

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 124/MP/2021**

**Coram:**

**Shri I.S. Jha, Member**

**Shri Arun Goyal, Member**

**Shri P.K. Singh, Member**

**Date of Order: 05.01.2022**

**In the matter of**

Petition under Section 79 of the Electricity Act, 2003, read with Section 38 and Regulations 33A and 33B of the CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Sixth Amendment) Regulations, 2017, thereby imploring Hon'ble Commission to exercise its regulatory powers, as well as its Power to Relax and to Remove Difficulties, for the purpose of facilitating the Petitioner to obtain connectivity for its oil refinery located at Moti Khavadi, Jamnagar, Gujarat to the CTU network, at the nearest ISTS pooling station, which is located at Jam Khambhaliya, in order to source/ procure 500 MW of renewable power for its refinery.

**And in the matter of**

M/s. Reliance Industries Limited,  
Through its Authorised Signatory,  
PO: Motikhavadi, Meghpar, Padana Gagva,  
Jamnagar, Gujarat-361140

**....Petitioner**

**Vs**

1. Central Transmission Utility of India Limited,  
Plot No.2, Sector-29,  
Gurugram, Haryana-122001
2. Power Grid Corporation of India Limited,  
B-9, Qutab Institutional Area, Katwaria Sarai,  
New Delhi-110016
3. Western Region Power Committee (WRPC),  
Member Secretary,  
MIDC Area, Marol, Andheri East,  
Mumbai – 4000093

**....Respondents**



**Parties Present:** Shri Sanjay Sen, Senior Advocate, RIL  
Shri Hemant Singh, Advocate, RIL  
Shri Harshit Singh, Advocate, RIL  
Ms. Suparna Srivastava, Advocate, PGCIL  
Shri Tushar Mathur, Advocate, PGCIL  
Ms. Soumya Singh, Advocate, PGCIL  
Shri Swapnil Verma, CTUIL  
Shri Siddharth Sharma, CTUIL  
Shri Ranjeet Singh Rajput, CTUIL  
Shri P. S. Das, CTUIL  
Shri Bhaskar Wagh, CTUIL

### **ORDER**

The instant petition has been filed by Reliance Industries Limited (RIL) which is having oil refinery located at Moti Khavadi, Jamnagar, Gujarat, with a total load of 1450 MW and captive generation capacity of 1750 MW. The said refinery is operating in island mode from the local grid since last 20 years. RIL has applied to Respondent No. 1, Central Transmission Utility of India Ltd. (CTUIL) for connectivity to the ISTS (inter-State transmission system) for a quantum of 500 MW, as a “bulk consumer” located at Moti Khavdi, Jamnagar, Gujarat.

2. The Petitioner has made the following prayers:

*“a) Issue appropriate directions upon the Central Transmission Utility of India Limited/ Respondent No. 1, and/ or PGCIL, to take steps for providing connectivity to the Jamnagar Facility of the Petitioner with ISTS pooling station located at Jam Khambaliya for the purpose of procuring 500 MW power through open access or otherwise, by planning and coordinating the construction of the transmission line, in terms of the Connectivity Application No. 1200002871 dated 02.10.2020;*

*b) Pass any order and/or any such orders as this Hon’ble Commission may deem fit and proper under the facts and circumstances of the present case and in the interest of justice.”*

### **Submissions of the Petitioner**

3. The Petitioner vide affidavit dated 20.09.2021 has submitted as follows:



(a) The Petitioner has applied for connectivity to ISTS for a quantum of 500 MW, as a “bulk consumer” from 01.01.2022.

(b) The proposed connectivity with ISTS is envisaged with 400 kV D/c overhead lines (dedicated transmission line) for import of around 500 MW of renewable power. For the said purpose, the Petitioner will establish a 2X250 MVA, 400/220 kV sub-station at their end, which will be inter-connected with 220 kV network of the Petitioner at its four locations through underground cables.

(c) During 53<sup>rd</sup> meeting of Western Region constituents held on 27.11.2020 regarding Long Term Access (LTA) and Connectivity applications made in the Western Region, it was observed that there is no provision in the Electricity Act, 2003 (hereinafter referred to as “the Act”) or the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 (hereinafter referred to as “the Connectivity Regulations”) for construction of a dedicated transmission line by the bulk consumer. In the meeting, inter alia, specific reliance was placed on the Order dated 29.01.2020 passed by the Commission in Petition No. 299/MP/2018. Accordingly, in the said meeting, the Petitioner was advised to approach the Commission for finalizing the modalities of construction of the transmission system up to Jam Khambhaliya pooling station.

(d) Section 38 of the Electricity Act, 2003 entitles the Petitioner to avail open access to ISTS, and connectivity thereof. Further, the first proviso to Regulation 3 of the Connectivity Regulations provides that no generating station or a bulk consumer can avail long term or medium-term open access, without availing connectivity. Hence, obtaining connectivity with the grid is vital for availing open access.

(e) Regulation 2(c) of the Connectivity Regulations recognises a “bulk consumer” as a consumer which has a load of 100 MW or above. Since the



requirement of renewable power through open access is 500 MW, the Petitioner qualifies as a bulk consumer.

(f) Regulation 8 of the Connectivity Regulations provides the protocol qua construction of dedicated transmission lines for obtaining connectivity with ISTS. However, under the said Regulation, the said right to construct such a line has been vested with a generating company, and not with a consumer/ bulk consumer.

(g) Vide order dated 29.01.2020 in Petition No. 299/MP/2018, the Commission issued appropriate directions for ensuring connectivity with ISTS to the bulk consumer.

(h) In view of the said decision, it is only the CTUIL which has to plan transmission elements of ISTS, including planning construction of the transmission line, which thereafter needs to be constructed by PGCIL, for the purpose of providing connectivity to the Petitioner with ISTS. Hence, in the present petition, the Petitioner is seeking a direction to CTUIL/ PGCIL to take steps for construction of the transmission line for enabling the Petitioner to avail connectivity with ISTS.

(i) The Petitioner made an application to CTUIL/ PGCIL on 11.09.2020 for grant of grid connectivity under the category of a “bulk consumer”.

(j) Since the connectivity with the grid is the pre-requisite for availing open access, connectivity cannot be denied on account of absence of any provision in the Connectivity Regulations. The right to seek connectivity with the transmission system is implicit within the scheme of Section 38 of the Act read with the extant regulations. The right of open access and connectivity are recognized under the parent statute.

(k) Section 79(1)(c) of the Act provides that the Commission has powers to “regulate” inter-state transmission of electricity. The Commission ought to



invoke its regulatory jurisdiction for the purpose of creating a protocol to plan and construct the transmission line, so as to enable the Petitioner to avail connectivity with ISTS.

(l) The Commission can also exercise powers available under Regulation 33A and 33B of the Connectivity Regulations for removing the difficulty which has arisen in the present case, on account of the silence of the Connectivity Regulations qua the protocol for providing connectivity to a bulk consumer.

**Proceedings during the hearing dated 13.7.2021**

4. The Petitioner submitted that as per the Connectivity Regulations, a “bulk consumer” can also apply for connectivity. However, there is no provision in the Act or in the Connectivity Regulations for construction of dedicated transmission line (DTL) by a “bulk consumer”. The Petitioner also submitted that Regulation 3, Regulation 5 and Regulation 8 of the Connectivity Regulations enable the Petitioner to apply for connectivity and Petitioner is willing to carry out all its obligations for grant of such connectivity including the cost of construction of ISTS.

5. CTUIL submitted that there is no difficulty in granting connectivity to the Petitioner for a quantum of 500 MW at Moti Khavdi, Jamnagar, Gujarat. However, there is no provision in the Act or in the Connectivity Regulations for construction of DTL by a “bulk consumer”.

6. The Commission directed CTUIL to undertake a study as per the Connectivity Regulations for identifying the infrastructure required for the purpose of providing connectivity to the Petitioner and the financial implications, if any, and to submit a report.



## **Submissions of CTUIL**

7. Respondent CTUIL vide affidavit dated 10.9.2021 has submitted as follows:

(a) The Petitioner's application was deliberated in the 53<sup>rd</sup> meeting of Western Region constituents regarding connectivity/ LTA applications held on 27.11.2020 wherein the Petitioner proposed to:

- (i) establish a 2x250 MVA, 400/220 kV sub-station at their end which could then be interconnected with 220 kV network of the Petitioner at 4 locations through underground cables; and
- (ii) develop the 400 kV connectivity/ dedicated line from the above substation to Jam Khambhaliya pooling station of ISTS, provided that the same was allowed by the extant regulations or in the alternate, the line could also be developed under ISTS.

(b) In the absence of regulatory clarity, the Petitioner's application for grant of connectivity continues to remain pending with CTUIL.

(c) "Open access" to ISTS is a statutory mandate under the Act and is available to a consumer as well. Definition of "supply" under Section 2(70) of the Electricity Act, 2003 reads as follows:-

*"(70) 'supply', in relation to electricity, means the sale of electricity to a licensee or consumer;"*

(d) A conjoint reading of the provisions of the Act dictate that the 'licensee' referred to in the Section 2(15) of the Act means a distribution licensee only.

(e) Any 'consumer' of electricity, intending to avail supply of a minimum load of 100 MW qualifies a 'bulk consumer' whose premises are connected with the system of an ISTS licensee. Statement of Objects and Reasons of the Connectivity Regulations dated 31.3.2009 issued by the Commission, mentions as under:

*"40. Regulation 8 (numbered as Regulation 12 in the earlier draft) dealing with the grant of connectivity has been modified duly taking into account the suggestions/comments of the stakeholders. As discussed earlier, the scope of this regulation for connectivity has been enlarged to include captive generators*



*and bulk consumers; details required to be submitted; inter-connection study by nodal agency; consultation with agencies involved in inter-state transmission system and other requirements.....”*

(f) Thus, the clear intention has been to enlarge the scope of Regulation 8 of the Connectivity Regulations so as to include bulk consumers as well as captive generators under its purview for gaining connectivity to ISTS. However, the clause (8) of Regulation 8 of the Connectivity Regulations restricts the scope to include only generating stations for implementation of the connectivity/ dedicated line.

(g) On an earlier occasion, BALCO as a bulk consumer of electricity, and being a grantee of connectivity, had approached the Commission by filing Petition No.299/MP/2018 seeking directions regarding construction modalities for the BALCO–Dharamjaygarh 400 kV 2<sup>nd</sup> D/C line. Vide its order dated 29.01.2020 and based on the recommendations of a committee constituted for examining the construction modalities, the Commission observed the following:

(i) for qualifying a line as connectivity/ dedicated transmission line, one point of such line was necessarily to terminate at generating station or captive generating station and as such, a line connecting a bulk consumer with ISTS could not be regarded as a dedicated transmission line as defined under the Act; and

(ii) there was no provision in the Act or in the Connectivity Regulations for construction of a connectivity/ dedicated transmission line by a bulk consumer and as such BALCO could not be permitted to construct such a dedicated transmission line.

(h) Furthermore, unlike in the case of BALCO, there is no existing grid connectivity arrangement of the Petitioner with ISTS which can be used for drawal of additional power, which was a relevant consideration for the Committee while deliberating upon the connectivity modalities for BALCO.

(i) CTUIL has undertaken a detailed study for identifying the infrastructure for grant of connectivity to the Petitioner and its financial implications.



(j) The Commission may take a comprehensive view regarding the issue of grant of connectivity to the bulk consumer category and the implementation modalities, metering, accounting and billing arrangements for construction and owning of a transmission line connecting the premises of bulk consumer to ISTS.

**Rejoinder of the Petitioner to reply of CTUIL**

8. The Petitioner vide Affidavit dated 27.9.2021 has submitted that CTUIL has supported the case of the Petitioner that the Petitioner as a bulk consumer, has a right to avail open access and consequently, right of connectivity with ISTS. The Commission may issue appropriate directions to the Respondent No. 1 (CTUIL) for providing connectivity to the Jamnagar facility of the Petitioner with ISTS pooling station located at Jam Khambaliya for the purpose of procuring 500 MW power through open access or otherwise, by planning and coordinating the construction of the transmission line, in terms of the Connectivity Application (No. 1200002871 dated 02.10.2020).

**Proceedings during the hearing dated 12.10.2021**

9. The Petitioner submitted that as per the directions of the Commission vide RoP dated 13.07.2021, CTUIL has conducted a study wherein CTUIL has submitted that ISTS connectivity to the Petitioner/ RIL for its oil refinery at Moti Khavdi, Jamnagar, Gujarat as Bulk Consumer for 500 MW may be granted at 400/220 kV Jam Khambhaliya (GIS) PS. Further, the Petitioner submitted that it shall be the long-term user of the said line, but cannot be the owner of the line.

10. CTUIL submitted that RIL has already agreed to bear the cost of the said inter-connecting line and the Commission may decide on the modalities of





construction of the said line which may also set precedence for all such future cases.

11. The Commission directed CTUIL to consult the constituents/ stakeholders on the aspects like who will construct the transmission line, who will own the transmission line and how the transmission charges of the transmission line will be billed and submit a report on these issues. The Commission further observed that it would be better if a transmission licensee constructs the transmission line and its transmission charges may not be included in the PoC pool but may be recovered on a bilateral basis.

12. In compliance of ROP for hearing dated 12.10.2021, CTUIL vide affidavit dated 12.11.2021 has submitted the report based on a meeting convened on 15.10.2021 with representatives of CTUIL, CEA, WRLDC, GETCO and RIL, summarizing the discussion, issue in hand and probable alternatives to sort out the same.

### **Analysis and Decision**

13. The Petitioner, Reliance Industries Limited (RIL) has an oil refinery located at Moti Khavadi, Jamnagar, Gujarat, with a total load of 1450 MW and captive generation capacity of 1750 MW. RIL has applied to CTUIL for connectivity to the ISTS for a quantum of 500 MW, as a “bulk consumer”. The Jamnagar facility of the Petitioner is located within a distance of around 60 km from the proposed Jam Khambhaliya ISTS pooling station. The Petitioner has sought connectivity through 400 kV D/C overhead lines (dedicated transmission line) for import of renewable power for meeting its Renewable Power Obligation (RPO). However, as per the Act



and the Connectivity Regulations, a bulk consumer cannot construct a dedicated transmission line. Therefore, during 53<sup>rd</sup> meeting of Western Region constituents held on 27.11.2020, RIL was asked to approach the Commission for finalisation of the modalities of the interconnecting transmission line from its Jamnagar refinery to Jam khambaliya ISTS Pooling Station. Accordingly, the Petitioner has filed the instant Petition.

14. The Petitioner has submitted that Regulation 3, Regulation 5 and Regulation 8 of the Connectivity Regulations enable the Petitioner to apply for connectivity and that the Petitioner is willing to carry out all its obligations for grant of such connectivity including the cost of construction of transmission line for connectivity to ISTS.

15. CTUIL has submitted that there is no difficulty in granting connectivity to the Petitioner for a quantum of 500 MW at Moti Khavdi, Jamnagar, Gujarat. However, there is no provision in the Act or in the CERC Connectivity Regulations 2009 for construction of DTL by a “bulk consumer”. In the absence of regulatory clarity, the Commission may take a comprehensive view regarding the issue of grant of connectivity to the bulk consumer category and the implementation modalities, metering, accounting and billing arrangements for construction and owning of a transmission line connecting the premises of the bulk consumer to ISTS.

16. CTUIL has submitted the results of system study and estimated cost of the transmission line to connect the Petitioner to ISTS as follows:

***“Observations:***



Studies reveals the power flow on various lines in the vicinity of Jam Khambhaliya PS is generally in order with 500 MW drawl by M/s RIL as bulk consumer at Jamnagar, Gujarat, under normal as well as various contingency conditions. Further, no overloading of lines have been observed.

### 3. Summary:

The ISTS connectivity to M/s RIL for 500 MW as Bulk Consumer for its Oil Refinery at Moti Khavdi, Jamnagar, Gujarat may be granted at 400/220kV Jam Khambhaliya (GIS) PS with the transmission system mentioned below:

- Reliance Industries Ltd. (Oil Refinery) (GIS) – Jam khambhaliya (SIS) PS 400 kV D/c (Twin Moose) line along with associated line bays at ISTS ends – 60 km approx. (Bays at Bulk Consumer end shall be under the scope of M/s RIL)
- Estimated Cost ≈ Rs 114 Cr. (Details enclosed at Annexure-I)”

.....  
.....

### Annexure-I

#### **CONNECTIVITY TRANSMISSION SYSTEM FOR M/S RIL**

Sl. No.	Particulars	Unit cost on Sep-20 PL	No.	Sub-Total	TOTAL
		A	B	C=AXB	D=1.18XC
1.	<b>Transmission Line</b>				
	RIL – Jamkhambhaliya (GIS) 400V D/c line (Twin Moose)	1.21	60	72.6	85.67
2.	<b>Substation</b>				
	400kV line bays at Jam Khambhaliya (GIS)	11.82	2	23.64	27.90
	400kV line bays at RIL (GIS) (under the scope of M/s RIL)	11.82	0	0	0.00
	<b>GRAND TOTAL</b>				<b>113.56</b>

”

17. CTUIL vide affidavit dated 12.11.2021 has submitted another report on the modalities for implementation of the aforesaid interconnecting line for connectivity of the Petitioner as a bulk consumer for its oil refinery at Jamnagar suggesting options for implementation of the said line.

18. Sections 38(2)(c) and 38(2)(d) of the Act reads as:

**“Section 38. (Central Transmission Utility and functions): ---- (1) The Central Government may notify any Government company as the Central Transmission Utility:**

.....



(2) *The functions of the Central Transmission Utility shall be –*

(a) .....

(c) *to ensure development of an efficient, co-ordinated and economical system of inter-State transmission lines for smooth flow of electricity from generating stations to the load centres;*

(d) *to provide non-discriminatory open access to its transmission system for use by -*

*(i) any licensee or generating company on payment of the transmission charges; or*

*(ii) any consumer as and when such open access is provided by the State Commission under sub-section (2) of section 42, on payment of the transmission charges and a surcharge thereon, as may be specified by the Central Commission.”*

19. Section 2(15) of the Act defines consumer as:

**“2. Definitions.**

(1) .....

.....

(15) *"consumer" means any person who is supplied with electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee, the Government or such other person, as the case may be.”*

20. As per conjoint reading of the above, “Open access” is a statutory mandate under the Act and is available to a consumer as well. The intent of the Legislature being to promote open Access, it is stated as “there would be open access in transmission from the outset with provision for surcharge for taking care of current level of cross-subsidy with the surcharge being gradually phased out”. We have considered that CTUIL is required to ensure development of the transmission network, and to provide “non-discriminatory” open access to its transmission system (i.e., ISTS) for use by any licensee or generating company or a consumer.



21. CTUIL has submitted that a meeting was convened on 25.10.2021 with representatives of RIL, CEA, POSOCO and other WR constituents. Based on the consultations in the meeting, CTUIL has submitted a report suggesting the following two options to implement the dedicated transmission line:

***“Conclusion:***

*Accordingly, after consultation with stakeholders two options have emerged regarding implementation modalities of transmission system for connectivity of M/s RIL as a bulk consumer and for sharing of its transmission charges:*

***Option 1:***

*M/s RIL may set up a Special Purpose Vehicle (SPV) for implementation of the interconnecting line for Connectivity of its Oil Refinery as a Bulk Consumer. The SPV may obtain transmission license for implementation of the subject interconnecting line from CERC. After grant of the transmission license, M/s RIL can implement the transmission system for Connectivity via the SPV. The transmission line would in this case be owned by the SPV and billing would be done bilaterally by the SPV to M/s RIL (based on trilateral agreement between the SPV, M/s RIL and CTU) for the entire useful life of the asset i.e. 35 years as per prevailing norms of CERC Regulations. The bill would be outside purview of the POC pool and suitable payment security/guarantee mechanism needs to be incorporated in the Agreement as protection against default of transmission charges payment/surrender of connectivity by M/s RIL, prior to completion of the useful life of the transmission assets.*

***Option 2:***

*Implementation of the interconnecting line for Connectivity as a Bulk Consumer can also be carried out by POWERGRID under nomination basis. In this case the Connectivity line would be owned by POWERGRID and billing would be done bilaterally by POWERGRID to M/s RIL (based on trilateral agreement between the SPV, M/s RIL and CTU) for the entire useful life of the asset i.e. 35 years as per prevailing norms of CERC Regulations and the same would be outside purview of the POC pool. Also, suitable payment security/guarantee mechanism is required to be devised as protection against default of transmission charge payment/surrender of connectivity by M/s RIL, prior to completion of the useful life of the transmission assets.*

*It is submitted that the Hon’ble Commission may further direct regarding the mode of implementation of transmission system for connectivity to M/s RIL as a bulk consumer.”*

22. The said report also states that

*“M/s RIL informed that they are of the view that line may be constructed by POWERGRID on nomination basis for fast-tracking implementation of the same and the applicable transmission charges would be paid by M/s RIL on a monthly basis to POWERGRID. They further added that implementation of line through SPV would*



*result in delay in construction of transmission system and the same is not agreeable to them.”*

23. We take note that during the meeting held on 25.10.2021, the Petitioner has shown inclination for option 2 i.e. construction of dedicated transmission line through PGCIL, a transmission licensee.

24. Accordingly, the Petitioner is at liberty to approach PGCIL for implementation of the said transmission line from RIL Refinery (Jamnagar) to Jamkhambaliya S/S of ISTS, with the cost of construction of transmission line for connectivity to ISTS to be borne by the Petitioner. As PGCIL was not a part of the meeting held on 25.10.2021, the Petitioner is also at liberty to approach some other licensee for implementation of the said transmission line. Transmission charges for the said transmission line shall be as mutually agreed between the Petitioner and PGCIL or other licensee, as the case may be. Such transmission charges shall not be included in Yearly transmission charges under the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2020. Further, the payment security and other modalities shall be dealt bilaterally between the Petitioner and PGCIL or other licensee, as the case may be.

25. The transmission licensee implementing the said transmission line from RIL Refinery (Jamnagar) to Jamkhambaliya S/S of ISTS shall approach the Commission for appropriate amendments of its license.

26. Further, we direct that metering and accounting shall be done at the ISTS interface point at Jam Khambaliya ISTS sub-station since transmission losses for the transmission system to be constructed is to be borne by the Petitioner itself.



27. We direct CTUIL to grant the connectivity to the Petitioner as a bulk consumer as per provisions of the Connectivity Regulations, subject to the conditions as mentioned in paragraph 24, paragraph 25 and paragraph 26 above.

28. CTUIL has requested that a comprehensive view may be taken by the Commission regarding the issue of grant of connectivity to bulk consumer and the implementation modalities, metering, accounting and billing arrangements for construction and owning of a transmission line connecting the premises of the bulk consumer to ISTS. We are not inclined to issue any general directions in this regard and such matters shall be decided on case to case basis depending upon specific circumstances and facts of the case.

29. Petition No. 124/MP/2021 is disposed of in terms of the above.

Sd/  
**(P.K. Singh)**  
Member

Sd/  
**(Arun Goyal)**  
Member

Sd/  
**(I.S. Jha)**  
Member

