

# Prayas (Energy Group)'s Comments and Suggestions on Draft Electricity (Amendment) Rules, 2022

14<sup>th</sup> September 2022

The Ministry of Power has published the Draft Electricity (Amendment) Rules 2005 for public comments on the 12<sup>th</sup> of August 2022. The Amendment introduces three new aspects in the form of 1) Resource Adequacy processes for DISCOMs, 2) Energy Storage and 3) a Uniform Renewable Energy (RE) Tariff for Central Pool. The draft also has provisions related to Surcharge for Open Access, Timely recovery of power purchase costs by DISCOMs, Subsidy Accounting, Hydro Power and Dispute Resolution. Finally, it also introduces several new definitions of terms relevant to the Uniform RE Tariff framework.

## Specific suggestions on the proposed framework

Our detailed comments and suggestions on specific Rules are detailed below. Our comments focus on provision of a clear, consistent framework which considers state contexts and can aid smooth rollout and implementation across the country.

### 1 New Rule 13 limiting Surcharge payable by OA Consumers to 20% of ACoS.

This new proposed rule mandates that the Surcharge payable by OA consumers as determined by the SERCs shall not exceed 20% of the Average Cost of Supply (ACoS).

Firstly, it is unclear whether this Surcharge refers to only Cross Subsidy Surcharge or to Additional Surcharge as well. Secondly, the recently notified Green OA Rules exempt certain consumers from this Surcharge (e.g., for production of Green H2 or Ammonia) and mandate the Forum of Regulators to come up with a methodology and principles for determining the OA charges (incl. the Surcharge). Thus, it is not clear whether this 20% cap proposed in these Rules will over-ride the methodology to be proposed by the FoR. Further, it is unclear which of the provisions related to OA Surcharge (in these Rules or in the Green OA Rules) will prevail in case of any dispute.

Adequately compensating the DISCOMs for costs incurred and services provided is necessary. Given their cost structures and sales mix, different DISCOMs will need varying levels of OA Surcharge support and a uniform 20% of ACoS ceiling may not be enough to compensate DISCOMs for their loss of revenue. Instead, a Rs 2.5-3/kWh Surcharge fixed for five years could be considered. This could be made applicable for all OA transactions, irrespective of the source of power. This will avoid unnecessary complexity and will bring in much-needed clarity, simplicity and certainty.

## 2 New Rule 14 on Timely recovery of power Purchase Costs by DISCOMs

This new rule mandates the ERCs to formulate a price adjustment formula for recovery of costs arising on account of variation in prices of fuel or power purchase costs. This cost will be automatically passed through to consumers on a monthly basis using this formula and will be trued up annually by the ERC. Such a price adjustment will have to be in accordance with the methodology enclosed in the Annexure.

Operationalising automatic monthly cost recovery along with disallowance of cost recovery unless strict timelines are met is **welcome and necessary** given the evidence of long delays in recovering fait accompli costs. This would ensure timely cost recovery in states which currently do have a framework for fuel surcharge levy or are not levying the fuel surcharge in practice. In addition, the specification in proviso in Para 1 (3) of the methodology for Fuel and Power Purchase Adjustment Surcharge (FPPAS) to enable disallowance with lack of timely filing and the specification in Para 1(7) of the methodology stating that true-ups must be completed by 30<sup>th</sup> June of the next financial year provide much required clarity towards timely filing and reconciliation of costs.

Rule 14 notes that price adjustment formula which is the formulated by the SERC *'shall be in accordance with the methodology enclosed at Annexure.'* Further, the Rule 14's proviso notes that until such formula is specified by the Appropriate Commission, *'the formula given in the methodology shall be applicable'*.

If SERC has an existing formula, it is unclear whether the formula specified in the Annexure would over-ride the existing formula, especially if the existing framework is not deemed to be *in accordance with the methodology enclosed at Annexure*. This is a crucial issue since many states already have very good provisions for fuel surcharge determination, which have been refined over time based on implementation challenges. One such example is the stabilisation fund for fuel surcharge applicable in Maharashtra to reduce tariff impact on consumers to some extent due to levy of fuel surcharge. It is thus suggested that the formula be applicable only in states which do not have an existing framework and that the proposed framework can be adopted and customised for the states. In this context, the following amendment is suggested in last sentence of proposed Rule 14: The price adjustment shall be in accordance with the **approach and principles outlined in** methodology enclosed at Annexure.

Some comments regarding the proposed methodology specified in the Annexure are:

- **Need to determine FPPAS as per unit charge rather than %:** Para 2 specifies the per unit charge as a % of presumably the monthly energy charge. While this would ensure that those with lower tariffs are charged less FPPAS, it would also make implementation challenging.

- In case of subsidised categories, it is not clear if the energy charge on which FPPAS is levied is the energy charge set by the regulator or the subsidised energy charge. As per the SoP, subsidy is declared independent of tariff determination process and thus the subsidised energy charge can change periodically. In case of a per unit levy, this can be clear and if required, the state government can also subsidise the fuel surcharge as is the case in many states.
- The % levy is possibly suggested to maintain cross subsidy design inherent in the approved tariff design. This would ensure that poorer consumers bear less of the burden of FPPAS and richer consumers bear more. However, the energy charges may not effectively reflect the cross-subsidy design in tariff categories where the revenue from fixed charge component is higher relative to other categories. This is particularly the case for HT Industrial and Commercial consumers in states. The converse is also true as there are categories, especially domestic categories in states like Andhra Pradesh and Tamil Nadu where domestic consumers do not pay any fixed charges and thus the levy could be disproportionately higher as compared to other categories.
- For consumers with flat rate tariffs, where there are no energy charges, the FPPA would be zero.

**It is therefore suggested that FPPAS be levied in Rs./kWh terms, calculated as a ratio of cost required to be recovered to energy sales considered for the quarter. Thus, the denominator in the prescribed formula should not be multiplied by ABR.** This is also consistent with the existing practice in most states.

- **Need for regulatory vetting in case requirement exceeds monthly cap:** The proposed rules imply that regulatory vetting would 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.

Para 1 (6) of the proposed methodology stipulates 3 brackets for cost recovery through the Fuel and Power Purchase Adjustment Surcharge (FPPAS) formula, which is summarised in Table 1.

*Table 1: FPPAS Recovery Schedule*

Level of FPPAS	Cost Recovery Schedule
FPPAS < 5%	95% cost recoverable shall be levied automatically
FPPAS > 5% but < 10%	5% FPPAS recoverable by DISCOMs shall be levied on consumers and balance shall be recoverable up to 90% automatically using the formula

FPPAS > 10%	10% FPPAS recoverable by DISCOMs shall be levied on consumers automatically using the formula and differential claim shall be recoverable after SERC approval during true up.
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First, the specification does not clearly mention what the level of FPPAS refers to. It is unclear if it refers to thresholds of 5% and 10% refer to % of power purchase cost, monthly average tariffs, % of variable power purchase cost.

Secondly, it is not clear if the cost recoverable is different from monthly FPPA calculated using the formula is it would include carry forward of unrecovered costs, if any from previous months.

Third, such a complex and codified procedure would make it hard to track without adequate reporting or costs considered and due vetting which would make automatic passthrough or approval even more complex and would result in most costs awaiting approval at the time of true-up.

To simplify implementation, it is suggested that:

Approval of FPPAS applicable for a month (including carry forward from previous periods) be subject to regulatory approval when the amount for recovery exceeds 20% of the variable component of consumer tariff (i.e.- the ceiling mentioned in Para 1 (4)).

- **Consideration of transmission charges:** Para 1 (1) and 2 (1) of the Annexure states that variation in cost due to transmission charges should also be recovered from consumers. It should be clarified in formula in Para 2 that only costs due to variation in inter-state transmission charges is to be considered.
- **Treatment of costs arising out of pending litigation:** If the intent is to reduce carrying cost impact due to decisions of Higher Courts/Tribunals/Orders passed by the Commission, then it is important that is allowed only a case to case basis after regulatory approval for cost recovery is allowed in a given year. A proviso should be added to Para 1 (1) and 2 (1) to this effect. Cost arising out of such litigation should also be reported separately and clearly in each filing by the DISCOM.
- **Management of under-recovery and over-recovery-** Under and over-recovery of FPPAS can take place due a multitude of reasons, especially due to variation in sales in a particular period. It is suggested that under-recovery and over-recovery be subject to the same carrying cost/holding cost to ensure consistent treatment. Currently the carrying cost rate in Para 1 (5) is different from the holding cost rate in Para 1 (8). It is also suggested that under-recovery and over-recovery from previous periods are reported and reconciled as part of the FPPAS determination process.
- **Management of carry-forward, refund-** Fuel price variation can be above as well as below the regulated rates. Thus, calculation of a “negative” FPPAS is also possible in some months. To manage consumer tariff impact due to FPPAS levy, it is suggested that instead of providing

consumers refund on bills in case there is “negative” FPPAS, the amount be parked in a separate fund and is utilised to manage/ reduce FPPAS in months when the levy is high. The negative FPPAS can be carried forward along with applicable holding cost till it accumulates to the equivalent of revenue from 20% of approved energy charges of the DISCOM. Above, this limit, bill refund can be allowed. Such a mechanism will allow for management of impact of FPPAS levy and minimise consumer tariff impact due to levy in some periods, to some extent. In order to ensure transparency in reporting of utilisation of such a fund, details of the fund and changes to the fund can be mentioned in Para 1 (11) of the Annexure on methodology on reporting.

- **Treatment of inter-state generators-** It must be clarified in the formula that the variable ‘Z’ captures power purchase and applicable losses for all inter-state and intra-state generators with whom the DISCOM has contracted capacity, including IPPs and would not be limited to only CGS capacity as is currently stated.
- **Data reporting-** Para 1 (11) mentions that all details of FPPAS formula, calculation of monthly FPPAS and recovery should be published and archived on the DISCOM website. It is suggested that the reporting include:
  - Generator-wise details of deviation in costs
  - Treatment of short-term power purchase
  - Costs incurred due to compensatory tariff and other dispensations
  - Variation in inter-state transmission charges
  - Under-recovery/ over-recovery adjustment along with carrying/ holding cost
  - Unmetered and metered sales reported for the period and four preceding periods
  - Inter-state and intra-state transmission loss considered
  - Time series information on FPPAS levied for the past 12 months.

### **3 New Rule 15 on Subsidy Accounting**

It mandates that the accounting of due subsidy for the purpose of section 65 of the Act shall be done by the DISCOMs in accordance to the SOP issued by Gol dated 22<sup>nd</sup> July 2022 under the RDSS scheme.

Rather than linking accounting to be done as per a SoP published under the RDSS scheme, it would be better if the SoP is actually codified as part of these Rules. Further, the reporting should be done on a quarterly basis and uploaded on the website of the DISCOMs. This should be in addition to the periodic reporting to BEE specified in the SoP document.

### **4 Resource Adequacy (RA)- Remove levy of penalties for not meeting RA target**

A guideline on RA is proposed to be issued by Gol in consultation with the Authority within 6 months of the notification of these Rules. These would be for both the generation planning stage (upto and >1 year) and operation planning stage (<1 year). Following this, the SERCs will issue

regulations on RA in accordance with the GoI guidelines and FoR model regulations if any. Finally, the DISCOMs will prepare a RA plan in accordance with these regulations and seek SERC approval for the same.

In terms of Monitoring and Review,

- *The State Commission shall review the resource adequacy, every 6 months, for each of the distribution licensees. The State Commission **may specify non-compliance charges for failure to comply with the Resource Adequacy target approved by the Commission.***
- *The National Load Dispatch Centre (NLDC) and the Regional Load Dispatch Centres (RLDCs) shall carry out assessments of Resource Adequacy, for operational planning, at the national and regional levels, respectively, on an annual basis, in accordance with the Guidelines issued by the Central Government.*
- *The State Load Dispatch Centre (SLDC) shall carry out assessments of Resource Adequacy, for operational planning, at the state level, in consultation with the distribution licensees on an annual basis, in accordance with the Guidelines issued by the Central Government and the direction of the State Commission. Further, the SLDC **shall review the operational resource adequacy on a daily, monthly and quarterly basis.***

In principle, RA is a much needed and welcome step. However, without evolving/specifying principles for RA which are appropriate for the Indian context, **it would be very premature to specify/levy non-compliance charges for failure to comply with the RA target approved by the ERC.** Firstly, it is not even clear whether the RA would be for an area of supply or DISCOM consumers alone? This is very critical given the strong momentum for sales migration through OA and CPP route (especially after the notification of the Green Open Access Rules, 2022) and the resulting uncertainty in load to be served by a particular date.

The draft Amendment to the Electricity Act has also proposed a framework for multiple distribution licenses in the same area of supply, which will make RA planning all the more complex in terms of responsibilities and accountability. Both risks in terms of over-investments leading to NPAs or under-investments leading to losses/load shedding is a real possibility if RA principles are not appropriately formulated. Further, on one hand there is a push for not so long term PPAs (like 10-15 years instead of 25) and increasing the share of market procurement. The reliance on markets will also depend on how the markets evolve over time.

**Thus, there is a need to move in a step wise manner and evolve such principles before directly moving to penalties for non-compliance with RA targets.**

## **5 New Rule 18 on Energy Storage System (ESS)**

Firstly, the Rule now formally recognizes ESS as part of the Power System and will be accorded status based on the application area, i.e., Generation, Transmission or Distribution. Stand-alone ESS is also recognized as a delicensed activity akin to Generation. This is a welcome new Rule,

given the growing importance of ESS in the power sector, especially with the increasing share of renewables.

Rule 18 (4) notes that, *'The ESS can be developed, owned, leased and/or operated by a generating company or a transmission licensee or a distribution licensee or a system operator or a standalone energy storage service provider. When an ESS is owned and operated by and co-located with a generating station or a transmission licensee or a distribution licensee, it shall have the same legal status as that of the owner.'*

*Provided that if such an ESS is not co-located with, but owned and operated by, the generating station or distribution licensee, the legal status shall still be that of the owner but for the purpose of scheduling and dispatch and other matters it shall be treated at par with a standalone ESS.'*

While this rule clarifies and enables various applicable and potential models for storage, it is unclear whether consumers (captive or rooftop solar with net-metering etc.) can also develop, own, lease and/or operate ESS.

Further, the proviso does not mention Transmission licensees.

The Rules should also direct POSOCO/FoR to come up with model guidelines/procedures for scheduling and dispatch rules for ESS as mentioned in the proviso of Rule 18 (4).

Rule 18 (5) states that, *'The developer/owner of the ESS shall have an option to sell/lease/ rent out the storage space in whole or in part to any utility engaged in generation or transmission or distribution; or to a Load Despatch Centre.'*

*Provided that the owner of the ESS may use part/whole of the storage space himself to buy and store electricity and sell the stored electricity at a later time/date.'*

To ensure the rules are comprehensive in their coverage, Rule 18 (5) should be modified to include consumers as suggested below:

*'The developer/owner of the ESS shall have an option to sell/lease/ rent out the storage space in whole or in part to any utility engaged in generation or transmission or distribution; or to a Load Despatch Centre; or to a consumer or set of consumers.'*

Rule 18(6) – notes that if ESS is operated on a stand-alone basis, it shall register itself with the Authority which will also verify it. ESS will also have to comply with the regulations notified by the Authority.

While the registration and verification are very important, **it should be extended to all ESS (stand alone and co-located with G/T/D) for system size > 1 MWh or > 1 MW.** This will enable tracking of sell/ lease/ rent out as specified in the rules. Currently the registration is mandated to be conducted by the authority (CEA) but it might be better that this is done by the respective SLDC/RLDC depending on whether the ESS is connected to the InSTS or ISTS.

To enable timely state level understanding and tracking, the registration of smaller systems (< 1 MWh or < 1 MW incl. consumer level kW ESS which would be Behind the Meter (BTM)) should be done with the DISCOM in whose area of supply the ESS is located. This is because a large scale national exercise for such registrations will be conducted in a much swifter manner, if there are state level agencies conducting the registration process. The DISCOMs should report such registrations to the CEA and SERC in a timely manner. In case of failure to register in a time-bound manner, the appropriate agency should also impose a penalty on the owners of such systems. This can also be reported to the CEA and SERC in a timely manner.

It would be better if the Rules also specify which aspect of ESS should be covered by the regulations to be notified by the Authority. Finally, the Rules should also emphasize that all ESS procurement by regulated entities (DISCOMs/ TransCos) should be through competitive bidding as per the guidelines under section 63 of the Act.

## **6 New Rule 19 on Implementation of a Uniform RE Tariff for a Central Pool**

A new Rule 19 proposes to introduce a novel concept - Uniform RE Tariff for a Central Pool. Under this framework, there shall be a different Central Pool for each of the sectors like Solar, Wind, Hybrid, Hydro, SHP and power from any RE resource incl. storage or their combination thereof. Such a pool will be for five years and for every five years a new Central pool shall be formed.

This is a novel concept and purportedly to avoid a situation where end procurers are not too eager to sign PPAs when there is even a small difference between discovered prices within winning bids. Such a variation is very likely given the difference in solar/wind resource across locations in different states and different land prices/evacuation costs. Hence such pooling will aggregate projects and all end procurers will be paying the same monthly tariff for a certain Central Pool.

To ensure there is clarity in the mechanism and certainty for existing procurers, it should be clarified in the Rules that the pooling will only be applicable for PPAs which are signed (not projects commissioned) after the notification of the rules. This will guarantee certainty in terms of contract for existing procurers.

It must also be clarified that Electricity (Uniform RE Tariff for Central Pool) Rules, 2022 referred to in Schedule 1 is the same as the proposed Rule 19.

Clarity should also be provided on whether the implementing agency and the intermediary procurer could be the same agency if required.

The design for pooling needs to minimize and mitigate price risk for procurers while securing long term contracts for power contracted by the intermediary procurer. However, the proposed design has some inherent risks which can be mitigated as detailed in Table 2.



Table 2: Mitigation Options to address risks/uncertainties in pool design

No	Risks / Uncertainties	Mitigation Option
1.	Since a pool will be for five years and for every five years a new Central pool shall be formed, this can introduce a level of uncertainty in terms of the price levels of new projects that will be added to the pool in the subsequent months/years.	Reduce Pool Time from 5 years to 1-3 years. AND/OR Specify a ceiling for variation within bids within a Pool. AND/OR Have a Central Pool with projects where only PPA prices fully known.
2.	Since the Pool can be for Hybrid projects or from any other renewable energy resource including storage or their combination thereof, this too can introduce a level of uncertainty/risk if certain resources/scale of storage is included in the pool, especially if these are high-cost resources.	Specify technology combinations (Solar+Wind; Solar+Storage; Wind+Storage etc.) upfront and do not leave uncertainty in terms of which resources can be added to the pool.

Further within the Methodology Annexure (Schedule 1), it notes,

*Tariff for a particular Month is calculated based on **actual** energy supplied to End Procurer (EP) from the Pool (e.g. Solar Power Central Pool, Wind Power Central Pool etc) by the Intermediary Procurer (IP) and actual amount to be payable for such supply of power as illustrated below:*

Since all ISTS RE project payments are made on schedule basis, the above text should be amended to

*Tariff for a particular Month is calculated based on **scheduled** energy supplied to End Procurer (EP) from the Pool (e.g. Solar Power Central Pool, Wind Power Central Pool etc) by the Intermediary Procurer (IP) and actual amount to be payable for such supply of power as illustrated below:*

Similar editing maybe needed in the para under, 'Continued Operation of Pool'.

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