



Delhi Electricity Regulatory Commission

Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi -110 017.

F.11(2421)/DERC/2025-26/8689

Petition No. 02/2026

In the matter of: Petition filed under Section 86(1)(c), 86(1)(e) and 86(1)(k) of the Electricity Act, 2003 read with Regulation 14 of the Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014 and Delhi Electricity Regulatory Commission (Peer to Peer Energy Transaction) Guidelines 2024.

Tata Power Delhi Distribution Ltd.

... Petitioner

Coram:

Sh. Surender Babbar, Member & Sh. Ram Naresh Singh, Member

Appearance:

1. Mr. Buddy Ranganadhan, Ld. Sr. Advocate for the Petitioner
2. Mr. Anand Kumar Shrivastava, Ld. Counsel for the Petitioner
3. Mr. Shivam Sinha, Ld. Counsel for the Petitioner
4. Mr. Chetan Saxena, Ld. Counsel for the Petitioner
5. Ms. Suryaprava Basu, Ld. Counsel for the Petitioner

ORDER

(Date of Order: 11.02.2026)

1. The present Petition has been filed by the Petitioner, Tata Power Delhi Distribution Ltd.(TPDDL) on 08.01.2026 *inter-alia* praying:
 - a. To provide guidance and consequential alignment of the Delhi Electricity Regulatory Commission (Peer to Peer Energy Transaction) Guidelines, 2024;
 - b. To provide approval of mechanism for implementation of Pilot Project for inter-state and intra-state P2P green energy trading as set out in Para 25 of this Petition;

Petitioner's Submissions

2. For the sake of ready explanation and understanding, the relevant submissions of the Petitioner made in the present Petition are brought out as under:
 - i. The Petitioner is a distribution licensee in terms of Section 14 of the Electricity Act, 2003 ("Electricity Act") read with Delhi Electricity Reforms Act, 2000 and is operating in North and North-West areas of Delhi in terms of distribution licenses issued by the Delhi Electricity Regulatory Commission ("Commission"/"DERC"). The Petitioner operates in the licensed area, which is exclusively under the jurisdiction of the Commission.

- ii. The present Petition is being filed seeking approval from the Commission for appropriate mechanism for platform-based interstate Peer-to-Peer ("P2P") trading of green energy and further guidance with the Guidelines for Peer-to-Peer Solar Energy Transaction through Blockchain Platform, 2023 ("UPERC Guidelines") prescribed by Hon'ble Uttar Pradesh Electricity Regulatory Commission ("UPERC").
- iii. The Petitioner under the present Petition also seeks guidance of the Commission under DERC (Peer to Peer Energy Transaction) Guidelines, 2024 (2024 Guidelines) as detailed in the present Petition for implementation of mechanism of pilot demonstration of inter-state P2P green energy trading.
- iv. That the preamble of Electricity Act *inter-alia* provides for taking the necessary measures for development of electricity industry, and promotion of efficient and environmentally benign policies, protecting the interest of consumers and supply of electricity to all areas. Further, Section 66 of the Electricity Act provides for development of market wherein it endeavours the development of power market by the appropriate Commission in the manner specified seeking guidance from the National Electricity Policy, 2005.
- v. The Government of NCT of Delhi, Department of Power on 14.03.2024 notified the Delhi Solar Energy Policy, 2023 ("Delhi Solar Policy") with the vision of making solar energy accessible to the consumers in Delhi and further promote innovative models for solar adoption. Further, one of the primary objectives of the Delhi Solar Policy is to provide access to solar across all consumers of Delhi and create avenues for income generation.
- vi. In this regard, the pilot project in Delhi was first made operational at the Petitioner's location on 15.01.2021 basis the Fixed Price Tariff Model for intra-state trading of P2P energy. Further, for the purposes of understanding the real customer experience in P2P green energy trading, the pilot project was rolled out to the customers of the Petitioner within their network in Delhi. This was conducted with the aim to place recommendations before the Commission to consider a regulatory regime to promote P2P trading of electricity in Delhi.
- vii. On 18.01.2022 and thereafter on 12.08.2022, the Petitioner vide its letter to the Commission requested for issuance of suitable amendments as enlisted in the letter to DERC (Net Metering for Renewable Energy) Regulations, 2014 and DERC (Group Net Metering and Virtual Net Metering for Renewable Energy) Guidelines, 2019. The amendments were sought to promote faster adoption of renewable power in the grid and allow P2P transactions. Further, the

Petitioner also provided a clear distinction between the concept of net metering and P2P trading in terms of the query raised by the Commission.

- viii. Subsequently, the Commission held a meeting on 14.09.2022 with all stakeholders to discuss the benefits and procedural aspects of P2P transactions wherein the Petitioner provided multiple suggestions.
- ix. Simultaneously, the Hon'ble UPERC had issued the UPERC Guidelines in 2023 for scaling up P2P trading of RTS energy in Uttar Pradesh. Subsequently, this Commission issued the 2024 Guidelines.
- x. On 27.06.2025, the Ministry of Power, Government of India ("MoP"), as part of the digitalisation initiatives constituted a task force for development of roadmap for India Energy Stack ("IES") aimed at creating a unified, secure, standardised and interoperable Digital Public Infrastructure ("DPI") to manage, monitor, and innovate across the electricity value chain for India's energy sector after drawing inspiration from Aadhaar and Unified Payments Interface ("UPI"). One of the key features of IES involves facilitating P2P green energy trading. Further, MoP has appointed REC Limited as the Nodal Agency.
- xi. On 17.12.2025, IES released the IES Strategy 0.2 and IES Architecture 0.2 documents, envisaging pilot demonstration of the feasibility of interstate P2P green energy trading. Subsequently, ISGF had submitted a Concept Note on Pilot Demonstration of interstate P2P Trading of Green Energy on DEG under IES initiative to REC to undertake along with its technology partner, PowerXchange a pilot DEG demonstration in the National Capital Region ("NCR") which has been accepted by MoP. This would involve two Distribution Companies ("DISCOMs") in State of Uttar Pradesh through Pashchimanchal Vidyut Vitran Nigam Limited ("PVVNL") and in Delhi through the Petitioner for Phase 1 (on Fast Track by 15.02.2026) followed by more DISCOMs from Delhi (BSES Rajdhani Power Ltd. ("BRPL")) and Haryana (Dakshin Haryana Bijli Vitran Nigam ("DHBVN")) in Phase 2 (3-6 months from Phase-1).
- xii. Further, a meeting was held on 27.12.2025 for a workshop which was scheduled to be held on 09.01.2026 on P2P energy trading project between the stakeholders and the officials of REC. The Minutes of the Meeting dated 27.12.2025 *inter alia* records the filing of the present petition before the Commission to enable the mechanism for P2P green energy trading.

- xiii. In the initial phase it is proposed to onboard limited number of participants (100 to 200 Nos.) from PVVNL and Petitioner and test the P2P platform for interstate transactions.
- xiv. That for successful implementation of the mechanism for pilot demonstration of interstate P2P trading of green energy, the Petitioner seeks guidance of the Commission to the extent of alignment of the 2024 Guidelines issued by the Commission with the UPERC Guidelines as also proposed in the Concept Note. Therefore, in view of the same, the Commission may consider the following: -

S.No.	Parameter	UPERC Guidelines	DERC 2024 Guidelines	Issues that require consideration for the purposes of implementing the P2P Pilot Project
1.	Title	Guidelines for Peer-to-Peer Solar Energy Transaction through Blockchain Platform	Delhi Electricity Regulatory Commission (Peer to Peer Energy Transaction) Guidelines, 2024	
2.	Eligible Participants	Prosumers with rooftop solar (Gross/Net metering) and Consumers within same DISCOM	Prosumers and consumers ≤ 200 kW sanctioned load; RE capacity up to 500% of sanctioned load	No change required
3.	Registration Process	Registration with DISCOM and empaneled P2P platform	Registration through DISCOM and approved P2P platform	No change required
4.	Registration Charge	As specified by DISCOM / Platform	Nil	No change required
5.	Metering Requirement	Post-paid Smart Meter mandatory for both prosumer and consumer	ToD compliant Energy Meter or Smart Meter mandatory	No change required
6.	Technology Platform	Mandatory Blockchain based P2P platform	Blockchain or any other secure digital technology	No change required
7.	Transaction Price	Mutually agreed price between P2P participants on P2P Platform	Dynamic / mutually agreed price between Prosumers and Consumers	No change required
8.	Transaction Charges	₹0.42/kWh (incl. GST) shared equally by buyer and seller	To be approved by DERC based on DISCOMs petition	Change required for Interstate P2P as well as Intra P2P ₹0.42/kWh (incl. GST) shared equally by buyer and seller.
9.	Wheeling Charges	Applicable as per applicable UPERC tariff order	Nil for both Prosumers and Consumers	Change required for Interstate P2P as well as Intra P2P trading - Rs 1.01/kWh to be paid to the Discom towards wheeling charges and

				<p>billing and settlement fees. This money is to be paid by the buyer (Consumer). No GST applicable on this wheeling charges.</p> <p>In case of inter-state P2P trading, the said amount shall be split equally between Petitioner and PVVNL. However, for the purposes of clarity, it may be noted that in case of intra-state P2P trading, the entire share will be retained by the Petitioner.</p>
10.	Network / Open Access (OA) Charges	Wheeling charges applicable; Cross Subsidy Surcharge (CSS) – waived; Additional surcharge – Nil, 100% waiver	Complete waiver of wheeling, CSS and additional surcharge till 31 March 2027	Wheeling charges proposed for Interstate P2P as well as Intra P2P trading.
11.	Settlement and Billing	Billing by DISCOM; P2P settlement integrated with DISCOM billing cycle	Billing by DISCOM / Service Provider; priority settlement for P2P energy	Changes required – P2P transaction Amount settlement wrt corresponding unit transacted shall be done on P2P Platform. Transacted Units adjustment shall be done in billing invoicing of DISCOM. However, for Intra P2P, transacted units, amount shall be as per regular billing and invoicing of TPDDL.
12.	RPO Treatment for P2P Transaction	RPO benefit retained by DISCOM	Counts towards DISCOM RPO if consumer not obligated	Commission's Guidance sought to enable DISCOM to retain RPO benefits.
13.	Notable / Distinguishing Features	First detailed state level P2P framework in India; clear scheduling, deviation and settlement rules	Most progressive framework; strong financial incentives and charge exemptions	No change required
14.	Time Block for transaction	Day-ahead scheduling by 17:00 hrs of (n-1) day; intraday scheduling allowed up to 4 time blocks before delivery	Participant shall submit schedule atleast 8 time blocks before the commencement of supply. Rescheduling shall be restricted during the 8 time block preceding the commencement of actual supply	Change required for Interstate P2P trading – No consideration for time block for Interstate P2P. Transaction for complete day from 6am to 6pm on day ahead basis.

15.	Restriction on Energy unit trade w.r.t. the capacity of the solar plant.	Prosumer cannot transact more than actual rooftop solar generation per day	P2P Prosumer shall not transact energy more than 20% CUF of installed Capacity of Renewable Energy System per day	Change required for Interstate P2P – No restriction on CUF for Interstate P2P.
16.	Under injection of energy by P2P Prosumer	Prosumer pays difference between DISCOM energy charges and mutually agreed P2P price for the shortfall energy	Payment by Prosumer to Consumer arrived as product of Energy imported by Consumer from DISCOM due to Non-Supply by Prosumer with rate equivalent to absolute difference of Energy Charges of Consumer, as per Tariff Schedule, and mutually agreed price on P2P Platform.	Change required for Interstate P2P – No consideration of Under injection provision for Interstate P2P for Pilot
17.	Under-drawl of energy by P2P Consumer	Consumer pays full committed P2P energy to Prosumer; excess energy injected into grid settled with DISCOM	Full payment of quantum of energy pledged by it on P2P platform to the Prosumer(s) Payment by Consumer to DISCOM arrived as product of excess Energy injected in Grid due to Under-drawl by consumer with rate equivalent to absolute difference of Landed Cost of Electricity at DISCOM periphery as per Tariff Schedule, and mutually agreed price on P2P Platform.	Change required for Interstate P2P – No consideration of Under-drawl provision for Interstate P2P for Pilot Project.

- xv. This pilot demonstration in Delhi will establish a replicable and scalable blueprint for nationwide deployment of decentralized digital energy marketplaces. Further, the same will also validate how India's power sector can transition toward consumer-centric, digitally governed, flexible and renewable-driven energy ecosystems, while maintaining DISCOM stability, system security, and regulatory trust.
- xvi. The demonstration will showcase how consumers and prosumers across these utilities can seamlessly participate in day-ahead renewable energy contracting, delivery, metering validation, billing reconciliation, and wallet-based financial settlement using a common technology stack. The consumers shall have the option to procure green energy through P2P trading unlike procuring through regular modes through DISCOMs. The platform will integrate with smart meters and MDM systems, interface with DISCOM billing platforms, utilize a blockchain-based trust and validation

layer, and incorporate an RBI-compliant payment gateway with escrow for assured settlements.

- xvii. The Commission may grant permission for following:
- a. **Wheeling Charges:** UPERC Guidelines provisions ₹1.01/kWh for the DISCOMs to be paid by the consumer (buyer) for intra-Discom P2P energy transactions. For proposed interstate P2P pilot project, this amount may please be allowed to split equally between the Petitioner and PVVNL. To have parity, similar amount shall be allowed to be charged by the Petitioner entirely for intra state P2P trading as well.
 - b. **Transaction Charges:** Per UPERC Guidelines, both Prosumer and Consumer need to pay ₹0.21/kWh towards Transaction charges (inclusive of GST). For proposed interstate P2P pilot project, kindly accord approval for the same fees for the prosumers and consumers in both Petitioner and PVVNL. There shall not be separate platform fee charges. To have parity, similar amount shall be allowed to charge for intra state P2P trading as well.
 - c. **Energy Charges:** The energy charges will be mutually agreed between the prosumer and the consumer, which will be settled on the P2P platform directly without involvement of the DISCOMs. The same may kindly be approved for this pilot project. The P2P Service Provider will indemnify the DISCOMs in case of any disputes/claims related to the energy charges and platform service fees.
 - d. **Penalties for Under Injection and Under Drawl:** It is requested to waive off these penalties for proposed inter-state P2P pilot project.
 - e. **Cross Subsidy Surcharge (CSS):** Under the existing guidelines, there is no CSS for P2P transactions. It is requested to kindly waive-off the CSS and other additional surcharges for proposed inter-state P2P pilot project.
 - f. **Waiver of other Charges for Interstate Power Trading for proposed Interstate P2P pilot project:** Per existing power market operations, interstate power trade involve following charges which may kindly be waived off by the Commission:
 - i. ISTS Transmission Charges
 - ii. ISTS Transmission Losses
 - iii. NLDC / RLDC System Operation Charges
 - iv. SLDC Charges
 - v. Open Access Charges

vi. Scheduling Charges

3. In the present Petition, while the Petitioner has sought the approval for the purposes of implementation of the inter-state pilot project for P2P green energy trading and intra-state P2P green energy trading, it further seeks that the subsequent and final implementation run will take place with modifications and necessary guidance and approval of the Commission.

Commission's Analysis

4. Based on the preliminary consideration of the present Petition and the oral submissions made by the Ld. Sr. Counsel of the Petitioner, the present Petition was admitted vide Commission's Order dated 20.01.2026. The matter was further heard by the Commission and order was reserved on 27.01.2026. The said Order reads as under:

"1. Heard the Learned Senior Counsel appearing on behalf of the Petitioner. During the hearing, the Commission observed that the relief sought vide Prayer "c" to the extent of "Waiver of Other Charges for Inter-State Power Trading", as detailed in Para 25(f) of the present Petition, falls within the jurisdiction of Hon'ble Central Electricity Regulatory Commission (CERC) and that it should be decided as per the applicable CERC Regulations/Orders. Accordingly, the Petitioner was at liberty to approach CERC for the said relief.

2. Order is reserved. In the meantime, if any clarifications are required by the Officers of the Commission, the same shall be provided by the Petitioner."

5. After the admission of the present Petition, the Commission considered the further submissions/arguments made by the Ld. Senior Counsel appearing for the Petitioner during the course of hearing. The said submissions and arguments have been examined in the light of the provisions of the Delhi Electricity Regulatory Commission (Peer-to-Peer Energy Transaction) Guidelines, 2024 ("DERC P2P Guidelines") DERC (Net Metering for Renewable Energy) Regulations, 2014 and DERC (Group Net Metering and Virtual Net Metering for Renewable Energy) Guidelines, 2019, and the Electricity Act, 2003.
6. Peer-to-peer (P2P) Green energy trading transaction (P2P energy transaction) is a mechanism whereby trading in electricity is transacted directly between a prosumer (seller of electricity) and a consumer (buyer of electricity/end-user), facilitated through a digital platform, rather than through the typically one-way sale of electricity from generators to distribution licensees and, thereafter to the end consumers. However, the P2P energy transaction shall operate within the existing legal and regulatory framework governing system operations and other related factors. The P2P energy transactions involving trading of green electricity aims to

- provide the commercial platform to be used by the consumers for deriving monetary benefits within the existing electricity system and operation of the Discom.
7. The DERC P2P Guidelines have been issued to facilitate P2P energy transactions within the existing regulatory and tariff framework applicable in the NCT of Delhi. Clause 9 of the said Guidelines provides that P2P energy transactions shall be implemented through the billing and settlement system of the Distribution Licensee, and that electricity shall continue to be supplied by the Discom.
 8. The DERC P2P Guidelines were issued by this Commission on 24.06.2024 under the Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014 with the objective of guiding and facilitating the P2P green energy trading transaction within the same Discom i.e. where both the prosumer and consumer are situated within the same distribution utility in Delhi. Accordingly, the existing DERC P2P Guidelines do not cover prospective P2P energy transactions involving prosumers and the consumers located in different Discoms areas within Delhi (intra-state Discoms) or located within the Discoms of two different States (inter-state Discoms). These guidelines have not been challenged by the Discoms at any point of time after the issue thereof.
 9. Since, in the present Petition, the Petitioner has also sought approval of this Commission in respect of intra-state Discoms and inter-state Discoms P2P energy transactions, also which are not expressly covered under the existing DERC P2P Guidelines, the Commission proceeds to consider/examine the said transactions within the framework of the DERC P2P Guidelines, Electricity Act, 2003, the Tariff Policy and the relevant Regulations of the Commission. While doing so, the Commission is mindful of the overarching objective of promotion of Solar and other renewable sources of Energy, and therefore there is need to facilitate the development and operation of consumer friendly digitalized platforms by the Discoms for undertaking Green Energy P2P trading transactions (P2P Energy Transactions) within consumers and prosumers.
 10. While by the present Petition the Petitioner is seeking guidance and approvals for the implementation of pilot project, as per the Petition PVVNL will also seek the similar guidance and approvals from UPERC.
 11. Through the present Petition, the Petitioner has sought approval for alignment with the Guidelines for Peer-to-Peer Solar Energy Transaction through Blockchain Platform, 2023 ("UPERC Guidelines") issued by the Uttar Pradesh Electricity Regulatory Commission ("UPERC") besides seeking approval for certain deviations and relaxations in the existing DERC P2P Guidelines for facilitation of intra-state and inter-state P2P Energy transactions. In this regard, the Commission has examined the said deviations/relaxations sought by the Petitioner in the existing DERC P2P Guidelines as mentioned in tabular/comparative form in paragraph 21 of the

present Petition, along with the specific approval sought in Paragraph 25 thereof. The said comparative table is reproduced in para 2(xiv) hereinabove.

12. As by this present Petition, the Petitioner is seeking approval for facilitation in undertaking of the P2P Green energy trading transactions by the consumers during the pilot project period, this order shall be applicable only for the pilot period. In this regard, the Commission notes the submissions made by the Ld. Senior Counsel for the Petitioner during the course of hearing, that the pilot period shall be within 3 to 6 months. Accordingly, considering the new and innovative project requiring the extensive publicity and understanding by the consumers and the need for initial troubleshooting, this Commission is of the view to make this Order applicable for the period upto six months as pilot period for the P2P Green energy trading project sought to be approved by the Petitioner.
13. Since, the existing DERC P2P Guidelines embody the broad framework for the implementation and facilitation of the P2P energy trading transactions by the prosumer and consumer within the same Discom, the Petitioner is allowed to facilitate P2P Green energy trading transactions to be undertaken by the Consumer (buyer) and prosumer (seller) both located within Petitioner's licensed area following the aforesaid Guidelines except otherwise considered and decided as per this Order. The said facilitation basically involve the provision of the digitalised platform by the Discoms for necessary accountal and settlement of the P2P Green energy trading transactions undertaken by the consumer and prosumer within the existing net metering system operation and settlement mechanism.

However, for the extension of the P2P energy transactions by the Prosumers and Consumers within intra-state or within inter-state, the existing DERC P2P Guidelines shall apply with relaxations and modifications with respect to the certain parameters as approved by this Commission in this order upon consideration by it of the present Petition.

For this purpose, the other Discom within the NCT of Delhi which is also intending to implement the pilot project shall also be required to file the Petition before this Commission so that the Order passed in this Petition is aligned with their Order. This will enable the execution of the transaction of trading of P2P Green energy between the Consumer and Prosumer located in two different Discoms within the NCT of Delhi with the uniform facilitation and charges for the trading of P2P Green energy. However, for enabling the implementation of the pilot project within two Discoms located in different states i.e. for inter-state P2P Green energy trading transactions, this Commission is set to endeavour by this Order to align the provisions of its DERC P2P Guidelines with the corresponding Guidelines issued by UPERC. But in case this Commission is not inclined to accept the said Guidelines of UPERC in respect of certain parameters of the P2P energy transactions, considering the

interest of the consumers of the NCT of Delhi, this Commission expect the formulation of common / uniform provisions in P2P platform by the Petitioner with mutual understanding and consent between the Petitioner and PVVNL (the Discom of the state of Uttar Pradesh) for the success of the pilot project which ultimately will lead to the success of the implementation of the P2P energy platform post pilot period.

14. The observations of this Commission on the extension or modifications in certain parameters specified in the aforementioned table in para 21 of the present Petition are explained hereinbelow. The reference of other Discom of NCT of Delhi in this order is for BSES Rajdhani Power Ltd., which is also involved as other Discom in the pilot project.

- i. **Transaction charges**: At serial no. 8 of the table in para 21 of the present Petition, the Petitioner has sought the approval for transaction charges @₹0.42/kWh (inclusive of GST) for intra-state Discoms as well as inter-state Discoms P2P transactions (besides for within same Discom), to be shared equally (i.e. ₹0.21/kWh each) between the buyer (Consumer) and seller (Prosumer). In this regard, the Ld. Senior Counsel for the Petitioner submitted during the course of hearing before this Commission that the proposed transaction charges @₹0.42/kWh (inclusive of GST) represent the fee against the cost towards development, operation and maintenance of the digitalized P2P platform for facilitating P2P energy transactions undertaken by the Prosumers and Consumers and that the said charges are aligned with the transaction charges specified under the UPERC Guidelines. However, on the query raised by the Commission during the course of hearing, the Ld. Senior Counsel for the Petitioner submitted that the Petitioner was currently in the process of developing its P2P platform, the aforesaid transaction charges amounting to ₹0.42/kWh (inclusive of GST) to be shared equally by consumer and prosumer were being proposed for levy during the implementation of the pilot project sought to be approved through the present Petition, and that the same are being proposed in parity with charges specified under the UPERC Guidelines.

Upon consideration of the submissions advanced on behalf of the Petitioner, this Commission is of the view that, in order to enable successful implementation of the P2P Portal and to encourage wider participation of consumers and prosumers which would ultimately promote generation & consumption of renewable energy, the transaction charges of ₹0.42/kWh (inclusive of GST), to be recovered from and shared equally by prosumer and consumer as prayed by the Petitioner may be allowed for the limited purpose of implementation of the P2P project during the pilot period/phase by the Petitioner within its licensed area.

This Commission is further of the view that though the existing DERC P2P Guidelines deal only with the P2P energy transactions by the consumers and the prosumers within the same Discom, the said Guidelines need to be extended by this Commission for facilitation of P2P energy transactions undertaken by the consumers and the prosumers for between intra-state Discoms and inter-state Discoms P2P energy transactions to achieve the objective of promotion of the Renewable Energy generation and consumption conceived under the existing DERC P2P Guidelines which the Petitioner by this Petition is seeking. Accordingly, the transaction charges for intra-state Discoms and inter-state Discoms P2P energy transactions undertaken by the consumer/prosumer located in licensed area of the Petitioner should also be allowed @ ₹0.42/kWh (inclusive of GST), to be shared equally between prosumer and consumer as prayed by the Petitioner. Therefore, in respect of intra-state Discoms and inter-state Discoms P2P energy transactions, the half of the said Transactions Charges shall be recovered from the consumers/prosumers by the Petitioner and the other half of the said transaction charges by the other Discom within the NCT of Delhi (intra-state Discoms transactions)/PVVNL (inter-state Discoms transactions). In respect of P2P energy transactions for inter-state trading, the PVVNL may take decision for the recovery of transactions charges from its consumers/prosumers as per its own Regulations/guidelines in this behalf and this Commission does not have any regulatory power to direct PVVNL for the same. The said charges however, shall be treated as non-tariff income while determining the ARR/True up of the ARR of the Petitioner and the other Discom in the NCT of Delhi by this Commission. However further, as provided under the DERC P2P Guidelines, the Petitioner and the other Discom in NCT of Delhi should be allowed to claim the capital expenditure towards the cost of development of the P2P platform along with the recurring annual operational expenses on actual basis, of course considering prudent financial principles in its ARR. However, this Commission is of the view that, based on the degree of participation on the P2P portal and the execution of P2P energy transactions during the pilot period, the aforementioned transaction charges for post pilot period shall be reviewed and firmed up separately by the Petitioner, based on competition, prudent financial principles and in accordance with the applicable DERC P2P Guidelines and shall be subject to the approval of this Commission.

- ii. **Wheeling charges:** At Serial No. 9 of the table in Para 21 of the Petition, the Petitioner has sought the approval for the wheeling charges toward P2P energy transactions for intra-State and inter-state@ 1.01/kWh to be paid by the buyer (Consumer). In this regard, the Commission notes that as per the DERC P2P Guidelines, the wheeling charges both for Consumers and

Prosumers are Nil for the P2P transactions within the licensed area of the same Discoms. In order to decide about the claim of the Petitioner for the levy of the Wheeling Charges for P2P energy transactions in intra-state Discoms, the rationale behind the "NIL" Wheeling Charges for the P2P energy transaction within the same Discoms in the existing DERC P2P Guidelines will have to be evaluated. In this regard, this Commission observes that considering the fact that the Petitioner is already recovering the cost of wheeling of electricity through its existing distribution network as part of the tariffs approved by this Commission, the further recovery of wheeling charges by the Petitioner towards the P2P energy transactions will increase the cost of energy to the consumers (buyer) which consequently will discourage the undertaking of P2P transaction by the consumers. In this regard it is worth consideration that in any case the additional wheeling charges towards the P2P energy transactions shall be subject to adjustment (set-off) in the ARR of the Petitioner as non-tariff income and thus will have revenue neutral effect on the ARR of the Petitioner. Therefore, in no way the Petitioner will be benefited financially by claiming wheeling charges from the consumers against P2P energy transactions. Further, the facilitation by the Petitioner for undertaking P2P energy transactions by the Consumers and Prosumers basically involve the provision of the digitalised platform for accountal and settlement of the P2P energy transactions within the existing net metering system operation and settlement mechanism without the actual wheeling of the Green energy from prosumer to consumer in the P2P energy transactions. Therefore, the levy of Wheeling charges for undertaking of the P2P energy transactions will run contrary to the provisions and objectives of the DERC (Net Metering for Renewable Energy) Regulations, 2014 and DERC (Group Net Metering and Virtual Net Metering for Renewable Energy) Guidelines, 2019, in furtherance to which DERC P2P Guidelines were issued by this Commission.

Further, the wheeling of the electricity for the purpose of the P2P energy transactions between the consumer and prosumer is not statutorily covered under the term "Open Access transactions". Furthermore, the claim of Wheeling Charges by the Petitioner citing the fee towards billing/settlement in the aforesaid Table in the present Petition is devoid of any basis in as much as fee for billing and settlement process by the Petitioner is already being allowed through the transaction charges. By the extension of the aforesaid rationale in the case of intra-state Discoms P2P energy transactions, the Commission observes that the Petitioner is not entitled to claim Wheeling Charges in such transactions too. Therefore, this Commission is of the view that the wheeling charges for the P2P transaction to be executed by the Consumer and the Prosumer of the Petitioner between the two different Discoms in the NCT of Delhi should not be applicable.

The request of the Petitioner at Serial No. 9 of the table in Para 21 of the Petition further relates to levy of Wheeling Charges @ ₹1.01/kWh (to be split equally between the Petitioner and PVVNL) for the P2P energy transactions involving two different States i.e. for inter-State Discom P2P energy transaction. The Commission is of the view that as the prospective P2P transactions shall involve two different Discoms situated and operating in two different States, this Commission can regulate the P2P energy transactions only with reference to the consumer or prosumer as the case may be, who are the electricity consumers of any Discom in the state of Delhi. Therefore, having observed about the Wheeling Charges @ NIL in the case of P2P energy transactions in intra-Discoms, this Commission is of the view that the Petitioner's claim for the levy and recovery of the Wheeling Charges from its Consumers (Buyers) @ ₹1.01/kWh (including ₹0.51/kWh for PVVNL) inter-State and intra-state energy transaction is also not tenable. The untenability of the Petitioner's claim for Wheeling Charges is further evident from the fact that, in respect of P2P energy transactions between inter-State Discom, the Petitioner has claimed Wheeling Charges only at the rate of ₹0.51/kWh (i.e. 50% of ₹1.01/kWh). This claim is manifestly superfluous, as the nature and extent of wheeling by the Petitioner involved in such inter-State P2P energy transactions are identical to those involved in intra-Discom P2P energy transactions, in respect of which the Petitioner has sought full Wheeling Charges at the rate of ₹1.01/kWh. However, the claim of wheeling charges towards the wheeling of Green energy by PVVNL, if applicable, as per Regulations of UPERC shall be recoverable by the Petitioner for PVVNL from its Consumers (Buyers) undertaking the P2P energy transactions with Prosumers in the state of Uttar Pradesh.

- iii. **Network/Open Access (OA) Charges:** At Serial No. 10 of the table in Para 21 of the Petition, the Petitioner has sought approval for Network/Open Access (OA) Charges for both Intra-state and inter-state P2P trading. Upon the consideration of the issue in para 14(ii) relating to the wheeling charges claimed by the Petitioner in serial no. 9 of the table in the present Petition towards the P2P energy transactions in Intra-state and inter-state, this Commission is of the view that, extending the applicability of the DERC P2P Guidelines, no Network/Open Access(OA) Charges should be levied and recovered by the Petitioner for intra Discom P2P energy transactions undertaken by their Consumers (buyers). As mentioned in the present Petition the said charges are not applicable even in the UPERC Regulations, therefore those charges shall not be recoverable by the Petitioner from its Consumers (Buyers) for the Green energy traded (sale) by the Prosumers of PVVNL (Discom of Uttar Pradesh). Also, the Petitioner shall not claim the aforesaid Charges from the Consumers of PVVNL through PVVNL.

However, the Commission notes that the Petitioner at Sr. No. 10 of the Table in the present Petition is seeking to claim only wheeling charges for intra-Discom and inter-state P2P transactions about which the Commission has already deliberated and discussed in the preceding paragraph of this order. Based on the discussion and deliberation in the said para, the Commission reiterates that no wheeling charges shall be applicable for intra-Discom and inter-state P2P transactions. Therefore, the claim of wheeling charges at Sr. No. 10 of the table in the present Petition is not accepted by this Commission.

- iv. **Settlement and Billing:** At serial no. 11 of the table in Para 21 of the Petition, the Petitioner has sought the approval regarding Settlement and Billing. The Commission observes that as the provision and guidelines in this regard are already laid down in the DERC P2P Guidelines for the P2P energy transactions within the same Discom, it is appropriate to extend the application of the same for P2P energy transactions for intra-state also. It is further clarified that the Petitioner and the other Discoms within NCT of Delhi involved in such transactions should also adhere to the provisions of the aforementioned DERC P2P Guidelines as the Petitioner and other Discoms in Delhi already have established the settlement & billing mechanism for the supply of electricity to its consumers. Accordingly, both the Petitioner and the other Discom shall facilitate the billing and settlement of the intra-Discoms P2P transactions undertaken by their Consumers and prosumers by devising claim & settlement mechanism in their existing Billing and Settlement system. Further, following the DERC P2P Guidelines, settlement for the intra-Discoms P2P energy transactions shall be done as per DERC P2P guidelines in the billing of the Petitioner in priority to the billing for electricity distributed/supplied by the Petitioner to its Consumers.

The Commission is of the view that for the inter-state Discoms P2P energy transactions, the Consumers and Prosumers ought not be asked to settle the accounts between themselves with each other independently (outside) of the existing billing and settlement system of the Petitioner since such independent (outside) mechanism shall not ensure seamless and secured execution of energy trading transactions as is expected to be available through P2P platform integrated with the existing Billing and Settlement system. In this regard, it is noted from the contents of table (Sr. No. 11- Settlement and Billing) in the present Petition that as per UPERC guidelines, the P2P settlement is to be integrated with the Discom billing cycle and it is expected that PVVNL has complied with that. But there is no clarity whether the said integration is available with PVVNL for inter-state P2P energy transactions.

Therefore, for the inter-state energy transactions, the Petitioner and PVVNL shall make the provision in their P2P platform through which the settlement of the account of inter-state P2P energy transactions shall be subsumed with the existing Billing and Settlement system of the Petitioner and PVVNL and said account shall be given priority in settlement over the billing and settlement of the account of energy distributed (supplied) by the Petitioner and PVVNL.

- v. **RPO Treatment for P2P Transactions:** At serial no. 12 of the table in Para 21 of the Petition, the Petitioner has sought the approval regarding the RPO Treatment for P2P Transactions. The Commission observes that the provision/guidelines in this regard as specified in Clause 13 of the DERC P2P Guidelines, should be followed by the Petitioner.
- vi. **Time Block for Transaction:** At serial no. 14 of the table in Para 21 of the Petition, the Petitioner has sought the approval of Time Block for inter-state P2P energy Transactions which is in deviation both to the respective provisions in UPERC Regulations and DERC P2P Guidelines. Therefore, in order to facilitate the seamless undertaking of the inter-stat P2P energy transactions, the Petitioner shall devise uniform Time Block with PVVNL and the same shall be informed by the Petitioner to this Commission on reaching the consensus and devising the said uniform mechanism.
- vii. **Restriction on Energy unit trade w.r.t. the capacity of the solar plant:** At serial no. 15 of the table in Para 21 of the Petition, the Petitioner has sought approval regarding restriction on Energy unit trade w.r.t. the capacity of the solar plant. The Commission notes that, as per the DERC P2P Guidelines "*P2P Prosumer shall not transact energy more than 20% CUF of installed Capacity of Renewable Energy System per day*". However, as these Guidelines are applicable only for P2P energy transactions within the same Discom, these need to be harmonised with the goal of P2P Green energy pilot Project which also encompasses the P2P energy transactions in intra-Discoms and inter-state Discoms. Further, the UPERC Guidelines do not restrict the quantum of the P2P energy transactions to the extent of 20% CUF of the Solar Plant. Considering these variations in the provisions in guidelines of UPERC and DERC and the need to promote the generation and consumption of renewable energy within the State of Delhi, this Commission is of the view to lift the restriction of transacting capacity of 20% CUF of the Solar plant in case of Solar energy. Therefore, if a prosumer of P2P energy transaction is able to generate and sell the solar energy exceeding 20% CUF, it should be allowed to do so without any restriction as prayed by the Petitioner, which is also in consonance with the UPERC Guidelines.

viii. **Under injection and Under-drawl of energy by P2P Prosumer and Consumer:**

At serial no. 16 & 17 of the table in Para 21 of the Petition, the Petitioner has sought the approval for the non-application of the DERC P2P Guidelines with respect to payments against under-injection by the Prosumer and under-drawl by the Consumer in case of inter-state P2P transactions. The Commission notes that inter-state P2P transactions involve Consumers and Prosumers governed by different regulations and norms of the respective states, including with regard to under-injection and under-drawl, of energy. However, with a view to promote the generation and consumption of renewable energy, this Commission is of the considered view that any default on account of under-injection/under-drawl of energy under P2P transactions, either by Prosumer/Consumer ought to be appropriately addressed through a suitable payment (penalty) mechanism against the defaulting party. The Commission is also conscious of the fact that such mechanism can be laid down and implemented only based on the uniform provision for the same in the UPERC Guidelines and the existing DERC P2P Guidelines, which unfortunately is not the case before this Commission.

Therefore, the Commission consider it appropriate to admit the request of the Petitioner to defer the implementation of such a mechanism during the pilot period for P2P transactions. However, as observed hereinabove, the admission of this request by this Commission can help execution of the P2P energy transactions only when PVVNL also waive such payments (Penalties) during the Pilot Period and therefore the Petitioner shall ensure the said waiver by the PVVNL through mutual understanding and acceptance by the UPERC. At the same time, the Commission observes that the said mechanism is an essential component of all P2P transactions, including intra Discom and inter-state transactions, in order to prevent misuse or exploitation of the P2P platform by unscrupulous Prosumer or Consumer. Therefore, this Commission observes that there is need that the Petitioner put in place an appropriate mechanism for payment (penalty) against the defaulting Consumer or Prosumer responsible for under-injection and under-drawl in P2P transactions post the implementation of pilot period for P2P transactions within two Discoms in the state of Delhi and other state.

15. In view of the above discussion and observations, the Commission hereby Order and permit the Petitioner to undertake Peer-to-Peer (P2P) energy transactions within its licensed area (i.e. when the prosumers and consumers are within the licensed area of the Petitioner) and the intra-State Discom P2P energy transactions (i.e. involving the Petitioner and other Discoms within the NCT of Delhi)and inter-state P2P energy transactions of the Renewable Energy in accordance with the DERC (Peer to Peer Energy Transaction) Guidelines, 2024, with the deviations sought by

the Petitioner in the present Petition and approved by this Commission to the extent of and in the manner discussed hereinabove and as summarily stated herein below:

- a) This Order shall be applicable only for the pilot period i.e. upto six months.
- b) The P2P energy trading platform being commercial trading platform for the consumers and prosumers, both shall be at liberty to decide the rate for energy trading among themselves as the commercial transactions.
- c) The transaction charges of ₹0.42/kWh (inclusive of GST), to be borne and shared equally between the Prosumer and the Consumer, are approved for P2P transactions undertaken within the licensed area of the Petitioner (i.e. same Discom), between intra-State Discoms between inter-state Discoms P2P energy transactions. The said transaction charges shall be recovered respectively by the Petitioner and other Discom (of NCT of Delhi in case of intra-Discom P2P energy transaction and PVVNL in case of inter-state Discom P2P energy transaction) from consumer and prosumer @₹0.21/kWh each through its/their billing and settlement system. The said charges shall be treated as non-tariff income while determining the ARR/true-up of the Petitioner. However, the Petitioner shall be allowed to claim the capital expenditure towards the cost of development of the P2P platform, if any, along with the recurring annual operational expenses, if any, on actual basis subject to the prudence check by the Commission in its ARR. The transaction charges applicable post the pilot period shall be reviewed and determined separately by this Commission ensuring the adoption of competitive procedure, exercising prudent financial principles and in accordance with DERC P2P Guidelines as amended from time to time.
- d) No wheeling charges shall be applicable for P2P energy transactions undertaken (i) within the licensed area of the Petitioner (i.e. same Discom), (ii) between intra-state Discoms and (iii) between inter-state Discoms upto territorial limit of NCT of Delhi. With respect to inter-State P2P transactions, this Commission also clarifies that it does not have regulatory jurisdiction to regulate wheeling charges or related aspects beyond the territorial limits of the NCT of Delhi. Therefore, the wheeling charges for the wheeling of electricity by PVVNL beyond the territorial limits of NCT of Delhi shall be governed by the applicable regulations and guidelines of the UPERC.
- e) The claim of recovery of wheeling charges at Sr. No. 10 of the table in the present Petition by the Petitioner for intra-state Discoms and inter-state Discoms P2P transactions are not accepted by this Commission.
- f) Settlement and billing shall be governed in accordance with the provisions of the DERC P2P Guidelines, 2024, and the Petitioner is directed to comply with

the same. Further, in respect of intra-state Discoms P2P energy transactions, the Petitioner shall devise the billing and settlement mechanism with the other Discom of NCT of Delhi which will form part of existing billing and settlement system of the Petitioner and the said other Discom. For the inter-state Discoms energy transactions, the Petitioner and PVVNL shall make the provision in the P2P platform through which the settlement of the account of inter-state P2P energy transactions shall be subsumed with the existing Billing and Settlement system of the Petitioner and PVVNL. Further, billing for intra-state Discoms and inter-state Discoms P2P energy transactions shall be done by the Petitioner in priority to the billing for electricity distributed/supplied by the Petitioner to its Consumers.

- g) In respect of RPO treatment of P2P energy transactions, the provision/guidelines in this regard as specified in Clause 13 of the DERC P2P Guidelines, should be followed by the Petitioner.
- h) In order to facilitate the seamless undertaking of the inter-state P2P energy transactions, both the Petitioner and the PVVNL shall devise uniform Time Block with mutual consent and the same shall be informed by the Petitioner to this Commission on reaching the consensus and devising the said uniform mechanism.
- i) The restriction on P2P transactions upto 20% CUF of installed capacity of solar plant system as laid down in the existing DERC P2P Guidelines is hereby relaxed and Prosumers in the licensed area of the Petitioner shall be permitted to transact P2P energy transactions without any limitations.
- j) The provision under DERC P2P Guidelines regarding the under injection and under drawal is relaxed and accordingly the payment (penalty) for the under injection of energy by the prosumer and under-drawl of energy by the consumer under P2P transactions is waived during the pilot period.
- k) The waiver of charges applicable in the case of inter-state power trading as mentioned in para 25(f) of the present Petition and para 2(xvii)(f) in this Order can be only considered by the Central Electricity Regulatory Commission (CERC).

16. Petition is disposed of in terms of the above.

Sd/-
(Surender Babbar)
Member

Sd/-
(Ram Naresh Singh)
Member