

Additional Submission: Comments and Suggestions on GERC Approach Paper

Prayas (Energy Group)

4th August 2023

1. Demand Forecasting and Power Procurement planning

We welcome the Commission's approach in Para 6.3.1 and Para 6.2.3 to include a comprehensive resource adequacy plan as well as demand forecasting based on granular data, load research studies, advanced statistical methods including PEUM and econometric methods, and exploring the use of various IT tools, including Artificial Intelligence as part of the MYT regulations.

To this end, the following is proposed for addition to the MYT regulations:

- The DISCOMs should submit a detailed load research study with consumer category wise load curves at the beginning of every MYT period. This should be part of the tariff petition of DISCOMs. The load research study should be based on consumer, feeder and DT meter data as well as survey information on appliance usage, where relevant.
- Energy and Demand requirements for a ten year period should be based on projections made as per the load curves of each consumer category. Such an approach (as opposed to rule-of-thumb approaches of assuming load factors) will account for seasonal variations and enable scenarios for load shifting.
- Trends with respect to open access, captive consumption should also be considered taking into account, migration behaviour of consumers, existing contract durations etc.
- 10 year plans for solarisation of agriculture (especially under KUSUM A and C) should be submitted to account for load shifting as well as power procurement due to solarisation.
- The model for demand forecasting should include scenarios and should be shared with the Commission along with assumptions and data.
- Demand forecasts for a 10 year period, should be revised during the mid-term review process.
- Projections for agricultural demand should be based on data from a large and geographically diverse sample size AMR/AMI-enabled segregated agricultural feeders. The norm should be determined based on the methodology specified by the Commission using the feeder input data. The data should be published on the DISCOM websites on a monthly basis. (This is similar to the approach in Maharashtra (Case No. 322 of 2019¹ and Case No. 226 of 2022). MSEDCL publishes the feeder input data for 502 sample feeders².)

With respect to the resource adequacy plan, it is suggested that:

¹ <https://www.mahadiscom.in/consumer/wp-content/uploads/2020/03/Order-322-of-2019.pdf>

² <https://reshorttermc.mahadiscom.in/SolarDTC/CaptchaServletNew>

- Plans should be scenario based to account for cost impacts and resource adequacy based on various technologies, sales growth and load shifting etc.
- Demand side measures with respect to increase in appliance efficiency, impact of time of day tariffs should also be considered in resource adequacy plans
- The role of storage, especially BESS as well as short-term power procurement should also be part of RA plans. There should also be consideration of renewable capacity addition and capacity value of RE procurement.
- Scenarios for RE generation need to be in sync with demand variations to the extent that they are both weather dependent. Thus, it is important to understand the extent to which weather simultaneously impacts both demand and VRE generation, and these should be incorporated to the extent possible
- The use of production cost and capacity expansion models for RA is of paramount importance. The model used by the DISCOMs along with data and assumptions should be shared with the Commission. The models should have 15-minute time resolution.
- RA plan of the DISCOMs should be shared publicly and finalized based on a public consultation process.
- The RA plan approved by the Commission should be followed and all investment and power procurement decisions should be based on what has been approved as part of the RA plan.
- The RA plan approved should also state the investment requirements to meet the RA plan.

2. Fuel and Power Purchase Price Adjustment (FPPPA)

GERC has undertaken significant innovations in FPPPA but has not revised the methodology for estimation of FPPPA in a decade. Some suggestions to change in the FPPA framework are given below:

- Variation in inter-state transmission charges should only be considered, not intra-state transmission charges. This is because intra-state tariff determination coincides with the tariff process for DISCOMs.
- It is not clear if the new methodology will have FPPPA as a percentage of the billed amount or whether the 5% threshold for automatic passthrough is 5% of the billed revenue or the category-wise ABR. This should be clarified. Treatment of categories where the revenue includes subsidies should also be clarified.
- The rules imply that regulatory vetting could take place during the true-up process. Since fuel costs form a substantial part of total costs, vetting of periodic filings by the Commission is essential. In fact, explicit approval should be necessary from the Commission each time the amount for recovery exceeds a pre-specified threshold/cap for recovery in a month.

This is particularly critical if the price increase is substantial and could lead to tariff shock in subsequent months.

- Any cost impact due to decisions of courts or tribunals should be recovered only after explicit regulatory approval is awarded for recovery of the cost. Further, such costs should be reported separately and clearly in each FPPPA filing by the DISCOM.
- The carrying cost for carry-forward, under-recovery and over-recovery should be similar.
- In case of negative FPPA, the amount should be deposited into an 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.
- During every tariff process, the base average tariff should be adjusted by the fuel surcharge being charged so as to reflect revenue recovery from consumers.

3. Separate Regulations for Capital Investment

We support the proposal of GERC to introduce separate, comprehensive regulations for capital investment approval in line of the MERC (Approval of Capital Investment Schemes) Regulations, 2022. The regulations should also have public processes for in-principal approval of capex schemes, clear frameworks specified for post-facto cost-benefit analysis at the time of DPR submission as well as a web-based portal with details on delays, cost-overruns and capital works in progress for DPR and non-DPR schemes. The scrutiny and approval process should be relevant for all capex projects.

4. Smart Metering

Consumer category-wise trajectories for smart metering would provide necessary clarity on the roll-out plan. It would also aid phase-wise implementation and examine the necessity of pre-paid smart meters for consumer categories with high collection efficiencies. Similar trajectories should also be provided for ensuring functional feeder AMR/ AMI and DT metering.

With regards to cost passthrough, it is suggested that the DISCOMs quantify expected benefits from the scheme and a gain and loss sharing framework is set up for assessing costs to be borne by the consumers post the roll out.

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