ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

Vidyut Niyantrana Bhavan, Adjacent to 220/132/33 kV AP Carbides SS,
Dinnedevarapadu Road, Kurnool - 518 002, Andhra Pradesh.
Phones: 08518 - 294823,24,25,26

WEDNESDAY, THE FOURTH DAY OF DECEMBER
TWO THOUSAND AND TWENTY-FIVE

(04.12.2025)

Present:
Sri P.V.R.Reddy,
Member & Chairman(i/c)

In the matter of the First Amendment to the Andhra Pradesh Electricity Regulatory Commission (The Grid Interactive Solar Rooftop Photovoltaic Systems under Net/Gross Metering) Regulation, 2023 (Regulation No. 4 of 2023)

Statement of Reasons/Order

The Government of Andhra Pradesh released the Integrated Clean Energy (ICE) Policy, 2024, on 16.10.2024, aiming to establish Andhra Pradesh as a leader in clean energy by attracting investments and promoting sustainable development. This policy aims to achieve 50% cumulative electric power capacity from non-fossil fuel sources by 2030 and net-zero emissions by 2047 in AP.

To successfully implement the aforementioned policy, the Government of Andhra Pradesh (GoAP), acting through the Special Chief Secretary/Energy Department, and invoking Section 108 of the Electricity Act, 2003, addressed a letter to the Commission. In the letter, the GoAP proposed the following amendments to the Principal Regulation and requested the Commission to incorporate the same.

A. *"For installation of SRTPVS for residential consumers, the Distributed Energy Resource (DER) aggregators shall be allowed for the DISCOMs. The DER Aggregators shall have a commercial agreement with the DISCOM and shall be paid an Aggregator fee."*

B. *"The application fee as specified below shall be collected:*

   Capacities up to 5 kWp: Nil, Capacities above 5 kWp and up to 100 kWp: Rs. 1,000, Capacities above 100 kWp and up to 1000 kWp: Rs. 10,000, Capacities above 1000 kWp: Rs.25,000/MWp."

After thoroughly examining the amendments proposed by the GoAP, the Commission has decided to amend the Andhra Pradesh Electricity Regulatory Commission (The Grid Interactive Solar Rooftop Photovoltaic Systems under Net/Gross Metering) Regulation, 2023 (Regulation No. 4 of 2023). Accordingly, it published a Public Notice, along with a copy of the draft amendment, on its website on 26 March 2025, inviting comments, suggestions, and objections from all stakeholders and interested parties. In response, the Commission received comments and suggestions on the draft amendment and other provisions of the Principal Regulation. After carefully examining all submissions, the Commission has decided to issue a revised draft of the first amendment and, accordingly, published a Public Notice along with a copy of the draft amendment on its website on 19 August 2025, inviting further suggestions and objections from all stakeholders and interested parties. On 02.09.2025, the Commission, upon the request of the APDISCOMs and other stakeholders, extended the timeline for submission of comments, suggestions, and objections on the draft amendments up to 15.09.2025. In response, the Commission received comments/suggestions/objections on the draft amendment from 13 stakeholders. The following paragraphs discuss the relevant comments/suggestions/objections received on the draft amendment and the Commission's analysis and decisions on the same.

Views/suggestions/objections received and the Commission's analysis and decisions on the same

1. **Clause 2(xi) of the Principal Regulation shall be substituted with the following:**

Draft

"Virtual Net Metering" means a mechanism whereby total energy exported from the grid-interactive solar Rooftop Photovoltaic system of a group of prosumers/society is exported to the grid through a gross meter. The exported such energy is adjusted in the electricity service connection(s) of the same Group (society) prosumers in proportion to the share in their Grid-Interactive Solar Rooftop Photovoltaic system in units (kWh / kVAh) to arrive at the net imported or exported energy by an individual prosumer in the Group / Society from/to the Distribution licensee during the applicable billing period/cycle located within the same distribution licensee's area of supply. The net energy imported by the prosumers is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission".

In case the prosumer(s) is/are in the ambit of the Time of Day (ToD) tariff, the share of exported energy of such prosumer(s) under virtual net metering shall be netted off against his/their electricity consumption during the respective ToD slots.

The applicable T&D losses and Distribution/wheeling charges as per MYT order of the Commission applicable for relevant periods from the injection point to the drawl point shall be deducted while adjusting the generation against the consumption.

Provided that Distribution/wheeling charges shall be waived if the injection and withdrawal of power occur at the same voltage levels.

Provided also that, for projects implemented under schemes fully sponsored by the State Government, Distribution/wheeling charges shall be waived, irrespective of the voltage level."

Comments/Suggestions/Objections:

APSPDCL and APCPDCL stated that permitting Virtual Net Metering (VNM) across the entire distribution licensee area would create settlement complexities and require additional manpower to monitor adjustments to exported energy, particularly for LT consumers. They proposed restricting VNM adjustments to within the same ERO/Division limits, rather than across the entire DISCOM area.

They further stated that the waiver of wheeling charges for State-sponsored projects, irrespective of voltage level, is discriminatory under Section 62(3) of the Electricity Act 2003 and inconsistent with Section 61(d) relating to cost recovery. It also bypasses the subsidy reimbursement mechanism under Section 65 of the Act.

They recommended removing the proviso granting a waiver of distribution/wheeling charges solely based on the same voltage level, as DISCOMs would still need to monitor DTR loading and feeder capacity at that level and may be required to undertake network strengthening. APCPDCL additionally stated that the Regulation should clearly provide for financial sources to compensate the DISCOMs for the revenue loss arising out of mandatory waivers of distribution or wheeling charges.

Manikaran Power Limited requested that the Regulation include a detailed methodology and a worked-out illustration of slot-wise energy accounting for Virtual Net Metering, particularly for prosumers under Time-of-Day (ToD) tariff categories.

Ecoren Energy suggested that the Regulation explicitly provide for ToD-wise accounting of exported energy under Virtual Net Metering. They proposed that any surplus generation beyond consumption within a billing cycle be accounted as generation during normal and off-peak slots. They also proposed a waiver of distribution/wheeling charges for the life of the project or 25 years (whichever is longer), providing a 100% waiver when injection and withdrawal occur at the same voltage level (irrespective of DISCOM boundaries) and a 75% waiver when they occur at different voltage levels. They stated that such clarity regarding the duration and extent of the waiver would provide regulatory certainty and promote consumer aggregation.

Commission's Analysis and Decision:

The APEPDCL had proposed expanding the scope of Virtual Net Metering (VNM) adjustments across the entire Distribution Licensee's area, in contrast to the views

expressed by other DISCOMs. The Commission notes that, while locational restrictions were practical at the time the principal Regulation was framed, they are now less relevant owing to the digitisation of consumer billing and energy-accounting systems across DISCOMs. The *A.P. Integrated Clean Energy Policy, 2024,* suggested Virtual Net Metering at the State level, not confined to ERO boundaries. However, extending VNM beyond the DISCOM's area of supply could create complexities in energy settlement, loss reconciliation, and verification of adjustments across network boundaries. Considering all aspects, the Commission is inclined to permit Virtual Net Metering within the same distribution licensee area, ensuring a balanced approach that supports policy objectives and supports broader consumer participation.

Regarding the waiver of wheeling or distribution charges, considering the DISCOM's views, it is inclined to modify the draft. With respect to the request for a detailed illustration of VNM settlement, the Commission is inclined to consider the suggestion. On ToD-wise accounting of exported energy, after examining the MoP's SoP on Virtual Netmetering, the draft is suitably modified.

Regarding the suggestion that the waiver of distribution/wheeling charges be applicable for the life of the project or for 25 years, this Regulation protects all waivers granted through the savings clause for a period of 25 years from the CoD.

Accordingly, the modified draft is as follows:

"Virtual Net Metering" means a mechanism whereby total energy exported from the grid-interactive solar Rooftop Photovoltaic system of a group of prosumers/society is exported to the grid through a net meter. The exported such energy is adjusted in the electricity service connection(s) of the same Group (society) prosumers in proportion to the share in their Grid-Interactive Solar Rooftop Photovoltaic system in units (kWh / kVAh) to arrive at the net imported or exported energy by an individual prosumer in the Group / Society from/to the Distribution licensee during the applicable billing period/cycle located within the same distribution licensee's area of supply. The net energy imported by the prosumers is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission.

In case the prosumer(s) is/are in the ambit of the Time of Day (ToD) tariff, the share of exported energy of such prosumer(s) under virtual net metering shall be netted off against his/their electricity consumption during the respective ToD slots in the following manner:

- *Surplus energy injected into the grid during peak ToD slots shall first be adjusted against consumption within peak slots, and any balance remaining shall next be adjusted during normal slots, followed by off-peak slots.*
- *Surplus energy injected into the grid during normal slots shall first be adjusted*

against consumption within normal slots, and any remaining balance shall be adjusted during off-peak slots; and

- *Surplus energy injected into the grid during off-peak slots shall be adjusted only against consumption during off-peak slots.*

The applicable T&D losses and Distribution/wheeling charges as per MYT order of the Commission applicable for relevant periods from the injection point to the drawl point shall be deducted while adjusting the generation against the consumption.

Provided that Distribution/wheeling charges shall be waived if the injection and withdrawal of power occur at the same voltage levels.

The Distribution Licensee shall claim the waivers under Section 65 of the Electricity Act, 2003, from the Government of Andhra Pradesh.

2. Clause 2(xii) of the Principal Regulation shall be substituted with the following:

Draft

"Group Net Metering" means a mechanism whereby energy exported from the Grid - Interactive Solar Rooftop Photovoltaic system of an individual prosumer at one or more points is adjusted in consumption by multiple electricity service connection(s) of her/him in units (kWh /kVAh) to arrive at the net imported or exported energy from/to the Distribution licensee during the applicable billing period/cycle located within the same distribution licensee's area of supply. The net energy imported by the prosumers is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission.

In case the prosumer(s) is/are in the ambit of the Time of Day (ToD) tariff, the share of exported energy of such prosumer(s) under Group Net Metering shall be netted off against his/their electricity consumption during the respective ToD slots.

The applicable T&D losses and Distribution/wheeling charges as per MYT order of the Commission applicable for relevant periods from the injection point to drawl point shall be deducted while adjusting the generation against the consumption.

Provided that Distribution/wheeling charges shall be waived if the injection and withdrawal of power occur at the same voltage levels."

Comments/Suggestions/Objections:

The DISCOMS, Manikaran Power Limited, and Ecoren Energy raised similar objections/suggestions as discussed against the VNM**. Sri. Rammohan Reddy** suggested implementing computerised systems for transparency and the enforceability of regulatory provisions, for the accurate and timely settlement of energy.

Commission's Analysis and Decision:

In line with the Commission's views in the above paragraph regarding VNM, after

considering/examining the suggestions, the draft is modified as follows**.**

""Group Net Metering" means a mechanism whereby energy exported from the Grid - Interactive Solar Rooftop Photovoltaic system of an individual prosumer at one or more points is adjusted in consumption by multiple electricity service connection(s) of her/him in units (kWh /kVAh) to arrive at the net imported or exported energy from/to the Distribution licensee during the applicable billing period/cycle located within the same distribution licensee's area of supply. The net energy imported by the prosumers is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission. The Solar PV system under Group Net Metering may be installed at the premises of any of the service connections or at any other premises or land within the same Distribution Licensee's area of supply. The energy exported from the Solar Rooftop Photovoltaic system under Group Net Metering shall be measured by a separate Net meter.

In case the service connection(s) is/are in the ambit of the Time of Day (ToD) tariff, the share of exported energy of such service connection(s) under Group Net Metering shall be netted off against it/it's electricity consumption during the respective ToD slots in the following manner:

- *Surplus energy injected into the grid during peak ToD slots shall first be adjusted against consumption within peak slots, and any balance remaining shall next be adjusted during normal slots, followed by off-peak slots;*
- *Surplus energy injected into the grid during normal slots shall first be adjusted against consumption within normal slots, and any remaining balance shall be adjusted during off-peak slots; and*
- *Surplus energy injected into the grid during off-peak slots shall be adjusted only against consumption during off-peak slots.*

The applicable T&D losses and Distribution/wheeling charges as per MYT order of the Commission applicable for relevant periods from the injection point to drawl point shall be deducted while adjusting the generation against the consumption.

Provided that Distribution/wheeling charges shall be waived if the injection and withdrawal of power occur at the same voltage levels.

The Distribution Licensee shall claim the waivers under Section 65 of the Electricity Act, 2003, from the Government of Andhra Pradesh.

3. The following definition shall be inserted as Clause 2 (xxiv) of the Principal Regulation.

Draft

"Distributed Energy Resources Aggregator or DERA" means an entity registered/ appointed with/by the distribution licensee to provide aggregation of one or more

services like demand response services under the demand response mechanism, Distributed Generation, Energy Storage, etc., within a license area. The aggregators shall assist the DISCOMs, inter alia, in the promotion of Distributed Generation/storage like Solar Rooftop projects with/without storage for all categories of consumers by managing, dispatching, metering, and settling the individual Distributed Energy Resources (DERs) energy, disbursement of rooftop subsidies, within their aggregation, as well empanelling of vendors, and construction of systems, etc."

Comments/Suggestions/Objections:

APSPDCL stated that the proposed introduction of a Distributed Energy Resources Aggregator (DERA) in Regulation No. 4 of 2023 is premature, as there is presently no central framework or operational guideline issued by the Ministry of Power (MoP) or the Ministry of New & Renewable Energy (MNRE). In the absence of a defined national policy, operational model, or licensing framework, introducing DERA at the State level could lead to regulatory inconsistencies and role duplication once the central framework is issued.

It suggested that the Commission may defer the implementation of the DERA provision until the MoP or MNRE formally notifies a national framework. Alternatively, the concept may be introduced through limited pilot projects under controlled conditions to assess its technical and regulatory viability.

APCPDCL proposed that the Regulation may define DERA as an entity with a capacity up to 5 MW, depending on available substation capacity, registered or appointed by the distribution licensee to aggregate one or more services, including demand response, within the licensed area. It is justified that this limit aligns with the Commission's Solar Rooftop Regulation, which sets 5 MW as the maximum. Any aggregation exceeding this capacity should only be allowed after detailed load-flow and technical feasibility studies to ensure safe grid operation. APCPDCL further stated that the primary purpose of DER aggregators is to improve grid security, stability, and resilience through distributed flexibility solutions. However, expanding the role of DER aggregators to include managing, dispatching, metering, and settlement functions could cause procedural disparities in billing and coordination across utilities.

Manikaran Power Limited stated that while including a DERA mechanism is a progressive step, the draft clause lacks clarity on eligibility, operational responsibilities, and alignment with national policy. They suggested that the Regulation should specify the criteria for the registration or appointment of a DERA, including minimum technical and financial qualifications, such as a net worth of INR 75 crore, a valid trading license, and at least 2 years' experience in solar rooftop implementation. They further stated that the Regulation should clearly define DERA's operational roles in energy accounting, scheduling, dispatch,

settlement of distributed energy resources, subsidy disbursement, and empanelment with the distribution licensee. They also requested clarification on whether DERA services will be available to all consumer categories, including HT/EHT consumers, or limited to specific classes. Additionally, they emphasised the importance of explicitly aligning the definition and scope of Distributed Energy Resources (DER) with the Ministry of Power's national framework, or if the State adopts an independent definition, ensuring it does not conflict with central directives or future policy developments.

Commission's Analysis and Decision:

The proposal originates from the A.P. Integrated Clean Energy (ICE) Policy, 2024, which recognises DER Aggregators as critical enablers in scaling up distributed energy resources and supporting DISCOMs in the aggregation, metering, settlement, and management of small-scale energy systems in a decentralised manner.

It does not mandate the appointment of DERAs but merely enables DISCOMs to engage such entities where considered necessary. This enabling framework is consistent with the A.P. Integrated Clean Energy Policy, 2024.

It should be noted that the eligibility criteria and operational responsibilities of DERAs are already covered under Regulation No. 5 of 2025 (Battery Energy Storage Systems Regulation), which requires aggregators to register with the State Load Despatch Centre (SLDC) and obtain approval in accordance with the eligibility conditions notified by it. Accordingly, the draft remains as notified.

4. The following text shall be added as Clause 3.10 after Clause 3.9 in the Principal Regulation.

Draft

"For installation of Solar Rooftop Photovoltaic System for all categories of consumers, the Distributed Energy Resource (DER) aggregators shall be allowed for the DISCOMs. The DER Aggregators shall have a commercial agreement with the DISCOM and shall be paid an Aggregator fee."

Comments/Suggestions/Objections:

APSPDCL stated that any Aggregator fee payable under Clause 3.10 should not be borne by the DISCOM, but by the scheme sponsor or beneficiary.

APCPDCL proposed that the Regulation clearly link Clause 3.10 to Clause 2(xxiv) regarding DER Aggregators. The Regulation should explicitly include a standardised agreement format between DER Aggregators and DISCOMs, to be prescribed in an annexure to the Regulation. It further suggested that the aggregator fee be specified under Clause 11.2 of the Regulation for consistency and transparency. It stated that since APERC has already published prescribed formats for agreements under 'Individual,' 'Virtual,' 'Group Net Metering,' and

'Gross Metering,' it would be appropriate for the Commission to similarly define the agreement structure for DER Aggregators to avoid ambiguity and ensure uniform implementation.

Ecoren Energy stated that the ICE Policy, 2024, already provides a framework for Aggregator remuneration payable by DISCOMs, and that such linkage should be explicitly captured in the Regulation for clarity and alignment with the State's renewable energy promotion objectives.

Commission's Analysis and Decision:

In line with the view expressed in the previous paragraph, and after examination of the suggestions, the draft is modified as follows.

"For installation of Solar Rooftop Photovoltaic System for all categories of consumers, the Distributed Energy Resource (DER) aggregators shall be allowed for the DISCOMs. The DER Aggregators shall have a commercial agreement with the DISCOM and shall be paid a one-time Aggregator fee as approved by the Commission."

5. The text in Clause 11.2 of the Principal Regulation shall be substituted with the following.

Draft

"The application fee as specified below shall be collected: Capacities up to 5 kWp: Nil, Capacities above 5 kWp and up to 100 kWp: Rs. 1,000, Capacities above 100 kWp and up to 1000 kWp: Rs. 10,000, Capacities above 1000 kWp: Rs.25,000/MWp."

Comments/Suggestions/Objections:

APCPDCL proposed a fee structure for DERA.

Sri Burra Phani Chandra and Sri Potluri Bhaskara Rao sought clarity that for projects between 500 kWp and 1000 kWp, the applicable application fee should remain Rs. 10,000.

Commission's Analysis and Decision:

For now, the Commission is not inclined to consider the fee structure proposed by APCPDCL for DERA. Regarding the other suggestion, the application fee of Rs. 10,000 will apply to projects with capacities between 500 kWp and 1000 kWp. Therefore, the draft remains as notified.

6. **The existing Clause 13.1 of the Principal Regulation shall be substituted with the following:**

"The agreement (Annexure-IX (A) /(B) as applicable) duly filled and signed in by the consumer shall be submitted to DISCOM within four months from the date of receipt of the technical feasibility, and DISCOM shall provide the acknowledgement for the

same. The agreement is deemed to have come into force if there are no remarks communicated by DISCOM within two weeks from the date of receipt of the agreement. In case, within four months of issuing Technical feasibility, if the Agreement is not submitted by the consumer, the application is deemed to be cancelled. The officers designated for the release of new services of supply as per the present DISCOMS' orders in vogue shall sign the agreement. For Group Net Metering or Virtual Net Metering, the agreement shall be in the prescribed format as per MNRE Guiding/Helping Standard Operating Procedure (SOP) for Implementation of Virtual Net Metering and Group Net Metering Mechanism issued on 23.02.2023 and its amendments."

Commission's Analysis and Decision:

After examination of the SoP issued by MNRE regarding VNM and GNM, the draft is further modified as follows.

"The agreement (Annexure-IX (A) /(B) as applicable) duly filled and signed in by the consumer shall be submitted to DISCOM within four months from the date of receipt of the technical feasibility, and DISCOM shall provide the acknowledgement for the same. The agreement is deemed to have come into force if there are no remarks communicated by DISCOM within two weeks from the date of receipt of the agreement. If the consumer does not submit the Agreement within 4 months of issuance of the Technical feasibility, the application is deemed cancelled. The officers designated for the release of new services of supply as per the present DISCOMS' orders in vogue shall sign the agreement. For Group Net Metering or Virtual Net Metering, the agreement shall be in the prescribed format as per the MNRE Guiding/Helping Standard Operating Procedure (SOP) for Implementation of Virtual Net Metering and Group Net Metering Mechanism, issued on 23.02.2023, and its amendments. The Eligible Consumers under VNM/GNM shall have the right to amend the list of consumers or change the Sharing Ratio provided in the List of Consumers/Services once every financial year by sending notice at least 1 month in advance to the DISCOM."

7. The existing Clause 15 of the Principal Regulation shall be substituted with the following:

Draft

"15. Provisions applicable to prosumers/consumers

Subject to the present regulation, all provisions of the GTCS, Supply Code, and other relevant regulations/guidelines applicable to consumers in general shall also be applicable to prosumers. The SRTPVS behind the prosumer/consumer's meter without any capacity limitation and without injection to the grid, not involving either Net Metering Arrangement or Net Billing Arrangement, may be installed with prior intimation to the DISCOM concerned. The prosumer/consumer shall furnish an undertaking to pay the applicable charges as determined by the Commission from

time to time for such capacity of SRTPVS installed behind the meter. In case the prosumer/consumer installs SRTPVS behind the prosumer's meter without prior intimation to the DISCOM concerned, or such installation does not conform to the Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013, the SRTPVS shall be disconnected from the Grid after notice to the prosumer. For SRTPVS behind the meter already connected to the electricity system on the date of commencement of this regulation, the prosumer/consumer shall take all necessary steps to meet the technical standards specified by CEA within sixty days of the coming into force of this Regulation and intimate the same to the DISCOM concerned."

Comments/Suggestions/Objections:

Manikaran Power Limited stated that the Regulation may clarify the nature of applicable charges payable by the prosumer/consumer for SRTPVS installed behind the meter without grid injection and specify the timeline for intimation to the Distribution Licensee.

Commission's Analysis and Decision:

Regarding the nature of charges applicable, it shall be noted that grid support charges based on the SRT integration system behind the meter and other charges, in any event, as determined by the Commission from time to time. The draft has been modified as follows to provide greater clarity while keeping stakeholder requests in mind.

"15. Provisions applicable to prosumers/consumers

Subject to the provisions of this Regulation, all provisions of the GTCS, the Supply Code, and other relevant regulations/guidelines applicable to consumers in general shall also apply to prosumers. The SRTPVS behind the prosumer/consumer's meter, without any capacity limitation and without injection to the grid, and not involving either a co-located Net Metering Arrangement or a Net Billing Arrangement, may be installed with prior intimation to the concerned DISCOM, not less than seventy-two (72) hours before installation. The Distribution Licensee shall verify and certify that the SRTPVS installed behind the meter is configured to prevent any export of power to the grid.

The prosumer/consumer shall furnish an undertaking to pay the applicable charges, as determined by the Commission from time to time, for the capacity of the SRTPVS installed behind the meter.

In case the prosumer/consumer installs SRTPVS behind the meter without prior intimation to the DISCOM concerned, or if such installation does not conform to the Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013, the SRTPVS shall be disconnected from the Grid after due notice to the prosumer/consumer. The System may be

reconnected after addressing the remarks outlined in the notice, after due inspection by the DISCOM.

For SRTPVS behind the meter already connected to the electricity system on the date of commencement of this Regulation, the prosumer/consumer shall take all necessary steps to meet the technical standards specified by CEA within sixty days of the coming into force of this Regulation and intimate the same to the DISCOM concerned."

Other Suggestions

8. **APCPDCL,** by letter dated 21.11.25, suggested increasing the maximum permissible capacity for SRTPVS under Net metering to 1000 kW.

Ecoren Energy suggested increasing the maximum capacity permissible under Group Net Metering, Virtual Net Metering, and Gross Net Metering to 10,000 kWp per location. It stated that the Government of Andhra Pradesh intends to deploy rooftop solar systems for SC/ST subsidised consumers under the PM-Surya Ghar scheme, and the enhancement of the capacity limit would facilitate faster implementation and support large-scale adoption of rooftop solar across the State.

Sri Burra Phani Chandra and Sri Potluri Bhaskara Rao, through multiple representations, have suggested enhancing the net metering capacity to 1000 kW or to the consumer's contracted demand, whichever is lower, mentioning the Regulations of other States. They also requested that the normative monthly generation cap of 144 units per kW be removed, given the higher efficiency of the solar modules.

APSPDCL and **Sri City** have sought certain clarifications regarding the implementation of SRTPVS under GNM.

Commission's Analysis and Decision:

The existing capacity limits under Clause 5 were finalised after careful consideration of technical feasibility, network reliability, grid security and safety, and the costs to be borne by the DISCOMS due to net metering. Consumers were permitted up to 1 MW under net billing under the current Regulation, and therefore, the enhancement from 500 kW to 1 MW is not required under net metering. Hence, the Commission is not inclined to revise the capacity limits. However, after examining other suggestions, clause 5.6 is modified as follows.

"5.6 The summary of the capacities that are permissible under the Net/Gross metering is shown in the table below

Particulars	***Capacity that can be availed***		
	Min	***Max***	***Capped Up to***
Individual Net Metering	*1 kW*	*500 kW*	*Contracted Load/Contracted Maximum Demand (CMD) of the consumer(s)*
Group net metering	*1 kW*	*500 kW*	
Virtual net metering	*5 kW*	*500 kW*	
Gross net metering	*5 kW*	*5000 kW*	
Net Billing or Net Feed In	*1 kW*	*1000 kW*	

Explanation:

1. *Inverter capacity (AC Output capacity) is the basis for deciding the SRTPVS capacity, and there shall be no restriction on CUF/energy exported to the grid.*
2. *The SRTPV's capacity that can be availed under this Regulation shall not exceed the sum (GNM/VNM) of the Contracted Load for LT consumers or the Contracted Maximum Demand for HT consumers. In cases where both LT and HT service connections are under VNM/GNM, the SRTPV's capacity that can be availed under this Regulation shall not exceed the sum of the Contracted Load and the Contracted Maximum Demand. In any case, the maximum capacity permissible is as mentioned in the table above or the sum (GNM/VNM) of Contracted Load/CMD of the consumer(s), whichever is lower.*
3. *Under VNM/GNM, there is no restriction on the number of consumers/service connections.*
4. *The service connections can be in the same or a different category under the GNM arrangement.*
5. *A single consumer may have multiple GNM arrangements..”*

9. Sri Burra Phani Chandra suggested to permit full netting-off for all categories of prosumers, and apply ToD tariffs only for net energy imported over a month, and not for matched solar exports.

Commission's Analysis and Decision:

The Commission has examined the suggestion and finds no merit. However, considering the changes made in this order, the Commission is inclined to modify clauses 16.4 and 16.7 as follows.

“16.4 ***Net Metering (Non-ToD consumers):*** *The energy exported from the SRTPVS shall be adjusted against the consumption of energy from the DISCOM in every billing month. In cases where multiple rooftops belonging to a single owner are*

located within a DISCOMS's area, the combined energy exported from SRTPVs shall be adjusted against the combined consumption recorded across multiple connections of the same consumer. In the case of a group of persons/societies setting up SRTPVSs, the generation from such SRP shall be treated as a collective generation for the supply of power to the households of each society /group member. Such energy generated from SRTPVSs shall be prorated as per the installed capacity share indicated in the Agreement between the group/society and DISCOM. This computed energy share shall be adjusted against the consumption of energy for each consumer of such group in every billing month."

…….

16.7 ***Net Metering (ToD consumers):*** *Where a prosumer is within the ambit of the Time of Day (ToD) tariff, the energy settlement will be as per the illustration provided in the Annexure of this regulation."*

10. **Sri Burra Phani Chandra, Sri Potluri Bhaskara Rao and Ecoren** have suggested the incorporation of a Saving or Grandfathering Clause to protect projects entered into agreements under the present Regulation.

Commission's Analysis and Decision:

The Savings Clause in Clause 22 of this Regulation already protects projects that had obtained feasibility approval under earlier guidelines prior to the Regulation's notification. However, after considering and examining the suggestions, clause 22 of this regulation is suitably modified to provide greater clarity regarding the projects to be commissioned under the present Regulation.

"22. Repeal and Savings

The SRTPVSs already commissioned and those under various stages of construction, including the cases wherein a feasibility report was issued under the provisions of earlier/existing Guidelines, shall stand governed by those guidelines till the completion of the term of such agreements in all respects, including the feed-in tariff. However, in cases where, after the issue of technical feasibility, the projects are not completed within the timelines stipulated in the existing guidelines as of the date of this Regulation coming into force, all such projects shall come under the purview of this Regulation. The internal procedures of the DISCOMS specified in existing guidelines on SRTPVSs by EPDCL letter dated 04.01.2019, approved by the Commission in its order dated 25.05.2019 and not in conflict with the present regulation, shall stand saved. Notwithstanding anything contained in the future Regulations or any amendments issued hereafter to this Regulation, all agreements

entered into under the provisions of this Regulation (with the waivers, relaxations, or concessions such as waiver of wheeling charges, CSS etc., and feed-in tariff as applicable) shall remain operative and protected for the term stipulated in the respective Net/Gross Metering agreements."

11. The Commission has decided to adopt the remaining clauses proposed in the draft without alterations, where no comments or modification proposals were received from stakeholders. The list of objectors is provided in **Annexure-I**, the finalised Regulation in **Annexure-II,** and the illustrative examples in **Annexure-III.**

Sd/-
Sri P.V.R.Reddy,
Member & Chairman i/c

Annexure-I

List of Objectors

S.No	Name of the Objector
1	Sri. M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad (Sought time extension)
2	Sri. Kandharapu Murali, Secretariat Member, CPI(M), Tirupati District Committee, Tirupati (Sought time extension)
3	Sri. U.Kumar, APTMA (Sought time extension)
4	Aurobindo Pharma Limited
5	Andhra Pradesh Southern Power Distribution Company Limited
6	Sri. Kumara Swamy K, General Manager Electrical, Amara Raja Energy & Mobility Limited (Sought time extension)
7	Manikaran Power Limited
8	Sri. I.Gopinath, SICMA
9	Sri. Rammohan Reddy A
10	Andhra Pradesh Central Power Distribution Company Limited
11	Sri. Murthy Pendyala,Vice President – Commercials, Ecoren energy
12	Sri. Burra Phani Chandra, Member, State Advisory Committee (SAC)
13	Sri. Potluri Bhaskara Rao, President, Andhra Pradesh Chambers of Commerce and Industry Federation

Annexure-II

ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

First Amendment to the Andhra Pradesh Electricity Regulatory Commission (The Grid Interactive Solar Rooftop Photovoltaic Systems under Net/Gross Metering) Regulation, 2023 (Regulation No. 4 of 2023)

[Regulation No.10 of 2025]

Introduction:

The Commission notified the Andhra Pradesh Electricity Regulatory Commission (The Grid Interactive Solar Rooftop Photovoltaic Systems under Net/Gross Metering) Regulation, 2023 (Regulation No. 4 of 2023) (hereinafter referred to as 'the Principal Regulation'), which was published in the AP Extraordinary Gazette on 24.02.2024.

Whereas the Government of Andhra Pradesh released the Integrated Clean Energy (ICE) Policy, 2024 on 16.10.2024, which aims to establish Andhra Pradesh as a leader in clean energy by attracting investments and promoting sustainable development. This policy aims to achieve 50% cumulative electric power capacity from non-fossil fuel sources by 2030 and net-zero emissions by 2047 in AP.

Key aspects of the policy are:

- Focus on the entire value chain, including renewable energy (RE) manufacturing projects, which are crucial to achieving ambitious targets.
- Harnessing the RE potential in the State, which has significant potential in solar, wind, and hybrid energy sources, along with pumped storage projects.
- The democratisation of energy generation by supporting energy self-sufficiency through schemes like PM Surya Ghar Yojana and PM KUSUM.
- The Anticipated Investment of approximately Rs.10 lakh crores and the creation of around 7,50,000 direct and indirect jobs.
- Promotion of Green Hydrogen in the State, making it a global hub for Green Hydrogen exports.
- Promotion of investments by simplifying processes, offering incentives for clean energy and RE manufacturing projects, and imparting skills in RE technologies.
- Promotion of a circular economy and reduction of the cost of production by including RE manufacturing projects.
- Aligning the policy with the Government of India's schemes.

- Development of Renewable Economic Zones (REZs) and Renewable Energy Manufacturing Zones (REMZs).
- Support for various clean energy technologies, including solar power, wind power, wind-solar hybrid power, green hydrogen and its derivatives, biofuels, energy storage (including Pumped Storage Power (PSP) and Battery Energy Storage Systems), mini and small hydro projects, and electric mobility charging infrastructure.
- Establishment of a University for Green Energy & Circular Economy (UGC) and a Clean Energy Knowledge & Skill Development Centre (CEKSDC).
- Single window clearance for projects.

To successfully implement the aforementioned policy, the Government of Andhra Pradesh (GoAP), acting through the Special Chief Secretary/Energy Department, and invoking Section 108 of the Electricity Act, 2003, addressed a letter to the Commission. In the letter, the GoAP proposed the following amendments to the Principal Regulation and requested the Commission to incorporate the same.

A. *"For installation of SRTPVS for residential consumers, the Distributed Energy Resource (DER) aggregators shall be allowed for the DISCOMs. The DER Aggregators shall have a commercial agreement with the DISCOM and shall be paid an Aggregator fee."*

B. *"The application fee as specified below shall be collected:*

   Capacities up to 5 kWp: Nil, Capacities above 5 kWp and up to 100 kWp: Rs. 1,000, Capacities above 100 kWp and up to 1000 kWp: Rs. 10,000, Capacities above 1000 kWp: Rs.25,000/MWp."

After thoroughly examining the amendments proposed by the GoAP under Section 108 of the Electricity Act, 2003 and other relevant aspects, including the promotion of efficient and environmentally benign policies as envisaged in the preamble of the Electricity Act, 2003, the Commission, in exercise of the powers conferred on it under Sections 9, 61, 66, 86(1)(e) and 181(1) of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in that behalf, issued a draft amendment to Andhra Pradesh Electricity Regulatory Commission (The Grid Interactive Solar Rooftop Photovoltaic Systems under Net/Gross Metering) Regulation, 2023 (Regulation No. 4 of 2023).

Accordingly, the draft amendment was published on the Commission's website on 26.03.2025 along with a Public Notice inviting comments, suggestions, and objections

from all stakeholders and interested parties. In response, the Commission received comments and suggestions on the draft amendment, as well as on other provisions of the Principal Regulation. After carefully examining all the submissions, the Commission decided to issue a revised draft of the First Amendment, which was published on 19.08.2025, along with a Public Notice inviting further suggestions and objections from stakeholders and interested parties. Later, the time was extended up to 15.09.2025 for submission of suggestions and objections. In response, the Commission again received comments and suggestions on the draft amendment. After carefully examining all the submissions as detailed in the statement of reasons dated 04.12.2025, the Commission issued the first amendment, as detailed below.

1. Short Title, Extent, and Commencement

i. This Regulation shall be called the First Amendment to the Andhra Pradesh Electricity Regulatory Commission (The Grid Interactive Solar Rooftop Photovoltaic Systems under Net/Gross Metering) Regulation, 2023 (Regulation No. 4 of 2023).

ii. This Regulation shall extend to the whole of the State of Andhra Pradesh.

iii. This Regulation shall come into force on the date of its publication in the Andhra Pradesh Gazette.

2. Clause 2(xi) of the Principal Regulation shall be substituted with the following:

"Virtual Net Metering" means a mechanism whereby total energy exported from the grid-interactive solar Rooftop Photovoltaic system of a group of prosumers/society is exported to the grid through a net meter. The exported such energy is adjusted in the electricity service connection(s) of the same Group (society) prosumers in proportion to the share in their Grid-Interactive Solar Rooftop Photovoltaic system in units (kWh / kVAh) to arrive at the net imported or exported energy by an individual prosumer in the Group / Society from/to the Distribution licensee during the applicable billing period/cycle located within the same distribution licensee's area of supply. The net energy imported by the prosumers is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission.

In case the prosumer(s) is/are in the ambit of the Time of Day (ToD) tariff, the share of exported energy of such prosumer(s) under virtual net metering shall be netted off against his/their electricity consumption during the respective ToD slots in the

following manner:

- Surplus energy injected into the grid during peak ToD slots shall first be adjusted against consumption within peak slots, and any balance remaining shall next be adjusted during normal slots, followed by off-peak slots;
- Surplus energy injected into the grid during normal slots shall first be adjusted against consumption within normal slots, and any remaining balance shall be adjusted during off-peak slots; and
- Surplus energy injected into the grid during off-peak slots shall be adjusted only against consumption during off-peak slots.

The applicable T&D losses and Distribution/wheeling charges as per MYT order of the Commission applicable for relevant periods from the injection point to the drawl point shall be deducted while adjusting the generation against the consumption.

Provided that Distribution/wheeling charges shall be waived if the injection and withdrawal of power occur at the same voltage levels.

The Distribution Licensee shall claim the waivers under Section 65 of the Electricity Act, 2003, from the Government of Andhra Pradesh.

3. Clause 2(xii) of the Principal Regulation shall be substituted with the following:

”Group Net Metering" means a mechanism whereby energy exported from the Grid - Interactive Solar Rooftop Photovoltaic system of an individual prosumer at one or more points is adjusted in consumption by multiple electricity service connection(s) of her/him in units (kWh /kVAh) to arrive at the net imported or exported energy from/to the Distribution licensee during the applicable billing period/cycle located within the same distribution licensee's area of supply. The net energy imported by the prosumers is billed by the distribution licensee on the basis of the applicable retail tariff as per the Tariff Order. The net energy exported by the prosumers is paid by the Distribution licensee at the Feed-In-Tariff as fixed by the Commission. The Solar PV system under Group Net Metering may be installed at the premises of any of the service connections or at any other premises or land within the same Distribution Licensee’s area of supply. The energy exported from the Solar Rooftop Photovoltaic system under Group Net Metering shall be measured by a separate Net meter.

In case the service connection(s) is/are in the ambit of the Time of Day (ToD) tariff, the share of exported energy of such service connection(s) under Group Net Metering shall

be netted off against it/it's electricity consumption during the respective ToD slots in the following manner:

- Surplus energy injected into the grid during peak ToD slots shall first be adjusted against consumption within peak slots, and any balance remaining shall next be adjusted during normal slots, followed by off-peak slots;
- Surplus energy injected into the grid during normal slots shall first be adjusted against consumption within normal slots, and any remaining balance shall be adjusted during off-peak slots; and
- Surplus energy injected into the grid during off-peak slots shall be adjusted only against consumption during off-peak slots.

The applicable T&D losses and Distribution/wheeling charges as per MYT order of the Commission applicable for relevant periods from the injection point to drawl point shall be deducted while adjusting the generation against the consumption.

Provided that Distribution/wheeling charges shall be waived if the injection and withdrawal of power occur at the same voltage levels.

The Distribution Licensee shall claim the waivers under Section 65 of the Electricity Act, 2003, from the Government of Andhra Pradesh."

4. The following definition shall be inserted as Clause 2 (xxiv) of the Principal Regulation.

Distributed Energy Resources Aggregator or DERA" means an entity registered/ appointed with/by the distribution licensee to provide aggregation of one or more services like demand response services under the demand response mechanism, Distributed Generation, Energy Storage, etc., within a license area. The aggregators shall assist the DISCOMs, inter alia, in the promotion of Distributed Generation/storage like Solar Rooftop projects with/without storage for all categories of consumers by managing, dispatching, metering, and settling the individual Distributed Energy Resources (DERs) energy, disbursement of rooftop subsidies, within their aggregation, as well empanelling of vendors, and construction of systems, etc.

5. The following text shall be added as Clause 3.10 after Clause 3.9 in the Principal Regulation.

For installation of Solar Rooftop Photovoltaic System for all categories of consumers, the Distributed Energy Resource (DER) aggregators shall be allowed for the DISCOMs. The DER Aggregators shall have a commercial agreement with the DISCOM and shall

be paid a one-time Aggregator fee as approved by the Commission.

6. The following text shall be added in Clause 5.6 of the Principal Regulation.

The summary of the capacities that are permissible under the Net/Gross metering is shown in the table below

Particulars	Capacity that can be availed		
	Min	Max	Capped Up to
Individual Net Metering	1 kW	500 kW	Contracted Load/ Contracted Maximum Demand (CMD) of the consumer
Group net Metering	1 kW	500 kW	
Virtual net Metering	5 kW	500 kW	
Gross net Metering	5 kW	5000 kW	
Net Billing or Net Feed In	1 kW	1000 kW	

Explanation:

1. Inverter capacity (AC Output capacity) is the basis for deciding the SRTPVS capacity, and there shall be no restriction on CUF/energy exported to the grid.
2. The SRTPVS capacity that can be availed under this Regulation shall not exceed the sum (GNM/VNM) of the Contracted Load, in the case of LT consumers or the Contracted Maximum Demand, in the case of HT consumers. In cases where there is a combination of both LT and HT service connections under VNM/GNM, the SRTPVS capacity that can be availed under this Regulation shall not exceed the sum of the Contracted Load and Contracted Maximum Demand. In any case the maximum capacity permissible is as mentioned in the table above or sum (GNM/VNM) of Contracted Load/CMD of the consumer(s), whichever is lower.
3. Under VNM/GNM, there is no restriction on the number of consumers/service connections.
4. The category of the service connections can be of the same or a different category under the GNM arrangement.
5. A single consumer may have multiple GNM arrangements.

7. The existing Clause 11.1 of the Principal Regulation shall be substituted with the following:

The consumer shall make an application to Discom for setting up the SRTPVS by paying the requisite application fee either on AP Discoms websites and/or through designated Mee Seva centres or the National Portal for Solar Rooftop https://solarrooftop.gov.in/. The DISCOMS shall prepare their websites accordingly and also shall register at the National Portal for Solar Rooftop. The prescribed format for the application is shown in ANNEXURE-I of this Regulation. For Group Net Metering or Virtual Net Metering, the application shall be made to the Distribution Licensee in the prescribed format as per the MNRE Guiding/Helping Standard Operating Procedure (SOP) for the Implementation of Virtual Net Metering and Group Net Metering Mechanism, issued on 23.02.2023, and its subsequent amendments. Consumers intending to apply through the National Portal for Solar Rooftop shall use the applications in the portal.

8. The text in Clause 11.2 of the Principal Regulation shall be substituted with the following.

The application fee as specified below shall be collected:

Capacities up to 5 kWp: Nil, Capacities above 5 kWp and up to 100 kWp: Rs. 1,000, Capacities above 100 kWp and up to 1000 kWp: Rs. 10,000, Capacities above 1000 kWp: Rs.25,000/MWp.

9. The existing Clause 13.1 of the Principal Regulation shall be substituted with the following:

The agreement (Annexure-IX (A) /(B) as applicable) duly filled and signed in by the consumer shall be submitted to DISCOM within four months from the date of receipt of the technical feasibility, and DISCOM shall provide the acknowledgement for the same. The agreement is deemed to have come into force if there are no remarks communicated by DISCOM within two weeks from the date of receipt of the agreement. In case, within four months of issuing Technical feasibility, if the Agreement is not submitted by the consumer, the application is deemed to be cancelled. The officers designated for the release of new services of supply as per the present DISCOMS' orders in vogue shall sign the agreement. For Group Net Metering or Virtual Net Metering, the agreement shall be in the prescribed format as per MNRE Guiding/Helping Standard Operating Procedure (SOP) for Implementation of Virtual Net Metering and Group Net Metering Mechanism issued on 23.02.2023 and its amendments. The Eligible

Consumers under VNM/GNM shall have the right to amend the list of consumers or change the Sharing Ratio provided in the List of Consumers/Services once every financial year by sending notice at least 1 month in advance to the DISCOM.

10. The existing Clause 15 of the Principal Regulation shall be substituted with the following:

15. Provisions applicable to prosumers/consumers

Subject to the provisions of this Regulation, all provisions of the GTCS, the Supply Code, and other relevant regulations/guidelines applicable to consumers in general shall also apply to prosumers. The SRTPVS behind the prosumer/consumer's meter, without any capacity limitation and without injection to the grid, and not involving either a co-located Net Metering Arrangement or a Net Billing Arrangement, may be installed with prior intimation to the concerned DISCOM, not less than seventy-two (72) hours before installation. The Distribution Licensee shall verify and certify that the SRTPVS installed behind the meter is configured to prevent any export of power to the grid.

The prosumer/consumer shall furnish an undertaking to pay the applicable charges, as determined by the Commission from time to time, for the capacity of the SRTPVS installed behind the meter.

In case the prosumer/consumer installs SRTPVS behind the prosumer's meter without prior intimation to the DISCOM concerned, or if such installation does not conform to the Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations, 2013, the SRTPVS shall be disconnected from the Grid after due notice to the prosumer. The System may be reconnected after addressing the remarks outlined in the notice, after due inspection by the DISCOM.

For SRTPVS behind the meter already connected to the electricity system on the date of commencement of this Regulation, the prosumer/consumer shall take all necessary steps to meet the technical standards specified by CEA within sixty days of the coming into force of this Regulation and intimate the same to the DISCOM concerned.

11. The existing Clause 22 of the Principal Regulation shall be substituted with the following:

22. Repeal and Savings

The SRTPVSs already commissioned and those under various stages of construction,

including the cases wherein a feasibility report was issued under the provisions of earlier/existing Guidelines, shall stand governed by those guidelines till the completion of the term of such agreements in all respects, including the feed-in tariff. However, in cases where, after the issue of technical feasibility, the projects are not completed within the timelines stipulated in the existing guidelines as of the date of this Regulation coming into force, all such projects shall come under the purview of this Regulation. The internal procedures of the DISCOMS specified in existing guidelines on SRTPVSs by EPDCL letter dated 04.01.2019, approved by the Commission in its order dated 25.05.2019 and not in conflict with the present regulation, shall stand saved. Notwithstanding anything contained in the future Regulations or any amendments issued hereafter to this Regulation, all agreements entered into under the provisions of this Regulation (with the waivers, relaxations, or concessions such as waiver of wheeling charges, CSS etc., and feed-in tariff as applicable) shall remain operative and protected for the term stipulated in the respective Net/Gross Metering agreements.

(By Order of the Commission)

Sd/- 04/12/2025

Place: Kurnool
Date: 04.12.2025.

P.KRISHNA
Commission Secretary $_{i/c}$

Annexure-III

Illustrations

The following illustrations are shown only for the prosumer(s) who are covered under the ambit of the Time of Day (ToD) tariff. These illustrations do **not** include technical or distribution losses. The applicable losses, as prescribed under the relevant Regulation/Orders/DISCOM procedures, shall apply during actual implementation.

1. VNM - Settlement Mechanism

This example illustrates the allocation of total generation among participating consumers (A, B, and C) based on allocation ratios, followed by slot-wise netting of energy within and across ToD slots.

Assumptions:

(i) SRTPVS Generation under VNM

ToD Slot	Total VNM Generation (E_{Total})
Peak	700 kWh
Normal	300 kWh
Off-Peak	2,000 kWh
Total Generation	**3,000 kWh**

(ii) Allocation ratios as per the VNM agreement:

Consumer	A	B	C	Total
Allocation Ratio	40%	30%	30%	100%

(iii) Allocated Exported Energy from SRTPVS under VNM to participating consumers as per the ratios in the VNM agreement.

ToD Slot	E_{Total} (kWh)	Consumer A (40%)	Consumer B (30%)	Consumer C (30%)
Peak E_P	700	280	210	210
Normal E_N	300	120	90	90
Off-Peak E_O	2,000	800	600	600

(iv) Participating Consumer's consumption:

Consumer	Peak Consumption	Normal Consumption	Off-Peak Consumption	Total Consumption
A	300 kWh	500 kWh	700 kWh	1,500 kWh
B	600 kWh	400 kWh	600 kWh	1,600 kWh
C	110 kWh	90 kWh	200 kWh	400 kWh

(v) Energy Settlement for participating consumers.

Consumer A:

Slot	Cons. (C)	Export (E)	Step 1 (P → P → N → O)	Step 2 (N → N → O)	Step 3 (O → O)	Final Net Import(+)/ Export(-)
Peak (P)	300	E_P=280	C_P = 300 - 280 = 20 S_{P1} = 0	(N/A)	(N/A)	20 (Consumption from DISCOM)
Normal (N)	500	E_N=120	C_{N1}= 500 -S_{P1} = 500 S_{P2} = 0	C_{N2} = C_{N1}(500) -120 = 380 S_N = 0	(N/A)	380 (Consumption from DISCOM)
Off-peak (O)	700	E_O=800	C_{O1}=700 - S_{P2} = 700	C_{O2} = 700 - S_N = 700	C_{O3} = 700 - 800 = 0 S_O = 100	-100 (Feed-in-tariff paid to consumer)

Consumer B:

Slot	Cons. (C)	Export (E)	Step 1 (P → P → N → O)	Step 2 (N → N → O)	Step 3 (O → O)	Final Net Import(+)/ Export(-)
Peak (P)	600	E_P=210	C_P = 600 - 210 = 390 S_{P1} = 0	(N/A)	(N/A)	390 (Consumption from DISCOM)
Normal (N)	400	E_N=90	C_{N1}= 400 -S_{P1}(0) = 400 S_{P2} = 0	C_{N2} = 400-90=310 S_N = 0	(N/A)	310 (Consumption from DISCOM)
Off-peak (O)	600	E_O=600	C_{O1}=600 - S_{P2}(0) = 600	C_{O2} = 600 - S_N (0) = 600	C_{O3} = 600 - 600 = 0	0

Consumer C:

Slot	Cons. (C)	Export (E)	Step 1 (P → P → N → O)	Step 2 (N → N → O)	Step 3 (O → O)	Final Net Import(+)/ Export(-)
Peak (P)	110	E_P=210	C_P = 110 - 210 = 0 S_{P1} = 100	(N/A)	(N/A)	0
Normal (N)	90	E_N=90	C_{N1}= 90 -S_{P1}(100) = 0 S_{P2} = 10	C_{N2} = 0 S_N = 90	(N/A)	0
Off-peak (O)	200	E_O=600	C_{O1}= 200 - S_{P2}(10) = 190	C_{O2} = 190 - S_N (90) = 100	C_{O3} = 100 - 600 = 0 S_O = 500	-500 (Feed-in-tariff paid to consumer)

*__S__= Surplus, __C__= Consumption, $\mathbf{C_P}$= Net consumption during Peak slot, $\mathbf{C_{N1}}$= Net consumption during Normal slot (Step 1), $\mathbf{C_{N2}}$= Net consumption during Normal slot (Step 2), $\mathbf{C_{O1}}$= Net consumption

Off-peak slot (Step 1), $\mathbf{C_{O2}}$= Net consumption Off-peak slot (Step 2), $\mathbf{C_{O3}}$= Net consumption Off-peak slot (Step 3), $\mathbf{S_{P1}}$= Net Peak Surplus in Peak slot, $\mathbf{S_{P2}}$= Balance Net Peak Surplus in Normal slot, $\mathbf{S_N}$= Net Surplus in Normal slot, $\mathbf{S_O}$= Net Surplus in Off-peak slot.

2. GNM - Settlement Mechanism

This illustration demonstrates the slot-wise accounting for a single prosumer with multiple service connections/meters (Meter 1, Meter 2, and Meter 3) under a Group Net Metering arrangement. Service connections/meters may or may not be under the same category.

The total energy exported from the rooftop solar plant is allocated among the meters according to ratios mentioned in the GNM agreement, and each meter's net energy position is determined through sequential adjustments within and across ToD slots.

Assumptions:

(i) SRTPVS Generation under GNM

ToD Slot	Total Exported Energy (E_{Total})
Peak (P)	700 kWh
Normal (N)	300 kWh
Off-Peak (O)	2,000 kWh
Grand Total	**3,000 kWh**

(ii) Allocation ratios as per the GNM agreement:

Service Connection/ Meter	1	2	3	Total
Allocation Ratio	40%	30%	30%	100%

(iii) Allocated Exported Energy from SRTPVS under GNM to Service connections/meters as per the ratios in the GNM agreement.

Slot	E_{Total} (kWh)	Meter 1 (40%) (E1)	Meter 2 (30%) (E2)	Meter 3 (30%) (E3)
Peak E_P	700	280	210	210
Normal E_N	300	120	90	90
Off-Peak E_O	2,000	800	600	600

(iv) Service Connection's consumption:

Service Connection/ Meter	Peak Consumption (C_P)	Normal Consumption (C_N)	Off-Peak Consumption (C_O)	Total Consumption
1	300 kWh	500 kWh	700 kWh	1,500 kWh
2	600 kWh	400 kWh	600 kWh	1,600 kWh
3	110 kWh	90 kWh	200 kWh	400 kWh

(v) Energy Settlement for Service connections/meters

Meter 1:

Slot	Cons. (C)	Export (E)	Step 1 (P → P → N → O)	Step 2 (N → N → O)	Step 3 (O → O)	Final Net Import(+)/Export(-)
Peak (P)	300	E_P=280	C_P = 300 - 280 = 20 S_{P1} = 0	(N/A)	(N/A)	20 (Consumption from DISCOM)
Normal (N)	500	E_N=120	C_{N1}= 500 -S_{P1} = 500 S_{P2} = 0	C_{N2} = C_{N1}(500) -120 = 380 S_N = 0	(N/A)	380 (Consumption from DISCOM)
Off-peak (O)	700	E_O=800	C_{O1}=700 - S_P = 700	C_{O2} = 700 - S_N = 700	C_{O3} = 700 - 800 = 0 S_O = 100	-100 (Feed-in-tariff paid to consumer)

Meter 2:

Slot	Cons. (C)	Export (E)	Step 1 (P → P → N → O)	Step 2 (N → N → O)	Step 3 (O → O)	Final Net Import(+)/Export(-)
Peak (P)	600	E_P=210	C_P = 600 - 210 = 390 S_{P1} = 0	(N/A)	(N/A)	390 (Consumption from DISCOM)
Normal (N)	400	E_N=90	C_{N1}= 400 -S_{P1}(0) = 400 S_{P2} = 0	C_{N2} = 400-90=310 S_N = 0	(N/A)	310 (Consumption from DISCOM)
Off-peak (O)	600	E_O=600	C_{O1}=600 - S_{P2}(0) = 600	C_{O2} = 600 - S_N (0) = 600	C_{O3} = 600 - 600 = 0	0

Meter 3:

Slot	Cons. (C)	Export (E)	Step 1 (P → P → N → O)	Step 2 (N → N → O)	Step 3 (O → O)	Final Net Import(+)/Export (-)
Peak (P)	110	E_P=210	C_P = 110 - 210 = 0 S_{P1} = 100	(N/A)	(N/A)	0
Normal (N)	90	E_N=90	C_{N1}= 90 -S_{P1}(100) = 0 S_{P2} = 10	C_{N2} = 0 S_N = 90	(N/A)	0
Off-peak (O)	200	E_O=600	C_{O1}= 200 - S_{P2}(10) = 190	C_{O2} = 190 - S_N (90) = 100	C_{O3} = 100 - 600 = 0 S_O = 500	-500 (Feed-in-tariff paid to consumer)

*__S__= Surplus, __C__= Consumption, C_P= Net consumption during Peak slot, C_{N1}= Net consumption during

Normal slot (Step 1), $\mathbf{C_{N2}}$= Net consumption during Normal slot (Step 2), $\mathbf{C_{O1}}$= Net consumption Off-peak slot (Step 1), $\mathbf{C_{O2}}$= Net consumption Off-peak slot (Step 2), $\mathbf{C_{O3}}$= Net consumption Off-peak slot (Step 3), $\mathbf{S_{P1}}$= Net Peak Surplus in Peak slot, $\mathbf{S_{P2}}$= Balance Net Peak Surplus in Normal slot, $\mathbf{S_{N}}$= Net Surplus in Normal slot, $\mathbf{S_{O}}$= Net Surplus in Off-peak slot

3. **Individual Net-Metering**

The net exported energy during the Peak, Normal and Off-Peak ToD slots in the Net Meter shall be adjusted as shown in above illustrations of the VNM and GNM.

Disclaimer: The above illustrations are provided for explanatory and reference purposes only, to facilitate a clear understanding of the slot-wise settlement sequence and adjustment hierarchy for both VNM, GNM and Individual Net Metering systems. Actual settlements shall be carried out in accordance with the actual metering data for generation, consumption, and allocation ratios in VNM/GMM agreements. Allocation ratios and the list of consumers/service connections may be amended once in a financial year. In case there is any conflict between the illustrations and wordings of this Regulation, the Regulation would prevail.

Sd/- 04/12/2025
P.KRISHNA
Commission Secretary i/c