Comments and Suggestions on Draft KERC Multi Year Transmission, Distribution and Retail Supply Tariff Regulations, 2023

Prayas (Energy Group) *25th October 2023*

Karnataka Electricity Regulatory Commission (KERC) published the draft Multi-Year Tariff (MYT) Regulations, 2023 - and has invited comments and suggestions from the public on the draft regulations. We welcome the Commission's initiative to consolidate the existing "Tariff Regulations" and "Terms and Conditions for Determination of Tariff for Transmission and Distribution and Retail Sale of Electricity Regulations". This will provide clarity to utilities, consumers and investors in the state. We also welcome the proposals in the draft regulations which are in line with the FoR Model MYT Regulations. In addition, it must be noted that the coming years are crucial for the Karnataka Electricity Sector as there will be:

- scaling up of RE and storage technologies,
- increased open access and change in the DISCOMs roles, business models and services
- significant requirement of cost-effective investments in metering, T&D networks.

To enable a smooth transition, there is a need for effective scaling up of investments and infrastructure, while ensuring reliable, affordable supply, certainty in tariffs and clear frameworks for evaluation of investments and utility performance.

Prayas (Energy Group) has proposed the following suggestions to prepare for the major changes expected in the upcoming control period in the state sector, as well as to bring about more accountability and transparency in tariff processes. Further, it suggests measures for planning and forecast, as well as cost and performance evaluation.

1. Multi-Year Tariff framework and Control Period

The draft MYT regulations define a "Control Period" as a multi-year period comprising of *three* financial years. It is suggested that the Commission make as a multi-year period for *five* years. The tariff, cost and performance parameters should be approved for a five-year period, with a mid-term review with due public process. For the mid-term review, true-up can happen for the first two years and revised forecasts can take place for the coming years.

We strongly feel that an annual true-up process for distribution and transmission companies weakens the objective of the multi-year tariff process which seeks to provide tariff certainty as well as cost and performance trajectories over a medium-term. Annual revision via true-ups imply that medium term cost and performance benchmarks have no meaning and that tariff and tariff design is revised each year. Provision of clarity in regulatory frameworks and certainty in charges is of paramount importance towards a consumer-centric and investor-friendly power sector. Trajectories for tariffs and charges also provide important incentives for adherence to performance trajectories. In this context, it is suggested that:

— DISCOMs have tariffs announced for a five-year period at the start of the control period. This will provide certainty in tariff structure, tariff trajectories and tariff design.
— In addition, the tariffs for all LT consumers with consumption less than 300 units should be linked to inflation so as to prevent such consumers from facing undue tariff shock. This can be codified in the regulations for the control period.
— The mid-term review process should be conducted for DISCOMs and TRANSCOs to evaluate performance parameters, controllable costs, revenue trajectories etc. Tariffs and tariff design can also be revised in this process.
— True-ups for DISCOMs are to take place at the start of the control period, during MTR and at the beginning of the next control period.
— At the end of each year there should be public reporting of DISCOM performance, sales, revenue and audited accounts which will highlight trends and any major challenges for the utility. This will ensure data availability on status and performance of DISCOMs despite of having a Mid Term Review process after a two year interval.
—Timely recovery of costs, especially fait accompli/ uncontrollable costs would take place through the FPPPA mechanism stipulated in KERC Fuel and Power Purchase Cost Adjustment Regulations. Thus, moving from annual to true-up during MTR would not impact DISCOMs finances and working capital requirement substantially. In comparison, the gains to consumers in terms of performance accountability for controllable costs and tariff certainty are significant.

2. Process and specifications for Multi-Year Tariff

2.1 Ensure Technical Validation Sessions

The fourth proviso of draft Regulation 11.2 states that the Commission, whenever necessary, *may* conduct a Technical Validation Session (TVS) prior to admission of the Petition. It is suggested that the Technical Validation Sessions be treated as indispensable to the tariff determination process. Here, important information can be derived from clarifications and additional data that is provided by the licensees. Thus, the draft regulation should say that the Commission *shall* conduct TVS prior to the admission of tariff petitions. In addition, TVS can also involve sector experts, consumer groups etc., to ensure relevant information, clarifications and data is available before the tariff petition is public. In this context, the following amendment is suggested:

Provided also that the Commission, ~~whenever necessary, may~~ ***shall*** *conduct a Technical Validation Session prior to admission of the Petition;*

The Commission may also invite consumer groups, sector experts and industry representatives to be part of the Technical Validation Sessions.

2.2 Hosting regulatory filings

Draft regulation 11.9 mandates that petitioner to host downloadable spreadsheet formats with all regulatory filings, information and documents on its website, which is a welcome move. The Commission has a good practice of hosting yearly filings on its website for easy access to the same for stakeholders. The regulation should specify that such filings, submitted by the licensees in a machine-readable format, will also be hosted on the Commission's website. Further, the regulations should clearly specify that the queries raised during the technical validation session as well as the data provided to the commission should also be available on the website.

2.3 Publication of periodic data by utilities

Draft Regulation 12.2 specifies that the Commission may direct the Licensee to submit performance-related data, as it may stipulate. Draft Regulation 12.3 specifies that the utilities shall submit periodic returns as may be prescribed containing operational and cost data to enable the Commission to monitor the implementation of its order. It is suggested that the Commission mandate the utilities to submit quarterly and annual reports on certain performance related and operation related data; and that the Commission publish such periodic data on its website. The Gujarat ERC, for example, hosts quarterly regulatory information reports on its website (https://gercin.org/quarter-year-discom/). This enables more transparency and public accountability of the DISCOMs.

2.4 Timely filing of tariff petitions

The regulations can specify a penalty by way of reduction in the rate of return on equity by 0.25% per month in case petitions are not filed on time. It can further specify that if the petition is not submitted within the stipulated time, then the corresponding revenue loss and associated carrying cost due to consequential delay in issue of the Order, shall not be allowed to Transmission Licensee or Distribution Licensees or SLDC, as the case may be. This has been specified in the recent Draft MYT Regulations (Regulation 25.11) recently notified by GERC.

3. Power Procurement Planning

As per Regulation 19.1, KERC will issue regulations on Resource Adequacy, in line with the Resource Adequacy Guidelines issued by CEA. As per the guidelines, the planning period is for ten years. Therefore, it is hoped that the licensee drafts a long-term plan for ten years, and not less (alongside a medium-term plan for five years and a short-term plan for one year). The long term- plan should also be submitted as part of the Business Plan and Tariff Petition for the Control Period as per the MYT regulations.

Regulation 19.2 specifies a list of components that the power procurement plan should comprise of. Items such as measures for energy conservation, energy efficiency, demand side management, impact of open access on load and impact of storage capacities (including batteries, electric vehicle charging stations) are a welcome inclusion, among others. It is hoped that for each of the items listed, detailed provisions and formats can form a part of the Resource Adequacy framework to be notified by KERC. This detailed framework, along with formats, can be similar to the draft Framework for Resource Adequacy published by MPERC[1] recently.

All power procurement during the control period should be based on the approved power procurement plan. Any procurement over and above the plan should be only approved based on the revision of the plan and assessment of demand and supply via a regulatory process.

4. Demand Forecast mandate and load research

As per Draft Regulation 17.1, the Licensee is to submit month-wise annual forecasts for the entire duration of the Control Period. Draft Regulation 19.2 propose forecast for long-term, and monthly forecasts for the Control period. However, it is not clear and explicit that the load forecasts need to be submitted for a short, medium and long-term horizons. It is suggested that data be submitted in the same format as the
10 year annual rolling plan requirement under the RA guidelines. In addition, the demand forecasts should capture: :

- Not just the impact on open access on load, or trends in captive power, but also energy consumed by RTPV – all of these should be tracked and projected not just on a monthly basis but also for the medium-term (5 year) and long-term (10 year).

[1] https://mperc.in/uploads/notice/6ba006cd845c254f839825055afe58cb.pdf

- Impact of time of day (ToD) tariffs on various consumer categories in load shifting should also be captured.
- Impact of banking services provided by DISCOMs to open access and captive consumers should be captured to aid recalibration of banking frameworks and charges and to plan power procurement.

The Commission has specified the need for forecast to be stated separately for peak and off-peak periods. For this, a load research study needs to be conducted. To operationalise this, from the first year of the control period, the Commission should mandate DISCOMs to report hourly consumer demand profiles at least for each year of the control period to aid demand assessment. This can be based on AMI metering of agricultural/ urban feeders/ DTs, SEM data of open access/ off-site captive consumers, AMI metering of HT consumers and eventually smart meter data of LT consumers.

5. Mandate for Circle-wise capital investment plans for distribution licensees

With decentralised generation options and consumer choice of supplier, it is important that network planning takes place in a disaggregated manner. In addition to scheme-wise details, it is suggested that for DISCOMs, circle-wise, DPR/ scheme-wise capital expenditure and capitalisation data is reported for each year in the capital investment plans. Such detailed reporting is provided in Madhya Pradesh and Tamil Nadu.

Transmission utilities in Karnataka have a good practice of reporting zone-wise disaggregation of plans. This should be codified in the MYT regulations, where the STU should report zone-wise disaggregation of plans for the control period.

6. Revenue from sale of surplus power

As per Draft Regulation 20.3 - Revenue from sale of surplus power shall be estimated at per unit weighted average price of bilateral purchases and power exchange rates for *the last available three months* at the time of finalization of the ARR for the ensuring year. It is not clear why the preceding three months are considered – as this could likely be a period when surplus is high and rates are low. Instead, this should ideally be based on an annual estimate. For this, the Commission should specify that DISCOMs submit a monthly block-wise data as part of the petition.

7. Creation of a Fuel and Power Purchase Cost Adjustment (FPPCA) fund

Tariff certainty is integral; and thus with quarterly imposition of FPPCA charge, there is a significant amount of uncertainty that seeps in, with a potential to cause tariff shocks to the consumers. To minimise such tariff shocks, KERC should create a FPPCA stabilisation fund. In case of negative FPPA, the amount should be deposited into this FPPPA stabilization fund, which can be used to offset positive FPPPA in other months and reduce tariff volatility and impact on consumers. In order to ensure transparency in reporting of utilisation of such a fund, details of the fund and changes to the fund should be separately reported in FPPPA filings of the DISCOMs. This approach is currently being followed in Maharashtra, where there is significant benefit for consumers.

8. Framework for approving capital investment schemes

8.1 Need for capital investment regulations

It is suggested that provisions under Annexure II, which are currently 'guidelines' be made part of the MYT regulations such that there are detailed regulatory mandates for capital investment planning. Clear mandates are necessary. Having regulations for capex approval is also an approach taken by the Maharashtra ERC. Draft regulations were also recently notified by the same by Delhi ERC.

Further, details regarding the Capital Investment Schemes, outlays, overruns, and interest during construction – should be tracked on a public portal to be maintained by the Commission.

8.2 Threshold for DPR schemes and prudence check

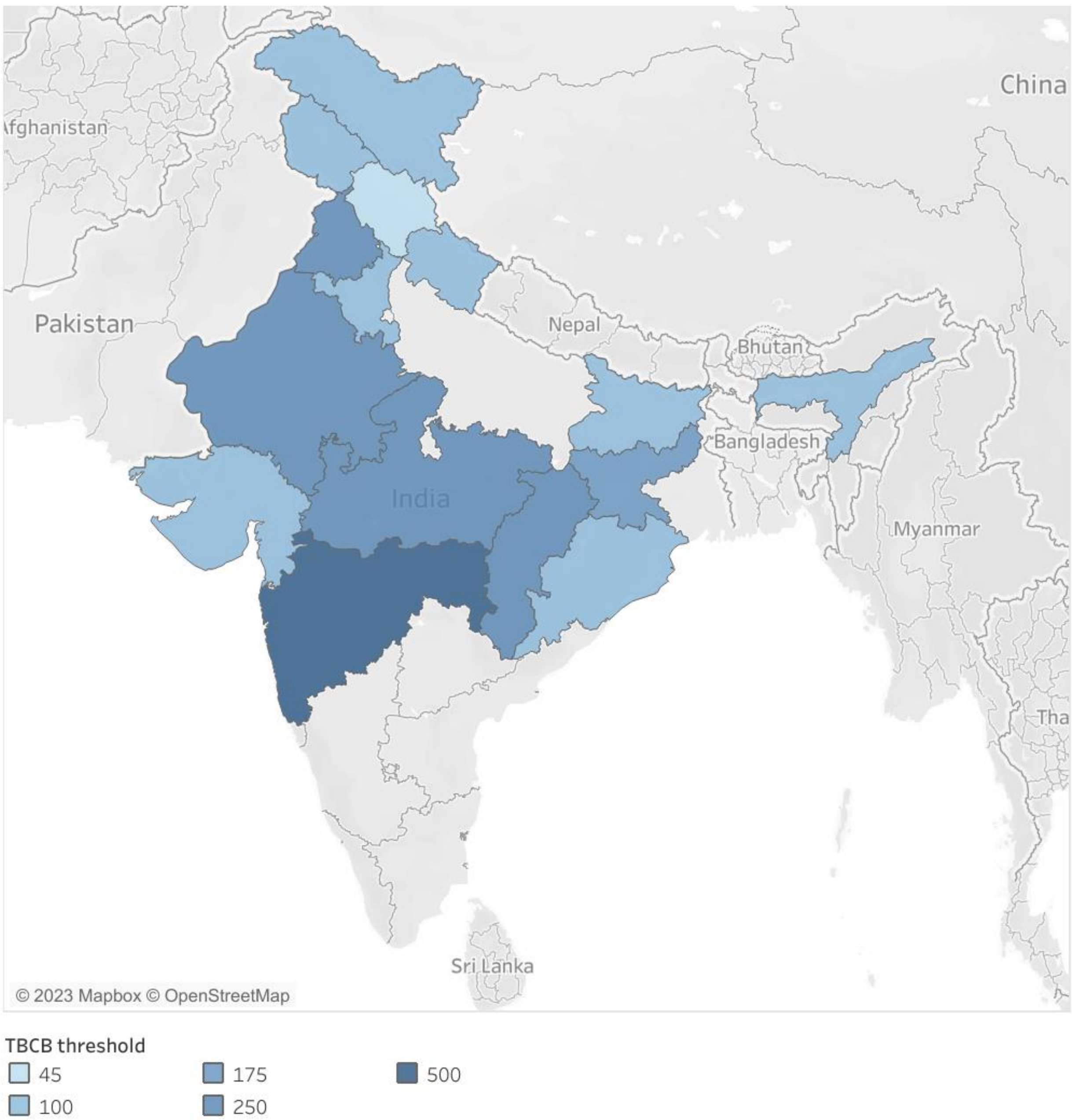
In Annexure II, provisions 3.a and 4.a make a reference to DPR, without clarifying the threshold limit for capex to be qualified as a DPR scheme. It is suggested that KERC clearly specify such a limit. MERC has a minimum threshold of Twenty-five crores for a company's capital investment schemes to be considered as DPR schemes.

Further, in Annexure II, provisions 2.a.i and 2.b.i specify 5 crores and 5 lakhs as thresholds for capex schemes for Transmission and Distribution licensees respectively – for undergoing prudence check. However, prudence check and scrutiny should happen for all capital investment schemes. It is suggested that the ERC delete these thresholds from the draft regulations.

8.3 Threshold for Tariff-based competitive bidding (TBCB) limit

In order to further competition in the transmission sector, TBCB is being adopted by various states as per the recommendation of the National Tariff Policy, 2016. This process has further gained pace since the Supreme Court's judgement directing SERCs to frame regulations under Section 181 of the Act on the terms and conditions for determination of tariff for transmission projects.

Below is a graph that highlights SERCs which have notified a TBCB threshold limit (in Rs. Crores)



Source: India Transmission Portal

Note: The thresholds (in terms of project cost) are in Rs. Crores. Each state has specified a different limit. The stipulation of the limit as well as the revisions – are available on the India Transmission Portal.

It is suggested that KERC clearly specify this limit in its MYT regulations. We suggest a **TBCB limit of 100 crores**, similar to the one notified in states like Gujarat, Bihar, Odisha etc.

8.4 Regulatory framework for cost approval of smart metering

KERC has disallowed capital expenditure for consumer smart metering in the tariff processes in the past, citing lack of sufficient evidence as well as issues of large-scale procurement, consumer data privacy, etc. We hope that the ERC continues such scrutiny of large-scale capital investment schemes.

However, given that smart metering investments are expected under RDSS, and if such a large-scale capital investment has to be made, it is anticipated to take place in the upcoming control period. Therefore, it is suggested that the Commission specify regulations which provides a clear framework for:

— Basis for approval of smart meter roll-out plan in the state

— Annual estimation of costs (under TOTEX mode) for a ten-year period along with estimated benefits from the rollout.

— Devise cost pass through based on evaluation of actual costs and benefits versus estimated costs and benefits.

— The details for cost benefit analysis before and after installation on a circle wise basis should be provided by the DISCOMs based on data formats stipulated by the Commission as part of these regulations. A more detailed framework is available here - [Smart metering of electricity consumers in India: getting it right (prayaspune.org)](). Such a detailed framework would provide clarity to DISCOMs and consumers alike on cost impact and benefits of the initiative.

9. Demand Side Management (DSM) and Energy Efficiency (EE) plans

Over the past few years, it is appreciable that KERC has consistently nudged the DISCOMs, via its directives in tariff processes, to plan for DSM and EE specific programs. Given this, it is suggested that KERC mandate the DISCOMs to submit plans for DSM as part of its ARR petition for the Control Period. It is suggested that KERC, as per Regulation 4 of KERC DSM Regulations (2015), also notify year-wise targets for energy and peak savings for all of the DISCOMs.

Post the submission of DSM plans by DISCOMs, the Commission should also consider levying a penalty for the DISCOMs as following:

- In case DISCOMs are unable to incur 90% of actual DSM expenditure of the total approved DSM expenditure for the year, a penalty is levied by way of reduction in the rate of return on equity by 0.25%.

10. Return on Equity (RoE)

Draft Regulation 19 specifies that Transmission and Distribution licensees shall be allowed ROE at the rate of 14% and 15.5% per annum respectively. Instead of specifying one rate, it is suggested that the Commission provides for RoE in two parts -

a) Base Return on Equity allowed at an indicate rate of say 12.5% and 14% for Transmission and Distribution respectively,

b) Additional Return on Equity which shall be allowed at the time of true-up

   The Additional RoE for Discoms can remain performance-linked in nature and can be provided if -

   - DT failure rates reduce by at least 1 percentage point year on year
   - Feeder level outages reduce by 1 percentage point year on year for urban and industrial feeders and 2 percentage point for rural feeders. This is easily possible as DISCOMs are already reporting monthly feeder wise outages on their websites.

   The Additional RoE for Transcos can be provided for improvement in availability.

11. Sales to IP sets

The Commission has repeatedly asked for Distribution Licensees in the past tariff processes to complete the survey, and reconcile its findings by furnishing data on GPS – to accurately assess the sales to IP sets.

It is suggested that as part of the MYT regulations, the Commission stipulates that –

— A detailed study of agricultural demand be conducted by a working group appointed by the Commission which includes:

- Year long, month-wise data from sample dedicated agricultural feeders based on AMI/ AMR readings
- Year long, month-wise data from sample consumers or agricultural DTs where feeder data is unavailable.
- Provided that the sample size covers at least 3 to 5% of the agricultural consumers/ agricultural feeders and covers all electrical circles where agricultural consumers are present.

— The working group should consist of representatives from the Commission, consultant, consumer groups and academics with the DISCOMs as special invitees.
— The study report should be submitted before the commencement of the second year of the MYT control period.
— The study report should analyse the data to re-estimate the agricultural consumption norm and therefore agricultural demand for all DISCOMs.
— Based on the study report findings, the Commission should re-state the agricultural consumption norm as well as the distribution loss trajectory for the control period. MERC initiated a similar process in November 2018 for assessment of the agricultural consumption norm by March 2020. Bihar ERC has specified similar provisions in their MYT Regulations, 2018.

12.Tracking of working capital borrowings

The actual working capital borrowings are often much higher than the regulated working capital borrowings. These are often due to strained cash flow issues and indicate financial stress faced by the utilities. It is suggested that the Commission track the actual working capital borrowings as part of revenue heads, and transparently report it during the tariff process. Such tracking can be useful for the Commission and other stakeholders to understand the financial duress under which the DISCOMs are operating at, and can ensure that timely and proactive decisions are taken to improve DISCOM finances over a longer term.

13. Tracking and reporting to improve collection efficiency

The DISCOMs should be mandated to report: —

- The extent of dues pending from the previous year which were collected in that year. This will enable a better understanding of performance of the DISCOMs, especially as collection efficiency can exceed 100% (without caps) if such collection was significant.
- Category-wise pending dues
- Age-wise analysis of receivables of the DISCOMs.

14. Need for clarity on operationalisation of gain and loss sharing mechanism

Draft Regulation 8 states that there shall be sharing of gains and losses, and respective pass through to consumers via tariff, for both controllable and uncontrollable costs. It is suggested that the Commission clarify the ratio in which these gains and losses are shared with the consumers. This can give some future clarity and certainty – which will allow the utilities to better optimise its costs and operations. The Commission can also explore a distinct gain and loss sharing mechanism for each controllable parameter, if necessary.

15. BEE Energy Audit Regulations

Bureau of Energy Efficiency (BEE) had notified its Energy Audit Regulations for DISCOMs in 2021. The MYT Regulations can specify the distribution licensees to submit these audit reports as part of the tariff petition. The annual energy audit report for the preceding financial year and the preceding quarterly reports can be submitted along with the petition for Annual Performance Review. The Commission can take cognisance of data submitted in the energy audit reports to remain informed about various performance measures.

16. Data formats for tariff process

In draft Regulations 9.1, 9.2, 11.2, 18.1, the Commission mentions that it shall prescribe formats for licensees to furnish requisite information during the tariff determination and true-up process. It is suggested that the formats be shared by the commission and finalised based on stakeholder comments within three months of the notification of the regulations. Specification of the formats, before the effective date of the control period, provides clarity and certainty to the stakeholders. For example, in addition to the existing formats, to make the MYT process more effective, the formats should also specify detailed information on:

— Consumer Category-wise subsidy accounting and annual reconciliation of category-wise booked and paid subsidies as well as pending payments
— Actual working capital borrowings from DISCOMs to provide a clear picture of financial strain faced by DISCOMs
— Project-wise expenditure for Energy Efficiency (EE) or Demand Side Management (DSM) measures incurred by the DISCOMs
— Annual average availability and PLF across contracted capacity by DISCOMs to assess the extent of backing down in past years 12
— Data on short-term transactions from DEEP, TAM, G-TAM, I-DAM and RTM contracts with details of each transaction given separately.
— Extent of actual energy (conventional and RE) wheeled for open access and off-site captive consumption and extent of on-site captive consumption on an annual basis.
— Category-wise status of metering (including % of consumers where meter is AMI, pre-paid, capable of energy accounting in ToD slots etc.)
— Month-wise Hours of supply based on feeder data (such information was shared in data gaps as part of the petition)

— Detailed information of project/ scheme specific, general loans and working capital with details on loan amounts, tenure of loan, moratorium period and interest rates across utilities. Some such formats suggested for such data capture can be found in this 2018 publication: (https://energy.prayaspune.org/our-work/research-report/bricks-without-clay-crucial-data-formats-required-for-effective-tariff-processes).