No.13/05/2023-RCM/NRE Government of India Ministry of Power RCM Division NRE Section

Shram Shakti Bhawan, Rafi Marg, New Delhi, 25th October 2023

To The Chairman & Managing Director, Grid India

Subject: Approval of Procedure for Implementation of Uniform Renewable Energy Tariff.

Sir,

I am directed to refer to the above subject and to enclose herewith the Procedure for Implementation of Uniform Renewable Energy Tariff duly approved by the **Hon'ble Minister** for Power and New & Renewable Energy for further necessary action at your end.

Yours faithfully,

(Suresh Annepu) Director

Tel: 011-2371 7737

PROCEDURE FOR IMPLEMENTATION OF UNIFORM RENEWABLE ENERGY TARIFF

In compliance of
Ministry of Power, Government of India
Electricity (Amendment) Rules, 2022,
Notified on 29th Dec 2022



OCTOBER 2023
GRID CONTROLLER OF INDIA LIMITED

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ABBREVIATION

| IA | Implementing Agency |
|--------|---------------------------------|
| DISCOM | Distribution Licensee |
| EP | End Procurer |
| IP | Intermediary Procurer |
| PPA | Power Purchase Agreement |
| PSA | Power Sale Agreement |
| RE | Renewable Energy |
| URET | Uniform Renewable Energy Tariff |

1. DEFINITIONS AND TERMS INVOLVED.

- 1. **Act-** means the Electricity Act, 2003
- 2. Central Pool-shall be pool of category specific power from Inter State Transmission System connected renewable energy sources being procured by the designated intermediary procurers under section 63 of the Act and as per provisions of bidding guidelines notified by the Central Government, from time to time for supply to the end procurers of more than one State so that such power from renewable energy sources can be supplied to all end procurers from the concerned pool at uniform tariff under these procedures..
- 3. **End Procurer**—shall be the persons to whom a license to undertake distribution and retail supply of electricity has been granted under section 15 of the Act or is designated by the State Government to procure power on behalf of the licensees undertaking distribution and retail supply of electricity or open access consumer.

Note: For the Purpose of this procedure, Deemed distribution licensees will also be considered as End Procurer

- 4. **Implementing Agency** means the Central Agency as notified by the Central Government from time to time for the implementation of "uniform renewable energy tariff for central pool" under these procedures.
- 5. **Intermediary Procurer**-shall be the company, designated by an order made by the Central Government under Electricity (Amendment) Rules 2022.
- 6. **Renewable Energy**—shall be the electricity generated from renewable energy sources.
- 7. **Renewable Energy Sources** shall be hydro, wind, solar, bio-mass, bio-fuel, bio-gas, waste including municipal and solid waste, geothermal, tidal, forms of oceanic energy, or combination thereof, with or without storage and such other sources as may be notified by the Central Government from time to time;
- 8. **Uniform Renewable Energy Tariff** -shall be the tariff, computed by Implementing Agency separately on a monthly basis for each category of central pool specified under clause 3.1 of this procedure, at which the intermediary procurer will sell power from renewable energy from that central pool to all the end procurers under these procedures.
- 9. **Trading Margin** –shall be the margin levied by the Intermediary Procurer as per respective Power Sale Agreements executed with End Procurer.

2. **OUTLINE**:

- 2.1. Ministry of Power has notified Electricity (Amendment) Rules 2022 for, inter-alia, implementation of uniform renewable energy tariff on 29th Dec 2022. Under these rules, an Implementing Agency shall compute 'uniform renewable energy tariff', on a monthly basis for each category of central pool like that Solar Power Central Pool, Wind Power Central Pool, etc. at which the intermediary procurer shall sell power from renewable energy from that central pool to all the end procurers. As per proviso 2(ac) of the Electricity (Amendment) Rules 2022, 'Implementing Agency' has been defined as the Central Agency, as notified by the Central Government from time to time, for the implementation of 'uniform renewable energy tariff for central pool'. MoP vide order dated 17.03.2023 has notified Grid-India as the Implementing Agency for the implementation of 'uniform renewable energy tariff for central pool'. This procedure is made in compliance to the proviso 19(n) of the Electricity (Amendment) Rules 2022 for implementation of uniform renewable energy tariff.
- 2.2. Words and expressions used in these Procedures and not defined herein but defined in the Act, Electricity Rules or any other Rules issued by the Central Government will have the same meaning assigned to them respectively in the Act, the Electricity Rules or any other Rules issued by the Central Government.

3. GENERAL

General Conditions of Electricity (Amendment) Rules,2022 for Uniform Renewable Energy Tariff for Central Pool.

- 3.1. There will be a different category of central pool for each of the following sectors of the renewable energy sources such as
 - i. Solar Power Central Pool
 - ii. Wind Power Central Pool
 - iii. Hydro Power Central Pool
 - iv. Solar-Wind Hybrid Central Pool
 - v. Round the Clock Power (Solar Wind Hybrid + Storage) Central Pool
 - vi. Peaking Power (Solar Wind Hybrid + Storage) Central Pool
 - vii. Firm and Dispatchable RE Power
 - viii. Any other new pool as specified by the Central Government

Note:

1. Renewable Energy Sources definition will be as per the definition notified by the Central Government from time to time

- 2. There may be more than one category of Central Pool for Solar-Wind Hybrid Central Pool, Round the Clock Power (Solar Wind Hybrid + Storage) Central Pool and Peaking Power (Solar Wind Hybrid + Storage) Central Pool depending upon the technology, generation mix, etc. as decided by the Central Government.
- 3.2. The start date of each category of central pool will be separately notified by Central Government. The duration of the central pool will be for five years. All the capacity for which PSA is signed within this duration of 5 years will be part of the Central Pool, provided, other eligibility conditions are fulfilled. After the end of the duration of five years from the start date of the pool, no new capacity will be added to the pool. All such capacity will remain part of the pool till the expiry of their respective Agreement. The URET of this pool will be calculated considering energy from such capacities only.

Further, after the end of five years from the start date of the central pool of any renewable energy source, a new Central Pool of that renewable energy source maybe formed. All new participants of the pool may be added in the new pool.

Illustration:

Say, start date of Solar Central Pool is 01.01.2024. Then, the Solar Power Capacity under the URET mechanism, whose PSA date lies between 01.01.2024 and 31.12.2028, shall be part of this pool. On 31.12.2028, this Central Pool will be freezed and the pool will remain in existence till the PSAs of all the participants of the pool expires. The URET for this pool will be calculated based on the data of the participants of this pool only. Any Solar Power Capacity, whose PSA is signed on or after 01.01.2029 will be part of a new Solar Central Pool, having capacity addition for further 5 years' duration. The URET for this new pool will be calculated separately.

- 3.3. The Uniform Renewable Energy Tariff for Central Pool (URET) under these procedures will be applicable only to the end procurers for their contracted capacity which forms part of central pool..
- 3.4. The Uniform Renewable Energy Tariff for Central Pool (URET) will be applicable only to power procured by the End Procurer and will not in any manner have any implication on the renewable energy tariff discovered under the respective tariff based competitive bidding process and payable to renewable energy generators by the Intermediary Procurer as per the PPA.
- 3.5. An IP will ensure that the bidding documents including PPA and PSA, have suitable provisions aligned with the relevant proviso of Electricity (Amendment) Rules 2022 pertaining to the Uniform RE Tariff and these procedures. Further, respective IP will also

- ensure that there is no deviation from the Standard Bidding Guidelines (SBG) as issued by the Central Government from time to time.
- 3.6. In case of any deviation from SBG, the IP inviting bids shall obtain all necessary approvals including approval of Hon'ble Central Commission or Central Government (as applicable) before commissioning and supply of Power from such capacity failing which such capacity shall not form part of the pool till the time of approval of such deviation(s).
- 3.7. The bilateral scheduling from the renewable energy generators shall be done directly to the end procurers as per the power supply agreement.
- 3.8. The scheduling, accounting, deviation settlement mechanism of the renewable sources under this mechanism will be as per extant regulations of the Appropriate Commission.
- 3.9. The sale of electricity due to excess generation/early commissioning shall be governed by the respective PPA/PSA, Standard Bidding guidelines and as per extant Rules/Regulations.
- 3.10. In case the End Procurer does not schedule electricity from generating stations, it shall be treated as per provisions of the extant Rules/Regulations.
- 3.11. The Implementing Agency will compute the Uniform Renewable Energy Tariff for selling of electricity to end procurer by intermediary procurer, on a monthly basis, as per the methodology specified at Clause 10 of this procedure.
- 3.12. The intermediary procurer will raise the bill, on a monthly basis, as per the uniform renewable energy tariff computed by the Implementing agency for the relevant month and in accordance with the terms of the respective Power Sale Agreement.
- 3.13. The Implementing Agency shall also issue the monthly account statements for adjustment of any surplus or deficit tariff among the intermediary procurers and the Intermediary Procurer shall within fifteen days make the payment as per the monthly account statements to the other intermediary procurer, if the payment is due to it. This adjustment will be carried out separately for each Central pool as identified under these Procedures.
- 3.14. In case of non-payment by the Intermediary Procurer of its due as per clause 3.13 above, within the stipulated period of fifteen days, the carrying cost at the rate of State bank of India Marginal Cost of Funds based Lending Rate (1 Year tenor) plus five percent will be payable for the period of delay.
- 3.15. The trading margin shall be payable by the end procurer to the intermediary procurer.
- 4. ELIGIBILITY CRITERIA FOR ENTITIES TO BECOME ELIGIBLE UNDER CENTRAL POOL

4.1. Generator/Producer's Capacity

Part or Full capacity of a Generator of the Renewable Energy Source as defined in this procedure will be eligible to be a part of the Central Pool if it fulfills <u>all</u> the following conditions:

- 4.1.1. Generator/Producer will be based on a Renewable Energy Source (RESs); and
- 4.1.2. Generator/Producer will be connected at Inter State Transmission System; and
- 4.1.3. Energy from the Generator/Producer will be procured by the designated intermediary procurers under section 63 of the Act and as per provisions of bidding guidelines notified by the Central Government from time to time,; and
- 4.1.4. The PSA for such capacity of the Generator with the Intermediary Procurer has been done after the start date of the respective Central Pool.

4.2. End Procurer

An End procurer as defined in this procedure will be eligible to be a part of the Central Pool if it fulfills the following condition:

- 4.2.1. It has a license to undertake distribution and retail supply of electricity granted under section 15 of the Act or is designated by the State Government to procure power on behalf of the licensees undertaking distribution and retail supply of electricity AND it must obtain approval from the relevant State Commission before procuring electricity from a pool at URET, OR
- 4.2.2. It is an open access consumer.

4.3. **Intermediary Procurer**

An Intermediary Procurer as defined in this procedure will be eligible to be a part of the Central Pool if it fulfills the following condition:

- 4.3.1. The Intermediary Procurer is designated by an order made by the Central Government as an intermediary between the end procurer and the generating company to purchase electricity from generating companies and resell it to the end procurer by aggregating the purchases.
- 4.3.2. The Intermediary Procurer Company should have a valid trading license.

5. FUNCTIONS AND ROLE OF IMPLEMENTING AGENCY

Following are the functions of Implementing Agency:

- 5.1. The Implementing Agency will compute the uniform renewable energy tariff on a monthly basis, based on information submitted by the Intermediary Procurer.
- 5.2. Implementing Agency will issue the monthly account statements for adjustment of any surplus or deficit tariff among the intermediary procurers, based on information submitted by the Intermediary Procurer.
- 5.3. The Implementing Agency will publish the relevant details including the monthly accounts statements, on its website and will have no liability except for computing tariff on a monthly basis for sale of power from the central pool as per these procedures and will be kept indemnified.
- 5.4. The procedure for implementation of uniform renewable energy tariff for central pool is issued by the implementing agency, with the approval of the Central Government. Any modifications in these procedures may be made with the approval of the Ministry of Power.

6. REGISTRATION OF INTERMEDIARY PROCURER:

To participate in the mechanism of Uniform Renewable Energy Tariff as per the Electricity (Amendment) Rules 2022, the Intermediary Procurer will register with the Implementing Agency, which will be a one-time exercise.

Following are the steps to be followed by Intermediary Procurer for getting registered with the Implementing Agency:

- 6.1. Submit the general details of Intermediary Procurer as per format-A of this procedure.
- 6.2. Submit Copy of order issued by the Central Government designating it as an Intermediary Procurer.
- 6.3. Copy of valid trading license.
- 6.4. Submit the declaration available at Format- B of these procedures.
- 6.5. The details of each scheme needs to be submitted to Implementing Agency by sharing all relevant PPA/PSA. The Intermediary Procurer will also submit the approval from the Appropriate Commission allowing the end Procurer to procure electricity through URET mechanism. The details of scheme along with the associated information will be submitted in the excel form as per the Format C.

7. COMPUTATION OF UNIFORM RE TARIFF FOR CENTRAL POOL (URET)

Computation and declaration of URET for each central pool as mentioned in para 3.1 above involves submission of data by the Intermediary Procurer, verification of this data by RLDCs and calculation of the Tariff by the Implementing Agency.

7.1. Submission of Data:

- 7.1.1.Intermediary Procurer (IP) shall submit the schedule energy details of all the relevant PPAPSA as per the details mentioned in regional energy account (REA) published by the respective RPCs where the generator is located to the Implementing Agency with a copy to the Respective RLDC within 4 days of publication of REA.
- 7.1.2. The data will have the following information: Capacity Contracted, Tariff as per PPA and PSA, Category of Source Pool or any other details as sought by Implementing Agency from time to time. In case of Energy sold from the Central Pool to entities who are not end Procurers the Intermediary Procurer will also submit its detail along with the price. The data format for the collection of data for a particular category of Pool is attached at Format –D of these procedures.
- 7.1.3. The Intermediary Procurer will submit PPA and PSA for the capacity which is part of the Central Pool.
- 7.1.4.In case of addition of new Capacity (including the part capacity) to the Central Pool, the Intermediary Procurer will submit the related PPA and PSA to the Implementing Agency. The Energy transaction data from this additional capacity will be submitted as per the routine procedure, i.e., along with the data of the next month.
- 7.1.5. If there is modification in the Central Pool due to change in the PPA /PSA affecting the contracted capacity or change in End Procurer, the Intermediary Procurer shall submit the related PPA and PSA to the Implementing Agency as per the routine procedure, i.e., along with the data of the next month.

7.2. Data verification by RLDC:

- 7.2.1. The data submitted by the Intermediary Procurer will be verified by the respective RLDC where the generator is geographically located within 3 days and submit the details to Intermediary Procurer.
- 7.2.2.In case of any discrepancy observed or any further clarification/details required by the respective RLDCs, the same shall be informed to Intermediary Procurer within 2 working days after the receipt of the data by the concerned RLDCs.
- 7.2.3. The Intermediary Procurer within 3 working days shall provide the clarification/ details as sought under clause 7.2.2 to the concerned RLDCs.

7.2.4. After final receipt of the data the RLDCs shall verify the details within 2 working days and submit the details to the Implementing Agency.

7.3. Calculation of Tariff:

- 7.3.1. Subsequent to verification of data by RLDC, the data is aggregated at each Source-wise Central Pool. Implementing Agency will compute the tariff within 3 working days for each Source-wise Central Pool.
- 7.3.2.Implementing Agency will publish Uniform Renewable Energy Tariff for each Sourcewise Central Pool on its website within 3 working days of receiving the verified data from the RLDCs.
- 7.3.3. The Tariff for the month shall be calculated by aggregating, for each source of RE, all the amount to be paid for the energy supplied as per the tariff (including trading margin) in the PSA and divided by the total scheduled energy of the plant/scheme qualified under this scheme.
- 7.3.4. The details of such calculation shall be published by the Implementing Agency on monthly basis each Source-wise Central Pool on its website along with the Uniform Renewable Energy Tariff for the (source-wise) Central Pool. Method for calculation of uniform tariff for central pool is given in clause 10 of this procedure.

7.4. Monthly Account Statements for adjustment of any surplus or deficit tariff among the Intermediary Procurers

- 7.4.1. The Implementing Agency shall issue Monthly Account Statements for adjustment of any surplus or deficit tariff among the Intermediary Procurers
- 7.4.2. The Tariff Adjustment Addend and Monthly Account Statements (as per format E) as specified above shall be published by the Implementing Agency within 7 days of submission of data by Intermediary Procurer and verification of the data by RLDC of all the Intermediary Procurers.
- 7.4.3. In case there is any revision in the REA, the Implementing Agency will recalculate the Uniform Renewable Energy Tariff of the respective Pool, Monthly Account Statements for adjustment of any surplus or deficit tariff among the Intermediary Procurers (if any), and Tariff Adjustment addend (if any). This revision will be done by the Implementing Agency only once in a month, if required.
- 7.4.4. The Intermediary Procurer shall within fifteen days make the payment as per the monthly account statements to the other intermediary procurer, if the payment is due to it. In case of non-payment within the stipulated period of fifteen days, the carrying cost at the rate of

State bank of India Marginal Cost of Funds based Lending Rate (1 year tenor) plus five percent will be payable for the period of delay.

8. LEGAL OBLIGATIONS

- 8.1. All the contractual obligations between power generators and intermediary procurer and intermediary procurer and end procurer including but not limited to liquidated damages, penalties, extension charges, dispute resolutions will be governed by respective bidding document including Power Purchase Agreements, Power Sale Agreements and will have no bearing on uniform renewable energy tariff.
- 8.2. The impact on the tariff due to the Change in Law provisions will be in accordance with the bidding documents and will be reflected in the pooled tariff computed in accordance with these procedures.

9. INDEMNIFYING GRID CONTROLLER OF INDIA LIMITED

Grid Controller of India Limited will be indemnified against any consequences or liability, including the cost of litigation that arise on account of action taken under these procedures by the concerned end procurer, intermediary procurer, generating company.

Also, Grid Controller of India Limited will have no liability except for computing tariff on a monthly basis for sale of power from the central pool as per these procedures and will be kept indemnified.

10. METHOD FOR CALCULATION OF UNIFORM TARIFF FOR CENTRAL POOL

The tariff is calculated based on scheduled energy to end procurer from the Pool by the intermediary procurer and actual amount to be payable for such supply of power as illustrated below:

| Schem e | Capacity | Tariff- PPA | Tariff-PSA | Energy Scheduled during the month | Amount to be paid to Project developers by IP under PPA | Amount to be paid to IP by EP under PSA |
|------------|----------|----------------|-----------------------|-----------------------------------|--|---|
| | (MW) | (INR/kWh) | (INR/kWh) | (MU) | (Rs in Million) | (Rs in Million) |
| | | A | (B=A+ Rs 0.07/kWh) | С | (D=A x C) | (E= B x C) |
| T-I | 2000 | 2.502 | 2.572 | 415.95 | 1040.70 | 1069.81 |
| T-II | 600 | 2.440 | 2.510 | 131.49 | 320.84 | 330.04 |

| T-III | 1200 | 2.585 | 2.655 | 248.34 | 641.96 | 659.34 |
|--------|------|-------|-------|---------|---------|---------|
| T-IV | 1150 | 2.540 | 2.610 | 234.63 | 595.97 | 612.39 |
| T-V | 480 | 2.613 | 2.683 | 95.97 | 250.72 | 257.44 |
| T-VI | 900 | 2.710 | 2.780 | 174.22 | 472.15 | 484.34 |
| T-VIII | 1200 | 2.502 | 2.572 | 258.60 | 646.92 | 665.03 |
| T-IX | 2000 | 2.372 | 2.442 | 438.30 | 1039.65 | 1070.33 |
| Total | 9530 | | | 1997.50 | 5008.90 | 5148.73 |

Table1: Sample data to illustrate calculation of URET

Tariff of the Month (INR/kWh) =
$$\frac{\sum_{i}^{n} E}{\sum_{i}^{n} C} = \frac{\sum_{1}^{9} E}{\sum_{1}^{9} C} = \frac{5148.73}{1997.50} = 2.578$$

i.e. (Sum total amount to be paid under PSA for that particular month /sum total electricity supplied during that particular month) T-I to T-IX are projects forming part of the Central Pool.

Let us say above scenario is in the Month M-4. In the beginning of M-5, additional capacity of 250 MW (T-X) is getting commissioned and to be included as a part of Pool. Accordingly considering generation during month M-5, tariff for the month M-5 will be calculated considering scheduled energy during the Month M-5 as per following:

| Scheme | Capacity | Tariff- PPA | Tariff-PSA | Energy Scheduled during the month | Amount to be paid to Project developers by IP under PPA | Amount to be paid to IP by EP under PSA |
|--------|----------|----------------|-----------------------|-----------------------------------|--|---|
| | (MW) | (INR/kWh) | (INR/kWh) | (MU) | (Rs in Million) | (Rs in Million) |
| | | A | (B=A+ Rs 0.07/kWh) | С | (D=A x C) | (E= B x C) |
| T-I | 2000 | 2.502 | 2.572 | 415.95 | 1040.70 | 1069.81 |
| T-II | 600 | 2.440 | 2.510 | 131.49 | 320.84 | 330.04 |
| T-III | 1200 | 2.585 | 2.655 | 248.34 | 641.96 | 659.34 |
| T-IV | 1150 | 2.540 | 2.610 | 234.63 | 595.97 | 612.39 |
| T-V | 480 | 2.613 | 2.683 | 95.97 | 250.72 | 257.44 |
| T-VI | 900 | 2.710 | 2.780 | 174.22 | 472.15 | 484.34 |
| T-VIII | 1200 | 2.502 | 2.572 | 258.60 | 646.92 | 665.03 |
| T-IX | 2000 | 2.372 | 2.442 | 438.30 | 1039.65 | 1070.33 |
| T- X* | 250 | 2.17 | 2.24 | 56.61 | 122.85 | 126.81 |
| Total | 9780 | | | 2054.12 | 5131.76 | 5275.54 |

Table2: Sample data to illustrate calculation of URET (addition of new generation)

Tariff of the Month (INR/kWh) = $\frac{\sum_{1}^{9} E + E_{10}}{\sum_{1}^{9} C + C_{10}} = \frac{5148.73 + 126.81}{1997.50 + 56.61} = \frac{5275.54}{2054.12} = 2.568$

i.e. (Sum total of amount to be paid under PSA for that particular month /sum total electricity supplied during that particular month)

T-I to T-X are projects forming part of the Central Pool..

FORMAT – A

Application Form for Registration of Intermediary Procurer for Uniform Renewable EnergyTariff

| IP Name | : |
|---------------------------------|----------|
| State | : |
| Registered Address | : |
| Postal Address | : |
| Permanent Account Number (PAN) | : |
| Corporate Identity Number (CIN) | : |
| Goods and Services Tax (GSTIN) | : |
| Year of Establishment | : |
| | |
| Name of the Applicant | : |
| Mob no | : |
| Email | : |
| Name of Secondary Contact | : |
| Mob no | : |
| Email | : |

Note: Proof of supporting documents to be submitted separately along with the application form.

FORMAT - B

DECLARATION

Declaration to be signed by the Authorised Signatory of the Intermediary Procurer

I/We certify that all information furnished above is true to the best of my/our knowledge and belief. I/We will abide by such terms and conditions that Ministry of Power/ CERC/Implementing Agency may impose from time to time, to participate in the Uniform Renewable Energy Tariff for Central Pool.

INDEMNIFICATION

I/We will keep Grid Controller of India Limited indemnified against any consequences or liability, including the cost of litigation that arise on account of action taken under these procedures/rules by the concerned end procurer, generating company or any other Intermediary Procurer.

Signature of the applicant (Seal of the Company)

FORMAT – C

| S. | Scheme/ | RE | End | Type of | Contracted | Tariff PPA | Trader | Total Tariff |
|----|---------|-----------|----------|----------|--------------|------------|-----------|--------------|
| no | PPA | Generator | Procurer | EP | Capacity | (INR/kWh) | Margin | (INR/kWh) |
| | | (Name) | (Name) | (D/S/OA) | which forms | | (INR/kWh) | |
| | | | | | part of Pool | | | |
| | | | | | (MW) | | | |
| | | | | | (A) | (B) | (C) | D = B + C |
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |

Classification of Type of EP

- ✓ Type D for the persons to whom a license to undertake distribution and retail supply of electricity has been granted under section 15 of the Act.
- ✓ Type- S for EP, designated by the State Government to procure power on behalf of the licensees undertaking distribution and retail supply of electricity.
- ✓ Type -OA for Open Access Consumer.

Declaration: The following has been ensured by $M/s(Name\ of\ IP)$ for sharing the data of $PPA/End\ procurer\ etc.$

- 1. Bidding documents including PPA and PSA, have suitable provisions of Electricity Rules 2022 pertaining to the Uniform RE Tariff.
- 2. The End procurer, other than open access consumer, has obtained approval from the appropriate commission for procuring electricity from a pool at URET.
- 3. Energy from the Generator/Producer has been procured under section 63 of the Act and as per provisions of bidding guidelines notified by the Central Government from time to time, for the supply of renewable energy from Inter State Transmission System connected sources to end procurers of more than one state.

Note:

- 1. The details in the format are to be submitted in the excel file till the time a platform for sharing the data is ready.
- 2. The details of PPA in the softcopy along with the relevant documents must be submitted separately, including the approval from Appropriate Commission for End Procurer to participate in the present mechanism.

FORMAT-D

The details of energy supplied to the End Procurer

| S. | Schem | RE | End | Type of | Contracted | Tariff | Trading | Total | Schedule |
|----|--------|-----------|----------|----------|------------|--------|---------|-----------|------------|
| n | e/ PPA | Generator | Procurer | EP | Capacity | PPA | Margin | Tariff | Energy |
| О | | (Name) | (Name) | (D/S/OA) | which | (INR/ | (INR/ | (INR/ | Supplied |
| | | | | | forms part | kWh) | kWh) | kWh) | during the |
| | | | | | of Pool | | | | Month |
| | | | | | (MW) | | | | (MWh) |
| | | | | | (A) | (B) | (C) | D = B + C | (E) |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |

Classification of Type of EP

- ✓ Type D for the persons to whom a license to undertake distribution and retail supply of electricity has been granted under section 15 of the Act.
- ✓ Type- S for EP, designated by the State Government to procure power on behalf of the licensees undertaking distribution and retail supply of electricity.
- ✓ Type -OA for Open Access Consumer.

Note:

- 1. The information in the above format are to be submitted in the excel file till the time a platform for sharing the data is ready.
- 2. Any request for addition of new Contracted Capacity which forms part of Pool will be submitted along with the monthly data.
- 3. The details of PPA in the softcopy along with the relevant documents must be submitted separately.

FORMAT-E

Sample Monthly account statements for adjustments of any surplus

| URET | ь. | 5.0272 | | | | | | | | | | |
|---|---------|------------|------------|-----------|-------------|-------------|------------|------------|--------------|--------------|-------------|---------------------|
| | | M | | | | JD2 | | | | <u>8</u> | рd | Total Sum (IP1+IP2+ |
| Generator | | ХХХ | λλλ | ## | Sum | WWW | W | nn | Sum | ≡ | MMM | |
| Tariff PPA | A | 3.75 | 3.2 | 3.9 | | 5.9 | 5.8 | 5.7 | | 7 | 4.1 | |
| Total Taniff | 8 | 3.82 | 3.27 | 3.97 | | 5.97 | 5.8 | 5.77 | | 7.07 | 4.17 | |
| Energy Scheduled to DISCOM (MWh) | Ĵ | 14400 | 17280 | 0 | 31680 | 21600 | 0 | 2)60 | 27360 | 16200 | 22680 | |
| Energy Scheduled to OA (MWh) | 0 | 2880 | 0 | 1440 | 4320 | 0 | 12960 | 0 | 12960 | 3240 | 3600 | |
| Total Energy Scheduled (MWh) | E=C+D | 17280 | 17280 | 1440 | 36000 | 21600 | 12960 | 2760 | 40320 | 19440 | 26280 | |
| Amount to be paid by DISCOM | F=T*C | 72,392,071 | 86,870,485 | | 159,262,556 | 108,588,106 | • | 28,956,828 | 137,544,935 | 81,441,080 | 114,017,512 | 492, |
| Amountto be paid by OA | (3=T*D | 14,478,414 | | 7,239,207 | 21,717,621 | | 65,152,864 | • | 65,152,864 | 16,288,216 | 18,098,018 | 121, |
| Total Amount to be paid by End Procurer | H=F+6 | 86,870,485 | 86,870,485 | 7,239,207 | 180,980,177 | 108,588,106 | 65,152,864 | 28,926,828 | 202,697,798 | 97,729,296 | 132,115,529 | 613, |
| Total Amount Realised by IP | 盂 | 86,870,485 | 86,870,485 | 7,239,207 | 180,980,177 | 108,588,106 | 65,152,864 | 28,956,828 | 202,697,798 | 97,729,296 | 132,115,529 | 613, |
| Amount as per Total Taniff | J=8*E | 66,009,600 | 56,505,600 | 5,716,800 | 128,232,000 | 128,952,000 | 76,075,200 | 33,235,200 | 238,262,400 | 137,440,800 | 109,587,600 | 613, |
| Total Amount to be Paid to Generator | K=A*E | 64,800,000 | 55,296,000 | 5,616,000 | 125,712,000 | 127,440,000 | 75,168,000 | 32,832,000 | 235,440,000 | 136,080,000 | 107,748,000 | 604, |
| Amount to be paid to other IP | 闩 | | | | 52,748,177 | | | | (35,564,602) | (39,711,504) | 22,527,929 | |
| Margin Realised by IP | M=I-L-K | | | | 2,520,000 | | | | 2,822,400 | 1,360,800 | 1,839,600 | 8, |
| Trader Margin/Unit Scheduled Energy | N=M/E | | | | 0.070 | | | | 0.070 | 0.070 | 0.070 | |

Receivable/ Payable matrix by the Intermediary Procurer based on the account statement shall be as follows:

| | Payable | | | | | |
|-------------|---------|-------------|-------------|-------------|-------------|--------------|
| Receivables | | IP1 | IP2 | IP3 | IP4 | Sum |
| | IP1 | 13,187,044 | 13,187,044 | 13,187,044 | 13,187,044 | 52,748,177 |
| | IP2 | (8,891,150) | , , | , , | | , , |
| | | . , , , | , , | . , , , | | |
| | IP3 | (9,927,876) | (9,927,876) | (9,927,876) | (9,927,876) | (39,711,504) |
| | IP4 | 5,631,982 | 5,631,982 | 5,631,982 | 5,631,982 | 22,527,929 |
| | Sum | 0 | 0 | 0 | 0 | 0 |

The transactions receivable is tabulated below for ready reference (negative sign means payable):

| | IP2 | (22,078,195) | |
|-----|-----|--------------|--------------|
| IP1 | IP3 | (23,114,920) | |
| | IP4 | (7,555,062) | (52,748,177) |
| | IP1 | 22,078,195 | |
| IP2 | IP3 | (1,036,726) | |
| | IP4 | 14,523,133 | 35,564,602 |
| | IP1 | 23,114,920 | |
| IP3 | IP2 | 1,036,726 | |
| | IP4 | 15,559,858 | 39,711,504 |
| | IP1 | 7,555,062 | |
| IP4 | IP2 | (14,523,133) | |
| | IP3 | (15,559,858) | (22,527,929) |

The Account settlement among the Intermediary Procurers shall be as under:

The Intermediary Procurer 1 will pay Rs 22,078,195 /- to Intermediary Procurer 2.

The Intermediary Procurer 1 will pay Rs 23,114,920 /- to Intermediary Procurer 3.

The Intermediary Procurer 1 will pay Rs 7,555,062/- to Intermediary Procurer 4.

Similarly, for the IP2, IP3 and IP4, as shown in table.

COMPUTATION OF TARIFF - ILLUSTRATIONS

Illustration 1:

| Intermediary Procurers | 1 |
|------------------------|-----|
| RE Generator | 3 |
| End Procurer | 4 |
| PPA Capacity (MW) | 250 |
| PSA Capacity (MW) | 250 |

Transactions:

| S. no | Scheme/ PPA | RE Generator | End Procurer | Type of EP | Contracted Capacity which forms part of Pool | Tariff PPA | Total Tariff= (Tariff PPA + Trading Margin) | Schedule Energy during the Month | Tariff to be paid =Schedule Energy* Total Tariff |
|-------|----------------|-----------------|-----------------|------------|---|------------|--|---|--|
| | | (Name) | (Name) | (D/S/OA) | (MW) | (INR/kWh) | (INR/kWh) | (MWh) | Rs |
| | | | | | (A) | (B) | (C) | (D) | E=(C)*(D) |
| 1 | SCHEME1 | XXX | AAA | D | 100 | 3.75 | 3.82 | 14400 | 55008 |
| 2 | SCHEME1 | XXX | BBB | OA | 20 | 3.75 | 3.82 | 2880 | 11002 |
| 3 | SCHEME2 | YYY | CCC | D | 120 | 3.2 | 3.27 | 17280 | 56506 |
| 4 | SCHEME3 | ZZZ | DDD | OA | 10 | 3.9 | 3.97 | 1440 | 5717 |
| | • | | | | | • | | 36000 | 128232 |

| Tariff | | |
|----------|--------|-------|
| computed | =ΣE/ΣD | 3.562 |
| INR/kWh | | |

ACCOUNT STATEMENT

| URET | Т | 3.5620 | | | |
|--|-------|-------------|------------|-----------|-------------|
| Generator | | XXX | YYY | ZZZ | Sum |
| Tariff PPA | Α | 3.75 | 3.2 | 3.9 | |
| Total Tariff | В | 3.82 | 3.27 | 3.97 | |
| Energy Scheduled to DISCOM (MWh) | С | 14400 | 17280 | 0 | 31680 |
| Energy Scheduled to OA (MWh) | D | 2880 | 0 | 1440 | 4320 |
| Total Energy Scheduled to End Procurer (MWh) | E=C+D | 17280 | 17280 | 1440 | 36000 |
| Amount receivable from DISCOM | F=T*C | 51,292,800 | 61,551,360 | - | 112,844,160 |
| Amount receivable from OA | G=T*D | 10,258,560 | - | 5,129,280 | 15,387,840 |
| Total Amount receivable from End Procurer | H=F+G | 61,551,360 | 61,551,360 | 5,129,280 | 128,232,000 |
| Total Amount to be Realised by IP | I=H | 61,551,360 | 61,551,360 | 5,129,280 | 128,232,000 |
| Total Amount to be Paid to Generator | J=A*E | 64,800,000 | 55,296,000 | 5,616,000 | 125,712,000 |
| Margin to be Realised by IP | K=I-J | (3,248,640) | 6,255,360 | (486,720) | 2,520,000 |
| Trader Margin/Unit Scheduled Energy | N=K/E | | | | 0.0700000 |

Illustration 2:

| Intermediary Procurers | 2 |
|------------------------|-----|
| RE Generator | 6 |
| End Procurer | 7 |
| PPA Capacity (MW)_IP1 | 250 |
| PSA Capacity (MW)_IP1 | 250 |
| PPA Capacity (MW)_IP2 | 280 |
| PSA Capacity (MW)_IP2 | 280 |

Transactions:

| S. no | Scheme/ PPA | RE Generator | End Procurer | Type of EP | Contracted Capacity which forms part of Pool | Tariff PPA | Total Tariff= (Tariff PPA + Trading Margin) | Schedule Energy during the Month | Tariff to be paid =Schedule Energy* Total Tariff |
|-------|-------------|--------------|-----------------|---------------|---|------------|---|---|--|
| | | (Name) | (Name) | (D/S/OA) | (MW) | (INR/kWh) | (INR/kWh) | (MWh) | Rs |
| | | | | | (A) | (B) | (C) | (D) | E= (C) * (D) |
| 1 | SCHEME1_IP1 | XXX | AAA | D | 100 | 3.75 | 3.82 | 14400 | 55008 |
| 2 | SCHEME1_IP1 | XXX | BBB | OA | 20 | 3.75 | 3.82 | 2880 | 11002 |
| 3 | SCHEME2_IP1 | YYY | CCC | D | 120 | 3.2 | 3.27 | 17280 | 56506 |
| 4 | SCHEME3_IP1 | ZZZ | DDD | OA | 10 | 3.9 | 3.97 | 1440 | 5717 |
| 5 | SCHEME4_IP2 | www | EEE | D | 150 | 5.9 | 5.97 | 21600 | 128952 |
| 6 | SCHEME5_IP2 | VVV | FFF | OA | 90 | 5.8 | 5.87 | 12960 | 76075 |
| 7 | SCHEME6_IP2 | UUU | GGG | D | 40 | 5.7 | 5.77 | 5760 | 33235 |
| | | | | | | | · | 76320 | 366494 |

Tariff computed $=\sum E/\sum D$ 4.8021 INR/kWh

ACCOUNT STATEMENT

| URET | T | 4.8021 | | | | | | | | |
|---|---------|------------|------------|-----------|-------------|-------------|------------|------------|--------------|---------------------|
| | | | IP1 | _ | | | lP2 | | | Total Sum (IP1+IP2) |
| Generator | | XXX | γγγ | 727 | Sum | WWW | W | nnn | Sum | |
| Tariff PPA | А | 3.75 | 3.2 | 3.9 | | 5.9 | 5.8 | 5.7 | | |
| Total Tariff | 8 | 3.82 | 3.27 | 3.97 | | 5.97 | 2.87 | 5.77 | | |
| Energy Scheduled to DISCOM (MWh) | C | 14400 | 17280 | 0 | 31680 | 21600 | 0 | 2760 | 27360 | 59040 |
| Energy Scheduled to OA (MWh) | 0 | 7880 | 0 | 1440 | 4320 | 0 | 12960 | 0 | 12960 | 17280 |
| Total Energy Scheduled (MWh) | E=C+D | 17280 | 17280 | 1440 | 36000 | 21600 | 12960 | 2760 | 40320 | 76320 |
| Amount receivable from DISCOM | F=T*C | 69,149,887 | 82,979,864 | • | 152,129,751 | 103,724,830 | | 27,659,955 | 131,384,785 | 283,514,536 |
| Amount receivable from OA | G=T*D | 13,829,977 | • | 6,914,989 | 20,744,966 | | 62,234,898 | • | 62,234,898 | 82,979,864 |
| Total Amount receivable from End Procurer | H=F+G | 82,979,864 | 82,979,864 | 6,914,989 | 172,874,717 | 103,724,830 | 62,234,898 | 27,659,955 | 193,619,683 | 366,494,400 |
| Total Amount to be Realised by IP | 표 | 82,979,864 | 82,979,864 | 6,914,989 | 172,874,717 | 103,724,830 | 62,234,898 | 27,659,955 | 193,619,683 | 366,494,400 |
| Amount as per Total Tariff |]*8=ſ | 009'600'99 | 56,505,600 | 5,716,800 | 128,232,000 | 128,952,000 | 76,075,200 | 33,235,200 | 238,262,400 | 366,494,400 |
| Total Amount to be Paid to Generator | K=A*E | 64,800,000 | 55,296,000 | 5,616,000 | 125,712,000 | 127,440,000 | 75,168,000 | 32,832,000 | 235,440,000 | 361,152,000 |
| Amount to be paid to other IP | 타 | | | | 44,642,717 | | | | (44,642,717) | 0 |
| Margin Realised by IP | M=I-L-K | | | | 2,520,000 | | | | 2,822,400 | 5,342,400 |
| Trader Margin/Unit Scheduled Energy | N=M/E | | | | 0.070 | | | | 0.070 | 0.070 |

Illustration 3:

| Intermediary Procurers | 4 |
|------------------------|-----|
| RE Generator | 8 |
| End Procurer | 11 |
| PPA Capacity (MW)_IP1 | 275 |
| PSA Capacity (MW)_IP1 | 250 |
| PPA Capacity (MW)_IP2 | 300 |
| PSA Capacity (MW)_IP2 | 280 |
| PPA Capacity (MW)_IP1 | 175 |
| PSA Capacity (MW)_IP1 | 150 |
| PPA Capacity (MW)_IP2 | 225 |
| PSA Capacity (MW)_IP2 | 200 |

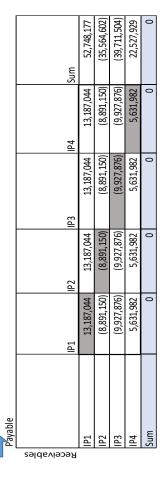
Transactions:.

| S. no | Scheme/ PPA | RE Generator | End Procurer | Type of EP | Contracted Capacity which forms part of Pool | Tariff PPA | Total Tariff= (Tariff PPA + Trading Margin) | Schedule Energy during the Month | Tariff to be paid =Schedule Energy* Total Tariff |
|-------|-------------|-----------------|--------------|---------------|---|------------|---|---|--|
| | | (Name) | (Name) | (D/S/OA) | (MW) | (INR/kWh) | (INR/kWh) | (MWh) | Rs |
| | | | | | (A) | (B) | (C) | (D) | E=(C)*(D) |
| 1 | SCHEME1_IP1 | XXX | AAA | D | 100 | 3.75 | 3.82 | 14400 | 55008 |
| 2 | SCHEME1_IP1 | XXX | BBB | OA | 20 | 3.75 | 3.82 | 2880 | 11002 |
| 3 | SCHEME2_IP1 | YYY | CCC | D | 120 | 3.2 | 3.27 | 17280 | 56506 |
| 4 | SCHEME3_IP1 | ZZZ | DDD | OA | 10 | 3.9 | 3.97 | 1440 | 5717 |
| 5 | SCHEME4_IP2 | WWW | EEE | D | 150 | 5.9 | 5.97 | 21600 | 128952 |
| 6 | SCHEME5_IP2 | VVV | FFF | OA | 90 | 5.8 | 5.87 | 12960 | 76075 |
| 7 | SCHEME6_IP2 | UUU | GGG | D | 40 | 5.7 | 5.77 | 5760 | 33235 |
| 8 | SCHEME7_IP3 | LLL | ННН | D | 125 | 7 | 7.07 | 16200 | 114534 |
| 9 | SCHEME7_IP3 | LLL | JJJ | OA | 25 | 7 | 7.07 | 3240 | 22907 |
| 10 | SCHEME8_IP4 | MMM | KKK | D | 175 | 4.1 | 4.17 | 22680 | 94576 |
| 11 | SCHEME8_IP4 | MMM | LLL | OA | 25 | 4.1 | 4.17 | 3600 | 15012 |
| | | | | | | | | 122040 | 613523 |

| Tariff computed | =ΣΕ/ΣD | 5.0272 |
|-----------------|--------|--------|
| INR/kWh | -21/20 | 3.0272 |

ACCOUNT STATEMENT

| URET | - | 5.0272 | | | | | | | | | | |
|---|--------|------------|------------|-----------|-------------|-------------|------------|------------|--------------|--------------|-------------|-----------------------------|
| | | P1 | | | | JJ | | | | <u>81</u> | bd | Total Sum (IP1+IP2+IP3+IP4) |
| Brator | | ХХХ | Ж | 72 | Scm | WWW | W | nn | Sum | = | MMM | |
| Tariff PPA | А | 3.75 | 3.2 | 3.9 | | 5.9 | 5.8 | 23 | | 7 | 4.1 | |
| Total Tariff | 8 | 3.82 | 3.27 | 3.97 | | 5.97 | 5.87 | 5.77 | | 7.07 | 4.17 | |
| Energy Scheduled to DISCOM (MMH) | Ĵ | 14400 | 17280 | 0 | 31680 | 21600 | 0 | 2)60 | 27360 | 16200 | 22680 | 97920 |
| Energy Scheduled to OA (MWh) | 0 | 7880 | 0 | 1440 | 4320 | 0 | 12960 | 0 | 12960 | 3240 | 3900 | 24120 |
| Total Energy Scheduled (MWh) | [=0+0 | 17280 | 17280 | 1440 | 36000 | 21600 | 12960 | 2)60 | 40320 | 1940 | 26280 | 122040 |
| Amount to be paid by DISCOM | FI*(| 72,392,071 | 86,870,485 | | 159,262,556 | 108,588,106 | • | 28,956,828 | 137,544,935 | 81,441,080 | 114,017,512 | 492,266,081 |
| Amount to be paid by 0A | G=T*D | 14,478,414 | | 7,239,207 | 21,717,621 | | 65,152,864 | | 65,152,864 | 16,288,216 | 18,098,018 | 121,256,719 |
| Total Amount to be paid by End Procurer | HFH6 | 86,870,485 | 86,870,485 | 7,239,207 | 180,980,177 | 108,588,106 | 65,152,864 | 28,956,828 | 202,697,798 | 97,729,296 | 132,115,529 | 613,522,800 |
| Total Amount Realised by IP | 盂 | 86,870,485 | 86,870,485 | 7,239,207 | 180,980,177 | 108,588,106 | 65,152,864 | 28,956,828 | 202,697,798 | 92,237,79 | 132,115,529 | 613,522,800 |
| Amount as per Total Tariff |]*8=[| 009'600'99 | 26,505,600 | 5,716,800 | 128,232,000 | 128,952,000 | 76,075,200 | 33,235,200 | 238,262,400 | 137,440,800 | 109,587,600 | 613,522,800 |
| Total Amount to be Paid to Generator | 3* A=X | 64,800,000 | 55,296,000 | 5,616,000 | 125,712,000 | 127,440,000 | 75,168,000 | 32,832,000 | 235,440,000 | 136,080,000 | 107,748,000 | 604,980,000 |
| Amount to be paid to other IP | 闸 | | | | 52,748,177 | | | | (35,564,602) | (39,711,504) | 22,527,929 | 0 |
| Margin Realised by IP | M÷-L-K | | | | 2,520,000 | | | | 2,822,400 | 1,360,800 | 1,839,600 | 8,542,800 |
| Trader Margin/Unit Scheduled Energy | N=M/E | | | | 0.070 | | | | 0.070 | 0.070 | 0.070 | 0.070 |





| | IP2 | (22,078,195) | |
|-----|-----|--------------|--------------|
| IP1 | IP3 | (23,114,920) | |
| | IP4 | (7,555,062) | (52,748,177) |
| | IP1 | 22,078,195 | |
| IP2 | IP3 | (1,036,726) | |
| | IP4 | 14,523,133 | 35,564,602 |
| | IP1 | 23,114,920 | |
| IP3 | IP2 | 1,036,726 | |
| | IP4 | 15,559,858 | 39,711,504 |
| | IP1 | 7,555,062 | |
| lP4 | IP2 | (14,523,133) | |
| | IP3 | (15,559,858) | (22,527,929) |
| | | | |

Transactions - Receivables