

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 224/MP/2022**

**Coram:**

**Shri Jishnu Barua, Chairperson  
Shri I. S. Jha, Member  
Shri Arun Goyal, Member  
Shri P. K. Singh, Member**

**Date of Order: 18.01.2024**

**In the matter of:**

Petition under Section 79(1)(f) and 79(1)(k) of the Electricity Act, 2003 read with Regulation 13(11) of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, Procedure No. 5.12 of NLDC's Procedure for Computation and Sharing of inter-State Transmission System Charges and Regulations 111 to 113 and 115 of the Central Electricity Regulatory Commission (Conduct of Business Regulations) 1999, for directions to NLDC to implement the provisions of Sharing Regulations, 2020 and detailed procedure and to exclude the quantum of PCKL share in UPCL, which is drawn through State Transmission Network from the total LTA considered for computation of ISTS charges and losses.

**And in the matter of:**

Power Company of Karnataka Limited,  
Room No 503, 5<sup>th</sup> Floor,  
KPTCL Building, Kavary Bhavan,  
Bangaluru-560009.

**.....Petitioner**

**Vs.**

1. Power System Operation Corporation Limited,  
B-9 (1st Floor), Qutab Institutional Area,  
Katwaria Sarai, New Delhi -110016.
2. Central Transmission Utility of India Limited,  
Saudamini, Plot No.2, Sector 29, Near IFFCO,  
Chowk, Gurgaon (Haryana) – 122001.
3. Southern Regional Power Committee,  
29, Race Course Cross Road,  
Bengaluru - 560 009.
4. Powergrid Corporation of India Limited,  
Saudamini, Plot No.2, Sector 29,  
Near IFFCO Chowk, Gurgaon (Haryana) – 122001.

**...Respondent(s)**



**For Petitioner** : Shri S. Vallinayagam, Advocate, PCKL  
Shri V. Krishnappa, PCKL  
Ms. Savithramma, PCKL

**For Respondents** : Ms. Suparna Srivastava, Advocate, CTUIL  
Shri Tushar, Advocate, CTUIL  
Shri N. Sadashiva, KPTCL  
Ms. Gayatri Kulkarni, KPTCL  
Shri Gajendra Singh, CTUIL  
Shri Swapnil Verma, CTUIL  
Shri Ranjit Singh Rajput, CTUIL  
Shri Ajay Dahiya, CTUIL  
Shri Bhanu Prakash Pandey, CTUIL  
Shri Muskan Agarwal, CTUIL  
Shri Alok Mishra, NLDC  
Shri Sanny Macha, NLDC

## **ORDER**

Power Company of Karnataka Limited (PCKL), an agent on behalf of Distribution Companies of Karnataka, for the purpose of power purchase activities, has filed the instant petition under Section 79(1)(f) and 79(1)(k) of the Electricity Act, 2003 (hereinafter referred to as "the Act") read with Regulation 13(11) of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2020 (hereinafter referred to as "the 2020 Sharing Regulations") and under Procedure No.5.12 of NLDC's Procedure and Regulations 111 to 113 and 115 of the Central Electricity Regulatory Commission (Conduct of Business Regulations) 1999 for directions to NLDC to implement the provisions of the 2020 Sharing Regulations and Detailed Procedure and to exclude the quantum of PCKL share in UPCL, which is drawn through the State Transmission Network, from the total LTA considered for computation of ISTS charges and losses.

2. The Petitioner has made the following prayers in the instant petition:

- i. Admit the present petition and direct the Respondent No.1 NLDC to exclude the entire quantum of power drawn by PCKL / ESCOMs from UPCL, drawn through KPTCL lines from the LTA of UPCL considered for calculation of ISTS transmission charges and losses;*
- ii. Direct the respondent No. 1 & 2 to revise the computation of transmission charges and losses and with effect from 1.11.2020 and notify the revised charges payable by the DICs;*
- iii. Direct SRPC to notify the revised RTA/RTDA based on revised LTA notified by respondent no. 1;*



- iv. *Direct the respondents to restrain from including the quantum of power drawn using STU in the calculation of transmission charge and losses for ISTS till the disposal of this petition;*
- v. *Direct the defaulting respondents (1) & (2) to bear the petition filing fee; and*
- vi. *pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."*

### **Submissions of the Petitioner**

3. The gist of the submissions made by the Petitioner are as follows:
  - a) Karnataka ESCOMS entered into PPA dated 26.12.2005 with Udupi Power Corporation Limited (UPCL) for off-taking 90% of power from the installed capacity of 1010 MW, i.e., 913.5 MW initially, subsequently, the installed capacity was enhanced to 1200 MW, totalling 1080 MW. ESCOMS of Karnataka did not sign for the balance quantum of power initially because UPCL, the Generator, wanted to avail itself of the status of the Mega Power Plant by entering into a PPA with Punjab for 10% of the installed capacity.
  - b) UPCL is an embedded generating station connected with the transmission lines of KPTCL, the State Transmission Network, at its bus bar. The entire contracted power under the PPA is drawn from the switchyard of UPCL, using a 220 kV D/C line connected to 220 kV Khemar and Kavour Sub-stations of KPTCL and 400 kV D/C Quad Moose line of KPTCL connected to Shantigrama Sub-station of PGCIL. The injection and drawl of power from the UPCL switchyard take place at the same point. There are no ISTS lines connected to the point of injection and drawl at the bus bar of UPCL.
  - c) Under the Point of Connection (PoC) mechanism, all the Designated ISTS Customers (DICs) are default signatories to the Transmission Service Agreement (TSA), requiring payment of PoC Charges. In the instant case, the State Distribution Licensees are drawing power from the bus bar of the generator using the STU network.
  - d) The Commission, vide orders dated 30.3.2017, 9.3.2018 and 4.5.2018 in Petition No. 291/MP/2015, Petition No. 20/MP/2017 and Petition No. 126/MP/2017 respectively, settled the issues related to the payment of transmission charges



and losses by the distribution companies where a generator was connected to both intra-State and inter-State transmission network.

- e) Subsequently, the Commission notified the 2020 Sharing Regulations vide notification dated 4.5.2020 for LTA based computation of transmission charges and losses.
- f) The National Load Dispatch Centre (NLDC), being the Implementing Agency (IA), notified the Procedure for Computation and sharing of ISTS charges vide notification dated 28.12.2020. As per the notification, transmission charges and losses in respect of ISTS lines are to be calculated on the basis of the LTA/MTOA quantum relating to the ISTS network used by the DIC for the drawl of power from CGSs using ISTS lines.
- g) The quantum of LTA/MTOA is required to be furnished by Central Transmission Utility of India Limited (CTUIL) to NLDC. The Regional Transmission Account (RTA) is prepared and published by the Southern Regional Power Committee (SRPC) for the Southern Regional beneficiaries based on the information notified by CTUIL.
- h) UPCL is scheduled by Karnataka-SLDC as per Regulation 6.4.2(c)(iii) of the 2010 Grid Code, as it has a firm share of more than 50% of the generating station. Further, UPCL has a PPA with a Punjab State Distribution licensee, necessitating a transfer of 10% of the power i.e., 101.5 MW. However, power is not scheduled for Punjab. Balance power available from the UPCL is sometimes sold in the exchange and sometimes to MUPL on a Short Term basis.
- i) ESCOMs of Karnataka never applied for Long Term Access with PGCIL/ CTUIL for drawl of power from UPCL. No LTA was ever granted to the Petitioner or ESCOMs by the PGCIL/ CTUIL. UPCL applied for Long-Term Open Access on 6.11.2006, and PGCIL/ CTUIL granted Long-Term Open Access for the total quantum of 939 MW on 28.6.2007. The application for LTA and the grant of LTA was under the 2004 Open Access Regulations. As per Regulation 11 of the 2004 Open Access Regulations, a long-term customer has to enter into a Bulk Power Transmission Agreement with the transmission licensee for the use of ISTS. However, no such agreement was entered into between UPCL and PGCIL/CTUIL. The said inter-State open access was meant for the drawl of



power by the Punjab State Distribution under the PPA it had with UPCL, which has not taken place.

- j) Both under the 2009 Connectivity Regulations and the 2004 Open Access Regulations, an applicant is required to enter into an Agreement with PGCIL/CTUIL before making physical connectivity with the ISTS. Though PGCIL/CTUIL granted Long Term Access to UPCL, the mandatory requirements under the 2004 Open Access Regulations, the 2009 Connectivity Regulations, the 2010 Sharing Regulations and the Grid Code were not complied with. There is no Open Access Agreement and no Connectivity Agreement. Therefore, no LTA quantum is allocated to UPCL.
- k) In the meanwhile, the Commission issued notice to the affected parties in a suo-moto petition registered as Petition No. 10/SM/2014 under the 2010 Sharing Regulations and all concerned parties filed their contentions and objections. The Commission vide order dated 30.6.2016 held that the Petitioner is liable to pay transmission charges for 939 MW. The said order was challenged by the Petitioner before APTEL in Appeal No. 296 of 2018.
- l) The Commission, in an order dated 23.8.2017 in Petition No.242/MP/2016 filed by UPCL, observed as follows:

“13. The Petitioner has submitted that the capacity of 18.5 MW is available at its disposal as untied capacity for which the Petitioner had neither applied nor had been granted LTA. The Petitioner has submitted that at present, the Petitioner is supplying 11 MW to MUPL under short term open access for which the Petitioner is paying the short-term open access charges. The balance capacity of 7.5 MW is being supplied to Karnataka ESCOMs at bus bar. SRPC has confirmed that a quantum of 18.5 MW has been tied up neither under LTA nor under MTOA”

- m) The 2010 Sharing Regulations were repealed, and the 2020 Sharing Regulations were notified. Accordingly, the Respondents are required to compute the transmission charges as per the 2020 Sharing Regulations. As per the 2020 Sharing Regulations, when a generating station is connected to both ISTS and intra-State transmission system, ISTS charges and losses are applicable to the LTA and MTOA corresponding to the capacity connected to ISTS.
- n) In the present case, the two evacuation lines of KPTCL are connected to the bus bar of the UPCL. CTUIL/PGCIL cannot have any Agreement of Open Access, Connectivity or Transmission with the Petitioner or UPCL in respect of the lines



of KPTCL used for the drawl of power from UPCL. As per Regulation 13(11) of the 2020 Sharing Regulations, ISTS transmission charges and losses shall be applicable on the quantum of LTA and MTOA corresponding to the capacity connected to ISTS.

- o) The injection and drawl, being at the bus bar of the generator, connected to the two lines at the level of 220 kV and 400 kV, there is no inter-State line involved in the drawl of power from the bus bar of UPCL. Both the withdrawal lines are connected to the bus bar of the generator, i.e., the 220 kV DC line and 400 kV DC Quad Moose line are built, owned and maintained by KPTCL.
- p) No ISTS is connected to the bus bar of UPCL, i.e., at the point of injection and drawl. The entire power purchased by the Petitioner is used in the State of Karnataka. Consequently, there cannot be any LTA and MTOA quantum being allocated in the ISTS.
- q) The Respondents included the total quantum of 939 MW for the purpose of calculating the ISTS transmission charges and losses relying on the order dated 30.6.2016 in Petition No. 10/SM/2014. PGCIL/ CTUIL has been raising invoices from 1.1.2021 onwards on PCKL for transmission charges and losses, including the quantum of UPCL power, drawn by the Petitioner using the KPTCL network under the nomenclature Deemed LTA. Neither the Regulations nor the Act have a term Deemed LTA. It is either LTA operationalised in terms of the Transmission Service Agreement as per the concerned Regulations or no LTA. The premise under which the charges are being levied is not provided for under the 2020 Sharing Regulations.
- r) After coming into effect of the 2020 Sharing Regulations, the earlier method as prescribed under the 2010 Sharing Regulations, has been repealed. Now the Respondents are required to calculate the transmission charges and losses as per the 2020 Sharing Regulations.
- s) PCKL has suffered a loss of ₹47542 lakh due to the non-compliance with the 2020 Sharing Regulations by the Respondents, the details of month-wise excess transmission charges and losses paid are as follows:



(₹ in lakh)

<b>Additional transmission charges imposed on PCKL on account of deemed LTA considered in respect of UPCL station connected with STU.</b>					
<b>(Month-wise statement)</b>					
<b>Sl. No</b>	<b>Billing Month</b>	<b>Total LTA considered in MW</b>	<b>Deemed LTA considered w.r.t to CGS in MW</b>	<b>Transmission Charges levied</b>	<b>Excess charges levied</b>
1	Jan-21	5559.724	4620.724	17889.75	3021.5
2	Feb-21	5613.55	4674.55	18260.31	3054.5
3	Mar-21	5721.262	4782.262	19808.30	3251.0
4	Apr-21	5742.463	4803.463	17386.62	2843.0
5	May-21	5839.646	4900.646	19952.01	3208.2
6	Jun-21	5780.356	4841.356	17800.77	2891.7
7	Jul-21	5842.815	4903.815	190.94.67	3068.7
8	Aug-21	5852.659	4913.659	17217.01	2762.3
9	Sep-21	5622.343	4683.343	16931.20	2827.7
10	Oct-21	5482.156	4543.156	16050.14	2749.1
11	Nov-21	5479.415	4540.415	15830.71	2712.9
12	Dec-21	5428.125	4489.125	18621.70	3221.3
13	Jan-22	5443.766	4504.766	17656.52	3045.6
14	Feb-22	5388.317	4449.317	17251.66	3006.4
15	Mar-22	5484.928	4545.928	17459.62	2989.0
16	April-22	5644.454	4705.454	17363.44	2888.5
Total					47541.5

t) P

OSOCO and CTUIL have not excluded the quantum of Petitioner's drawl of power from UPCL using KPTCL network, for the purpose of computation of transmission charges and losses as provided for in the 2020 Sharing Regulations and the Detailed Procedure as notified by POSOCO.

- u) Due to the above non-compliance by POSOCO and CTUIL, SRPC is not calculating the transmission deviation charges corresponding to the drawl of PCKL, as envisaged in the 2020 Sharing Regulations. Instead, SRPC is calculating the transmission deviation charges, considering the quantum of power drawn by using an intra-State network of KPTCL, which is contrary to the 2020 Sharing Regulations.
- v) The acts of POSOCO and CTUIL, which are totally in violation of the Regulations and the Detailed Procedure, have resulted in unwarranted financial claims against the PCKL and ESCOMs, which is a pass-through in the tariff to consumers.



- w) As per the judgment dated 15.3.2010 of Hon'ble Supreme Court in Civil Appeal No. 3902 of 2002, the parties to a litigation are bound by the regulations framed by the Commission under Section 178 of the Act, as it intervenes and even overrides the existing contracts between the regulated entities inasmuch as it casts a statutory obligation on the regulated entities to align their existing and future contracts with the said regulations.

### **Hearing on 7.2.2023**

4. The Commission vide RoP dated 7.2.2023 admitted the instant petition and directed the Respondents to file their reply. However, no reply is filed by any of the Respondents in the matter. The Commission further directed the Petitioner to submit the Single Line Diagram indicating power evacuation arrangement from UPCL along with the upstream transmission network.

### **Hearing on 13.4.2023**

5. As the information was not filed, the Commission in RoP dated 13.4.2023, observed that no information had been filed by the Petitioner in terms of RoP dated 7.2.2023 and directed the Petitioner to furnish the same. The Commission directed the CTUIL to furnish the details of the transmission system planned/envisaged for the evacuation of power from UPCL.

### **Submission of the Petitioner**

6. Petitioner vide written submissions dated 10.05.2023 has mainly submitted as under:

a) The Regulation does not envisage that the LTA quantum should be based on the transmission system planned by CTU or LTA allocated by CTU to a particular distribution licensee. Any such interpretation will result in violation of the express terms of Regulation 13 (11) of Sharing Regulations, 2020.

b) The system initially planned for evacuation of power from the generating station of UPCL was set out in the PPA and agreed to by parties to the PPA. Annexure 4 of the PPA provides that:

*“The electric power will be delivered to the grid at 400 KV and 220 KV and for this purpose the Facility will have its own 400 KV and 220 KV Switchyards within the Plant boundary. This Switchyard will be outdoor type with ‘one and half breaker scheme’. Principal Buyers shall provide one (1) 400*





*KV D/C line from the project Switchyard connecting to Hassan for power evacuation. Principal Buyers shall also provide two (2) nos. 220kV D/C lines for interconnecting from the project Switchyard connecting with the 220 KV switchyards of KPTCL at Kemar and Kavoov.*

*Metering points will be provided in the Switchyard for all the six (6) lines for measuring the net generation. Power Line Carrier Communication (PLCC) system will be provided for the transmission lines at the power plant end and matching PLCC panel will be supplied loose for installation at remote end. The protection scheme used for the Switchyard will be compatible with Indian standards and relevant practices followed in India. The Switchyard will be controlled from the Powerhouse Control room where necessary number of control and relay panels will be provided. The switchyard control and monitoring functions will be performed by a microprocessor-based Supervisory Control and Data Acquisition system (SCADA).*

*Construction power will be drawn from KPTCL's 220 KV/110 KV/33 KV system. For this purpose, Principal Buyers shall provide a line up to the plant and the Company will provide necessary receiving sub-station, step down transformer, switchgear, etc. The startup power will be drawn from either Kemar or Kavoov substation of KPTCL through the 220 KV lines and Switchyard to be constructed as part of the plant. The Seller will avail the construction and startup power or any other power from the jurisdictional distribution licensee."*

c) The transmission system for evacuation of 1015MW of power from Nagarjuna TPS in Karnataka was discussed in the 24<sup>th</sup> standing committee held on 18.6.2007 and in the 25<sup>th</sup> standing committee held on 28.3.2008.

d) The power evacuation system of the 2x600MW UPCL thermal power plant is as follows:

- i. 400 kV UPCL – Hassan (Shantigrama) 400 kV D/C line with Quad Moose conductor.
- ii. 2X315 MVA, 400/220 kV transformer at UPCL switchyard.
- iii. 220 kV D/C line with AAAC from UPCL switchyard to 220kV Kemar substation.

Downstream lines constructed at Shantigrama by KPTCL

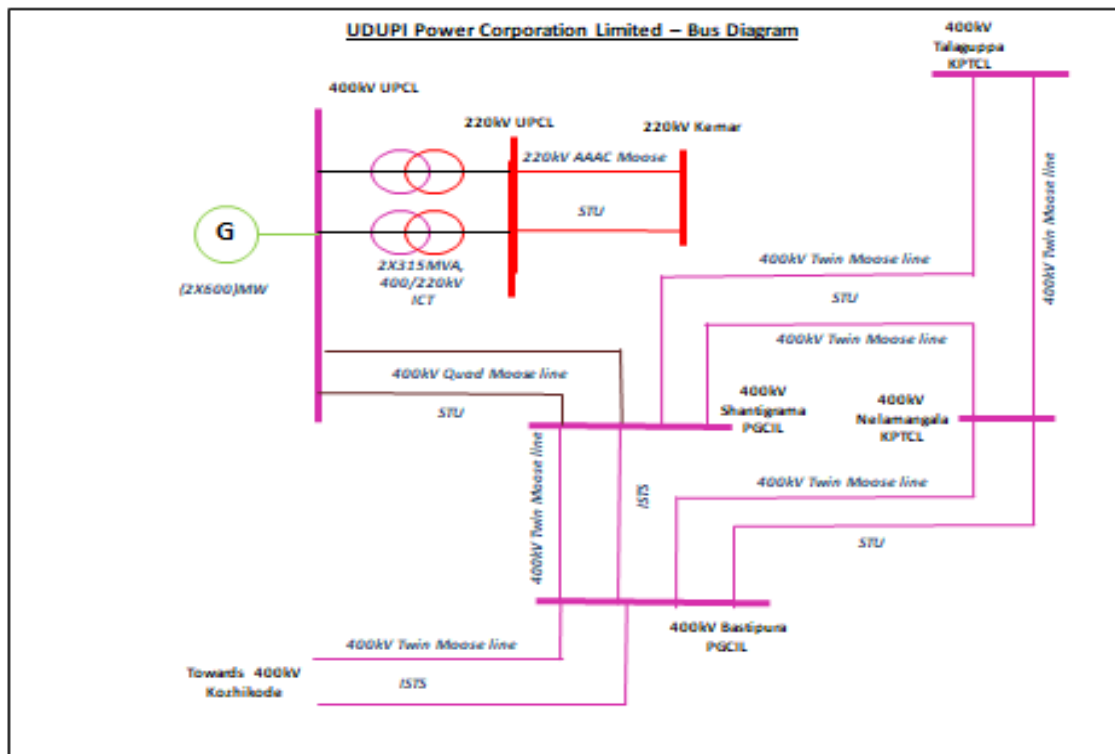
- i. LILO of 220kV M1 & M2 lines (Shivmoga-Mysore lines) to 400/220kV Shantigrama substation.
- ii. LILO of 220kV B4 line (Shivmoga-Nittur-Nelmangala) line to 400/220kV Shantigrama substation (On-going work).

e) Capital cost of the line constructed by KPTCL from UPCL generating station to Kemar (220kV line & Shantigrama 400kV line).



- i. Total cost incurred for construction of 400kV UPCL Shantigrama Quad Moose DC line is ₹ 5326926278.0.
- ii. Total cost incurred for the work of construction of 220kV line from 220kV Kamar substation to UPCL generating station at Nandikur is ₹ 191923446.00.
- iii. Total cost incurred for the evacuation of power from the UPCL plant is Rs-551,88,49,724.00
- iv. Additional impact due to increase in Transmission charges of KPTCL as in 2011- Rs. 1452.60 Crs, in 2012- Rs. 1655.35 Crs and in 2013- Rs. 1871.34 Crs.

f) Single Line Diagram indicating power evacuation arrangement from UPCL is as under:



g) During the 24th Standing Committee meeting of SR held on 18.06.2007 and the 5th and 6th meeting of SRPC held on 25.08.2007 and 15.02.2008 the following evacuation scheme was finalized:

a) Dedicated Transmission System for NPCL to be owned, operated and maintained by M/s. Nagarjunasagar Power Corporation Ltd.

- NPCL switchyard – Hassan 400 kV quad D/C Line

- Provision for 1x315 MVA 400/220 kV transformer at NPCL switchyard
  - 220 kV D/C line from NPCL switchyard to local substation viz Kemar
- b) Transmission system to be taken as the Regional Strengthening Scheme
- Hassan – Mysore 400 kV D/C line

In the 6<sup>th</sup> SRPC meeting dated 15.02.2008, the Committee approved the Hassan – Mysore 400 kV D/C link under the Regional strengthening scheme.

- h) The Generating Station is connected to the STU network and not to Inter State Transmission network, and scheduling is done by SLDC, Karnataka, as per Article 6.4 of the IEGC Regulations, 2010. The relevant finding of this Commission in 20/MP/2017 is as under:

*“58. It would be pertinent to mention that in accordance with the Detailed Procedure, the application for grant of connectivity to ISTS is required to be submitted along with above details as per the Format CON-2. The details sought in the application also include the capacity (MW) for which connectivity is required and the installed capacity of the generation station. **Therefore, CTU has the information about installed capacity of the generating station and capacity (MW) for which connectivity is sought from ISTS.** In case, a generator plans to get connected to both ISTS and State network, while granting connectivity CTU should ensure that adequate State system is available or shall be made available. In such cases, scheduling may be either with RLDC or SLDC as per applicable provisions of the Grid Code. In case, SLDC carries out scheduling, STU charges and losses shall not be applicable to schedules on ISTS. **In case, RLDC carries out scheduling, ISTS charges and losses shall not be applicable to schedules on State network.** It is also pertinent to mention that an associated issue may arise regarding treatment of UI/deviation charges. We are of the view that Deviation charges shall be considered pro-rata on the schedules on the State network and ISTS network.”*

- i) While deciding a similar issue, this Commission, by order dated 04.05.2018 in 126/MP/2017, held that:

*“29. **In the light of the principle laid down in order dated 9.3.2018 in Petition No.20/MP/2017, we are of the view that since IGSTPS is connected to both CTU network and STU network and its scheduling is being carried out by NRLDC, the ISTS charges and losses shall not be applicable for evacuation of the share of power of Haryana Utilities through 400 kV D/C IGSTPS-Daulatabad Transmission Line.** The deviation charges shall be considered on pro-rata basis on the schedules corresponding to ISTS and STU networks. POSOCO has submitted that in case of non-availability of 400 kV D/C IGSTPS - Daultabad line, the power from IGSTPS can be evacuated through 400 kV D/C IGSTPS-Mundka line. We find substance in the submission of POSOCO as power may flow to Haryana Utilities through 400 kV D/C IGSTPS-Mundka line in the event of shut down or outage of 400 kV D/C IGSTPS - Daultabad line. Accordingly, we direct that in such an eventuality, ISTS charges and losses shall be applicable on schedules of Haryana from IGSTPS.”*



## **Submission of Respondent CTUIL**

7. CTUIL, vide its affidavit dated 2.6.2023, has submitted as follows:

a) LTA was granted to UPCL (erstwhile Nagarjuna Power Company Limited) for supplying power to Karnataka (845 MW) and Punjab (94 MW). The transmission system associated with the grant of LTOA included a dedicated transmission line from the generation switchyard to the nearest ISTS point, viz. 400/220 kV Hassan Sub-station of PGCIL and system strengthening in the form of Hassan-Mysore 400 kV DC line.

b) Subsequently, for reasons known to KPTCL, KPTCL had chosen to implement the dedicated transmission line on behalf of the generation project. However, UPCL as LTOA grantee or Karnataka/Punjab as beneficiaries did not sign the long-term open access agreement for bearing the transmission charges. Accordingly, as provided in Regulation 35 of the 2004 Open Access Regulations, the matter was put up to the SRPC as the appropriate forum for the resolution of matters related to open access in inter-State transmission.

c) The Hassan-Mysore 400 kV DC line, as approved, was implemented as Regional System Strengthening by PGCIL and was put into commercial operation on 1.7.2011.

## **Analysis and Decision**

8. We have considered the submissions of the Petitioner and CTUIL and also perused the facts on record. The Petitioner has prayed to exclude the quantum of share of the Petitioner in UPCL (erstwhile Nagarjuna Power Corporation Ltd. (NPCL)), which is drawn through State Transmission Network from the total LTA considered for computation of ISTS charges and losses as per the provisions of the 2020 Sharing Regulations and Detailed Procedure for the period starting from 1.11.2020.

9. The Petitioner has submitted that the Karnataka ESCOMs entered into a PPA on 26.12.2005 with UPCL for the purchase of 90% of the installed capacity, i.e. 913.5 MW of power out of 1010 MW, which was later enhanced to 1080 MW power out of total 1200 MW. The Petitioner has submitted that the said power is evacuated from the switchyard of UPCL through the intra-State transmission network, i.e. 220 kV D/C line connected to 220 kV Khemar and Kavoor Sub-stations of KPTCL and 400 kV D/C Quad Moose line of KPTCL connected to Shantigrama Sub-station of PGCIL. The



Petitioner has submitted that the injection and drawl of power from the UPCL switchyard takes place at the bus bar of UPCL, and no ISTS lines are connected to the point of injection and withdrawal and, therefore, the Petitioner is not liable to pay any ISTS transmission charges. However, the CTUIL is wrongly billing Karnataka ESCOMs for the ISTS charges. The Petitioner has submitted that POSOCO, CTUIL and SRPC have included the total quantum of 939 MW of power for the purpose of calculating the ISTS transmission charges and losses relying on the Commission's order dated 30.6.2016 in Petition No. 10/SM/2014, based on which the CTUIL is raising invoices on PCKL for transmission charges and losses, including the quantum of UPCL power, drawn by the Petitioner using the KPTCL network under deemed LTA from 1.1.2021 (under 2020 Sharing Regulations). The Petitioner has given the line diagram showing the connectivity of the KPTCL 220 kV D/C line and 400 kV D/C line being connected at the bus bar of UPCL.

10. The Petitioner has referred to Orders dated 30.3.2017 in Petition No. 291/MP/2015, dated 9.3.2018 in Petition No. 20/MP/2017 and dated 4.5.2018 in Petition No. 126/MP/2017, and has contended that the Commission in the aforesaid orders, has settled the issues relating to payment of transmission charges and losses by the Distribution Companies where a generator was connected to both intra-State and inter-State transmission network. The Petitioner has further contended that in terms of Regulation 13(11) of the 2020 Sharing Regulations, where a generating station is connected to both ISTS and intra-State transmission system, only ISTS transmission charges and losses shall be applicable on the quantum of LTA and MTOA corresponding to the capacity connected to the ISTS. The Petitioner has submitted that the system initially planned for the evacuation of power from the generating station of UPCL was set out in the PPA and agreed upon by parties to the PPA.

11. CTUIL has submitted that during the 24th Standing Committee meeting of SR held on 18.6.2007, LTA was granted to UPCL (erstwhile NPCL) for supplying power to Karnataka (845 MW) and Punjab (94 MW), i.e. 939 MW. The transmission system associated with the grant of LTOA included dedicated transmission line from the UPCL (erstwhile NPCL) generation switchyard to the nearest ISTS point, viz. 400/220 kV Hassan Sub-station of PGCIL and system strengthening in the form of Hassan-Mysore 400 kV DC line. However, later on, KPTCL chose to implement the dedicated



transmission line on behalf of the generation project. UPCL as LTOA grantee or Karnataka/Punjab as beneficiaries did not sign the LTOA Agreement for bearing the transmission charges.

12. We have considered the submissions of Petitioner and Respondents. We have perused minutes of the meeting of SR constituents, convened by POWERGRID, held on 18.06.2007, quoted as under:

*“1. POWERGRID informed that it has received application from M/s Nagarjuna Power Corporation Ltd. (NPCL) seeking long term Open Access in Inter-State Transmission System (ISTS) for transfer of 938.875 MW power from their proposed generation project of capacity 1015MW at Yellur Village, Udupi district, Karnataka to its beneficiaries viz. Karnataka in SR - 845MW and Punjab in NR - 94MW. Expected date of commencement of open access is indicated as October, 2009.*

*2. AGM (Engg.-SEF), POWERGRID made presentation on the evolution of transmission system. He informed that as per the application of NPCL, about 845 MW is to be consumed by Karnataka and 94 MW is to be transferred to Punjab. The load demand in the costal area around project site is not enough to consume entire power generated by the project. Therefore, the power from the project is required to be transmitted to other parts of Karnataka crossing the Western ghats. He stated that as per the information provided by KPTCL, in the vicinity of proposed project of NPCL, about 7800 MW capacity addition is envisaged to be developed progressively in different phases*

Phase	New Generation	Cumulative capacity (MW)
I	NPCL-1015 MW Gundia - 400 MW	1400
II	ONGC -1400 MW JTPCL-1000 MW	3800
III	Tadari UMPP - 4000 MW	7800

*Power from these generation projects shall also be required to be evacuated across the Western ghats. As laying of transmission lines in Western ghats are likely to pose many ROW issues due to thick forest in the area, therefore it is necessary that a long term and judicious approach is adopted for evolving transmission system in ghats areas so as to optimize the number of transmission corridors from long term point of view.*

*Taking above into view he stated that the transmission system proposed for the evacuation of power through Western Ghats comprise of 2xS/c 765 kV transmission lines to be initially charged at 400 kV. This line ,therefore, shall be adequate to meet the evacuation requirement of projects in the first phase. Later on, when more projects shall get materialized, the lines shall be charged at its design voltage level of 765 kV thereby enhancing its transmission capacity to cater to transfer requirement of 3800 MW.*

*.....*  
*6. After deliberations on the issue it was decided that in the present scheme high capacity 400 kV line through the ghats may be adequate. It was advised that while seeking forest approval for this line, future requirement of 2nd corridor matching with materialization of identified generation addition in the area should also be brought out. Therefore, it was decided that a quad conductor 400 kV D/c from NPCL generation switchyard to Hassan substation should be taken up as dedicated transmission line for the project.*



7. AGM (Engg.-SEF) informed that beyond Hassan there is a requirement of strengthening of Hassan - Mysore corridor, which may be considered as a regional strengthening scheme.

8. As regards, transfer of share of Punjab from the project, it was informed that the same can shall be transferred through principle of displacement from Talcher-II project in ER in which Karnataka has share. The applicant however shall have to sign BPTA for sharing of transmission charges for SR, ER, and NR for transfer of power to Punjab.

9. Based on above and the transmission system proposed in the agenda following transmission system has been decided to be taken as dedicated transmission system for NPCL to be owned, operated and maintained by applicant

- a) NPCL switchyard - Hassan 400 kV quad D/c line.
- b) Provision of 1x315 MVA, 400/220kV transformers at NPCL switchyard.
- c) 220 kV D/c transmission line from NPCL switchyard to local substation viz. Kemar

Further, following transmission system has been decided to be taken up as regional strengthening scheme.

- a) Hassan - Mysore 400 kV D/c line

3. The long term open access as sought by the applicant, M/s NPCL shall be granted subject to applicant making arrangement for availability of above identified transmission system before commencement of Long Term Open Access in line with the regulation of CERC in this regard.”

13. As per the above, in reference to LTOA application of NPCL for 939 MW (845 MW - Karnataka, 94 MW - Punjab), an evacuation system was finalized, wherein (i) NPCL switchyard - Hassan 400 kV quad D/c line and 220 kV D/c transmission line from NPCL switchyard to local substation (Kemar) were to be developed as dedicated transmission system for NPCL to be owned, operated and maintained by the generating company, and Hassan - Mysore 400 kV D/c line was to be developed as a regional system strengthening scheme.

14. We have also perused the minutes of the 6<sup>th</sup> meeting of SRPC held on 15.02.2008 quoted as under:

**“11. TRANSMISSION SYSTEM FOR EVACUATION OF POWER FROM NAGARJUNA TPS (1015 MW) IN KARNATAKA, OF M/S NAGARJUNA POWER CORPORATION LTD.**

11.1 M/s. Nagarguna Power Corporation Ltd. had applied to CTU for long-term open access for evacuation of power from their 1015 MW (845 MW - Karnataka, 94 MW - Punjab) project near Mangalore In Karnataka. In the 24<sup>th</sup> meeting of Standing Committee held on 18.06.2007, the evacuation of power from this project in context of LTOA application was discussed. As per Minutes of the discussion in this regard, circulated by POWERGRID at the instance of Standing Committee, the following evacuation scheme was finalised:

- a) Dedicated Transmission system for NPCL to be owned, 1 operated and maintained by M/s. Nagarjuna Power Corporation Ltd.
  - (i) NPCL switchyard - Hassan 400 kV quad D/C line
  - (ii) Provision of 1 x 315 MVA 400/220 kV transformer at NPCL switchyard
  - (iii) 220 KV D/C line from NPCIL switchyard to local substation, viz. Kemar



b) *Transmission System to be taken as Regional strengthening scheme*

(i) *Hasan-Mysore 400kV D/C line*

11.2 *In the 5<sup>th</sup> SRPC meeting held on 25.08.2007, KSEB was not agreeable to the sharing of transmission of Hassan-Mysore 400 kV D/C, as part of Regional Strengthening Scheme. It was informed by KSEB that their views has not been appropriately recorded in the Standing Committee, and they had taken up the issue with CEA/PGCIL.*

.....  
11.5 *MD, KPTCL said that KPTCL would take up the issue with LANCO and KSEB would be invited to participate in the meeting that would be convened in this regard. He added that in case no power could be made available from LANCO to KSEB, KPTCL was willing to spare 100-150 MW power for KSEB from its own share in the project. He informed that land acquisition was already completed and the project was expected by the end of 2009.*

11.6 *On this, Chairman, KSEB agreed to share transmission charges of Hassan – Mysore 400 kV D/C, as part of Regional Strengthening Scheme, with assured allocation from Nagarjuna TPS to the extent of 100-150 MW.*

11.7 *In view of the foregoing, Committee approved Hassan-Mysore 400 kV D/C link under Regional Strengthening Scheme.”*

15. As per the above, during the SRPC meeting also, the evacuation system for NPCL consisted of (i) NPCL switchyard - Hassan 400 kV quad D/c line, and 220 kV D/c transmission line from NPCL switchyard to local substation (Kemar) was to be developed as a dedicated transmission system for NPCL to be owned, operated and maintained by the generating company.

16. We have also perused the Power Purchase Agreement (PPA) (submitted in another Petition No. 10/SM/2014) signed on 26.12.2005 between ‘Bangalore Electricity Supply Company Limited’, ‘Mangalore Electricity Supply Company Limited’, ‘Gulbarga Electricity Supply Company Limited’, ‘Hubli Electricity Supply Company Limited’, ‘Chamundeshwari Electricity Supply Corporation Limited’ and ‘Nagarjuna Power Corporation Limited’. The relevant extracts of Article 1 and Annexure-4 of this PPA are as under:

“

*Article 1*

1.1 *Definition: In this Agreement, the following words and expression shall have the respective meanings set forth below:*

.....  
“Principal Buyers” means Bangalore Electricity Supply Company Limited, Mangalore Electricity Supply Company Limited, Gulbarga Electricity Supply Company Limited, Hubli Electricity Supply Company Limited And Chamundeshwari Electricity Supply Corporation Limited and their authorized representatives.  
.....

Annexure 4

*DESCRIPTION OF FACILITY AND SITE*

.....  
The electric power will be delivered to the grid at 400 KV and 220 KV and for this purpose the Facility will have its own 400 KV and 220 KV Switchyards with in the Plant boundary. This Switchyard will be outdoor type with ‘one and half breaker scheme’.  
**Principal Buyers shall provide one (1) 400 KV D/C line from the project**





**Switchyard connecting to Hassan for power evacuation. Principal Buyers shall also provide two (2) nos. 220kV D/C lines for interconnecting from the project Switchyard connecting with the 220 KV switchyards of KPTCL at Kemar and Kavoov.** Metering points will be provided in the Switchyard for all the six (6) lines for measuring the net generation. Power Line Carrier Communication (PLCC) system will be provided for the transmission lines at the power plant end and matching PLCC panel will be supplied loose for installation at remote end. The protection scheme used for the Switchyard will be compatible with Indian standards and relevant practices followed in India. The Switchyard will be controlled from the Powerhouse Control room where necessary number of control and relay panels will be provided. The switchyard control and monitoring functions will be performed by a microprocessor-based Supervisory Control and Data Acquisition system (SCADA).

Construction power will be drawn from KPTCL's 220 KV/110 KV/33 KV system. For this purpose, Principal Buyers shall provide a line up to the plant and the Company will provide necessary receiving sub-station, step down transformer, switchgear, etc. The startup power will be drawn from either Kemar or Kavoov substation of KPTCL through the 220 KV lines and Switchyard to be constructed as part of the plant. The Seller will avail the construction and startup power or any other power from the jurisdictional distribution licensee."

17. As per the above, PPA provides that for evacuation of power from NPCL, NPCL will have to provide 400 KV and 220 KV Switchyards in the Plant boundary, and the Principal Buyers shall have to provide one (1) 400 KV D/C line from NPCL switchyard to Hassan and two (2) nos. 220kV D/C lines from NPCL Switchyard to 220 KV switchyards of KPTCL at Kemar and Kavoov.

18. The Commission, vide order dated 30.6.2016 in Petition No. 10/SM/2014, noted as under:

*"25. The PPA entered into between UPCL and DISCOMs of Karnataka provides for construction of 400 kV D/C transmission line from the project switchyard connecting to Hassan for power evacuation and two (2) nos. 220 kV D/C transmission lines for interconnecting the project switchyard with the 220 kV switchyards of KPTCL at Kemar and Kavoov. The PPA with Karnataka does not envisage the requirement of any ISTS line for evacuation of power from UPCL. Therefore, KPTCL was right in constructing the 400 kV D/C transmission line from the generating station to the Hassan sub-station as per the terms and conditions of the PPA signed in 2005. It is, however, seen that UPCL was granted LTA by CTU in June 2007 which consisted of transmission lines within the scope of the UPCL and the transmission lines to be executed by PGCIL as regional strengthening line. The transmission lines within the scope of UPCL were:*

- (a) UPCL Switchyard-Hassan 400 kV quad D/C line*
- (b) MVA 400/220 kv transformer at UPCL Switchyard,*
- (c) 220 kV D/C line from UPCL Switchyard to local sub-station at Kemar.*

*The transmission line within the scope of CTU is the Hassan-Mysore 400 kV D/C line. It is, therefore, seen that the transmission assets which were within the scope of UPCL as per the LTA were to be developed by KPTCL in terms of the PPA. The LTA discussions as well as the LTA granted by CTU has not captured the provision of PPA for construction of 400 kV D/C line from the generating station to Hassan by KPTCL due to which it appears that instead of UPCL developing the transmission assets, it is the KPTCL which developed the transmission assets from*



*the UPCL Switchyard till Kamar and Kavoov. The contention raised by CTU vide affidavit dated 21.7.2014 that "KPTCL chooses to construct the dedicated line as intra-State line" is not correct since this was provided for in the PPA signed in 2005."*

19. As per the above, the Commission observed in its Order dated 30.06.2016 in Petition No. 10/SM/2014 that the transmission assets, i.e. 400 kV D/C transmission line from the project switchyard connecting to Hassan for power evacuation and two (2) nos. 220 kV D/C transmission lines for interconnecting the project switchyard with the 220 kV switchyards of KPTCL at Kamar and Kavoov, which were within the scope of UPCL as per the LTA, were to be developed by KPTCL in terms of the PPA, which has not been captured in the LTA discussions as well as the LTA granted by CTU.

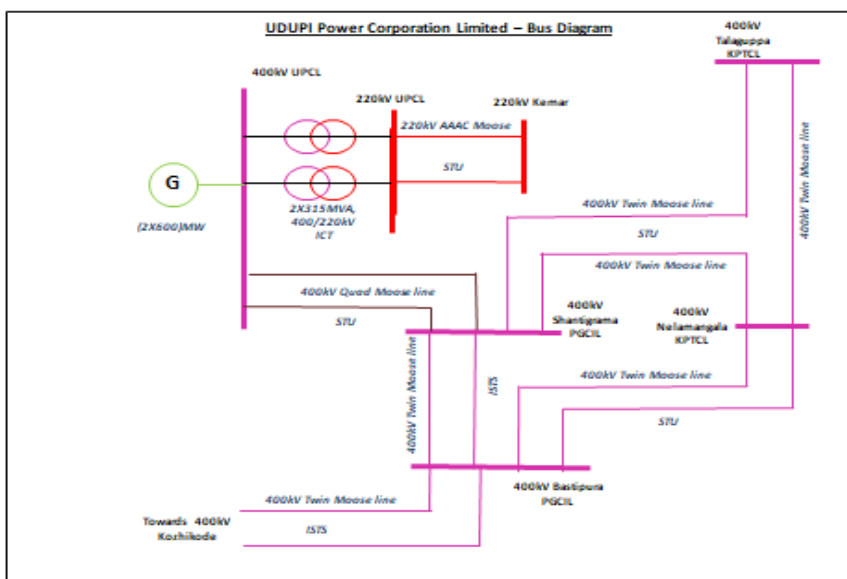
20. Regulation 13(11) of the 2020 Sharing Regulations provides as under:

***"13. Treatment of transmission charges and losses in specific cases***

*(11) Where a generating station is connected to both ISTS and intra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS."*

21. As per the above, the 2020 Sharing Regulations provide that if a generating station is connected to both ISTS and intra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS.

22. The Single Line Diagram for Udupi is as under:



23. As per the above, it is observed that Udupi is connected only to the intra-State transmission system of KPTCL. The issue which arises for consideration, in light of Regulation 13(11) of the 2020 Sharing Regulations and the connection of the generating station, is how much capacity of Udupi is connected to ISTS?

24. We observe that the issue of consideration for Udupi under Regulation 13(11) of the 2020 Sharing Regulations was discussed in the SRPC Meeting held on 6.12.2021 referring to the LTA sub-group meeting. The record notes of the LTA Sub-Group dated 28.10.2021 (Annexure CS.1), recorded the following deliberations:

*“3.1 SE (C), SRPC stated that the main objective is to formulate a methodology for determining the quantum of LTA corresponding to the capacity connected to ISTS from the MoP share allocation of the State for Central Generating Stations (CGS) connected to both ISTS and Intra-State Transmission System. It is also required to identify CGS of SR which are eligible to be considered under the Regulation 13 (11) of CERC Sharing Regulations 2020.*

*He observed that the CGS for which LTA had been granted by CTU need not be considered by the Sub-Group. As such, NTPC Kudgi STPS, Neyveli New Thermal Power Station (NNTPS), which has been granted LTA by the CTU as per the applicable CERC Regulations, need not be considered. Simhadri STPS (Stage-I) & Simhadri (Stage-II) also need not be considered for discussion as there are specific CERC Orders. UPCL station which is an Inter State Generating Station (ISGS) has also granted LTA by CTUIL, hence that also need not be considered by the Sub-Group.*

*.....*  
*3.5 The Sub-Group agreed that NTPC-Kudgi STPS, Neyveli New Thermal Power Station (NNTPS) Simhadri STPS (Stage-I), Simhadri STPS (Stage-II), and UPCL would not be considered since they do not qualify for adopting Regulation 13 (11) of CERC Sharing Regulations 2020 for LTA bifurcation.”*

*.....*  
**Commercial**

*.....*  
**Recommendation of the LTA Sub-Group:**

*a) Following methodology was agreed in principle by the Sub-Group for ascertaining the adequacy of intra-STU Network to evacuate their share from a GS connected to both STU system & ISTS:*

*i) **The intra-STU network planned and implemented at the time of commissioning of the concerned Central Generating Station (CGS) only to be considered.***

*ii) ISTS Network connected to CGS may be taken out of service and CGS may be left connected with intra-state transmission system (STU network) of home state. **If the home state STU system is meeting the all the criteria as per the transmission planning criteria to evacuate their share, then that quantum may be considered for exemption in the computation of sharing of transmission charges.***

*iii) Latest ATC/TTC All India Peak Base Case may be used for this purpose.*

*iv) Ex-Bus Firm + Un-allocated quantum of the beneficiaries (i.e., 100% of CGS net capacity) to be considered to evaluate whether the home state STU system is capable of evacuating their share.*

*However, TANGEDCO has expressed the concern on considering only the originally approved transmission system and opined that it may be appropriate to consider the present Intra-State Transmission system connected to the Generating Station for*



*evaluation of the capacity to be evacuated through Intra-State Transmission system for LTA exemption.*

*b) Following Generating Stations of SR connected to both ISTS and intra-State Transmission System have been considered and concluded as below:*

*.....”*

25. From the perusal of the above notes of the meeting of LTA Sub-Group of Southern Region dated 28.10.2021, we find that with regard to UPCL (erstwhile NPCL) generating station, it was stated that UPCL is an Inter-State Generating Station (ISGS) which has been granted LTA by CTUIL and hence they do not qualify for adopting Regulation 13 (11) of CERC Sharing Regulations 2020 for LTA bifurcation. We also observe that the LTA Sub-Group had recommended a principle for ascertaining the adequacy of the intra-STU Network to evacuate their share from a Generating Station connected to both the STU system & ISTS and considering the same under Regulation 13(11) of the 2020 Sharing Regulations.

26. We observe in the instant case that PPA was signed between Udipi and PCKL way back in 2005. The PPA clearly provided that KPTCL shall construct the transmission lines from Udipi (then Nagarjunasagar) to 220 KV Kemar/Kuvloor and 400 kV Hassan. However, the moot question which arises for our consideration is how much capacity of Udipi is to be considered as connected to ISTS under Regulation 13(11) of the 2020 Sharing Regulations?

27. In this regard, we have perused the principles of the adequacy of the STU system recommended by the sub-group of LTA for consideration under Regulation 13(11) of the 2020 Sharing Regulations quoted as follows:

***“i) The intra-STU network planned and implemented at the time of commissioning of the concerned Central Generating Station (CGS) only to be considered.***

***ii) ISTS Network connected to CGS may be taken out of service and CGS may be left connected with intra-state transmission system (STU network) of home state. If the home state STU system is meeting the all the criteria as per the transmission planning criteria to evacuate their share, then that quantum may be considered for exemption in the computation of sharing of transmission charges.***

***iii) Latest ATC/TTC All India Peak Base Case may be used for this purpose.***

***iv) Ex-Bus Firm + Un-allocated quantum of the beneficiaries (i.e., 100% of CGS net capacity) to be considered to evaluate whether the home state STU system is capable of evacuating their share.”***

28. We direct that NLDC shall calculate the quantum of LTA to be exempted for payment of ISTS charges towards the LTA quantum of Udipi from the date of effectiveness of the 2020 Sharing Regulations, based on the above quoted principles.



Under clause (ii) of the above-quoted principles, Udupi generation may be assumed as connected to ISTS at Hassan and intra-state at Hassan & Udupi through 400/220 kV ICT.

29. NLDC is directed to calculate the quantum of such LTA to be exempted for payment of ISTS charges by the Petitioner within a period of one month of the date of issue of this Order. Accordingly, the RTA/ RTDA shall be revised by SRPC within a period of 30 days thereafter.

30. Accordingly, Petition No. 224/MP/2022 is disposed of in terms of above.

**sd/-**  
**(P.K. Singh)**  
**Member**

**sd/-**  
**(Arun Goyal)**  
**Member**

**sd/-**  
**(I.S. Jha)**  
**Member**

**sd/-**  
**(Jishnu Barua)**  
**Chairperson**