

Delhi Electricity Regulatory Commission
Viniyamak Bhawan, C-Block, Shivalik, Malviya Nagar, New Delhi-110017

GUIDELINES

Dated: 24/06/2024

F.3(664)/Tariff-Engg./DERC/2021-22/7286- The Delhi Electricity Regulatory Commission (DERC), in exercise of the power conferred Section 61(h) and Section 86(1)(e) of the *Electricity Act, 2003* (Act 36 of 2003), Regulation 14 of *Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014* and all other powers enabling it in this behalf, hereby issues *Delhi Electricity Regulatory Commission (Peer to Peer Energy Transaction) Guidelines, 2024* (hereinafter referred to as “the Principal Guidelines”):

1.0 Short Title and Commencement:

- (1) These Guidelines may be called *Delhi Electricity Regulatory Commission (Peer to Peer Energy Transaction) Guidelines, 2024*.
- (2) These Guidelines shall come into effect from the date of uploading on DERC website and shall be in force till further amendments thereof.

2.0 Definition

- (1) “*Actual Injection*” in a time block means the actual electricity injected by the Prosumer, measured by the energy meters at specified point of injection;
- (2) “*Actual Transaction*” means actual exchange of energy (kWh) between a Prosumer and a Consumer as measured at a specified point of drawl for a quantum of energy (kWh) for any time block during a day;
- (3) “*Any other Technology*” means any technology or methodology that can be used to record all transaction data for enabling Peer-to-Peer Transactions.
- (4) “*Blockchain*” means a special technology for Peer-to-Peer Transaction Platform that uses decentralized storage to record all transaction data.
- (5) “*Energy Drawl*” or ‘*Actual drawl*’ in a time block means the electricity drawn by a consumer measured by the Energy meter.
- (6) “*Nth Day*” means day on which energy is transacted on Peer to Peer (P2P) platform.
- (7) “*Nth Month*” means the Month in which Distribution Licensee raises the bill of P2P participants for energy transacted on P2P platform.
- (8) “*Participant*” means a prosumer or a consumer who has registered with the Distribution Licensee to sell or buy surplus Renewable Energy through P2P transaction.
- (9) “*Peer to Peer Metering arrangement*” means arrangement whereby surplus energy generated/injected from a Renewable Energy System or Battery Energy Storage System (BESS) charged through Renewable Energy System is exported to the grid through Net Meter.

- (10) “*Peer-to-Peer (P2P) Platform*” means electronic platform provided by the Service Provider/ DISCOM on which P2P transactions occurs.
- (11) “*Peer-to-Peer (P2P) Transaction*” means a transaction, based on interconnected platform that serves as marketplace wherein Consumers and Prosumers meet to transact electricity through Blockchain or any other technology.
- (12) “*Prosumer*” means a consumer of the Distribution Licensee who consumes Electricity from the Grid and can also inject Renewable Energy into the Grid using the same network.
- (13) “*Registration Charges*” means one-time fee to get registered with the licensee for P2P transactions.
- (14) “*Renewable Energy System*” means the system to generate electricity from such source(s) which are recognized as renewable energy source(s) by Ministry of New and Renewable Energy (MNRE) or any other agency as may be notified by Government of India/Commission;
- (15) “*Scheduled Transaction*” means schedule for transaction for exchange of energy (kWh) between a Prosumer and a Consumer, from a specified point of injection to a specified point of drawl for a quantum of energy (kWh) for any time block during a month;
- (16) “*Scheduled injection*” for a time block or any period means the schedule of injection in MW or MWh by a Prosumer.
- (17) “*Service Provider(s)*” means an agency(s) that may be employed by Distribution Licensee to provide P2P transaction services within its Distribution area.
- (18) “*Smart meter*” means a AC static Watt-hour meter with time of use registers, internal connect and disconnect switches with two-way communication capability which is designed to measure the flow of forward (import) or both forward (import) and reverse (export), store and communicate the same along with other parameters as defined in relevant standard. The Smart Meter can be remotely accessed for collecting data/events, programming for select parameters for supplying electricity to a premises.
- (19) “*Transaction Charge*” means fees charged by Service Provider/ DISCOM for enabling P2P energy transaction on P2P platform, as approved by the Commission.
- (20) “*Transaction Price*” means mutually agreed price between Prosumers and Consumers, for energy transacted on P2P platform.

Save as aforesaid and unless repugnant to the context or the subject-matter otherwise requires, words and expressions used in these Guidelines and not defined, but defined in the Act, or the Regulations i.e. *DERC (Supply Code & Performance Standards) Regulations, 2017, DERC (Terms and Conditions for determination of Tariff) Regulations, 2017, DERC (Net Metering for Renewable Energy) Regulations, 2014 etc.*, made there-under by the Commission, shall have the meanings assigned to them respectively in the Act or the Regulations.

3.0 Introduction

- (1) To promote the use of Renewable Energy, promotion of embedded Generation within the Distribution Network, generation of additional avenues of income to Prosumer through innovative technologies & net saving to the consumer, DERC taking a progressive view, provides flexibility to Prosumers and eligible consumers to mutually sell and purchase Electricity through Peer to Peer Transactions in a secure and reliable way.

4.0 Determination of Transaction charges

Delhi DISCOMs shall file Petition under Delhi Electricity Regulatory Commission (Peer to Peer Energy Transaction) Guidelines, 2024 and subsequent amendments thereof, for determination of Transaction charges, if any, for enabling Peer to Peer Transactions.

5.0 Eligibility

- (1) These Guidelines shall apply to the Prosumers, except Ground Mounted Projects, and Consumers who opt to transact energy among themselves through an online Platform of Service Provider(s) or through Distribution Licensee within its area of supply.
- (2) Sanctioned Load/ Contract Demand of Prosumer & consumer under Peer to Peer Metering Arrangement shall be less than or equal to 200 kW or equivalent kVA.
- (3) The Capacity of Renewable Energy System installed or proposed to be installed at Prosumer's end for P2P Transaction shall be capped at 500% of its Sanctioned Load.
- (4) Consumer and Prosumer shall avail benefits of any one of the Virtual Net Metering, Group Net Metering and P2P Metering Arrangement at any point of time.

Provided that Eligible consumer and Prosumer can switch from Virtual Net Metering or Group Net Metering to P2P Energy Transaction arrangement or vice-versa once in every financial year.

Provided further that Consumer opting for P2P Transactions shall deemed to have terminated their Virtual Net Metering or Group Net Metering Connectivity Agreement, if applicable.

- (5) The Renewable Energy System or Battery Energy Storage System (BESS) charged through Renewable Energy System shall be governed as per provisions of *DERC (Net Metering) Regulations, 2014* and comply with the standards and technical specifications prescribed by relevant authority from time to time.

6.0 Metering Arrangement under P2P Transaction

- (1) To avail P2P Transaction services, Prosumer and Consumer shall have Time of Day (ToD) compliant Energy meter or Smart Meter installed in their premises. If ToD compliant energy meter / Smart Meter, as the case may be, is not installed in their premises, then Prosumer or Consumer shall install ToD compliant Energy meter or Smart Meter for enabling P2P Transaction. The procedure & charges for Metering under Peer to Peer

Energy Transaction shall be as per *DERC (Supply Code and Performance Standards) Regulations, 2017* & subsequent Amendment thereof.

- (2) Service Provider shall utilize the data of Distribution Licensee's meters to capture P2P transactions for the purposes of billing and also to reconcile the schedule transaction with the actual transactions on P2P platform for which they may enter into separate agreement with DISCOMs.

7.0 Procedure for Registration under P2P Transaction

- (1) Any Consumer, Prosumer already registered with DISCOM under Net Metering /Group Net Metering /Virtual Net Metering scheme and Prosumer who have installed Renewable Energy system upto their Sanctioned Load / Contracted Demand shall submit basic information online/ offline with Distribution Licensee/ Service Provider for registration in the format enclosed herewith as Annexure-I.

Provided Time of Day (ToD) compliant Energy meter or Smart Meter is already installed in such Consumer/ Prosumer premises.

- (2) Prosumer who have installed Renewable Energy system beyond 100% upto 500% of their Sanctioned Load / Contracted Demand shall submit information with Distribution Licensee/ Service Provider for registration in the format enclosed herewith as Annexure-II.
- (3) Within 15 days of submission of registration form, Distribution Licensee shall check Network compatibility for connectivity of Prosumer with its Network.
- (4) In case of deficiency/ rejection of request, Distribution Licensee shall convey reasons to applicant within 5 days of submission of Registration form.
- (5) For resubmitted application, Distribution licensee shall convey acceptance/ reasons to applicant within 5 days of re-submission of Registration form.
- (6) In case of acceptance from Distribution Licensee / its Service Provider, the P2P participant shall be registered on P2P platform within 5 days of acceptance of Registration form after that the P2P transactions shall be carried out in accordance with P2P Guidelines.
- (7) The applications for roof top solar photo voltaic systems upto 10 kW capacity, complete in all respects shall be deemed to have been accepted without requiring technical feasibility study and any commensurate enhancement of the sanctioned load of the consumer, as may be required, shall be carried out by the distribution licensee.

8.0 Scheduling for P2P Transaction

- (1) For P2P Transactions, 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.

Provided that P2P Prosumer shall not transact energy more than 20% CUF of installed Capacity of Renewable Energy System per day.

Provided further that if no schedule is submitted by consumer, then the energy injected by him on Nth day shall be adjusted as per Net Metering Arrangement of Prosumer.

9.0 Procedure for Billing and Energy Accounting for P2P Transaction

- (1) Billing cycle of P2P transactions shall be in sync with the billing cycle of Distribution Licensee.
- (2) Service Provider employed by DISCOM or DISCOM themselves shall use time block-wise meter data for each day for both P2P Prosumer and P2P Consumer for actual energy generated and consumed respectively required for billing.
- (3) Distribution Licensee or Service Provider employed by DISCOM shall generate the bills of P2P participants on the basis of following:

Sr. No.	Particulars	Charges/ Settlement
1.	Charges for Transaction on P2P platform	
(i)	Wheeling Charges	Nil for both Prosumers and Consumers
(ii)	Cross Subsidy Surcharge	Nil for both Prosumers and Consumers
(iii)	Additional Surcharge	Nil for both Prosumers and Consumers
(iv)	Charges for difference between schedule and actual P2P transaction	
a)	Under injection of energy by P2P Prosumer	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.
b)	Over injection of energy by the Prosumer	Settlement of excess energy shall be done as per the <i>DERC (Net Metering for Renewable Energy) Regulations, 2014</i> with regard to carry forward of surplus energy to next month(s). If no schedule is submitted by Prosumer, then the energy injected by him on N th day shall be adjusted as per Net Metering Arrangement of Prosumer.
c)	Under-drawl of energy by P2P Consumer	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

Sr. No.	Particulars	Charges/ Settlement
		absolute difference of Landed Cost of Electricity at DISCOM periphery as per Tariff Schedule, and mutually agreed price on P2P Platform.
d)	Over-drawl of energy by P2P Consumer	No Penal Charges. However, settlement shall be done as per Note below.
2.	Energy Charge, Fixed charge, PPAC, RA Surcharge, Pension Trust Surcharge and Electricity Tax (For energy supplied by Distribution Licensee)	As per applicable DERC Tariff schedule
3.	Mutually agreed Transaction Price	Dynamic Price agreed between P2P Prosumers and P2P Consumers, for energy transacted on P2P platform.
4.	Transaction Charge (inclusive of GST) per kWh or per Transaction to be paid by Consumer & Prosumer	Transaction Charges shall be determined by the Commission based on the Petition filed by DISCOMs as mandated under Regulations.

Note: Settlement shall be done first towards the energy transacted on P2P Platform and then towards the energy supplied by Distribution Licensee. In the event of Total Demand (P2P Transaction + Purchase from Distribution Licensee) exceeds the contracted demand, penalty shall be imposed as provisions of DERC Tariff Order and Supply Code Regulations 2017 as amended from time to time.

- (4) The bill shall be raised for Total Demand (P2P transaction + purchase from Distribution Licensee) by the distribution Licensee as per the provisions of Tariff Order and Supply Code.
- (5) Payments made by P2P consumers shall be settled in the following order of priority:
 - a) energy transacted by them on the P2P platform.
 - b) transaction charges.
 - c) the energy supplied by the distribution licensee.

10.0 Default in Payment for P2P Transaction

- (1) The P2P Participant shall clear all the dues for the energy transacted on P2P platform as per due date. P2P participant shall be deactivated from P2P platform, if the dues are not paid.
- (2) In the event of default in payment for energy supplied by Distribution Licensee, appropriate action shall be taken as per *DERC (Supply Code & Performance Standards) Regulations, 2017* as amended from time to time.

11.0 Dispute Resolution for P2P Transaction

Any dispute in billing of Prosumer & Consumer shall be referred to corresponding Consumer Grievance Redressal Forum (CGRF) and dealt as per the provisions of *DERC (Forum for Redressal of Grievances of the Consumers and Ombudsman) Regulations, 2018* as amended from time to time.

12.0 Applicability of other charges for P2P Transaction

- (1) The Renewable Energy system under Peer-to-Peer Transaction shall be exempted from wheeling, banking, cross subsidy and other charges till 31st March 2027, or as decided by the commission by an order, as may be applicable.
- (2) The Distribution Licensee shall facilitate and bear the capital expenditure on account of Service Line cum Development (SLD) and network augmentation towards Renewable Energy System registered under P2P Transactions and the same shall be pass through in Aggregate Revenue Requirement (ARR) for the schemes implemented upto 31st March 2027 subject to prudence check by the Commission.

13.0 Renewable Purchase Obligation for P2P Transaction

The quantum of electricity generated under these Guidelines shall qualify towards Renewable Purchase Obligation (RPO) compliance for respective Distribution Licensee if Consumer is not an Obligated Entity.

14.0 Powers to relax

The Commission may by general or special guideline, for reasons to be recorded in writing may relax any of the provisions of these Guidelines on its own motion or on an application made before it by an interested person.

15.0 Powers to amend

The Commission may by general or special guideline, for reasons to be recorded in writing from time to time add, vary, alter, suspend, modify, amend or repeal any provision of these Guidelines.

Date: 24/06/2024

Place: Delhi

**Sd/-
Rajesh Dangi, Secretary**

Annexure-I

Application Form Number.....
(Existing Consumer/Prosumer)

APPLICATION FOR REGISTRATION FOR P2P ENERGY TRANSACTIONS

1	Name	
2	Address for Communication	
3	Consumer Account No.	
4	Telephone No.	
5	E-mail	
6	Renewable Energy Source (Wind , Solar etc.)	
7	Category of Prosumer (Domestic / Non Domestic/Commercial etc. – specify)	
8	Sanctioned Load	
9	Capacity of Renewable Energy System to be connected	
10	Whether the Consumer is under ToD billing system (Yes/ No)	

Place:
Delhi:

Signature of Consumer

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Acknowledgement

Received the application for registration of the scheme for Renewable Energy System

Name Consumer Account No.
Date
Registration Number.....
Renewable Plant Capacity

Name of Officer
Seal

Designation of Officer
Signature

Annexure-II

Application Form Number.....
(New Consumer/Prosumer)

APPLICATION FOR REGISTRATION FOR P2P ENERGY TRANSACTIONS

1	Name	
2	Address for Communication	
3	Consumer Account No.	
4	Telephone No.	
5	E-mail	
6	Renewable Energy Source (Wind , Solar etc.)	
7	Category of Prosumer (Domestic / Non Domestic/Commercial etc. – specify)	
8	Sanctioned Load	
9	Capacity of Renewable Energy System to be connected	
10	Whether the Consumer is under ToD billing system (Yes/ No)	
11	Technical specifications and other particulars of Renewable Panel, Grid Tied Inverter and Interlocking System etc. proposed to be installed – whether attached (Yes/No)	
12	Technical specifications and other particulars of Renewable Energy meter and Net Meter to be installed – whether attached (Yes/No)	
13	Whether Consumer opts to purchase meter himself or from Distribution Licensee	
14	Drawings for installing the Renewable Energy System – whether attached (Yes/No)	
15	Proposed date of completion of the installation	

Place:
Delhi:

Signature of Consumer

Acknowledgement

Received the application for registration of the scheme for Renewable Energy System

Name Consumer Account No.
Date
Registration Number.....
Application Fee Paid or Not
Renewable Plant Capacity
Mode of payment (Cheque / DD/NEFT/RTGS).....
Details of Cheque/DD/RTGS/NEFT.....

Name of Officer
Seal

Designation of Officer
Signature