

Comments and Suggestions on Draft Electricity (Promoting renewable energy through Green Energy Open Access) Rules, 2021

Prayas (Energy Group)

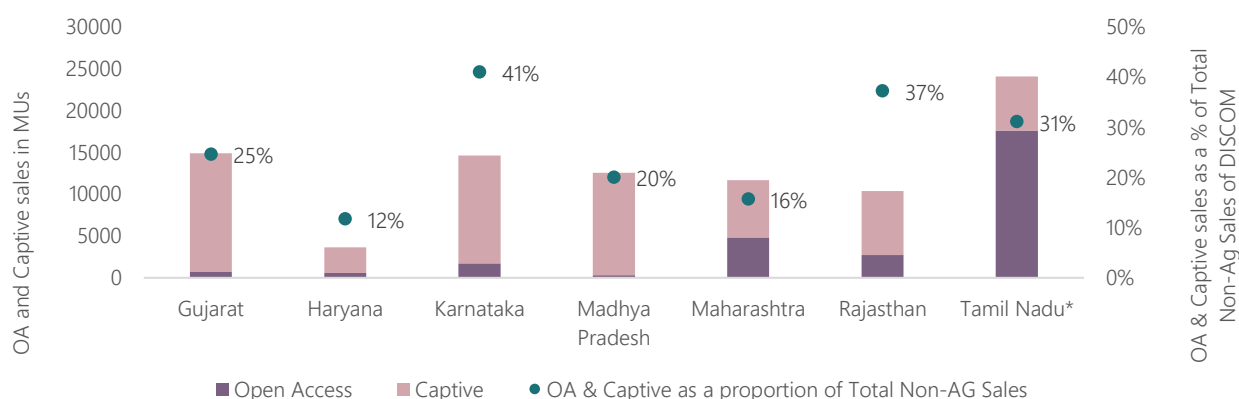
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The Ministry of Power has published the Draft Electricity (Promoting renewable energy through Green Energy Open Access) Rules, 2021, for public comments on the 16th of August, 2021. Our comments and suggestions focus on the challenges with promotion of open access, need for consistent framework through harmonious changes in policy and legislation as well as specific ideas which can be implemented in the existing framework to promote open access and captive and in turn open access through RE sources¹.

1 Background and Context

As illustrated in Figure 1, consumption from consumers via the open access (OA) and captive route was already comparable to 26% of DISCOMs' non-agricultural sales in FY19 across seven large states.

Figure 1: Open access and captive sales in seven states as compared to DISCOM non-agricultural sales in those states



Note: The OA numbers for Tamil Nadu are for the year 2019-20, as 2018-19 numbers are unavailable. Estimate does not include migration due to rooftop solar (6.8 GW as on Dec, 2020)

Source: PEG compilation from various tariff orders, additional surcharge petitions and CEA general review.

In fact, open access and captive avenues have provided large commercial and industrial consumers with competitive options to avail supply. In recent years, driven by price reduction, modularity of solar and wind technologies, and low gestation periods, much of the growth in the OA and captive segment has been driven by migration towards renewable energy (RE) sources. The revenue attrition with sales migration has affected the finances of the distribution company (DISCOM) and consequently has impacted the tariffs and quality of service of its regulated consumers. Due to loss of revenue, measures to encourage open access by DISCOMs and state agencies has been limited. Consumers and generators have faced uncertainty in charges and procedures, complexity, arbitrariness and delays in processing of applications and limited choice in avenues for competitive choices. On the other hand, sales migration, especially through short-term open access has increased demand uncertainty for DISCOMs. Lack of adequate compensation for services such as banking, deviation settlement and standby power provision

¹ In the backdrop of the draft rules, Prayas (Energy Group) also convened a round table on 7th September 2021 where provisions in the draft rules were deliberated by participants with representation from Distribution Companies (DISCOMs), Regulatory Commissions, Sector Experts, Lawyers, Renewable Energy (RE) project developers and Open Access (OA) consumers. The report of the round-table discussions can be accessed here: <https://www.prayaspune.org/peg/past-events/301>

by the DISCOMs are also challenges. These challenges have been noted by the Ministry of Power² and the Forum of Regulators³ in the past.

For accelerated, efficient development of competitive options for supply, it is critical that policy makers provide a framework that boosts investor confidence, protects consumer interests, enhances competition, promotes competition on techno-economic parameters and compensates utilities adequately for the risk they undertake and the services that they provide. Such a framework can be built on the following principles:

- **Clarity:** On applicability of rules and regulations, transparency and simplicity in application processes, treatment of new technologies such as behind the meter systems and new market structures such as demand aggregators, OTC trading platforms etc. Clarity would also be needed on processes for verification of captive status by regulators and DISCOMs, applicability of banking framework etc. Implementation of crucial proposed changes such as amending the Captive Rules would also help. Clarity would reduce decision making through litigation and help investors, consumers and developers make informed, long-term decisions in the sector.
- **Certainty:** To make medium-term techno-economic decisions, certainty should be provided in terms of charges for open access. Fixation of such charges over the medium term would also signal DISCOMs to operate efficiently in line with the spirit of the Multi-Year Tariff framework. However, the principle of certainty should not be restricted to charges alone but extended to ensuring certainty in policy frameworks. State and central policy makers should ensure applicability of policies for the announced time-periods and preclude retrospective applicability of any policy change. Further, any major policy change would require time for adaptation by utilities, developers, investors and consumers. Thus, such changes should be announced at least a year before it's effective date.
- **Compensation:** To facilitate open access especially from RE sources, DISCOMs provide valuable services related to banking, balancing and as provider of last resort. Many of these services entail risks and costs but the burden is often socialised among all grid users, especially DISCOM consumers. To ensure balanced and long-term development of the sector, DISCOMs must be compensated adequately. Given the gains from shifting, consumers will be willing to pay compensatory charges at cost. It would avoid restrictive measures by DISCOMs such as non-provision of banking and net metering services which would only accelerate the transition to behind the meter and storage options.
- **Choice:** Consumers have multiple requirements and varying constraints. Flexibility and choice increase competitive gains and reduce prices. Policies should be designed to maximise choice and avenues for obtaining competitive supply rather than restraining them. For example, applicability of certain enabling frameworks only for renewable energy instead of all open access reduces the flexibility to consumers to manage supply specially to mitigate variability in availability of wind and solar sources through purchase from real time markets or day ahead markets. Similarly, limiting access to a certain mechanism for grid-interactive rooftop systems based on connected load instead of providing consumers flexibility in choosing between net metering, gross metering, net feed-in and behind the meter options (on payment of applicable costs) restrains choice and therefore market development.

²https://powermin.gov.in/sites/default/files/webform/notices/Seeking_Comments_on_Consultation_paper_on_issues_pertaining_to_Open_Access.pdf

³ <http://www.forumofregulators.gov.in/Data/Reports/FOR%20Status%20of%20Open%20Access-13-01-2020.pdf>

- **Convergence:** In the spirit of providing choice and aiding market development based on techno-economic criteria, policy treatments across various options for migration should reduce. Thus, the charges levied on open access and captive should gradually be comparable such that consumers do not choose captive only on the basis of non-applicability of charges. Similarly, with the rising cost-competitiveness of RE, open access and captive procurement from such sources should be allowed on its own economic proposition, rather than being driven by concessions/waivers.

In this context, Prayas (Energy Group)'s specific comments are detailed below:

2 Applicability of Rules and Jurisdictional Challenges

The present draft has been proposed as rules with the Central Government exercising powers under Section 176 of the Electricity Act, 2003. Given the concurrent nature of jurisdiction in the electricity sector, it is not clear if the central government can notify rules on these matters when the responsibility of facilitating open access lies with the State Electricity Regulatory Commission as per Section 42 and Section 86 of the Electricity Act, 2003. Thus, the rules may fail in achieving its intent of providing an enabling framework to accelerate RE open access due to the risk of long, litigious processes impeding decision making.

As state level decision makers and small consumers bear the risk of promoting open access, it is critical that decisions regarding nature and pace of open access be made through deliberative decision making processes taking state level actors on board. **To ensure this, harmonious changes would be required across legal, policy and regulatory instruments.** Some of these include:

- Amendment of the Electricity Act, 2003
- Enabling provisions regarding charges, RE procurement and open access applications in the national tariff policy and national electricity policy.
- Notification of a new open access and captive power procurement policy to provide enabling framework.
- Change in model regulations by the FoR to nudge SERCs to adopt similar, simplified procedures.
- Incentive based mechanisms launched by the central government to promote reaching of pre-specified milestones (e.g.- number of applications processed, adopting standardised processes etc.)

3 Reduced flexibility with applicability only to renewables

The draft rules are intended only for RE based OA. However, even to promote RE, it is vital that several of the provisions are applicable to RE and non-RE sources alike. These provisions include the reduction in eligibility limit for open access, treatment of sales migration charges and applicability of standardised process and single window clearance for applications. For example, if reduced eligibility limit is only applicable for green open access, 100 kW consumer or a 500 kW consumer will be unable to procure power from real time markets to manage variability of their RE generator. Further, to avail supply especially from bundled sources, consumers will have to send multiple applications to the state agencies for non-RE power and the centralised agency for RE power, which would eliminate the benefits of a centralised process in the first place. Thus, such enabling provisions should be technology agnostic and focus on provision of flexibility to the consumer.

4 Lack of clarity in drafting of rules

While the overall intent of the rules is to encourage RE procurement especially through open access, provide clarity on charges and standardise processes across states, certain provisions are unclear and could lead to implementation issues. Some of these are detailed in Table 1.

Table 1: Lack of clarity in proposed rules

Rule	Draft Provision	Lack of clarity and potential challenges
Rule 2 (b)	“Entity” means any consumer who have contracted demand/sanctioned load of 100 kW or more except for captive consumers.	<ul style="list-style-type: none"> It is not clear if the proposals are applicable on captive consumers using RE. If applicable, it is not clear if captive consumers have no eligibility limit for OA. Thus, it is unclear if consumers below 100 kW can avail captive power, especially offsite captive. Contract demand should be considered for eligibility as it is more reflective of consumer demand.
Proviso 1 of Rule (5)	Provided that only Consumers who have contracted demand/sanctioned load of hundred kW and above shall be eligible to take power through green energy open access. There shall be no limit of supply of power for the captive consumers taking power under green energy open access.	
Rule 2 (c)	“Green energy” means electrical energy generated from renewable sources of energy;	There is no clarity on what is counted as renewable. For example, would large hydro be counted as RE? In such a case, would only large hydro counted for fulfilment of HPO be eligible under the provisions?
Rule 4 (1)	There shall be uniform Renewable Purchase Obligation, on all obligated entities that is - the distribution licensees, open access consumers and captive power consumers, from the date of notification of these Rules.	Does uniform RPO imply that all states will have the same RPO or whether all obligated entities in a state will have the same RPO for a particular year? Would RPO for captive consumers change every year, like DISCOMs or would it be fixed based on year of commissioning as clarified by the Ministry of Power in 2019 ⁴ ?
Rule 9 (a)	Provided that the surcharge for green open access consumer purchasing green energy, from a generating plant using renewable energy sources, shall not be increased, during twelve years from the date of commissioning of the generating plant using renewable energy sources, by more than fifty percent of the surcharge fixed for the year in which open access is granted.	As per the provision, levy of CSS will vary based on the vintage of the RE generator that the power is procured from. Would this be applicable only in case of long-term open access? If not, what would be the process of verifying applicable levy especially for transactions on the power exchanges? Would the SLDC or DISCOM decide this? This could lead to issues similar to verification of captive status which is settled on a case to case basis through tedious regulatory processes.

5 Reduction in eligibility of open access limit to 100 kW

In most states, since 2008, only consumers with contract demand above 1 MW have been eligible to avail open access. Further, in many states, the limit is intrinsically applicable to captive consumers as well. Non-revision of this limit implies that medium and small enterprises are unable to access market options despite compelling price advantages. With availability of competitive supply option, rise in DISCOM cost of supply and reduction in cost of metering technologies, such a shift is techno-

⁴https://powermin.gov.in/sites/default/files/webform/notices/Clarification_on_Orders_related_to_Renewable_Purchase_Obligation.pdf

economically viable even for smaller consumers. In this context, we welcome the proposal to reduce the eligibility limit to 100 kW and strongly urge that change in limits by the SERCs is applicable to all.

While the reduction in eligibility limit is welcome, it is critical that the reduction take place in a phased manner to provide time for actors to adapt to changes. To this effect, the limit can be reduced to 500 kW in FY22 with a further reduction to 100 kW by FY24. Reduction in limit also implies that open access will also be possible for small and medium enterprises. This would require changes in open access regulations and processes. To aid smooth implementation, sustained development and easy access, it must be ensured that there is differentiation in procedures for grant of open access, scheduling, treatment of wheeling loss etc., based on the contracted demand of the consumers. For example, the procedure for grant of open access could be different for consumers with 0.1 MW to 0.5 MW connected load than those with 0.5 to 1 MW load. It must also be clarified that captive consumers would have a limit similar to open access in the state to ensure lack of ambiguity. Ideally this change should take place through the amendment of the Electricity Act, 2003 or with SERCs amending their regulations.

Suggested Approach: Either through the amendment of the Electricity Act, 2003 or through amendment of SERC regulations:

- Eligibility limit should be reduced in a phase-wise manner to 500kW by FY22 and 100 kW by FY24.
- Limit should be uniform for RE and non- RE open access to provide flexibility and extended to captive to reduce ambiguity in applicability.
- Separate regulations for consumers with connected load between 0.1 to 0.5 MW, 0.5 to 1 MW and those with load greater than 1 MW.

6 Treatment of short-term open access

The provision of short-term open access contributes enables consumers to opportunistically switch between the DISCOM and market options to meet their demand based on relative price advantages. Such switching makes it challenging for DISCOMs to plan their power procurement⁵ in an effective and cost-optimal manner. Challenges with scheduling due to STOA have been identified by the Ministry of Power⁶ and the Forum of Regulators⁷ in 2017. The second proviso in draft Rule (5) seeks to address this issue by allowing for restrictions on minimum number of time blocks for which consumers shall not change quantum of OA procurement. However, this provision is not sufficient as procurement on a day-ahead or seasonal basis can affect procurement planning as volume of open access transactions increase. This is bound to take place with reduction in the open access limit. As the burden of such variation in demand for DISCOM power from OA consumers is borne by other small consumers of the DISCOM it is critical that:

- Open access be provided for a duration of not less than 1 year.
- OA for a duration of less than 1 year should be provided only under exceptional circumstances under payment of high application fees.

⁵ Instances of issues with power procurement planning have been reported in Tamil Nadu (<http://www.tangedco.gov.in/linkpdf/affidavit.pdf>), Punjab (http://www.pspcl.in/docs/pdf/arr_vol1_1112.pdf) and Rajasthan (<http://www.erc.rajasthan.gov.in/TariffOrders/Order237.pdf>).

⁶ https://powermin.gov.in/sites/default/files/webform/notices/Seeking_Comments_on_Consultation_paper_on_issues_pertaini ng_to_Open_Access.pdf

⁷ http://www.forumofregulators.gov.in/Data/WhatsNew/Open_Access.pdf

- Further, transmission and wheeling charges should increase progressively until there are doubled or tripled for repeat short-term open access applications in a year. A similar provision is currently applicable in Maharashtra⁸.

It must be noted that a one year contract does not limit participation in power exchanges as the consumers or buyers can participate in day ahead markets and sign multiple contracts of varying durations with generators to meet demand.

In addition, mechanisms can be instituted by DISCOMs and SERCs to ensure better scheduling and reduce instances of over/under drawal. This can include levy of penal standby charges for open access consumers. Introduction of a mechanism to share DSM charges on a pro-rata basis with open access and captive consumers embedded in the DISCOM network with no visibility at the SLDC level would also be required.

Another much needed effort to reduce instances of opportunistic switching would be to have time of day tariffs be reflective of system costs. This could include variation of time of day charges such as morning and evening 'shoulder' periods have high ToD rates. Further, ToD charges should also vary on a seasonal basis to reflect stress periods and periods of high RE availability to enable consumers to shift load in a manner where system costs are reduced.

Suggested Approach: Through amendment of regulations

- Duration of short-term open access should be restricted to not less than 1 year.
- Open access for shorter durations (under contingent circumstances) should be restricted through high application fees and higher wheeling/ transmission charges for repeat applications
- Measures to ensure better scheduling practices and reduced opportunistic switching needed such as pro-rata adjustment of DISCOM DSM charges with embedded open access consumers, levy of penal standby charges and variation of ToD charges on a daily and seasonal basis to reflect periods of high stress and high RE availability.

7 Enabling framework for RE procurement

Rule 4(2) provides clarity on the multiple routes that the consumers can used to procure renewable energy power. While the intent is welcome, the current framing results in significant ambiguity which will make implementation challenging. In this context it is suggested that the framework:

- Clarify that RE can be procured also from traders, OTC platforms etc. This will enable consumers to use new market instruments such as G-TAM and the proposed G-DAM for procurement.
 - Clarify that RE procurement from any source (not just the DISCOM) in excess of RPO is permitted.
- The rule also mentions procurement using behind the meter options, meeting RPO using green hydrogen and procuring RE power from DISCOMs on payment of 'green' tariffs. However, without an enabling framework for implementation there could be non-synchronous and haphazard development across states. It is suggested that the framework is more detailed as follows:

Behind the Meter (BTM) systems: Rule 4 (2) (A) proposes to not have any capacity limit for 'behind the meter' systems. However, from a safety perspective there should be a maximum limit. The capacity of

⁸ Please see Regulation 14.1 (v) of MERC DOA Amendment Regulations, 2019: "Provided that the applicable transmission charges in case of such repeated STOA transactions of Open Access Consumer(s) shall be increased by a multiplication factor of 1.25, 1.5 and 2.0 respectively for every 2nd, 3rd and 4th STOA transaction during financial year beyond which the transmission charges for STOA shall be payable at two times of the approved transmission charges for STOA."

BTM installations must not exceed the sanctioned demand of the consumer. Further, the framework should specify that all BTM systems (with capacity > 1 kW) should be registered with the DISCOMs. The DISCOMs should also be allowed to levy penal charges in case of lack of registration of such systems. While DISCOMs are not liable to purchase energy from such systems, consumers with BTM systems pay for standby services. **The levy of standby charges can be similar to that for captive consumers as detailed in Section 8 of this submission.**

Green tariffs for RE procurement from DISCOMs: As per draft Rule 4 (2) (C) (d) to (f) consumers can procure renewable energy from the DISCOM on payment of a pre-determined tariff for green energy. The pre-determined tariff would be based on the average pooled power purchase cost of RE, applicable CSS for the consumer category and services charges incurred by the DISCOM to provide green energy. The requisition should be for a minimum period of one year and such procurement would be counted towards meeting the RPO of the DISCOM.

The proposed mechanism could result in perverse incentives to procure RE power using green tariffs as the green tariffs could be lower than the energy charges of the DISCOM. With fall in RE prices, limit on CSS to 20% of ABR as per the National Tariff Policy and slow growth in wheeling charges across DISCOMs, it is likely that the 'green' tariff as per the proposed framework is not just lower than the energy charges but also lower than the DISCOM average power procurement cost itself in some states (such as Gujarat, Maharashtra and Tamil Nadu). To ensure such perverse incentives are removed, it must be ensured that green tariffs are at least 10 to 15% higher than the existing energy charges for the applicable category and the framework or methodology for green tariffs is determined as an 'add-on' to the energy charge. Allowing DISCOMs to count such procurement as part of their RPO is double counting as the DISCOMs have to fulfil such obligation in any case and consumers should not be paying higher to meet DISCOMs statutory obligations. Thus, any procurement using 'green' tariff should be counted towards renewable purchase but not counted towards meeting statutory RPO of the DISCOM, unless this green procurement on behalf of the consumer is over and above the minimum RPO level.

Meeting RPO through green hydrogen: Rule 4 (2) (E) proposes allowing obligated entities to meet the RPO by purchasing green hydrogen in equivalence to electricity targets. The norms to enable this are to be notified by CERC. In addition, it is suggested that the Central Government specify the agency and process for monitoring compliance, ensuring certification and verification of production through 'green' sources and specification of accounting mechanism towards meeting RPO. Further the State Commission's role in this process should be clarified.

Suggested Approach: Through provisions in national policies (NEP, NTP, renewable energy policy, open access policy etc.)

- Clarify RE procurement through multiple sources including traders even in excess of RPO
- For BTM systems, specify minimum limit of 1 kW and maximum limit of sanctioned load of the consumers to enable monitoring and address safety concerns.
- Specify need for registration of BTM systems and payment of charges for standby services
- For RE procurement from DISCOMs, clarify that the 'green' tariff should be in excess of energy charges of applicable tariff category and that the power procured would not be counted in meeting DISCOMs RPO target, unless the procurement is over and above the RPO level.
- For meeting RPO through green hydrogen specify mechanisms for monitoring, verification, certification and accounting to enable such purchase.

8 Open access charges

Rule 9 discusses levy of various open access charges such as CSS, Additional Surcharge and standby charges with respect to renewable energy open access consumers. It is proposed that CSS for consumers availing green open access shall not increase by more than 50% for the first 12 years of the date of commissioning of the RE source. Further, RE based open access is exempt from additional surcharge and power from waste to energy plants is exempt from Additional Surcharge and CSS. The rules specify that standby charges should be determined by the SERC without much emphasis on a prescribed framework. Any approach or proposal to revise open access charges should consider the following:

- **Justification for future levy of CSS and AS:** With recent changes in the power sector and while deliberating future trends, it is relevant to examine whether compensating the DISCOMs on the basis of cross-subsidy surcharge and extent of backing down due to open access can be justified and assured in the future. With availability of competitive supply options, SERCs are finding it challenging to increase cross subsidy revenue from consumers. As per PFC data for FY19, the average revenue from cross-subsidy was enough to compensate only 5% of the average cost of supply of DISCOMs⁹. This average cross subsidy revenue has also been falling at 2% per annum since FY16. In addition, many states (such as Punjab, Haryana and Maharashtra) are providing subsidies to industrial consumers in a bid to retain them and other states (such as Rajasthan, Madhya Pradesh and Tamil Nadu) have tariff such that industrial consumers pay less than the average cost of supply. Even with such rebates and concessional tariffs, DISCOMs find it challenging to retain consumers as the cost of supply is non-competitive. In such a situation, recovery of revenue from cross-subsidy and consequently CSS is not sustainable. Levy of additional surcharge too may not be justifiable in the future as increase in demand and muted thermal capacity addition will reduce backing down as a whole. Under such circumstances the framework for assessing DISCOM risk and ensuring compensation needs to be re-examined.
- **Move away from concessions on charges for RE power:** Given the rising cost-competitiveness of RE, procurement should be based on its own techno-economic viability rather than being driven by concessions. This is especially the case as concessions (such as the proposed additional surcharge waiver) are actually being cross-subsidised by other consumers. Thus, any policy proposal to promote RE should focus on creating an enabling framework rather than providing concessions an already competitive resource.
- **Ensuring revenue recovery for DISCOMs in medium term crucial:** While widening and broadening market operations in the future implies that the burden of DISCOM's inefficiencies are not perpetually borne by market participants, the fact remains that some form of transition finance support is crucial for DISCOMs in the medium term. In addition to the support the DISCOMs should also be compensated for its services as the wires provider and the provider of last resort. Due to these requirements and in order to raise revenue, many ERCs¹⁰ (Himachal Pradesh, Maharashtra,

⁹https://www.pfcindia.com/DocumentRepository/ckfinder/files/Operations/Performance_Reports_of_State_Power_Utillities/Report%20on%20Performance%20of%20State%20Power%20Utilities%202018-19.pdf

¹⁰ AS levied on Captive in [Himachal Pradesh](#); Maharashtra introduced AS on Group Captive, but the matter remains sub-judice at present (before the Supreme Court in Civil Appeal No. 5074-5075/2019); Madhya Pradesh too levied AS on a captive consumer (Ultra Tech Cement Limited), but this too remains sub-judice at [APTEL](#). It also introduced the same in its 'Draft Cogeneration and Generation of Electricity from Renewable sources of Energy', (Revision-II), Regulations, 2021'.

Madhya Pradesh) have introduced levy of additional surcharge on some captive consumers and DISCOMs (Tamil Nadu) have also petitioned for such a levy. This move along with increasing duties levied on captive consumers (like in Maharashtra and Rajasthan) are in order to raise revenue from captive sources to compensate DISCOMs. ERCs are also revising standby charges to reflect DISCOM cost of service. Thus, any revision of charges should take into cognizance the need for compensation for investments made and levy of cost reflective charges.

Based on this approach, it is suggested that:

- Levy of Surcharge be delinked from cross subsidy and backing down and be replaced by a single charge with a ceiling of Rs. 2.5/ unit¹¹ for a period of 5 years.
- Post this period, the surcharge should be phased out in a time-bound manner taking into account state realities.
- The new surcharge should be applicable for all captive projects within 2 years of its enactment.

The statutory exemption of CSS was provided for captive power plants at a time when capacity addition was mostly coal-based and required significant investments and time. In the current scenario, with cost-competitive renewables and significant surplus capacity, the rationale for the exemption for captive users, especially for captive projects going forward is not justifiable or strong. Fixing the surcharge in the Act will provide certainty to investors and consumers and limiting its levy to the medium term also provides a fixed timeline for DISCOMs to shift to a viable revenue model¹² which accounts for sales migration.

In addition, a framework for levy of standby services, especially for captive consumers, open access and behind the meter consumers can be suggested as many DISCOMs have not revised their standby charges in decades. A three tier mechanism¹³ based on services availed can be adopted as suggested in Table 2.

Table 2: Illustrative example for three tier standby charges

Scenario	Energy Charges	Demand Charges on standby capacity	Penal Additional Demand Charges
When standby demand is not utilized	Not applicable	25% of applicable demand charges	Not applicable
Standby services: Planned shut-down	For relevant category	Approved demand charge for category on standby capacity	2 times Demand Charges (on monthly basis) in force
Standby services: Unplanned shut-down	Temporary category	25% of demand charges on standby contracted capacity	2 times Demand Charges (on monthly basis) in force

Suggested Approach: Through amendment of the Electricity Act, 2003 as well as enabling provisions in national policies and adoption in state regulations.

- Discontinue levy of cross subsidy and additional surcharge as they are linked to cross-subsidy and backing down
- Institute a new surcharge fixed at Rs. 2.5 /unit for a five year period.
- New surcharge should be applicable on all captive projects within 2 years of its enactment.

¹¹ Rs. 2.5/unit is comparable to the estimate of CSS and AS levied in 8 states for the year FY21.

¹² More details on the transition related possibilities for the DISCOMs are detailed here:

<https://www.prayasgroup.org/peg/publications/item/377>

¹³ Such a mechanism is currently applicable in Maharashtra for captive consumers. (MERC Order in Case No. 322 of 2019)

- After 5 years, the surcharge can be phased out in a time-bound manner based on state realities and efficiency improvements.
- Levy of three tier standby charge for services availed by captive, OA and BTM consumers.
- Discontinue concessions on charges for renewable energy open access for future projects

9 Banking related provisions

Draft Rule 8 specifies that banking be permitted on a monthly basis instead of annual on payment of charges. It also specifies that the quantum of energy banked should not exceed 10% of the annual electricity consumption of consumer from the DISCOMs.

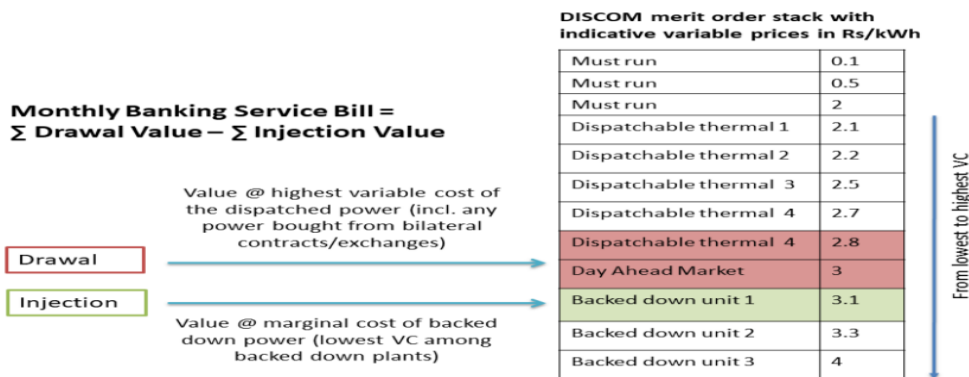
Banking mechanism is a major facilitator for renewable energy based open access and restrictions on quantum banked or availing of services on a monthly basis would accelerate the adoption of BTM and storage options by consumers.

In order to ensure phased and non-disruptive sector development, banking should be allowed on an annual basis. However, the charge for banking should be not be 'in kind' as is the levy by several SERCs but on a per unit basis. This per unit charge can be determined based on the difference between power purchase cost at the time of banking of energy and its drawl, which is revenue neutral. This should be done by linking energy banking with the actual Merit Order Dispatch of the distribution utility. This approach also enables the market to compare the cost of flexibility and value addition by other options like storage. The energy banking framework could be as follows:

- For each 15-minute block, energy banked would be valued by at the lowest variable cost of the backed down power or the cost of power on the Day Ahead Market, whichever is lower. In the absence of backing down in the block is valued at the cost of power on the Day Ahead Market.
- For each 15-minute block, energy drawal would be charged at the highest variable cost of the dispatched power (incl. any power bought from bilateral contracts/exchanges).
- Credit and charges are calculated for each 15-minute block and settled on a monthly basis which would preclude the need for specifying any buy-back rate for excess power banked (as needed for extant banking framework)
- Since wind and solar power have relatively low CUFs (20-35%), open access consumers may seek open access permission for capacity greater than stated requirement. To ensure banking service is not misused, maximum RE generation capacity procured in relation to the contract demand should be capped. It is suggested that renewable energy capacity contracted should be such that there is no significant excess generation (say up to 10%) over the yearly energy demand of the consumer.

A schematic of the above banking proposal is shown in the Figure 1.

Table 3: Schematic of proposed methodology for determination of banking charges



Suggested Approach: Through enabling policy frameworks and changes in open access regulations.

- Provide banking services on an annual basis
- Banking services should be valued on a Rs/unit basis rather than in kind.
- Framework for banking charges should be at cost on a 15 minute basis based on DISCOM MoD.
- To prevent misuse of banking service, RE capacity contracted should be such that excess generation is limited to 10% of annual energy demand of consumer.

10 Operationalising Open Access Registry

Draft Rule 6 and 7 focus on streamlining, centralising and standardising open access approval processes for RE. Given delays in processes and existing complex processes, such an approach is needed. Such an approach is also urgent with the proposed reduction in eligibility limits. However, to ensure effective implementation and increased uptake of open access, DISCOMs, ERCs, LDCs and STUs must be on board.

As per draft Rule 6 (1) a centralised registry is proposed to enable single window clearance for REOA applications. The applications are to be routed through the state nodal agency which as per Rule 6 (2) would either be the SLDC for STOA and the CTU/STU for LT/MTOA. As per Rule 7 (2) complete applications are to be uploaded by the nodal agency and in order to prevent delays, applications are deemed approved after 15 days subject to technical requirements specified by the ERC. Further as per Rule 7 (4) and (5) denial of open access should take place with a written order and the applicant has the right to be heard. Further appeal against orders by the nodal agencies are to be processed by the State Commission.

To simplify procedures, reduce implementation challenges and ensure uptake of open access by more consumers, the following steps are suggested to operationalise the centralised registry:

Enabling, centralised single window clearance not limited to RE OA: To reiterate the submission in Section 3, any provision to standardise, centralise and simplify processes should not be restricted to renewable energy sources but extended to all open access and captive migration. The single window should be extended to transmission and distribution open access as well to reduce the number of applications processes. In time, it can also be extended to captive and BTM registration, net metering applications, wheeling and banking applications, reduction in contract demand etc.

Incentivise participation and move towards standardisation: Routing applications through a centralised registry need not be contingent on having standardised processes across states. The interface for the centralised registry can be modified to suit the state's regulatory requirements to begin with. Over time, states can be nudged to adopt standardised processes. With more long-term open access, captive and net metering applications, DISCOMs will lose revenue. To facilitate participation in the centralised registry and to incentivise adoption of standardised processes, the central government could consider providing a one-time 'grand bargain' incentive for participation followed by an incentive for every one lakh applications processed. **The one-time grant can be in proportion to the commercial and industrial sales in the state and can be limited to say, Rs. 5000 crores¹⁴ at the national level.**

Transparent and simplified process based on connected load, duration and connectivity grant: The centralised process and registry will be effective only if it enables applicants to track progress online at

¹⁴ This is equivalent to a Rs. 1.40 per unit support for all commercial and industrial sales in the country. This should more than compensate for potential loss of cross subsidy due to sales migration.

various stages of the application process (similar to the functioning of the Passport Seva Online Portal). Thus, each complete application should be assigned a unique ID using which the applicant can check status of application on the portal. In addition, the registry should also display national and state-specific statistics (including number of applications submitted delays at various stages, number of denials, number of appeals, number of cases ruled in favour of the consumer etc) to enable tracking of state progress in processing applications and reducing delays. Also, can ask to provide a list of documents/ clearances/ consents required along with application at one place. Further, with the reduction in the eligibility limit, agencies have to process a much larger number of applications. Thus, there is a need to review and further simplify existing processes for grant of open access. Options such as providing standing clearance, reduction of requirements akin to provision of day ahead/ short-term open access and minimisation of interaction with multiple agencies can be ensured. Regulators can also specify the process in the regulations similar to the process followed for introduction of the national open access registry by the CERC.

Institute mechanisms to ensure accountability of DISCOMs and clarify role of the SERC: The rules propose shifting the nodal agency responsibility away from DISCOMs towards LDC and the STU. However, for the submission of a complete application, consent of the DISCOM is necessary. While the consent should be provided based on the technical specifications prescribed by the ERC, it is important that the rationale for denial of consent is transparently communicated as well. Accountability of DISCOMs is crucial to ensure delays do not persist even with deemed approval of complete applications in 15 days. Despite having such deemed approval provisions in Andhra Pradesh, the DISCOMs have reported negligible open access sales in FY21.

Consumers also find it onerous to appeal decisions, attend hearings and participate in regulatory processes. Steps are necessary to enable participation of consumers in regulatory processes and have easy access to the appeal provision (given the proposed reduction of the eligibility limit). Access can be increased by simplifying the appeal process, ensuring ERCs have capacity to process appeals (in terms of staff). A separate forum to address such appeals or grievances could also be considered. This would refine role of the regulator to specification of processes, ironing out implementation challenges, ensuring agile responses to changing technology and market landscape, monitoring trends and specifying an equitable risk reward framework to ensure long term development of competitive options in the sector.

Suggested Approach: Through enabling policy frameworks, central government incentive schemes and changes in open access regulations.

- Extend single window clearance and centralised registry for all applications for open access, captive, net metering, BTM registrations etc.
- Incentivise adoption of standardised process (which can be specified through a deliberative, consultative process by FoR) and participation in the registry through a one-time grant and an additional incentive for every 1 lakh applications processed.
- With participation of smaller consumers, processes should not only be standardised but also simplified by provision of standing clearance, reduction of involvement of multiple agencies
- Deemed approval not sufficient to prevent delays. Increased accountability of DISCOMs, transparency in provision of consent, simplification of appeal process for consumers are also necessary.