

Submission before Madhya Pradesh Electricity Regulatory Commission

Prayas (Energy Group)

25th January 2026

In the matter of: Filing of Petition for Determination of Revised ARR for FY 2026-27 and Tariff Proposal for Distribution & Retail Supply Business of Distribution licensees namely Madhya Pradesh Poorv Kshetra Vidyut Vitaran Co. Ltd. (East Discom), Madhya Pradesh Madhya Kshetra Vidyut Vitaran Co. Ltd. (Central Discom) & Madhya Pradesh Pashchim Kshetra Vidyut Vitaran Co. Ltd. (West Discom) and MP Power Management Co. Ltd. (MPPMCL) under the tariff principles laid down in the "Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) Regulations, 2021 dated 03rd December 2021" and its amendments thereof. (Case No. 140/2025)

Prayas (Energy Group)'s comments and suggestions in Case No. 140/ 2025 focusses on aspects related to cost-reflective tariffs and timely cost recovery for DISCOMs while ensuring accountability for DISCOMs performance and evidence-based assessments of performance projections. Our detailed comments are given below:

1. Power procurement projections

The DISCOMs contend that the MPERC methodology for projecting power procurement and its costs does not consider operational constraints such as technical minimum and its impact on MoD, which could lead to deviation in costs. This was highlighted during the true-up of FY 2022-23 and FY 2023-24 and was considered by the Commission. Such a consideration is possible during true-up in the presence of actual data submitted by the DISCOM rather than assumptions regarding MoD, scheduling and system operations. However, such an estimation for projections would require detailed 15 min scheduling information including operation of energy storage assets and cannot be ascertained/ verified by monthly aggregate information shared by the DISCOMs as projections. Assumptions regarding operational factors could lead to overprojection of costs which can impact consumer tariffs. Recognising this, for a similar request made by the DISCOMs for ARR of FY 2025-26, the Commission noted that:

*"The Commission is of the view that the technical minimum scheduling to some stations throughout the financial year while estimating the power purchase requirement is not **correct as projections do not depict the actual operational scenario in respect to actual availability and scheduling of generating stations. The Commission cannot arbitrarily assume technical minimum scheduling and burden the consumer with cost of such scheduling. Actual availability based on technical minimum scheduling may be examined at the time of true-up after applying prudence checks.**"* (Emphasis added).

While we agree with the Commission that deviations in cost due to technical minimum and other operational considerations can be recovered via monthly levy of fuel adjustment charges and with true-up of prudent costs, it is also likely that projections based on detailed production cost modelling to estimate costs might be worthwhile to reflect potential cost reduction with shifting of agricultural demand in the day-time and impact of utilisation of storage assets.

MPERC was the first Commission to issue state Resource Adequacy (RA) regulations in the country following the notification of the Electricity (Amendment) rules, 2022. Via an order issued by the Commission on 18th March 2025, these regulations came into effect from 1st April 2025. The regulations require Madhya Pradesh Power Management Company Limited (MPPMCL) to submit Long-Term Distribution Resource Adequacy Plan (LT DRAP) to the Central Electricity Authority by 30th September 2025 for the ensuing period starting from 1st April 2026, subsequent to which submit the vetted plan to the Commission for approval.

As resource adequacy plans consider changes in load shape, supply profiles of future capacity and operational constraints such as technical minimum and ramp rate, it is crucial that:

- DISCOMs share their resource adequacy plan (LT-DRAP and MT-DRAP) with the Commission and SLDC share the ST-DRAP.
- Each resource adequacy plan should include clear statement of assumptions, demand profiles, supply profiles and cost for the consideration of the Commission.
- In addition to the plan, DISCOMs should be directed to prepare Resource Adequacy Plans on open-source software rather than proprietary software such that the entire model can be shared with the Commission staff and the Commission can also undertake scenarios (delays in capacity addition, changes in load shape, cost assumptions) to assess the sensitivity, prudence and the robustness of the plan.
- Such a model can also help with assessment of Time-of-Day tariff design, revision of renewable energy banking charges etc.

Ideally the RA plan should be shared as part of the tariff petition given the cost and tariff implications for consumers. Transparent sharing would also result in reducing future litigation and disputes as the basis for commissions decisions are based on scientific and analytically rigorous exercise with all details being shared for public consultation.

Therefore, approving the resource adequacy plan as part of the annual regulatory process to approve retail supply tariff be ideal. Such a process has been carried out by the Maharashtra ERC wherein the medium-term resource adequacy plan for all the Maharashtra distribution licensees (MSEDCL, Tata Power (Distribution), AEML) was approved as part of the multi-year tariff process conducted in 2025.

2. Sales and Demand estimation

The DISCOMs have analysed 1-year to 5-year historical CAGR growth rates to project category-wise sales for FY 2026-27. However, growth rates considered by the DISCOMs for certain categories requires further scrutiny.

For example,

- The East DISCOM has considered a 10% growth rate in the average load (kW) for Domestic 101 – 200 Units category for both urban and rural category. Sales seems to be highest in this slab, even in rural areas and sales growth as well as demand growth seems be the highest for the segment as well. As the national average monthly consumption is closer to 100 units, the rationale for such quantum and growth, even in rural areas in the slab is unclear. More clarity needs to be provided on specific appliance penetration and utilisation in rural and urban domestic connections that is driving growth.

- While the DISCOMs have reported a cumulative rooftop solar installation of 737.84 MW by consumers, the estimation of sales for these consumer categories has not been separately estimated. This is critical as the sales from DISCOM will have distinct variations and needs to be accounted for.
- The DISCOMs have not factored in the extent of open access, captive when estimating the sales for the Industrial category. Additionally, the DISCOMs have not reported the number of pending open access applications, number of new connectivity applications of Data centres, all of which can have a significant impact on sales to industrial consumers.
- DISCOMs have considered a 50% year on year growth rate for sales to EV charging in rural areas without appropriate justification for the same.

For projecting agricultural sales, the DISCOMs have used specific consumption norms approved by the Commission. However, details of category and slab-wise connected load and number of consumers should also be stipulated. The norms themselves were approved by the Commission based on assumptions of hours of supply and has not been verified in recent years based on actual interface metering data. To enable demand estimate for agriculture, the following critical details are necessary, which have not been furnished by the DISCOM,

- a) Number of segregated agricultural feeders and mixed feeders.
- b) Number of agricultural consumers and connected load for each segregated agricultural feeder.
- c) Number of agricultural consumers and connected load for each mixed feeder.
- d) Number of agricultural feeders with AMR/AMI metering.

Such details should be provided to the Commission to enable restatement of agricultural norms.

While CAGR based sales projection has proved adequate so far given fairly predictable demand patterns with diurnal and seasonal variations, such an approach cannot be relied upon given the growing demand-side uncertainty going forward. This growing uncertainty is a result of ongoing fundamental shifts in the sector owing to some of the following reasons,

- a) A growing adoption of captive, net-metering and open access arrangements by commercial, industrial and residential consumers, thereby migrating away from DISCOM supply.
- b) Increased seasonal use of cooling appliances.
- c) Increased end-use electrification with different consumption patterns especially with electric vehicle adoption, electric cooking etc.
- d) Increased variability in weather patterns.

As a result, it is critical that DISCOMs are required to adopt more robust methodologies to estimate category-wise sales. Bottom-up studies based on consumer surveys to assess appliance penetration, coupled with smart meter data to assess load shape and load growth can be used to estimate sales for domestic and industrial consumer categories. Additionally, the results from the ongoing study to revise the agriculture consumption norm will prove critical towards ensuring accurate sales projections for the agricultural category.

DISCOMs might previously have been ill-equipped to carry out such exercises, given poor metering infrastructure, a lack of expertise and a lack of financial resources. However, given the increased penetration of AMR/AMR enabled meters under ongoing the smart meter rollout, the provisioning of a Rs. 2 Crore R&D fund, and the constitution of a Research and Development Committee comprising members from the DISCOMs, IITs, IIMs, CRPI and NITs by MPPMCL, DISCOMs are better positioned to carry out such exercises going forward.

As a result, the Commission can consider issuing a directive to carry out sales projection for domestic and industrial category on the basis of a robust bottom-up demand estimation based on consumer surveys and smart meter data for the next Multi-Year tariff process. Similarly, it can also issue a directive to project unmetered agricultural sales based on the results of the study to revise the agriculture consumption norm for the next Multi-Year tariff process.

3. Distribution loss trajectory

The second amendment to the 2021 tariff regulations notified AT&C trajectories for the FY 2024-25 to FY 2026-27 control period wherein DISCOMs were required to achieve a 100% collection efficiency and an aggressive distribution loss trajectory with annual improvements as high as 3 percentage points in some years.

AT&C is a composite indicator which aggregates the performance of two separate indicators, i.e., collection efficiency and distribution losses. As per regulation 18.2 (a) of the MPERC MYT Regulations as amended on 7th December 2023, variation in AT&C losses is considered as a controllable factor by the Commission and as per Regulation 26, targets for collection efficiency and distribution losses are levied separately with detailed framework for gain and loss sharing. As collection efficiency and distribution loss targets are different, the evaluation of performance vis-à-vis targets as well as gain and loss sharing should be done for both parameters/components of AT&C loss separately. Else there could be a distortion in performance evaluation. Let us consider a case where with collection of arrears, DISCOMs realise collection efficiency more than 100% (at 110%) for a distribution loss of 15%. If the collection efficiency is considered at the target of 100%, the AT&C loss estimated is 15%. However, if actual collection efficiency, in excess of target is considered, the AT&C loss is reduced to 6.5%, lower than even the distribution loss, due to the interaction of the two parameters in the formula. If DISCOMs succeed in arrear recovery, the gains should be retained 100% by them and if they fail in timely recovery of revenue the losses should not be shared with consumers.

Therefore, it is suggested that while targets are set for AT&C loss, gain and loss sharing as per Regulation 20 be such that 1/3rd of gains and 1/3rd of losses is passed onto consumers for distribution losses but 100% of gains and losses are retained with the DISCOM for collection efficiency. Such a treatment is possible as Regulation 20.3 provides for detailed frameworks for gain and loss calculation to evolve as part of the tariff process.

As part of the FY 2024-25 true-up process, the East and Central DISCOM reported a distribution loss of 26.66% and 26.96% respectively. These DISCOMs are required to achieve a halving in distribution loss to 14% by FY 2026-27. Even if the DISCOMs achieve a distribution loss of 20% –

a reduction by 3 percentage points per annum – and ensure a 100% collection efficiency, there would be a disallowance of ~ Rs. 637.5 crores in these two DISCOMs based on the power purchase costs reported for FY 2024-25. Perhaps restatement of loss reduction targets based on baseline distribution losses is crucial to offer realistic targets and performance trajectories to DISCOMs.

This restatement can take place based on compliance to the directives issued by the Commission on meterisation of Distribution transformers and unmetered rural domestic consumers (with quarterly audit reports submitted by the DISCOMs), data from smart meters as well as the result of the study on agricultural sales and losses by the next control period.

4. Regulatory treatment of Renewable Consumption Obligation

4.1. Need for information on PPAs signed to verify RCO compliance data

While we appreciate that DISCOM has provided overall RCO compliance data in the present petition, we suggest that the DISCOMs are asked to provide source-wise, project wise details like PPA rate, commissioning date (actual or expected, if under-commissioning) and CUF. The Commission has already stipulated that similar information be provided by the DISCOMs as part of the tariff process in format form F1J and form F1J(i), which was filled for FY 2026-27.

Such information will help verify the data submitted by DISCOM towards ensuring RCO compliance. Further, DISCOMs should submit their action plan for RE procurement for next 5 years. In case there is no such plan, they can be asked to prepare so and submit them to the Commission in next six months.

4.2. Part shortfall and reporting of compliance

The petition is silent as to any past shortfall/deficit in meeting RPO targets. It is submitted that any past shortfall up to FY 2023-24 should be reported by DISCOMs as per previous formats and any shortfall from FY 2024-25 onwards should be reported by DISCOMs in the appropriate data reporting formats given in the MoP Notification dated 27.09.2025 pertaining to RCO targets and their compliance.

4.3. Confusion around ESO

With the previous two MoP Notifications concerning RPO (dated 22.07.2022) and RCO (dated 23.10.2023) being subsumed by the Notification dated 27.09.2025, it is unclear what happens to ESO targets because it gets no mention in the new Notification. Storage is of paramount importance towards ensuring a stable RE grid. It is submitted that ESO targets be clearly complied with by DISCOMs as specified by the MPERC in their RPO regulations. It is further suggested that DISCOMs come up with a roadmap for future storage capacity addition to streamline RE procurement.

4.4. Penalty for RPO non-compliance in light of the MPERC order 10.10.2025 dismissing 65 Suo Motu petitions on RPO non-compliance

The Commission, in Clubbed Suo Moto Petitions No. 48 to 112 of 2025, dated 10.10.2025 stipulated the following:

"Further, vide notification dated notification dated 27th September, 2025, Ministry of Power while specifying the targets for Renewable Consumption Obligation has mentioned that no additional Renewable Purchase Obligation (RPO) shall apply under the Electricity Act, 2003 and

the State-Level Renewable Purchase Obligation (RPO) shall be subsumed within the targets of Renewable Consumption Obligation (RCO) specified in the said notification."

It is hereby submitted and clarified that the power and jurisdiction to impose penalties for RCO non-compliance continues to remain with the MPERC itself (as directed under sections 26(3), 27 and 28 of the EC Act). This power does not lie with the BEE. The BEE is concerned solely with monitoring and verification of compliance through submission of the appropriate details by distribution licensees, open access consumers, and captive consumers. However, the power to hold designated consumers accountable by levying consumers for non-compliance to RCO targets ultimately lies with the Commission.

4.5. Need for DRE capacity data

We have noticed that the DISCOM has mentioned that in case there is no metering for DRE projects, their generation can be determined/ assessed by assuming as follows:

*"Whereas input energy from RTS sources have been projected by considering a nominal escalation of 10% on the latest installed capacity of RTS (in MW) as on October 2025 (175.54 MW for East Discom, 235.94 MW for Central Discom & 326.36 MW for West Discom) and **with a multiplier of 4 kilowatt hour per kilowatt per day**" (Emphasis added)*

However, there is no reporting of how much of such capacity is present in the DISCOM's periphery. In case there is any such capacity, DISCOM should be directed to install the meter at their own cost within one year, as they are being benefitted from accounting energy generated from such projects. In case metering is not done in the stipulated time, any estimation of power generation from such projects should not be allowed post completion of one year timeline.

5. Time of Day (ToD) tariff

Given the ongoing changes to the power procurement mix, consumer demand, and load curves in Madhya Pradesh, we support the proposal of the DISCOMs to remove the rebate during the night time 10pm – 6 am slot. Bihar, Gujarat, Maharashtra and Rajasthan have removed the pre-existing rebates for night-time consumption by FY 2025-26 for precisely the same reasons. Table 1 outlines the change in rebates offered during the night-time slot in FY 2025-26 compared to FY 2023-24 in the four states mentioned above.

Table 1: Change in Time of Day tariffs levied on HT consumers in 4 states

State	Night-time Slot	Rebate (-ve) /Penalty (+ve) as % of EC	
		FY 2023-24	FY 2025-26
Bihar	11.00 Pm – 10.00 Am	-15%	0%
Gujarat	10.00 Pm – 6.00 Am	-10%	0%
Maharashtra	12.00 Am – 6.00 Am	- 18%	0%
Rajasthan	2.00 Am – 6.00 Am	-7%	0%

Source: Tariff orders issued by State Electricity Regulatory Commissions

Additionally, the following measures should also be considered in the Time of Day (ToD) design:

- Introduction of seasonal variation in ToD tariff design to account for significant agricultural demand in winter months and sharp increase in summer evening peak demand

- The applicability of Time of Day (ToD) tariffs should also extend to all consumers with load above 3 kW that avail net-metering irrespective of consumer category to account for significant demand increase in evening peak due to net metering. Such consumers should be subject penalties along with incentives.

Considering the larger ongoing changes to the sector as outlined in section 2, it is critical that a detailed study be carried out by DISCOMs to determine a trajectory for ToD tariff design in the medium term with progressive changes in incentives and rebates. Such a study was carried out in Rajasthan, wherein the Rajasthan Commission appointed an independent agency to carry out a study to determine the ToD tariff design for the Rajasthan DISCOMs.

On the basis of Rajasthan DISCOMs' supply and demand profiles, the study recommended the graded implementation of ToD tariffs over 2 phases of 3 years each as outlined in table 2. The results of the study fed into the ToD tariffs approved by the Commission as part of their annual tariff process.

Table 2: The Phase-wise Time of Day tariff design suggested for Rajasthan DISCOM'

Phase 1: FY 2024-25 to FY 2026-27						
Time Slot	FY 2024-25		FY 2025-26		FY 2026-27	
	Mar - Aug	Sep - Feb	Mar - Aug	Sep - Feb	Mar - Aug	Sep - Feb
06:00 – 09:00	0%	5%	0%	5%	0%	5%
09:00 – 18:00	-10%	-15%	-15%	-20%	-15%	-20%
18:00 – 22:00	10%	10%	10%	10%	10%	15%
22:00 – 04:00	10%	-5%	10%	-5%	10%	0%
04:00 – 06:00	5%	0%	5%	0%	10%	5%
Phase 2: FY 2027-28 to FY 2029-30						
Time Slot	FY 2027-28		FY 2028-29		FY 2029-30	
	Mar - Aug	Sep - Feb	Mar - Aug	Sep - Feb	Mar - Aug	Sep - Feb
06:00 – 09:00	0%	5%	0%	5%	0%	5%
09:00 – 18:00	-20%	-25%	-20%	-30%	-25%	-30%
18:00 – 22:00	10%	10%	15%	10%	15%	10%
22:00 – 04:00	10%	0%	15%	0%	15%	0%
04:00 – 06:00	10%	5%	15%	5%	15%	5%

Source: [Prayas \(Energy Group\). \(2024, July\). Study to access Time of Day Tariffs for Rajasthan DISCOMs](#)

A trajectory will provide clarity to consumers and move DISCOM tariff design to more cost reflective charges. Such a trajectory can also be based on future capacity addition plans as well as demand forecasts. It could also account for the seasonal variations in Madhya Pradesh demand profile and power procurement costs, ensuring more variations in the ToD tariffs being levied across seasons. The Commission can consider issuing a directive to carry out a similar study to determine ToD tariffs for the Madhya Pradesh DISCOMs whose results can feed into the ToD tariffs levied in the FY 2027-28 to FY 2031-32 control period.

6. Other tariff design considerations

6.1. Implementation of kVAh billing for High-Tension consumers

We welcome to the introduction of a kVAh billing as it encourages High-Tension consumers to maintain near unity Power factor and thereby achieve loss reduction, improve system

stability, power quality and voltage profile. DISCOMs in Andhra Pradesh, Chhattisgarh, Delhi, Gujarat, Haryana, Maharashtra and Jammu & Kashmir have already introduced kVAh billing for many consumer categories.

However, we also recognise that the shift to kVAh billing is a major shift for the MP DISCOMs and consumers and time and efforts to ensure preparedness and adoption of adaptive measures is critical. Given this, the Commission can consider issuing a directive notifying the introduction of kVAh billing from the start of the next control period. In the interim period, the DISCOMs should carry out the necessary testing to ensure that HT metering infrastructure is ready for the transition to kVAh billing. Additionally, DISCOMs should formulate a phase-wise category-wise plan to carry out the reprogramming of all those HT meters incapable of measuring kVAh consumption, and submit quarterly progress reports to the Commission.

A similar process was adopted by the Maharashtra Commission prior to the transition to kVAh billing for all HT consumers. Additionally, the MPERC can consider the graded implementation of kVAh billing to all consumers with connected load above 20 kW by the end of the 5-year period.

6.2. Tariff schedule for LT Domestic category

Towards the simplification of Domestic tariff sub-categories, the DISCOMs have proposed the merging of "151 – 300 Units" and "Above 300 Units" slab to a "Above 151 Units" slab. This has also been associated with an increased in the energy charge being levied from 6.79 Rs./Unit to 7.30 Rs./Unit on those consumers who were previously in the "151-300 Units" slab. It is important that there is a differentiated tariff being levied on consumers with higher monthly consumption.

Instead, towards simplification of the tariff schedule the Commission can consider adopting the following,

a) **Calculation of fixed charges for LV 1.2 category**

As per the proposed (& existing) tariff schedule, the actual connected load of domestic consumers with a consumption above 151 Units is not measured, but instead determined on the basis of a norm, wherein 15 units of energy consumption is equated to 0.1 kW of connected load. On the basis of the calculated connected load, consumers are billed a fixed charge Rs. 31 per 0.1 kW of calculated load.

While such an approach has been followed so far, the ongoing rollout of smart meters can more accurately measure the actual connected load of a consumer at 15-minute block-wise granularity. Once, the rollout has extended to majority of domestic connections, the norm should be reassessed for this consumer segment on the basis of the data being recorded from the smart meters to accurately reflect actual connected load and ensure appropriate cost recovery.

Once the norm has been reassessed, LV 1.2 consumers with installed smart meters should be given the choice between the levy of fixed charges on the basis of the revised norm, or the average connected load measured by the smart meter.

b) **Levy Domestic tariffs on all consumer categories consuming less than 300 Units/Month and 3600 Units/year:**

LT commercial and industrial consumers who use less than 300 Unit/Month and 3600 Units/Year include home-based enterprises, kirana stores, and tiny manufacturing units, among others. Charging these consumers, the same as LT domestic consumers would reduce the need for separate connections and decrease harassment of these small consumers by DISCOMs for unauthorised use where penal provisions are draconian. Such a framework has already been adopted by state-owned DISCOM in Maharashtra.

c) **Qualifying criteria for LV 1.1 category:**

LV 1.1 (sanctioned load < 100 Watts; Monthly consumption < 30 Units) are not levied any monthly fixed charge and a ~ 20% lower energy charge compared to the same slab in the LV 1.2 category. This is a good practice which ensures that electrically poor consumers are charged concessional rates without requiring a state-issued ration or BPL card. However, such consumers can experience tariff shocks if their consumption exceeds 30 Units in some months, while their average consumption throughout the financial year might actually be within qualifying criteria.

Instead, the qualifying criteria can be tweaked to ensure that all consumers with a connected load upto 100 Watts and who have consumed upto 360 Unit per annum in the previous financial year qualify for the LV 1.1 category in current year. Additionally, the eligibility of such consumers would be reassessed at the end of each financial year, such that those who have consumed more than 360 Units per annum would be charged under the LV 1.2 category going forward. Such a framework has already been adopted by state-owned DISCOM in Maharashtra.

6.3. Green Tariff

The introduction of a green tariff which can be availed by consumer by paying additional charge of 0.36 Rs./unit over and above the normal energy charge, while ensuring that it doesn't count towards the DISCOMs RCO compliance is welcome.

Given the commitments from Commercial and Industrial consumers to avail 100% of their energy requirements from RE sources, the Commission can consider the introduction of an additional 24 * 7 green supply category. DISCOMs would procure dedicated Solar and wind energy coupled with energy storage to ensure block-wise matching of green energy supply with consumption. However, it is critical that the tariff for this category is reflective of the additional cost burden borne by the DISCOMs to ensure firm RE supply.