



REGULATORY INSIGHTS



Policy Perspectives on Draft Distributed Renewable Energy and Consumer Rights Regulations

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Editorial

Power purchase constitutes 70–80% of the final tariff paid by the final consumers. Analysis of the load duration curve across some of the states reveals that the peaking capacity is required to address high demand during less than 5% of the time blocks across the year.

Demand response, passive as well as the active, is a cost-effective instrument to reduce the incremental financial burden to meet the peak demand, especially during the stress hours, when demand–supply imbalances either lead to costly market procurement or curtailment of load.

The mandate for deployment of energy storage solution by pros should be guided by its economics as well as contribution to reduction in system imbalances. We propose adoption of community-based energy storage (CESS) as well as distributed energy storage (DESS) solution to be deployed by the DISCOM or third parties through competitive bidding for aggregate capacity deployment. While this offers economies of scale in procurement of ESS, it also allows the DISCOM to identify key nodes in the distribution network for its deployment and also avoids the DISCOM being exposed to the associated operational/technological risk.

Demand response, a cost-effective way to address financial burden of peaking demand, has rarely found its due importance under the Resource Adequacy exercise. The effectiveness of price-based demand response, through time-of-day tariff, hinges on appropriate design of the TOD tariff, failing which it may often produce adverse results, leading to ineffective response or reduction in revenue collection. Analysis of the consumer behaviour across each of the DISCOM should be the foundational principle of direct design, and thus should not be bounded by artificial a priori limits.

Price-based signal, primarily through time-of-day tariff, remains the most effective instrument to incentivise distributed energy storage. A regulatory nudge, in the form of a limit on the energy injection by prosumers, would incentivise adoption of ESS by the existing prosumers; it will lead to scaling down of the rooftop capacity by late adopters and would be an economically inefficient solution.

The provision for lapsed energy, the injected energy over and above the proposed limit, creates additional issues identified with their solution herein. The regulatory provisions for group/virtual net metering vis-à-vis individual prosumers should avoid discrimination, as both are to be aligned to meet the common objective.

Updating the consumers’ contribution to the DISCOM’s RPO compliance through consumer bills would generate a positive support for RE adoption. Justification and recovery of system-strengthening charges should be based on an approved standardised framework for feasibility analysis and technical assessment.

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Opinion on MoP Draft Electricity (Rights of Consumers) Amendment Rules, 2026



The Ministry of Power (MoP) notified the draft Electricity (Rights of Consumers) Amendment Rules, 2026, issued on 12th March 2026. The main objectives of the proposed amendments are:

Objective: The draft seeks to promote grid flexibility and consumer participation through measures such as time-of-day tariffs, demand response, and energy storage, while optimizing the rooftop solar framework. It also aims to improve service delivery by rationalizing connection timelines, strengthening grievance redressal mechanisms, and introducing safeguards against abnormal billing, thereby creating a more efficient, consumer-centric, and future-ready electricity distribution system.

CER Opinion

CER Definition of Demand Response: In the proposed Rule 2(1), clause (ga) “*Demand Response means managing electricity demand on the grid by encouraging consumers to shift their electricity usage to periods when supply is high or demand is low, using price signals or financial incentives;*” (emphasis added)

and in the proposed Rule 17, “*Implementation of Demand Response. - The Commission shall specify a framework for the implementation of Demand Response. Such framework may include eligibility criteria for Demand Response Providers, incentives for participating consumers, software and system requirements, communication protocols, and procedures for measurement, verification and financial settlement.*”

The definition of Demand Response (DR) as proposed in the draft appears to be incomplete, as it is limited primarily to ‘shift’ in DR with respect to price signals or financial incentives. A defined response program may effectively result in reduction in electricity demand during certain time blocks, without the same being shifted to any other block of the day. For example, reduction in cooling requirement during the day would not mean that this cooling demand would be shifted to evening hours. Definition of DR should thus not be restricted to shift of electricity demand, to another time period.

Further, the definition does not adequately recognise that DR can also involve the use of behind-the-meter resources such as energy storage. In such cases, a consumer may draw power from storage or inject electricity into the grid, thereby reducing net demand at the meter. Thus, DR is not limited to shifting or reduction of demand but may also include net injection of electricity, particularly in scenarios where consumer load falls below behind-the-meter generation such as rooftop solar or storage systems.

The definition also does not reflect the broader classification of DR into Active and Passive forms. Active DR typically involves voluntary reduction in load by consumers in response to a signal or communication from the distribution licensee. Such programmes may also be implemented through third-party aggregators, wherein the response may be reflected at an aggregated level rather than at the level of individual consumers. In such arrangements, the interaction between consumers and aggregators may not necessarily be based on explicit price differentials and may instead form part of a bundled service offering.

In view of the above, it is suggested that the definition of DR be expanded to include variations in terms of Active and Passive programmes, as well as implementation through distribution licensees directly or via third-party aggregators. The definition should provide sufficient flexibility to accommodate different demand-side actions, including reduction, shifting, and substitution through behind-the-meter resources, and should allow for diverse institutional arrangements, with or without intermediaries.

With respect to implementation, the concept of baseline is critical. Establishing an appropriate baseline is essential for measurement and verification of DR. It is therefore suggested that the Appropriate Commission may consider issuing a separate regulation detailing the procedure and methodology for baseline determination. Such a framework should also explicitly allow for implementation of DR programmes with or without intermediaries.

It is also noted that certain States have already introduced specific regulations on DR or demand flexibility. Accordingly, the definition and framework across the country should be aligned with to ensure consistency and avoid fragmentation across jurisdictions, especially in cases where DR may also participate in the energy or ancillary services market.

CER Timelines for New Connection: In the proposed rule 11 *“The Commission shall specify the maximum time period, from the date of submission of an application complete in all respects, not exceeding three days in metropolitan and municipal corporation areas, seven days in other municipal areas and fifteen days in rural areas, within which the distribution licensee shall provide new connection or modify an existing connection:”* (emphasis added)

The provision specifies timelines for release of new connections in terms of “days”. It is submitted that the term “days” should be replaced with “working days” throughout the provision, as operational processes within distribution utilities are aligned with working days. This is particularly relevant in cases involving intervening holidays, where adherence to strict calendar days may not be practically feasible.

Further, while the reduction in timelines is a welcome step, it is important that such timelines are grounded in an assessment of existing practices across states. The level of operational readiness, volume of applications, and field-level constraints vary significantly across regions. In the absence of such assessment, uniform timelines may lead to implementation challenges. It is also noted that this provision is closely linked to Standards of Performance (SoP), which are typically specified and monitored by the State Commissions. Direct specification within the Rules may create overlaps with existing regulatory frameworks.

An additional concern arises in areas where online application systems are not fully developed or utilised, particularly in rural/remote areas. In such cases, physical submission, internal processing and field verification may require additional time, making strict adherence to a three-day timeline difficult.

It is also not clear whether “application complete in all respects” includes payment of all applicable charges. In cases where additional infrastructure is required (e.g., extension of service line beyond a specified distance), the provision should explicitly state that timelines are applicable only upon payment of all required dues payable as per the approved rates by the respective commission.

Finally, technical feasibility and compliance requirements must also be considered. For instance, where a consumer seeks connection along with rooftop solar installation, the distribution licensee is required to verify compliance with applicable grid code and connectivity regulations. It may therefore be appropriate to clarify that timelines are subject to the consumer meeting all technical and regulatory requirements, so as to safeguard system integrity and ensure safe operation

CER Abnormal Billing Detection and Ambiguity in “Resolution”: In the proposed Rule 6(13), *“The distribution licensee shall make suitable arrangements in its billing system to identify cases where, in any billing cycle, the electricity consumption of a consumer exceeds five times or falls below one-fifth of the average consumption of the preceding six billing cycles or, such other limits as may be determined by the State Commission. Such cases shall be reviewed at the appropriate level, and resolved within thirty days from the date of generation of such bill.”* (emphasis added)

The provision identifies abnormal consumption based on a threshold such as five times increase or significant reduction in consumption compared to previous billing cycles. However, the basis and implication of such identification is not clearly articulated. There can be practical scenarios where consumption naturally falls or rises without any irregularity. For instance, a consumer owning multiple houses may occupy one house for a few months

and shift to another for an extended duration. Similarly, a consumer may be travelling or transferred to a different location for several months. In such cases, consumption may reduce significantly and then increase again upon return. If consumption falls in such a manner, it is unclear what exactly is intended to be done under this provision.

The current framing appears to implicitly assume wrongdoing, such as theft, in cases of abnormal variation. However, if consumption is lower than previous levels, it is not evident what the issue is. Conversely, if consumption increases significantly, it may simply indicate an increase in load factor or under-declaration of load, rather than any deliberate violation like theft. In the latter case, the sanctioned load/ maximum demand should be automatically updated based on a threshold to be decided by the respective commission.

Further, the threshold of “five times” appears arbitrary and excessively large. Such limits should ideally be determined through analytical studies, using billing data and data analytics to identify genuine anomalies. The absence of a data-driven basis may lead to incorrect flagging of normal consumption patterns.

Most importantly, the provision uses the term “reviewed and resolved” without clearly defining the process of review or the nature of resolution. The concept of “resolution” typically applies in the context of mutual consent to the resolution. A case may be ‘resolved’ by a discom leading to updation of sanctioned load/demand but without the satisfaction of the consumer taking it to CGRF or beyond. This should be taken case through the applicable consumer grievance framework approved by the respective regulator. The clause may refer to the same.

CER Time-of-Day (ToD) Tariff Design and Implementation: The introduction of ToD tariff is a timely requirement, as it has the potential to reduce the cost of power procurement, ease the resource adequacy burden of distribution licensees, and enable consumers to optimise their electricity costs. However, careful consideration is required in the design of ToD tariffs. The structure should be based on robust data analysis and modelling to assess whether the incentive and penalty framework is sufficient to induce meaningful load change. Without such analysis, the intended changes in the demand profile may not materialise.

The Rules may bring clarity by specifying that consumers with smart metering would be a candidate for ToD metering. It is also suggested that all domestic consumers with smart meters be brought under the ToD tariff framework in the initial phase itself.

CER Specified Limits for ToD Tariff (1.2 and 0.8 Multipliers) and Definition of Peak/Solar Hours: In the proposed Rule (8A), “*The Time of Day tariff for Commercial and Industrial consumers with a maximum demand exceeding ten Kilowatts shall be implemented no later than 1st April, 2027 and for all other consumers, excluding agricultural consumers, the Time of Day tariff shall be made effective from the date specified by the State Commission, but no later than 1st April, 2028:*

Provided that, the Time of Day Tariff specified by the State Commission for Commercial and Industrial consumers during peak period of the day shall not be less than 1.20 times the normal tariff and for other consumers, it shall not be less than 1.10 times the normal tariff:

Provided further that, tariff for solar hours of the day, specified by the State Commission shall be at least twenty percent less than the normal tariff for that category of consumers:

Provided also that the Time of Day Tariff shall be applicable on energy charge component of the normal tariff:

Provided also that the duration of peak hours shall not be more than solar hours as notified by the State Commission or State Load Despatch Centre.

Explanation:- For the purposes of this rule, the expression “solar hours” means the duration of eight hours in a day as specified by the State Commission.” (emphasis added)

CER The design of ToD tariffs should not be prescribed in a uniform manner: It needs to be differentiated across states and distribution licensees, taking into account consumer mix, load profile, power purchase cost at different times of the day, and the potential impact on revenue from each consumer category. Data analytics would help design of ToD tariff for the respective state/discom.

The draft prescribes specific limits for ToD tariff, including a peak tariff of at least 1.2 times and a reduced tariff (e.g., 0.8 times) during solar or off-peak hours. It is submitted that such limits should not be specified in a prescriptive manner within the Rules. The appropriate level of tariff differentiation depends on multiple factors, including the ratio of peak power procurement cost to base cost, consumer demand elasticity, and the overall impact on revenue. In certain cases, a lower differential (for example, 1.15 times) may be sufficient to induce the desired load shifting while maintaining revenue neutrality, whereas a higher mandated multiplier such as 1.2 may lead to unintended revenue loss for the distribution licensee. Therefore, such parameters cannot be considered in isolation and should ideally be determined for the respective state/discom based on detailed analysis.

Further, the provision that limits the duration of peak hours below duration of solar hours may not also be uniformly optimal across the country. There may be cases where peak demand includes both morning and evening peaks, which are associated with higher power procurement costs, the total duration of peak hours may exceed solar hours, and restricting peak hours artificially may dilute the effectiveness of ToD tariffs. This may also be dynamic as demand profile and power procurement cost evolves further in the future.

Additionally, the assumption of solar hours being uniformly around eight hours is not suitable. In practice, low-cost solar power is generally available for a shorter duration, typically around four to five hours, beyond which power procurement costs begin to increase due to ramping requirements. It is therefore recommended that both tariff differentials and the definition of peak, off-peak, solar and non-solar hours be determined by the respective SERC based on system-specific conditions and cost profiles.

CER Requirement of Regulations for Net/Gross Metering: Absence of specific regulation should not automatically lead to a 'deemed' net/gross metering mechanism. Given a number of technical, commercial and regulatory issues, scope for disputes would be significant and, in the absence, of appropriate regulation, the dispute resolution process itself would be prone to further legal scrutiny, further compounding the burden of legal disputes in the sector. The Commissions, which are yet to issue such regulations, may be provided technical assistance through Forum of Regulators for the same.

CER Installation of Solar Energy Meter: In the fourth proviso to proposed Rule 11 (4) *"The arrangements for net-metering, gross-metering, net-billing or net feed-in shall be in accordance with the regulations made by the State Commission from time to time:*

Provided also that in case of net-metering or net-billing or net feed-in, the distribution licensee may install a solar energy meter to measure the gross solar energy generated from the Grid Interactive rooftop Solar Photovoltaic system for the purpose of renewable energy purchase obligation credit, if any: "

... (emphasis added)

A number of rooftop installations may already have a solar energy meter in place. Such data can simply be piped through existing system. The respective regulation may mandate sharing of such data rather than making additional investment in metering infrastructure. It will avoid additional investment in installing new solar meters and associated data infrastructure.

Further, installation of an additional meter may lead to technical and institutional complications and give rise to disputes. Issues such as meter malfunction, damage, or alleged tampering may arise. In such situations, the consumer may contend that the meter is not under their ownership or responsibility, leading to further disputes.

CER Energy Storage Requirement: In the proposed rule 4(A), *"Energy Storage: The State Commission may mandate the installation of energy storage system of appropriate capacity by the Prosumer where installed capacity of renewable energy generation unit exceeds five hundred kilowatts. "* (emphasis added)

It is not clear whether the requirement for energy storage system is intended to be retrospective or prospective in nature. This lack of clarity may create ambiguity in implementation. It appears that the provision may be interpreted as retrospective. This may explicitly clarified.

Further, the threshold of five hundred kilowatts appears arbitrary. The appropriate threshold should ideally be based on analysis, such as feeder capacity, load flow considerations, and overall system requirements. It may also be appropriate to evaluate whether a different threshold, such as one hundred kilowatts or another level based on analysis, would be more suitable. Such study would also help in determination of ‘appropriate capacity’ level to be mandated for the ESS.

CER Strengthening Consumer Grievance Redressal Mechanism: The existing consumer grievance redressal mechanism involves multiple stages including Consumer Grievance Redressal Forums (CGRF) and the Ombudsman¹. However, the absence of an integrated complaint tracking system makes it difficult to analyse the lifecycle of consumer complaints. It is not clear how the inventory of cases will be traced across different levels, as there is no common identification system. Accordingly, a unified complaint numbering system may be introduced across the state, wherein each complaint is assigned a unique ID that is mapped across all stages, including the Ombudsman level. This would enable effective tracking of cases, facilitate analysis of complaint patterns, and help identify systemic issues, thereby improving the overall grievance redressal process.

Further, there should also be provision for an online submission portal, if not available, through which consumers can file and track their grievances. Consumers should be able to submit complaints and receive approvals through online mode. This is particularly important for consumers such as daily wage workers, for whom visiting offices may result in loss of livelihood for a day. Given that mobile connectivity is reasonably available, including in rural areas, enabling online submission would reduce opportunity cost for consumers and improve accessibility and efficiency of the grievance redressal mechanism

Opinion on GERC (Grid Interactive Distributed Renewable Energy Sources) Regulations, 2026



GERC notified draft Grid Interactive Distributed Renewable Energy Sources Regulations, 2026, issued on 15th May 2026. The main objectives of the proposed regulations are:

Objective: The Draft aim to establish a comprehensive regulatory framework for the development and integration of distributed renewable energy systems across Gujarat. The regulations replace the existing 2016 rooftop solar net metering regulations by facilitating consumer participation through multiple metering mechanisms, including Net Metering, Net Billing, Gross Metering, Group Net Metering, and Virtual Net Metering. The Draft Regulations further seek to standardize grid connectivity requirements to promote the deployment of Battery Energy Storage Systems (BESS) and innovative ownership models; and establish transparent energy accounting, billing, and commercial settlement mechanisms and supporting the State's renewable energy and Renewable Purchase Obligation (RPO) goals.

CER Opinion

CER Multiple Solar PV or Storage Deployment under Group/Virtual Net Metering: Multiple locations for rooftop Solar PV within a licensee's area would reduce variability of PV generation, especially when different locations may witness varying cloud conditions. This would reduce the risk for the participating consumers in Group/Virtual net metering schemes as well as the distribution licensees. Apart from the reduced variability of generation, it would also reduce localised impact on the distribution network.

The current definition of Group/Virtual net metering provides for a single point of injection for the Distributed Renewable Energy System (DRES). The regulation should provide for multiple location of DRES as well as the Energy Storage System (ESS) under the two types of schemes. (See Figures 1 & 2)

Singh A. (ed.). (2026), Opinion on "Ministry of Power (Draft National Electricity Policy, 2026)", Regulatory Insights (Vol. 08, Issue 04, pp. 2-31), Centre for Energy Regulation, IIT Kanpur. https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume08_Issue04.pdf

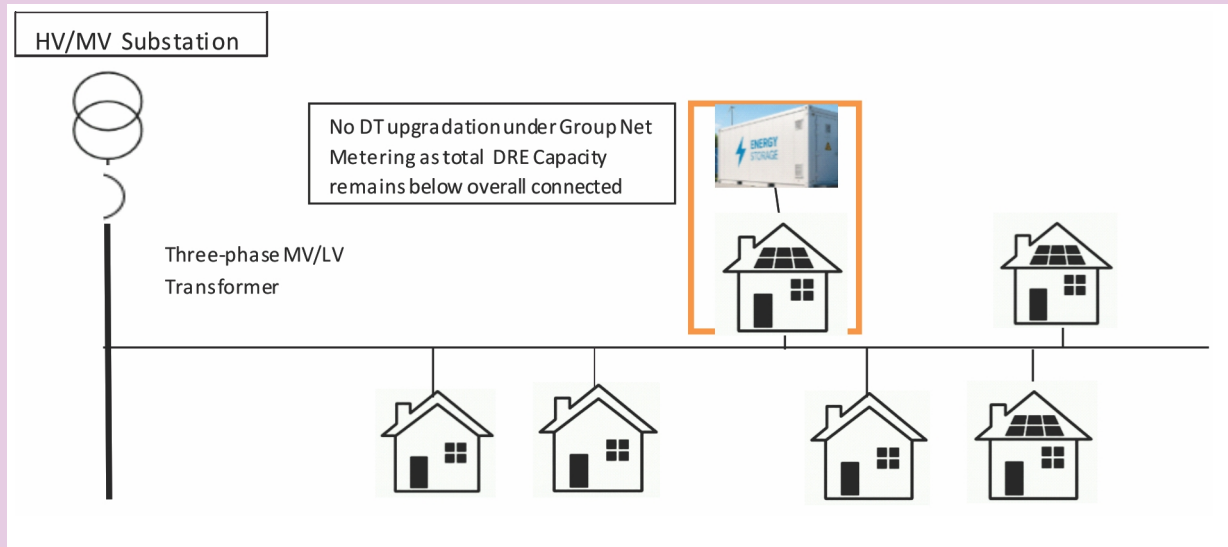


Figure 1: Group Net Metering with distributed PV capacity and Single Storage

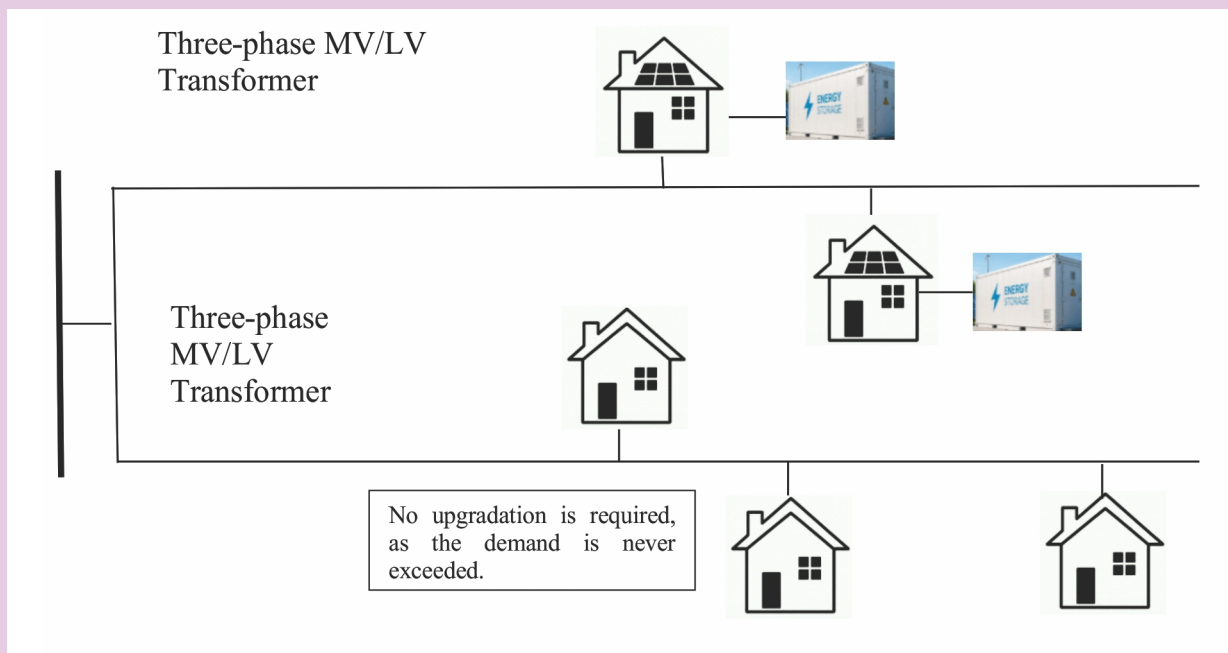


Figure 2: Group Net metering with distributed PV capacity and Distributed Storage

Definition 18 may be amended as follows, “Group Net Metering” or “GNM” means an arrangement whereby surplus energy generated/injected from a DRES installed by prosumer(s) is exported to the grid through Net Meter and the exported energy is adjusted in more than one electricity service connection(s) of the same consumer having same consumer category either at the same or different premises located within the same distribution licensee’s area of supply, subject to the provisions of these Regulations;

Definition 32 may be amended as follows,

“Virtual Net Metering” or “VNM” means an arrangement whereby the entire energy generated from a DRES is exported to the grid and recorded at the respective delivery point and the exported energy is adjusted in more than one electricity service connection(s) of the participating consumers belonging to the same consumer category located within the same distribution licensee’s area of supply, subject to the provisions of these Regulations;”

CER Provision for Non-Co-located Energy Storage in DRES: In the proposed Clause 2.1 (11) “*Distributed Renewable Energy System*” or “*DRES*” means electricity generation system based on renewable energy sources with or without BESS installed under the provisions of these Regulations and connected to the distribution network at voltage level of 33 KV and below using a distributed renewable energy source with or without energy storage having an anti-islanding protection to prevent flow of energy into the grid when grid supply is not available”. (emphasis added)

In cases where a DRES does not have co-located storage, it may utilize storage services from a battery energy storage system (BESS) located at a different site, including a community-based BESS system that is not necessarily co-located with the DRES. In this context, the definition of DRES may also explicitly recognize cases where storage is not co-located with the renewable energy system.

CER Correction in terminology “English calendar” to “Gregorian Calendar”: In the Proposed Clause 2.1 (16) “, Financial Year” or “Year” means the period beginning from the first of April of an English calendar year and ending with the thirty-first day of March of the next year. (emphasis added)

It is recommended that the term "English calendar" be replaced with "Gregorian calendar". The English Calendar, generally refers to the Julian System, which was replaced with the Gregorian Calendar in 1752.

CER DRES Threshold and Bidding Provision: As per the proposed Clause 2.1 (19) “ “Gross Metering” or “GM” means a mechanism whereby the total energy generated from DRES of a prosumer and the total energy consumed by a prosumer are accounted separately through appropriate metering arrangements and for the billing purpose, the total energy consumed by the prosumer is accounted at the applicable retail tariff and total energy generated and injected by DRES is accounted for at generic tariff determined by the Commission in its tariff order for respective RE-based sources for the RE capacity below threshold capacity limit for participating in the competitive bidding for RE procurement by the distribution licensees and applicable from time to time;”. (modified text, emphasis added)

The additional underlined text may be added to bring about clarity and avoiding disputes in terms of the respective definition and interpretation thereof.

CER Distributed Energy Storage System (DESS): Increasing renewable energy (RE) penetration at the distribution level offers several benefits. However, it also creates certain operational and technical challenges for the distribution utilities. These challenges may include uneven loading across phases of distribution transformers (DTs), high voltages at the far end of distribution network, and increased uncertainty due to behind-the-meter generation, which can complicate scheduling and network operations for the distribution licensee, and challenges in demand forecasting.

Typically, electricity demand and net electricity demand during solar generation hours are relatively low, whereas demand during peak hours is significantly higher. An economically viable BESS deployed at the distribution level can help address many of these technical and operational issues faced by the distribution licensees.

While individual ownership of BESS is one possible solution, greater economies of scale can be achieved through larger DESS integrated across the distribution network of a licensee. The distribution licensee can identify suitable feeders or DTs based on the technical and operational characteristics of the network, along with local demand patterns, distributed generation, and behind-the-meter storage profiles.

Multiple such locations within the distribution licensee's area can be aggregated and bid out together for the implementation of distributed/community-based distributed energy storage systems under competitive bidding through alternate business models. The Commission may consider introducing such solutions to be adopted only on the basis of their cost-benefit analysis with ultimate benefit for the end consumers. This may require suitable modifications to various provisions of the draft regulations. Some of these changes have been identified and are reflected in the suggestions provided herein.

In the case of an energy-based storage system, energy supplied during peak hours would be served locally. One of the key benefits in this context is that the DISCOM can itself benefit from energy arbitrage. This would also help address high voltage situation in feeders dominated by rooftop solar PV during solar hours.

Charging and discharging of batteries involve energy losses. For example, if 100 kWh is stored in a battery, only around 88 kWh may be available upon discharge, resulting in approximately 12% storage losses. Being located near the consumers, these losses are effectively offset through avoided transmission and distribution losses that would otherwise be incurred when importing power from outside the local area during peak hours.

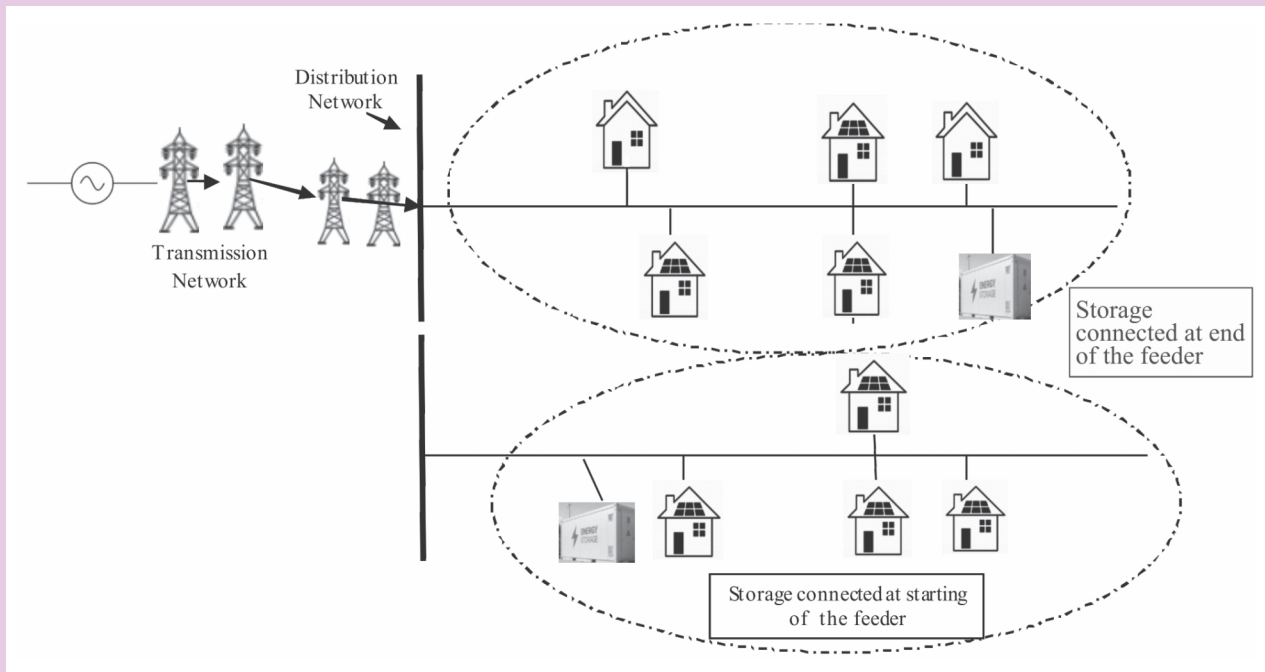


Figure 3: Distributed Energy Storage System (DESS)

CER Community-based energy storage system (CESS): The community-based energy storage system (CESS) can be implemented by prosumers under the Group / Virtual Net Metering mechanisms. The energy storage system may be deployed at more than one location of the participating consumers and may or may not be co-located with the DRE systems deployed under the mechanism. An important differentiation being that the Distributed Energy Storage Systems are to be implemented by the discom or a third party, whereas the Community-based Energy Storage System are to be implemented by consumers under Group/ Virtual Net metering mechanism.

Under a community-based storage arrangement, for example (Figure 3), five households with rooftop solar systems may jointly utilize a common battery energy storage system installed at one of the participating houses. The battery would be charged using the surplus solar energy generated Solar PV installation. Accordingly, energy accounting would track each participating consumer's contribution to the stored energy and utilization. The sizing limitation for the energy storage system may be guided by the overall capacity of the rooftop system as well as the sanctioned load of the participating consumer(s). Special consideration would be required for ESS that is not co-located with the rooftop system.

A prosumer may also be a person who injects electricity into the grid from an ESS or a community-owned storage system. The following definition may accordingly be amended

As per the proposed Clause 2.1 (26) “Prosumer” means a person who consumes electricity from the grid and can also inject distributed renewable energy generated or stored from DRES into the grid using the same network of distribution licensee; (additional text highlighted in bold, emphasis added)

CER Time of Day (ToD) Tariff to Encourage Adoption of Energy Storage System: While mandate for energy storage system would be suitable for new and large capacity behind the meter systems, the existing as well as the smaller systems can be nudged towards the same through implementation of the ToD. ToD-based net metering would ensure that the discom as well the consumers receive the value of energy as per the tariff differentiation across the day. This

would also reduce the evening peak demand thus reducing costly energy purchase during such peak hours thus reducing the need for costly peak power procurement arrangements under the Resource Adequacy requirements or under short-term shortage conditions.

CER Uniform Eligibility Criteria for Group Net Metering Across Consumer Categories: As per the proposed Clause 4.3 *“Provided that the eligible consumers of all categories shall be eligible to install the DRES under the Gross Metering / Virtual Net Metering Arrangement for maximum capacity up to 4000 (Four thousand) kW (AC) subject to technical feasibility at the point of injection;”*(emphasis added)

Does the above clause suggest that the consumers from any category may participate under Group/Net Metering, provided that all participating consumers belong to the same consumer category. It is likely that participating consumers across categories may benefit from the economics of group net metering mechanism. For example, a domestic-commercial, domestic-agriculture, domestic-agricultural-commercial etc. Additional proviso enabling participation of consumers across selected categories may be introduced.

CER Exemption from Open Access Charges for 'Captive' Renewable Energy Arrangements: As per the proposed Clause 4.4 *“The wheeling of energy from DRES to the participating connections in case of Group Net Metering and Virtual Net Metering arrangement shall be allowed after considering the wheeling loss in the network and on payment of applicable Open Access charges and banking charges as specified in these Regulations read with relevant Order / Regulations of the Commission”*

As per the proposed provision requiring payment of applicable Open Access charges under Group Net Metering and Virtual Net Metering arrangements, it is submitted that such charges should not be applicable where the renewable energy project qualifies as a captive generating plant under the provisions of the Electricity Act, 2003.

Applicability of Open Access charges would place Group/Net metering arrangements at a significant disadvantage as compared to RE-based captive units, which are exempt from Cross Subsidy Surcharge. It is also not aligned with the spirit of Section 86(1)(e) of the Electricity Act, 2003, which mandates the promotion of renewable energy.

While the applicability of wheeling charges may be justified on account of technical losses associated with the use of the distribution network, the applicability of Open Access charges, particularly the Cross-Subsidy Surcharge, should be re-evaluated to ensure that it does not undermine the intended promotion of renewable energy initiatives. The applicability of wheeling as well as banking charges would be justified as the discom's network would be used for wheeling of energy, where it would also offer banking of energy.

The underlying philosophy of captive generation is to enable consumers to generate and consume their own electricity. The consumers under group/virtual net metering are essentially consumers with captive generation capacity. Imposition of Open Access charges (particularly cross subsidy surcharge) on such 'captive' renewable energy projects would adversely impact their economic viability and discourage investment in distributed renewable energy systems. This would be contrary to the objectives of promoting renewable energy adoption, consumer participation, and decentralised clean energy generation. It is noteworthy to highlight that RE-based captive generating plants are exempted from such charges across the state.

CER Discriminatory Treatment of Group and Virtual Net Metering: As per the proposed Clause 4.5 *“In case of DRES, whether self-owned or owned by a RESCO, is installed on prosumer's premises under Gross Metering or Net Metering or Net Billing arrangement, as the case may be, such a prosumer shall be exempted from wheeling charges and loss”*

Treatment of Group Net Metering and Virtual Net Metering, as compared to RESCO-owned DRES under Gross Metering, Net Metering, or Net Billing arrangements, appears discriminatory. This is because exemption from wheeling charges and losses is available to prosumer under Gross Metering, Net Metering, and Net Billing arrangements where the DRES is installed on the prosumer's premises and owned by a RESCO.

However, similar exemption is not extended to Group Net Metering and Virtual Net Metering arrangements. The maximum capacity of participating prosumers under Group Net Metering, and Virtual Net Metering may be relatively small, often only 5 kW or 10 kW. Therefore, the regulation may unintentionally discriminate against smaller

consumers who seek to aggregate their demand and participate collectively under the Group/Virtual Net Metering framework.

CER Dispute Resolution Mechanism for Excess Energy Settlement under RESCO Agreements: As per the proposed Clause 4.7, *“The RESCO/third-party owner shall enter into a separate mutual agreement with the consumer / participating consumers for payment and other commercial terms relating to supply and consumption of energy from the DRES. The Distribution Licensee shall not be a party to such commercial arrangement and shall not be responsible for recovery of dues of the RESCO from the consumer. However, for interconnection, wheeling, metering, energy accounting and billing adjustment, the RESCO / DRES owner, consumer/participating consumers and Distribution Licensee shall execute such agreement as may be approved by the Commission”*

At a minimum, the Commission should issue appropriate guidelines to address such disputes arising under such arrangements, especially in cases where participating consumers may be entitled to recover certain dues from the RESCO on account of excess energy injected into the grid and accounted for under the agreement between the RESCO and the respective prosumer.

CER Standardised Framework for Technical Feasibility Assessment: As per the proposed Clause 6.1 *“Technical Feasibility Analysis”*

The Commission should issue guidelines for undertaking technical feasibility analysis under Clause 6.1. A uniform guideline should be provided for such feasibility analysis, which may include consideration of various aspects, including the consumer load, connected load, sanctioned load, expected CUF, energy storage, phase connectivity, DT capacity, feeder loading, voltage profile, and other relevant technical parameters of the distribution network. This would ensure consistency, transparency, and non-discriminatory treatment in the approval of DRES connections.

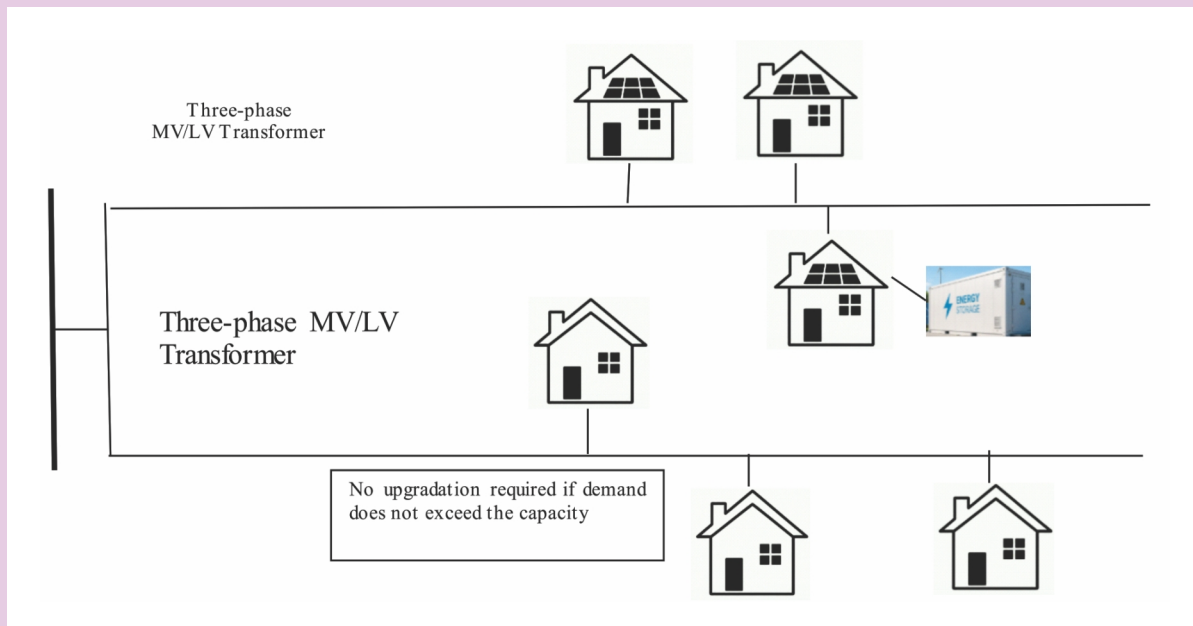


Figure 4: Avoided upgradation under net metering arrangements

CER Assessment of Distribution Network Upgradation: As per the proposed Clause 6.4 *“The distribution licensee shall update distribution transformer capacity / feeder capacity available for connecting DRES under Gross Metering, Net Metering, Net Billing, Group Net Metering, Virtual Net Metering arrangement on yearly basis and shall provide the information on its website with intimation to the Commission”*

- In some cases, network upgradation may not be necessary, and the requirement for such upgradation may be deferred under specific technical circumstances.

- In certain cases, alternative investments may be required, such as investments in distributed energy storage systems.
- In some cases, circumstances may require upgradation of distribution transformer capacity. The Commission should issue guidelines for assessing and estimating such upgradation in consultation with the stakeholders.
- As these issues have broader regulatory and technical implications, they may also be deliberated at the Forum of Regulators (FoR) level to ensure a uniform and transparent approach.

CER Justification of System Strengthening Charges: As per the proposed Clause 6.4 (a) *“For LT consumers installing DRES above 6 kW up to 100 kW in aggregate: (i) In respect of State owned Discoms and Torrent Power Limited: System strengthening charges for DRES capacity above 6 kW up to 100 kW shall be recovered from the Applicant by the Distribution Licensee at the rate of 25% of per kW basis charges as applicable for release of new/additional load at Low Tension, being recovered from the applicant by the concerned Distribution Licensee as approved by the Commission from time to time.”*

It is submitted that the proposed system strengthening charges should not be recoverable from a DRES consumer unless there is a genuine requirement for a new service connection or upgradation of the existing service connection. Where no such requirement exists, recovery of such charges from the DRES consumer would not be justified.

It should also be explicitly clarified that where consumers contribute 25% of the system strengthening charges, the corresponding portion of the capital expenditure funded through consumer contribution shall be excluded from the capital cost considered for Aggregate Revenue Requirement (ARR) purposes. Consequently, depreciation, return on capital, interest, and any other related costs attributable to such consumer-funded portion of the investment should not be recoverable through ARR from consumers.

CER Recovery of additional investment through ARR and consumer contribution: As per the proposed Clause 6.4 (b)(ii) *“Provided that the cost of strengthening the distribution infrastructure, including distribution transformer, as necessary, to facilitate the installation of DRES up to a capacity of 6 kW shall be included in the **annual revenue requirement** of the distribution licensee”.*(emphasis added)

System strengthening requirement is a capital expenditure and hence would not be part of expenses under the 'annual revenue requirement'. The corresponding amount shall be incorporated in the proposed capital investment of the Distribution Licensee while approving the capital expenditure and interest cost, O&M, depreciation and RoE towards such investment would form part of the ARR of the respective Licensee. This clarification is necessary to ensure that the same cost is not recovered twice, once through consumer contribution and again through tariff recovery under ARR.

CER App/Web Based Procedure for Application: The procedure should be fully online through app/ web-portal for receiving applications from applicants for installation, interconnection and metering of DRES under these Regulations, within three months from the date of notification of these Regulations.

CER Differential Treatment for DRES Consumers: As per the proposed Clause 7.2 *“Provided that there shall not be requirement for execution of separate written connectivity agreement between the Distribution Licensee*

consumer in case of DRES installed under PM Surya Ghar Muft Bijli Yojana and the Consumer shall be deemed to be bound by terms and conditions of these Regulations in respect of DRES. In such case, the date of commencement of agreement shall be the date of commissioning of DRES and in lieu of execution of formal connectivity agreement, the concerned Discom shall communicate to the Applicant, under proper receipt, mentioning the date of commencement of agreement along with the applicable rate of purchase of surplus energy.

Provided further that in case of any delay on the part of distribution licensee without any just cause, the Licensee shall be liable to pay compensation to the consumer at a rate which shall not be less than five hundred rupees per day for each day of default” (emphasis added)

It is submitted that such differential treatment of rooftops set up under the PM Surya Ghar Muft Bijli Yojana and those

funded by consumers. Even while the later is not placing any additional burden on budgetary resources of the government, Therefore, the regulatory requirement for execution of separate written connectivity agreement should either be exempted or be streamlined and made easier for other prospective prosumers.

CER DRES Switching and Lock-in Period: As per the proposed Clause 8.2 *“Prosumer / Consumers can also switch from existing Net Metering arrangement to Gross Metering or Net Billing arrangement maximum three times during life of the DRES project or as decided by the Commission. Further, such switch over can be allowed only once in a financial year with advance intimation of 30 days before commencement of the next financial year.”* (Emphasis added)

The applicability of the above clause is based on the assumption that the 'life of the DRES' is defined properly. Is this the life of the original system or the one extended by replacement of old panels or balance of the system? Is this the 'actual technical life' or 'guaranteed life' as per contract between the prosumer and the installer/supplier of the rooftop system? with the clause should not relate to a parameter which which is neither firm nor known to the distribution licensee.

Due to significant information asymmetry arising from different equipment makers and contractual arrangements, the DRE facility, upgradation, or replacement may be undertaken at different intervals. In such circumstances, the distribution licensee may not be in a position to seamlessly track the actual life of each project.

Furthermore, in the absence of any certification regarding the project life, the operationalization of such a provision may lead to implementation challenges and potential disputes between the consumer and the distribution licensee. As an alternative, the Commission may consider specifying a minimum lock-in period, say, 2-3 years, for consumers in any of the mechanisms.

Within this framework, multiple switches may be permitted, as consumers would typically switch only after satisfying all conditions prescribed under the regulations and ensuring appropriate metering arrangements. There should be no artificial restriction on switching, provided technical feasibility, preparedness, and compliance with regulatory requirements are met. In this manner, consumers may be allowed to make economically rational decisions, subject to a reasonable lock-in period.

CER Definition, Applicability and Continuity of BESS Requirement: As per the proposed Clause 8.3 second proviso *“Provided that the prosumer /consumer having contract demand of above 100 kW and installing DRES capacity in excess of contract demand, such DRES capacity shall be permitted only if such DRES include BESS having provisions for at least 2 hours per charging / discharging cycles per day, for at least 50% of DRES capacity which is in excess of contract demand”.*

This proviso does not clearly specify whether the BESS capacity requirement is to be met at the time of initial installation or whether it continues to apply throughout the period where the DRES capacity exceeds the contract demand. Furthermore, in the absence of any mechanism for subsequent verification of BESS, this ambiguity may lead to disputes between consumers and the distribution licensee. How would 2 hours of charging/discharging be measured? Based on a normative average annual CUF of the PV in the state or for CUF for the peak solar month i.e. the month with highest CUF? Is the required capacity in terms of rated kWh capacity, with an operating state of charge of 20-80% or the effective capacity to be delivered by the BESS? The same needs to be clarified.

What is the consequence of such shortfall at a later stage? A time limit to upgrade BESS capacity or reduce PV capacity within the limit? Would failure to do so result in cancellation of the sanction and a penalty? Given that the battery capacity may degrade later, the clause should also include a proviso permitting a shortfall of up to, say, 5-10% post 3-4 years after installation.

CER Group Net Metering DRES and Contract Demand Conditions: As per the proposed Clause 8.5 *“Provided that service connection(s) of prosumer / consumer installing DRES under Group Net Metering arrangement shall have same name, same tariff category and located in the supply area of the same distribution licensee.*

The minimum size of DRES that can be set up under group net metering mechanism shall be 6 kW, while the maximum size shall be limited to 1000 kW (AC).

Provided that the prosumer / consumer having contract demand of above 100 kW and installing DRES capacity in excess of aggregated contract demand, such DRES capacity shall be permitted only if such DRES include BESS having provisions for at least 2 hours per charging / discharging cycles per day, for at least 50% of DRES capacity which is in excess of contract demand". (emphasis added)

The inputs provided above in the context of definition, applicability and continuity of BESS requirement are applicable in the context of group net metering arrangement as well. In group and virtual group net metering arrangements, the relationship between DRES capacity and contract demand should be looked at for the entire group of participating consumers, rather than for each individual consumer separately. In the context of Group Net Metering as well as Virtual Net Metering, the DRES capacity may be higher than an individual consumer's contract demand. Therefore, it should be clarified that this clause applies to the group as a whole.

CER RPO Compliance Communication Through Consumer Billing: As per the proposed Clause 9.1.4 (f) “DRES generation used by distribution licensee for RPO compliance, if applicable”.

If DRES generation is being used by the distribution licensee for RPO compliance, the same should be clearly communicated to the consumer. Ideally, such information may be reflected in the consumer's regular electricity bill so that the consumer is aware of their contribution towards renewable energy compliance and can acknowledge that such generation has been considered for meeting the RPO requirement.

CER Review of 30% DRE Limit, Lapsed Energy and Distribution Losses: As per the proposed Clause 9.1.5 “Provided that in case of prosumer other than residential category, such adjustment shall be allowed upto thirty percent (30%) of the total energy drawn or imported by the prosumer from the Distribution Licensee during the relevant billing period subject to payment of applicable banking charges as specified under the GERC Green Energy Open Access Regulations, as amended from time to time. Any excess energy exported or injected beyond the permissible limit specified above shall not be eligible for adjustment and shall be treated as lapsed energy”.

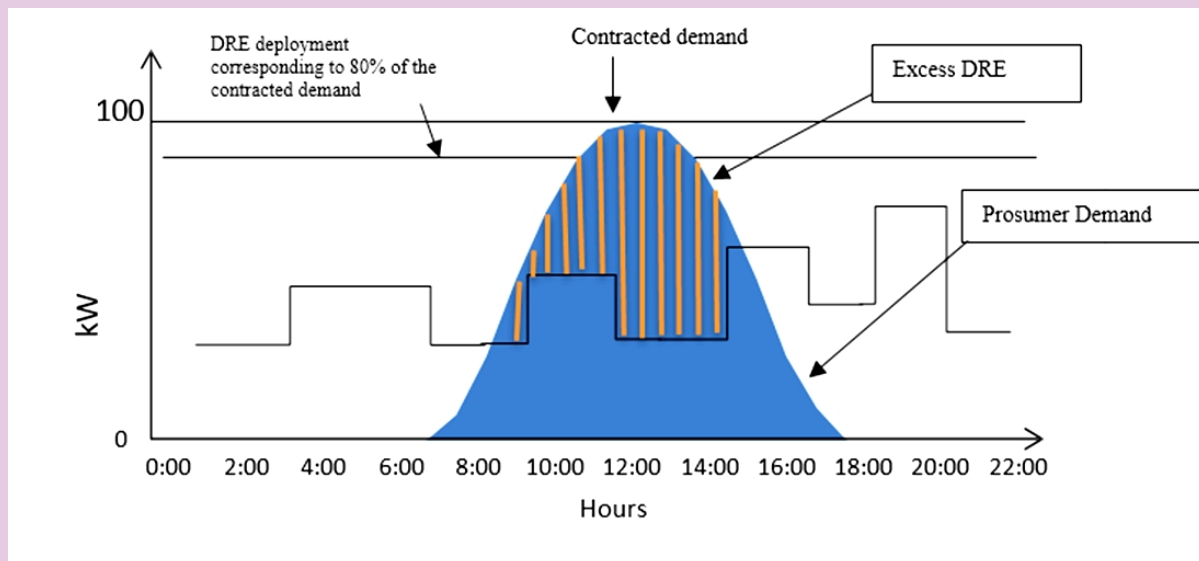


Figure 5: DRE Deployment and Excess Generation

Imposition of 30% limit, excluding residential category, to be adjusted against the energy injected from a DRES facility would reduce its attractiveness to the participating consumers. The smaller installations, due to diseconomies of scale, would be further disadvantaged due to this limit. It is suggested that smaller installations, say up to 10 kW, irrespective of the consumer category be excluded from the proposed limit for energy adjustment.

The excess energy that is not adjusted against the energy drawal by consumer from the distribution licensee, i.e. lapsed energy should be duly accounted for by the distribution licensee in its energy procurement as a part of the tariff petition

as well as true up tariff petition. The lapsed energy would artificially reduce the distribution loss of the distribution licensee.

The lapsed energy would also be accounted towards the RPO compliance of the distribution licensee. Such a discriminatory treatment should be avoided. An alternate approach would be to compensate the prosumers for the greenness embedded in the 'lapsed energy'. This compensation can be linked to the trailing 6-month weighted price of the Renewable Energy Certificates (RECs) across the power exchanges.

Another issue arises due to varying demand profile of the consumer and the generation profile of the DRES across different billing periods. This can be addressed by extending the overall window for energy adjustment to the whole financial year.

The ToD based energy adjustment, in place of the 30% limit, would be a win-win situation as this would encourage adoption of storage by prosumers, ensure that consumers get due credit of energy generated from DRES, and also avoid the energy accounting challenge for estimation of distribution loss.

The Commission may consider introducing Time-of-Day (ToD) tariffs for initially for all consumers with load above 10 kW (subsequently reducing it to 5 kW) and on voluntary basis for the smaller consumers. For such consumers, excess DRES energy beyond the prescribed 30% adjustment limit need not be treated as lapsed energy. Instead, such energy would be valued at the applicable ToD tariff.

As per Clause 10.3 third Proviso *“In case a consumer consuming energy from such DRES does not claim RE attribute of energy and allow DISCOM to avail the same for RPO compliance, such consumer shall be allowed to claim 25% concession in the Cross Subsidy Surcharge and Additional Surcharge”*

The applicable compensation for 'non-captive' energy not claimed by the DRES should be aligned with that proposed above in comment #22 for 'lapsed energy' or vice versa. Clause 10.3 should also clarify if the treatment of excess energy over and above the RPO/RCO obligation of the captive consumer would also be compensated by the distribution licensee, if it is claimed under the RPO compliance of the latter. The consumer should be compensated by higher of the 25% concession in CSS and AS, or the REC value.

Overall, a fair adjustment mechanism is needed so that consumers are not disadvantaged for contributing to RPO compliance indirectly through their excess generation. These provisions should also be applicable to consumers under Group Net Metering and Gross Metering arrangements, as covered under Clauses 9(4.5) and 9(5.6).

CER Time-of-Day Based Energy Offset and Proportional Adjustment Mechanism: As per the proposed Clause 9.1.7 *“(a) Exported or injected energy in the grid from DRES in the off-peak hours during the billing cycle shall be eligible to off-set / adjust against consumption from Grid during off-peak hours only, subject to 9.1.5 above.*

(b) Exported or injected energy in the grid from DRES in the peak hours during the billing cycle shall be eligible to off-set against consumption from Grid during peak as well as off-peak hours during the billing cycle, subject to 9.1.5 above”.

Energy adjustment should be carried out on a slot-wise basis under the ToD framework. The energy adjustment should then be linked to the respective slots of the ToD tariff structure. In case of excess energy remaining after adjustment against a time slot, say solar hours, that can be adjusted against, say peak hour, post adjustment for difference in tariff across the solar and peak hours respectively.

Accordingly, the adjustment shall follow the same proportion as the applicable ToD tariffs during injection and adjustment periods. For instance, if solar hours are ₹2/unit and peak hours are ₹6/unit (i.e., 1:3 ratio), and if 15 kWh are net injected during solar hours, then only one-third of that energy (i.e., equivalent value) would be considered for adjustment during peak hours.

Analytics of stored energy and its utilization along with those generated, consumed and injected (as applicable) could be an alternate mechanism to monitor the same.

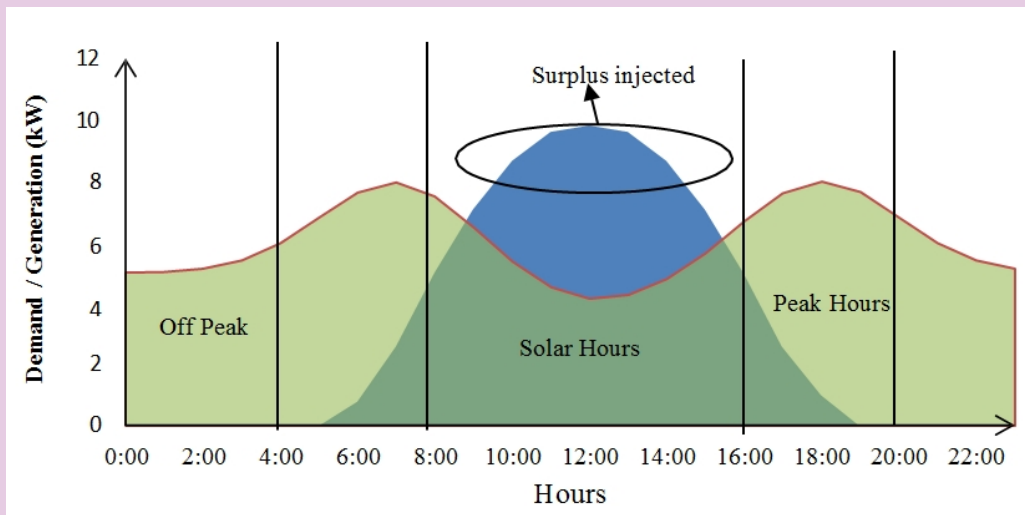


Figure 6: Adjustment of Energy During Peak/Off-peak hours

CER kWh to kVAh Conversion for Tariff Applicability: As per the proposed Clause 9.1.8 “*The exported or injected electricity measured in kilowatt hour (kWh) shall only be utilized to offset the consumption measured in kWh and shall not be utilized to compensate any other fee and charges levied by the distribution licensee.*”

In some cases, consumer energy is measured in kWh. However, for industrial consumers pay kVAh-based tariff. A clear methodology should be specified to convert kWh into kVAh for adjustment and settlement purposes.

Similarly, for prosumers under different consumer categories, tariff applicability should clearly specify whether energy adjustment will be based on kWh or kVAh. Where required, an appropriate conversion factor, to be specified in the regulation, for adjusting the energy injected in kWh terms against consumption billed in kVAh terms.

CER Consider Cumulative Financial Year DRES Generation Instead of Billing Period: As per the proposed Clause 9(9.4) (9.4.2) “*Quantum of DRES generation recorded in the Generation Meter in the billing period;*” (emphasized added)

It is submitted that the quantum of DRES generation should be considered cumulatively over the financial year, instead of being limited to the billing period. This would address the variability of consumption as well as generation profile across months. This would also help address cases wherein certain unoccupied domestic premises have very low consumption during a billing period.

CER Banking Charges: As per the proposed Clause 9(9.4) (9.4.4) “*In case of participating consumers other than in the residential category, credit of such banked energy shall be allowed up to a maximum of thirty percent (30%) of the total energy drawn by the participating consumers from the Distribution Licensee during the relevant billing period, subject to payment of applicable banking charges as specified under the GERC Green Energy Open Access*

Regulations, as amended from time to time:

Provided that such banked energy shall be adjusted within the same billing cycle and shall not be permitted to be carried forward to subsequent billing cycles:

Provided further that any unutilized banked energy remaining at the end of the billing cycle shall be treated as lapsed energy.”(emphasis added)

The applicability of banking charges would make Group/Virtual Net Metering much less attractive, especially for small commercial consumers who do not have access to suitable rooftop space and depend on such arrangements to participate in renewable energy generation.

To encourage wider adoption of distributed renewable energy, banking charges may be waived, at least for small consumers with DRES installations up to a capacity limit as may be specified by the Commission. In the future, with the deployment of smart meters, energy accounting and settlement can be carried out more accurately through ToD based settlement, reducing the need for broad-based banking charges.

CER Visibility of RE Generation and Utilization: With the increasing share of Distributed Renewable Energy (DRE), especially behind-the-meter installations, the actual electricity consumption of consumers is becoming less visible to distribution utilities. This creates challenges in accurately estimating and forecasting electricity demand in both the short term and the long term. As the share of DRE continues to grow, this issue is likely to become even more significant.

To address this concern, all new renewable energy installations should be mandatorily connected through smart meters with appropriate capabilities to monitor both generation and utilization of energy from each DRE resource. Considering the substantial rooftop solar capacity already installed across distribution licensees in Gujarat, there is also a need to improve the visibility of existing DRE resources.

A sampling-based smart metering or metering enhancement program for existing installations may be implemented to improve the visibility of DRE generation across the state. Better visibility would help distribution utilities improve demand forecasting, plan power procurement more effectively, and reduce deviations under the applicable Deviation Settlement Mechanism (DSM).

Such a stratified sampling framework may be designed and implemented in a suitable manner, with the required investments supported through an appropriate mechanism identified by the Commission. The expenditure may also be considered under the ARR of the distribution licensee, subject to approval by the Commission.

The smart meter data would provide visibility of generation, consumption, and energy injection. In cases where a DRE system has storage, additional information should also be provided from the respective inverter, including battery charging and discharging details as well as the state of charge (SoC) of the battery for each individual DRE with storage.

CER Data accessibility for demand and forecasting research: To support research in demand forecasting and RE generation forecasting, anonymized data from DRE resources, including generation, consumption, and storage-related information, should be made available by the distribution licensee through its website. This will help researchers, students, and academic institutions access relevant data for analysis and innovation in this area.

Making such data available will also ensure that doctoral and master's researchers across Indian institutions do not have to rely on data from foreign countries for their studies. Instead, their research efforts can focus on Indian conditions and challenges, thereby contributing to research outcomes that are aligned with the country's needs and national interest.

CER KW (KWh) to be corrected as kW (kWh) all through the document.



Regulatory Lexicon

Draft Gujarat Electricity Regulatory Commission(Grid Interactive Distributed Renewable Energy Sources) Regulations, 2026

Distributed Renewable Energy System (DRES)	DRES means electricity generation system based on RE sources with or without BESS installed and connected to the Discom at voltage level of 33 kV and below. The system will be equipped with anti-islanding protection, which automatically prevent flow of energy into the grid when grid supply is not available. A DRES generates electricity at or near the point of use, rather than at massive, centralized power plants. Powered by sources like rooftop solar panels, wind turbines, or small-scale hydro, they reduce transmission loss and can operate independently or alongside the main electric grid.
Delivery Point	In general terms, a Delivery Point (or Interconnection Point) is the physical and contractual location where power changes hands. It marks where a seller delivers net energy and a buyer (or utility) receives it, and it dictates where system responsibilities, transmission charges, and metering responsibilities shift from one party to another. As per the GERC Regulation for Grid Interactive DRES Regulation, Delivery Point means interconnection point with distribution grid where energy generated from DRES installed is metered for the purpose of determining exported or injected energy in the grid.
Meters	Bidirectional Meter – an energy meter which is capable of recording both import and export of electricity in the grid. It is also called as Net Meter. Check Meter – used for accounting and billing of electricity in case of failure of Net Meter or RE Generation Meter. It works as an auxiliary meter. Generation Meter – is an energy meter installed to measure the electricity generated by the DRES. ABT / Special Energy Meter – An ABT Meter is a specialised, high-accuracy energy meter designed to record electricity import and export in 15-minute time blocks to support India's Availability Based Tariff (ABT) framework. ABT meters are essential infrastructure for inter-utility electricity trading, grid scheduling, and deviation settlement.
Net Billing	Net Billing is a billing arrangement in which a single bidirectional meter records both the electricity imported from the grid and the electricity exported to the grid by a Distributed Renewable Energy System (DRES). Under this arrangement – Electricity imported from the grid is charged at the applicable retail tariff approved by the Commission. Surplus RE exported to the grid is paid for at the generic tariff determined by the Commission for the respective RE source. The value of the exported energy is adjusted against the value of the imported energy, and the balance amount is payable by or to the consumer. Eligibility – Consumers of all categories are eligible to install a DRES under the Net Billing arrangement. Minimum capacity = 1 kW (AC), Maximum capacity = 1000 kW (AC). Billing Procedure – The electricity generated by the DRES shall first be used for the consumer's own consumption. Any surplus electricity shall be exported to the grid. For each billing cycle, the distribution licensee shall record: • Electricity generated by the DRES. • Electricity exported to the grid. • Electricity imported from the grid. • Electricity consumed directly from the DRES. • Renewable energy generation counted towards Discom's RPO, wherever applicable.

Applicable Export Tariff – The tariff applicable to electricity exported from the DRES shall be the generic tariff in force on the date the DRES is commissioned. The same tariff shall continue to apply for the entire useful life of the DRES, unless otherwise provided by the Commission.

Draft Electricity (Rights of Consumers) Amendment Rules, 2026

Consumer Grievance Redressal Forum (CGRF)	CGRF is a two-level forum that each Discom is required to establish under sub-section (5) of section 42 of the Electricity Act, 2003 – one at the company level and another at the district or municipality level, as specified by the State Commission. Each forum is to be headed by an officer of the licensee of appropriate seniority and shall consist of a chairperson and not more than three members, including consumer representatives. Different types of grievances may be assigned to different levels of the forum depending on the nature of the grievance and the appropriate level for its effective resolution. A grievance is ordinarily to be decided within 30 days and in any case not exceeding 45 days from the date of its receipt. A consumer not satisfied with the decision of the district or municipal level forum may approach the company level forum within ninety days of that decision, before appealing to the Ombudsman. The distribution licensee is required to give wide publicity to the forum's office address, contact details and grievance registration procedure through print and electronic media, notice boards and electricity bills, and shall also create or upgrade its web portal and mobile application to enable online submission, virtual hearing and tracking of grievances. The status of each grievance shall be made available online for consumers.
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DERC (Terms and Conditions for Green Energy Open Access) (First Amendment) Regulations, 2026

Green Energy Open Access Consumer	Green Energy Open Access (GEOA) Consumer means any person having a contract demand or sanctioned load of 100 kW or more, either through a single connection or multiple connections aggregating 100 kW or more located in same electricity division of a distribution licensee, shall be eligible to take power through Green Energy Open Access and there shall be no limit of supply of power for the captive consumers taking power under Green Energy Open Access.
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MSERC (Multi Year Tariff) Regulations, 2026

Beneficiary	Beneficiary means, in relation to a generating station covered by a distribution licensee that procures electricity generated from such generating station pursuant to a Power Purchase Agreement, executed either directly with the generating company or through a trading licensee, and makes payment of the applicable capacity charges and energy charges. The procurement arrangement shall be supported by a corresponding back-to-back PPA and PSA executed by the trading licensee.
De-capitalisation	De-capitalisation means, for the purposes of tariff under these Regulations, the reduction in the Gross Fixed Assets of a project, as admitted by the Commission, on account of the inter-unit transfer of assets or the withdrawal of assets from service.
Hybrid Escalation Rate	"Hybrid Escalation Rate" means the average annual inflation rate determined by giving 60% weight to the Wholesale Price Index (WPI) and 40% weight to the Consumer Price Index (CPI), using the data of the last three available years, as notified by the Government of India or any other authorised authority.

Regulatory Updates

Tariff



KERC notified the Average Pooled Power Purchase Cost (AAPC) at ₹6.73/unit for FY 2026-27, effective from 1st April 2026, subject to truing-up based on actual data. For RE generators operating under the REC mechanism, ESCOMs will pay the lower of ₹6.73/unit or 75% of the generic tariff determined by the commission for the respective RE source for FY 2026-27. Further, since the actual AAPC for FY 2025-26 (₹6.73/unit) differs from the provisional AAPC (₹5.54/unit), the resulting payment adjustment for energy supplied under the REC mechanism during 1st April, 2025 to 31st March 2026 will be settled between ESCOMs and generators in three equal instalments, based on the lower of the revised AAPC or 75% of the applicable generic tariff.



RERC approved the Investment Plan filed by Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (RVPNL) for FY 2026-27. RVPN initially sought approval for an investment plan of ₹6,340 crore through its petition dated 4th December 2025, which was subsequently revised to ₹6,500 crore through an interlocutory application filed on 23rd March 2026. The Commission conducted hearings and examined stakeholder concerns relating to delays in project execution, TBCB projects, RE evacuation infrastructure, transmission losses, and proposed capacity additions. After considering stakeholder submissions and RVPN's responses, the Commission approved the investment plan for strengthening Rajasthan's transmission network, subject to regulatory prudence checks and compliance with applicable policy directions and regulations.



WBERC, through its Order dated 21st May 2026, approves the Annual Performance Review (APR) and Fuel Cost Adjustment (FCA) of Durgapur Projects Ltd. (DPL) for FY 2020-21 and, after prudence check, admits a fuel cost of ₹62,057.65 lakh and allowable fixed charges of ₹84,807.35 lakh, resulting in ARR of ₹1,46,865.00 lakh. Based on the audited revenue and admissible expenses, the Commission determines a net recoverable amount of ₹3,042.30 lakh for FY 2020-21 and, in accordance with Regulation 2.6.6 of the 4th Amendment of the Tariff

Regulations, allows carrying cost on the recoverable amount from 1st April 2023 until its recovery from WBSEDCL, with the amount and applicable carrying cost to be recovered in line with the prevailing tariff regulations.



WBERC approved the petition filed by CESC Ltd. seeking adoption of tariff for the long-term procurement of 600 MW power from Wind-Solar Hybrid (WSH) projects through a TBCB process to meet its Renewable Purchase Obligation (RPO). The petition was submitted under the provisions of the Electricity Act, 2003 and the Ministry of Power's TBCB Guidelines. After examining the bidding process and the recommendations of the Bid Evaluation Committee, the Commission adopted the discovered tariffs of ₹3.74/kWh for 100 MW awarded to Vismaya Renewables India Project Pvt Ltd and ₹3.75/kWh for 500 MW awarded to Hexa Climate Solutions Pvt Ltd, Purvah Green Power Pvt Ltd, and Sprng Energy Pvt Ltd, observing that the competitive bidding process was transparent and that the discovered tariffs would be beneficial to consumers.

Power Procurement



PSERC approved PSPCL's long-term procurement of 160 MW and 250 MW Firm and Dispatchable Renewable Energy (FDRE) (solar, wind, and BESS) from NHPC for 25 years, holding that the proposal satisfies the criteria of necessity, cost reasonableness, and efficient power procurement under the Resource Adequacy Regulations. However, approval of the 250 MW green shoe capacity is subject to CERC's approval of the pending tariff adoption petition, and PSERC clarified that its approval is limited to the power procurement arrangement and does not extend to the detailed terms and conditions of the PPA/PSA.



MERC approved the petition filed by MSEDCL for the adoption of a discovered tariff under Section 63 of the Electricity Act. The Commission adopted a firm tariff of ₹5.90/kWh for the long-term procurement of 2500 MW Round-the-Clock power from Adani Power. This supply-based arrangement aims to address resource adequacy needs and growing data center demands by ensuring a

Regulatory Updates

minimum of 51% traceable green power. MERC found the bidding process transparent, directing MSEDCL to submit a final copy of the executed PPA.



KSERC approved KSEBL's proposal to procure up to 250 MW of short term power through the Day Ahead Contingency Market and Intra-day Market contracts of Exchanges. KSEB was permitted to procure through TAM contracts with a premium of up to ₹0.05/kWh over Day Ahead Market (DAM) clearing price. The approval is valid for the remaining days of April 2026 and up to 15th May 2026, or until the State's critical power situation improves, whichever is earlier. The Commission also directed KSEBL to establish a daily monitoring mechanism for the power situation, with reporting to the highest management level, and to submit a detailed day-wise report of procurement and costs to the Commission within one week of completing the procurement.



KSERC granted in-principle approval to KSEBL for inviting tariff based bids for procuring 300 MW of wind power from Intra-state connected WPPs. The Commission approved key deviations from the Ministry of Power's bidding guidelines, including reduction of the minimum bid capacity from 10 MW to 2 MW, EMD to ₹5 lakh/MW, and adoption of a PBG of ₹28.75 lakh/MW, while directing KSEBL to adopt a CUF range of 25-30% without any revision provision. KSERC also approved extension of PPA signing up to 12 months from the LoA date subject to PBG submission, mandated forfeiture of PBG if construction does not commence within 18 months of PPA signing, and directed KSEBL to revise certain bidding provisions and file a separate petition for tariff adoption after completion of the bidding process.



GERC approved PPA executed between GUVNL and Shree Narmada Khand Udyog Sahakari Mandali Ltd. for procurement of 15 MW power during the crushing season from its 30 MW bagasse-based co-generation project. The Commission observed that the PPA is consistent with GERC Order No. 03 of 2022 and will help GUVNL and the State DISCOMs meet their RPO targets through this procurement.



APERC approved the PPAs executed on 22nd December 2025 between APSPDCL/APEPDCL and four Waste-to-Energy developers for procurement of 57 MW from projects at Nellore (12 MW), Kurnool (15 MW), Kadapa (15 MW), and Kakinada (15 MW). The Commission adopted the competitively discovered tariffs of ₹7.80/kWh for the Nellore project, ₹8.10/kWh each for the Kurnool and Kadapa projects, and ₹7.50/kWh for the Kakinada project, as these were lower than the corresponding CERC benchmark tariffs. APERC also approved development of evacuation infrastructure by DISCOMs at their own cost, rejected the proposal to shift the metering point to the plant site, and reiterated the obligation of DISCOMs to procure 100% of power generated from Waste-to-Energy plants.



WBERC approved the petition filed by WBSEDCL seeking approval of PPA executed with Mahalaxmi Ennore Coke and Power Pvt Ltd. (MECPPL) for procurement of the entire 12 MW power from its Waste Heat Recovery Boiler (WHRB) plant. The petition was submitted under the applicable Tariff Regulations for a period of five years, with a proposed single-part tariff of ₹2.00/kWh. The Commission approved the PPA, observing that the proposed tariff is below the ceiling rate prescribed by the Commission as well as APPC of WBSEDCL, and held that the procurement would promote co-generation, efficient energy use, and reduction of pollution.



WBERC approved the petition filed WBSEDCL seeking approval of the 4th Supplementary PPA executed with Himadri Speciality Chemical Ltd. (HSCL) for the purchase of surplus power from its waste gas-based power plant. The petition sought extension of the existing agreement for a further five years from 17th February 2026 to 16th February 2031 while retaining the existing terms and conditions, including the capped tariff of ₹2.00/kWh. The Commission approved the supplementary PPA, observing that the proposed tariff is below the prescribed ceiling rate as well as WBSEDCL's APPC, and that the procurement would promote cogeneration, reduce pollution, and benefit both the power system and consumers.

Regulatory Updates



WBERC approved the petition filed by CESC Ltd. seeking approval of PPA executed with Sprng Green Energy 5 Pvt. Ltd. (SGE5PL) for the long-term procurement of 100 MW power from a grid-connected Wind-Solar Hybrid project. The petition was submitted pursuant to TBCB process conducted under the Ministry of Power Guidelines to meet CESC's RPO and system demand requirements. The Commission approved the PPA for a 25-year period and allowed procurement at the discovered tariff of ₹3.75/kWh, observing that the bidding process was transparent, the tariff was reasonable and market-aligned, and the procurement would be beneficial for consumers.

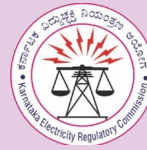


UPERC approved the joint petition filed by UPNEDA and UPPCL seeking approval of PPA executed with Nexgen Digital Infrastructures Pvt. Ltd. (NDIPL) and adoption of the tariff discovered through a TBCB process for procurement of 5 MW grid-connected Solar PV power for a period of 25 years. The Commission examined the bidding process and found it to be in compliance with the approved bid documents and the provisions of the Electricity Act, 2003, and accordingly approved the PPA and adopted the discovered tariff of ₹2.24/kWh for the entire term of the agreement for the solar project proposed at Sarasai Village, District Mau, Uttar Pradesh.



UPERC approved the petition filed by Noida Power Company Ltd. (NPCL) seeking approval for the procurement of power from 4×20 MW / 320 MWh Standalone BESS projects to be established at multiple locations in Greater Noida through TBCB for a period of 12 years. The Commission examined the applicability of capital subsidy under the Uttar Pradesh Solar Energy Policy, 2022, and held that no subsidy would be available for the proposed arrangement. Accordingly, the Commission approved the bidding documents submitted by NPCL, considering the project without any capital subsidy, and disposed of the petition.

Renewable Energy, RPO and REC



KERC has determined generic tariff of ₹3.60/unit for wind power projects for the period FY 2026-27 to FY 2028-29. This tariff will also be used as the basis for payment towards banked energy purchased by Discoms, under REC mechanism and in such other cases. Further, the above tariff of ₹3.60/unit will act as the ceiling tariff for conducting tariff based reverse bidding for WPPs during FY27-FY29.



MPERC approved exercising its powers under the Electricity Act, 2003, took Suo-motu cognizance of the reduction in GST on RE devices and components from 12% to 5% with effect from 22nd September 2025 treating it as a Change in Law event. It held that the benefit of the reduced GST rate must be passed on to beneficiaries wherever invoices are raised or payments are received on or after 22nd September 2025, provided there is a clear one-to-one correlation between the project, supplies, and invoices. The Commission directed that tariffs or charges be adjusted/refunded to reflect the savings arising from the GST reduction. Further, all intra-state RE generators and DISCOMs were instructed to reconcile the financial impact of the GST reduction, supported by auditor-certified documentation, before approaching the Commission for Change in Law compensation.

Others



CERC allowed the petition filed by JSW Renew Energy Ltd. seeking a thirty-day time extension for infirm power injection to test and commission ten (10) wind turbine generators (WTGs) of 27 megawatts. The petitioner experienced unexpected delays after a critical sub-controller component failed during functionality testing, exceeding the maximum timeline under regional load dispatch purview. CERC condoned a 67-day filing delay and granted the extension, finding the project in an advanced stage of execution



CERC approved the corrigendum petition filed by JSW Hydro Energy Ltd. to rectify an arithmetical error in a previous remand order for the Karcham Wangtoo HEP. The

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petitioner originally sought the recovery of unrecovered energy charges due to an uncontrollable generation shortfall during FY 2018-19. Because the actual amount realized from beneficiaries was lower than recorded, the Commission revised its final directive. CERC re-computed the total refundable amount as ₹162.46 lakh instead of ₹626.95 lakh.



RERC adjudicated the dispute between Adani Power and Rajasthan DISCOMs regarding the methodology for computation and adjustment of Late Payment Surcharge (LPS) under the PPA dated 28th January, 2010 for supply of 1,200 MW from the Kawai TPS.

The Commission held that LPS is payable for the day on which payment is made if it falls beyond the due date and clarified that LPS can be adjusted only after being claimed through a supplementary bill in accordance with Article 8.3.5 of the PPA.



AERC approved the petition filed by APDCL seeking relaxation of the provisions of the AERC (FPPPA) Regulations, 2024 for the phased recovery of the FPPPA Surcharge for March 2026.

The petitioner requested permission to recover the surcharge in a staggered manner during FY 2026-27 to avoid tariff shock to consumers, as the computed FPPPA for March 2026 was exceptionally high due to substantial supplementary power purchase and transmission bills. The Commission approved the phased recovery of the FPPPA amount of ₹215.30 crore from June 2026 to March 2027, observing that the costs were legitimate and uncontrollable in nature and that spreading the recovery over an extended period would balance the financial viability of the utility with consumer interests.



Tariff Orders

State/Union Territory (SERC)	Licensee/Utility	True-up	APR	ARR	Tariff
TERC	TSECL	2024-25	2025-26	2026-27	2026-27
MPERC	MPIDC	2026-27		2026-27	2026-27
RERC	RRVPL	-	2024-25	2025-26	2026-27
KSERC	Smart City, Kochi	-	2024-25		
KSERC	KPUPL	-	2024-25		
KSERC	Rubber Park India	-	2024-25		
KSERC	CSEZ	-	2024-25		
KSERC	KSEBL	-	2024-25		
UPERC	UPSLDC	2024-25	2025-26	2026-27	2026-27
UPERC	UPPTCL & STU	2024-25	2025-26	2026-27	2026-27

Regulations

Title	Date of Approval/ Notification
BERC (Consumer Grievance Redressal Forum, Electricity Ombudsman and Consumer Advocacy)(Fourth Amendment) Regulations, 2025	22 nd April 2026
CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) (First Amendment) Regulations, 2026	1 st April 2026
CERC (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2026	10 th April 2026
CERC (Terms and Conditions for Purchase and Sale of Carbon Credit Certificates) Regulations, 2026	27 th April 2026
HPERC (Conduct of Business) (Second Amendment) Regulations, 2026	10 th April 2026
MERC (Transaction of Business and Fees and Charges) (Third Amendment) Regulations, 2026	1 st April 2026
PSERC (Terms and Conditions for intra-State Open Access) (Thirteenth Amendment) Regulations, 2026	12 th May 2026
PSERC (Grid Interactive Rooftop Solar Photo Voltaic Systems) (Third Amendment) Regulations, 2026	7 th April 2026
PSERC (Harnessing of Captive Power Generation) (First Amendment) Regulations, 2026	18 th May 2026
TGERC (Multi Year Tariff) (First Amendment) Regulation, 2026	3 rd June 2026
TGERC (Electricity Supply code) (Third amendment) Regulation, 2026	27 th May 2026
UPERC (Terms and Conditions for Open Access) Regulations (Removal of Difficulty) First Order, 2026	22 nd May 2026

6th Regulatory Certification Program (RCP) on "Power Sector Regulation: Theory and Practice"

The Centre for Energy Regulation (CER), in collaboration with the Energy Analytics Lab (EAL), successfully conducted the Regulatory Certification Program on "Power Sector Regulation: Theory and Practice" from 30th May to 21st June 2026. The program was organized under the aegis of the Office of Outreach Activities, IIT Kanpur, with the objective of providing participants with an in-depth understanding of power sector regulation in practice, grounded in fundamental economic principles.

The program was delivered by distinguished resource persons, including Mr. Ghanshyam Prasad (Chairperson, CEA), Mr. Arun Goyal (Former Member, CERC), Mr. S. C. Shrivastava (Former Chief (Engineering), CERC), Prof. Tooraj Jamasb (Director, CSEI), Mr. Buddy A. Ranganadhan (Senior Advocate, Supreme Court of India), Dr. Srini Parthasarathy (Partner and Head of Efficiency Practice, Oxera), Ms. Shilpa Agarwal (Joint Chief (Engineering), CERC), Mr. Vivek Mishra (Partner and Practice Lead, cKinetics), Mr. Himanshu Chawla (Head – Regulatory and Research, PFI), Dr. Raj Addepalli (Consultant, Texas, USA), Mr. Bijoy Kumar Sahoo (Former Project Executive Officer (PEO) , CER, IIT Kanpur) and Prof. Anoop Singh (Founder & Coordinator, CER & EAL, IIT Kanpur).

The online valedictory ceremony was graced by Mr. T. K. Jose, IAS (Retd.), Chairman, Kerala State Electricity Regulatory Commission (KSERC), as the Chief Guest. He congratulated the participants on successfully completing the program, following which certificates were awarded to all successful participants.



The editor thanks Regulatory Insights team for their contribution in supporting the analysis, copy editing, compiling snippets of tariff orders, regulatory updates, and coordinating final production of this Issue.

Regulatory Insights Team- Filza, Mohit, Aman, Himanshu, Keerti, Mrudul, Nitin, Nainsy, Muskan

Disclaimer: The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

Other Initiatives



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Note: Additional information can be accessed through the hyperlinks provided in the online version of this periodical.