybrid Generating Station, connected to a single Pol.*

*(d) The Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2022 also have different provisions for Bulk Consumer (Buyer) and RE Hybrid Generating Station (Seller).*

*(e) The Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, and the subsequent amendments thereto provide separate regulatory requirements to be complied with by the Bulk Consumer and the RE Hybrid Generating Stations at the Pol level. The proposal of the Petitioner for connecting Bulk Consumer and RE Hybrid Generating Station at a single Pol will lead to non-compliance with the various regulatory requirements as specified therein.*

*(f) Presently, there is no methodology to facilitate, verify, and monitor the compliances to the standards (as specified in the CEA Connectivity Standards) at the common Pol level in case Pol is being shared by the Bulk Consumer and RE Hybrid Generating Station. The views of the CEA in this regard are also necessary, and accordingly, the Commission may also invite the comments of the CEA on the proposal of the Petitioner.*

*(g) The Petitioner, in its reply dated 4.6.2024 to the above aspects, has submitted that the Petitioner (RIL) may act in a role similar to that of a lead generator – being responsible for connected entities (both generator & bulk consumer). However, the said suggestion is impermissible as the regulatory requirements/stipulations for the connected entities, i.e., Bulk Consumer and RE Hybrid Generating Station, as pointed out, are quite different & distinct. GCIL is, as such, not agreeable to the suggestions put forth by the Petitioner in its above reply.*

(h) The Petitioner has also placed reliance on the Commission's order dated 29.1.2020 in Petition No. 299/MP/2018 in the matter of BALCO v. PGCIL & Ors. However, the said order may not strictly apply to the present case.

5. Learned counsel for the Petitioner submitted that the Petitioner vide its affidavit dated 4.6.2024 has already furnished its suggestions to the above concerns raised by WRLDC in its reply dated 17.5.2024, and Respondent, WRLDC / GCIL are yet to formally respond to these suggestions, in case they are not feasible as per them. Learned counsel also added that keeping in view that the proposal of the Petitioner is aimed towards optimal utilisation of the transmission infrastructure, the Commission may request CEA to hold a meeting with the participation of the Petitioner, CTUIL, GCIL, and other concerned stakeholders to resolve/propose solution to the concerns raised by GCIL/ WRLDC.

...

7. Considering the submissions made by the learned senior counsel and learned counsels for the parties, the Commission ordered as under:

**Petition No.132/MP/2024**

(a) Respondents to file their reply within 10 days with a copy to the Petitioner who may file its rejoinder, if any, within three days thereafter.

(b) Respondent(s), WRLDC or GCIL, to file their response to the affidavit of the Petitioner dated 4.6.2024 within five days.

(c) The CEA to convene a meeting with the participation of the Petitioner, CTUIL, GCIL, and other concerned stakeholders to resolve/propose solutions to the concerns raised by GCIL/ WRLDC and the Petitioner to file the outcome of the meeting before the next date of the hearing."

23. CTUIL, vide its reply in the instant Petition, has filed minutes of meeting dated 9.8.2024 for meeting held on 1.7.2024 at CEA with Grid-India, CTUIL, and the Petitioner wherein various issues like metering, scheduling, and accounting for two distinct regional entities (one load entity and other one generator) at Point of Inter-connection (POI) were discussed and concluded as follows:

"(i) RIL shall be the nodal entity for all coordination activities with CTUIL and WRLDC/NLDC for ensuring compliance to various Standards and Regulations of CEA and CERC and procedures made thereunder. RIL, shall also ensure sharing of the requisite information with CEA, CTUIL and Grid-India for studies/analysis.

(ii) As per the facts of the case, it stands to logic that RIL as a regional entity shall be treated as a "Bulk Consumer" for all commercial purpose of scheduling and deviation accounting. The status of RIL shall not change from "Bulk Consumer" to "Generator" at any point of time.

(iii) The 400 kV bus at Jam Khambhaliya ISTS Pooling Station shall be the interface point/Point of Interconnection (PoI) for metering and energy accounting. The scheduling and commercial settlements shall be done at PoI on a net basis.

(iv) RIL shall ensure compliance to the Central Electricity Authority ((Technical Standards for Connectivity to Grid) Regulation, 2007 and subsequent amendments, as applicable to

*'Bulk Consumer and Renewable Hybrid Generating Station (RHGS). The compliances shall be verified and monitored for 'Bulk Consumer and RHGS independently at Pol.*

*(v) The metering scheme as proposed by RIL (attached at Annexure I) is considered to be in order. The real time visibility of both RHGS & Bulk consumer shall be made available to WRLDC for monitoring of generation and consumption data, The necessary SCADA data shall be made available to WRLDC by RIL as per the extant regulations.*

*(vi) Phasor Measurement Units (PMUs) shall be installed as per Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, and PMU data shall be reported to WRLDC. The dynamic compensation device shall have PMUs installed on its bus with visibility at WRLDC.*

*(vii) CTUIL shall modify the connectivity to recognize both 'Bulk Consumer and Renewable Hybrid Generating Station (RHGS) in the instant case, with specified maximum quantum of injection and drawal at Pol. The Connection Agreement shall be construed accordingly."*

As per the above, the concerns of Grid India have been discussed, and a suggested way forward has been recommended by the CEA.

24. We also note that in a similar case in Petition No. 299/MP/2018, vide Order dated 29.01.2020, the Commission directed as under:

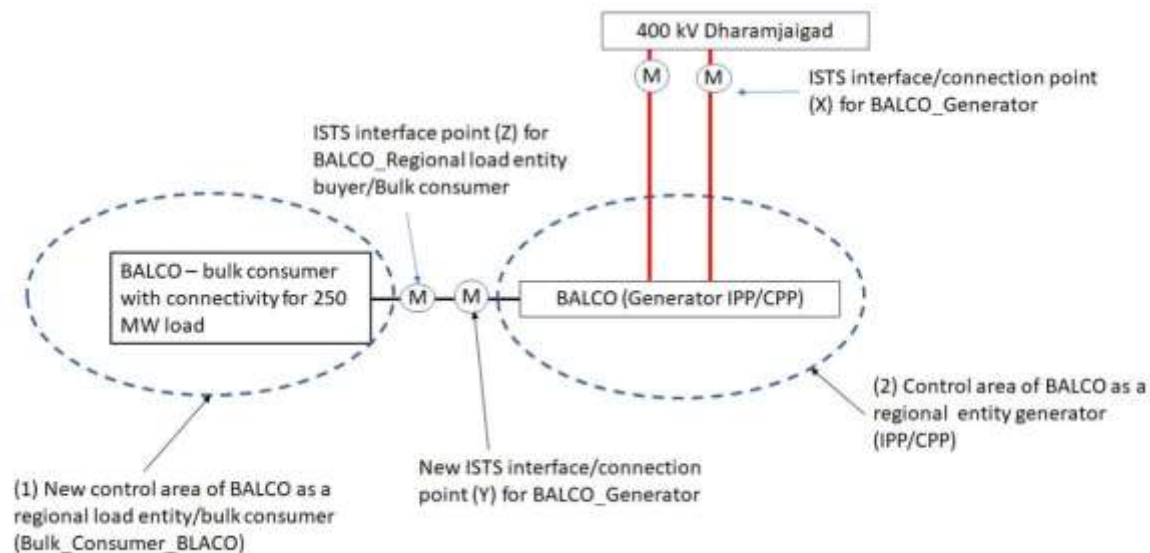
*"16. The Committee constituted under chairmanship of Member (PS), CEA has recommended as under:*

***"5. Recommendations:***

*a) From optimal transmission planning point of view and to conserve scarce RoW, the connectivity to BALCO as bulk consumer for its 250 MW load may be granted through existing 400 kV D/C line between BALCO and Dharamjaygarh. Connectivity to BALCO as bulk consumer involves grant of connectivity at 220 kV bus of BALCO, which is not an ISTS point. Hence, sharing of existing 400kV D/C dedicated line along with 400/220kV, 315MVA ICTs for connectivity to Dharamjaygarh ISTS point for BALCO as a bulk consumer is required.*

*In case of emergency situation like outage of BALCO-Dharamjaygarh 400 kV D/C line (tower outage) / outage of 400 kV Dharamjaygarh bus, grid connectivity to BALCO can be provided through LILO of 2<sup>nd</sup> ckt of Korba - Birsinghpur 400kV D/c line at BALCO switchyard (LILO section already existing as a part of earlier interim arrangement and 400 kV switchyard to be implemented by BALCO) with suitable bypass arrangement at BALCO 400 kV switchyard. The LILO would normally remain bypassed at BALCO and in case of exigencies and as per the instructions of the Grid Operator, the LILO could be utilised for extending grid connectivity to BALCO. M/s BALCO needs to submit the bypassing scheme, so that the same could be deliberated with WR constituents and finalised."*

*17. The Committee has recommended granting Connectivity to the Petitioner as a bulk consumer for load of 250 MW through existing 400 kV BALCO-Dharamjaygarh D/C line. The Committee has noted that such an arrangement will have benefits such as ensuring optimal transmission system; saving investment of about Rs. 120 crores in constructing a new D/C line; avoiding unnecessary right of way issues in constructing a new line; saving transmission losses; and avoiding net annual loss of 3.82 million units in round tripping. Therefore, we accept the recommendation of the committee as regards providing Connectivity through existing 400 kV BALCO-Dharamjaygarh D/C line. As suggested by the Committee, it should be done through suitable metering, accounting and scheduling arrangements for the Petitioner (as a captive generator) and the Petitioner (as bulk consumer). The metering arrangement proposed by the Committee is as below:*



18. We observe that with above arrangement there shall be two entities connected at ISTS interface point of Dharamjaygarh namely BALCO (as captive generator) and BALCO (as Bulk consumer). WRLDC shall carry out scheduling and accounting for these two entities at ISTS periphery duly considering accounting of BALCO (as Bulk consumer) at its interface with BALCO (as captive generator). Necessary metering and accounting arrangements shall be finalised by CTU and WRLDC after discussing the same at Western Regional Power Committee.

19. Further, during deliberations in the Committee under Member (PS), CEA, the representatives of NLDC had suggested that BALCO may be provided with additional source other than Dharamjayagarh from reliability point of view. This aspect may be considered by CTU in consultation with CEA and NLDC so that required reliability is met.

20. The control area jurisdiction of BALCO complex shall be under WRLDC that shall carry out Scheduling and energy accounting in accordance with the prevailing regulations.”

As per the above, the connection of the Bulk consumer was permitted through the DTL of the captive generating plant of BALCO. We also note that subsequent to the Order, the metering and accounting scheme has been finalised by WRLDC and CTUIL in the above-quoted case, which is in operation.

25. As per the above discussions, we conclude that sharing of DTL and terminal bay among drawee and injecting entities as recommended by CTUIL, has been in operation in the BALCO case, and the concerns of Grid India have been discussed in the CEA meeting held on 1.7.2024 and way forward has been suggested. We are of the considered view that permitting connection through sharing of DTL and terminal bay leads to optimal utilisation of ROW as well as ISTS. At the same time, such sharing requires an appropriate mechanism in place such that metering, accounting, and compliance with CEA Standards and Grid Code are ensured.

26. As stated in the preamble of the GNA Regulations, 2022, the objective of the Commission is to provide a regulatory framework to facilitate the non-discriminatory open access for use of the inter-State transmission system.

**“PREAMBLE**

*Whereas it is necessary to provide for a regulatory framework to facilitate non-discriminatory open access to licensees or generating companies or consumers for use of inter-State transmission system through General Network Access and to consolidate the regulations on the subject, it is hereby specified as under:”*

27. Undisputedly, the Petitioner is an eligible entity in accordance with Regulation 17(iii) of the GNA Regulations for the grant of GNA. During the discussion held in the 28<sup>th</sup> CMETS held on 30.04.2024, CTUIL suggested that the present case of sharing of generating station`s DTL by a bulk consumer may be referred to the Commission so that a holistic view is obtained from CERC. As per CTUIL, while the sharing of the terminal bay or the switchyard and the dedicated transmission line among the injecting entities is permitted under Regulation 5.6 and bulk consumers or distribution licensee are permitted to share a common terminal bay at ISTS substation for seeking the GNA, there is no explicit provision to permit sharing of the terminal bay/ switchyard/ dedicated transmission line amongst the injecting and drawee entities.

28. In light of the above, a difficulty has arisen in granting the GNA to the Petitioner in the absence of an explicit provision regarding the sharing of terminal bay/switchyard/dedicated transmission line. We are of the considered view that the Commission’s intervention is needed to remove the difficulty in the grant of GNA to the Petitioner in exercise of its power under Regulation 42 (**Power to Remove Difficulty**) of the GNA Regulations, 2022. Regulation 42 is extracted as under:

**“42 Power to Remove Difficulty**

*If any difficulty arises in giving effect to the provisions of these regulations, the Central Commission may, on its own motion or on an application made before it by affected party by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Central Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations.”*

29. It is observed that permitting connection through sharing of DTL and terminal bay will not be inconsistent with the provisions of the Act or provisions of other regulations

specified by the Central Commission and will remove the difficulty in giving effect to the objective of grant of open access under the GNA Regulations.

30. In view of the above benefits recorded in para 25 above and the difficulty arising in granting GNA to the Petitioner, the Commission, in exercise of its power to remove difficulty under Regulation 42 of the GNA Regulations, 2022, allows the prayer of the Petitioner and directs CTU to take steps for providing GNA to the petitioner as under:

- (a) The CTUIL shall process the application of the Petitioner, subject to the Petitioner entering into an agreement with Torrent Power Limited (TPL) for sharing the DGEN Switchyard, DGEN-Navsari dedicated transmission line and fulfilment of all other requirements as per the GNA Regulations.
- (b) CTUIL shall finalise the metering and accounting scheme with WRLDC after discussing the same at the Western Regional Power Committee.
- (c) Both the DGEN generating station and the Petitioner (Bulk consumer) shall be separate regional entities within the control area of WRLDC as per the Grid Code.
- (d) The Petitioner shall ensure compliance with CEA Standards and Grid Code.
- (e) The Dedicated transmission line of TPL shall remain as a Dedicated transmission line and shall not be considered as ISTS on account of permitting such connection with a Bulk consumer. It shall be a mutual arrangement between these entities as to the sharing of such DTL.
- (f) Compliance with all the applicable standards and regulations needs to be ensured by the Petitioner at the Point of Interconnection with the ISTS.

31. Petition No. 246/MP/2024 is disposed of in terms of the above findings.

|                                           |                                  |                                   |                                      |
|-------------------------------------------|----------------------------------|-----------------------------------|--------------------------------------|
| <b>Sd/-</b>                               | <b>sd/-</b>                      | <b>sd/-</b>                       | <b>sd/-</b>                          |
| <b>(Ravinder Singh Dhillon)</b><br>Member | <b>(Harish Dudani)</b><br>Member | <b>(Ramesh Babu V.)</b><br>Member | <b>(Jishnu Barua)</b><br>Chairperson |

