

Comments on Draft Electricity (Rights of Consumers) Rules, 2020





About AEEE

Alliance for an Energy Efficient Economy (AEEE), is one of the leading organizations in India that works on creating awareness about energy efficiency as a resource. It is a policy advocacy and energy efficiency market enabler with a not-for-profit motive. We advocate for data-driven and evidence-based energy efficiency policies and research.

We foster a culture of energy efficiency in India, working with industry, government and civil society organizations. AEEE advocates for Thermal Comfort for All, and a Lean-Mean-Green philosophy to design and construct net-zero energy-water-waste built environments, Sustainable Transportation and robust Energy Data Framework for better policy-making and implementation, to build a culture of energy efficiency in India. We are committed to achieve India's energy transition for a climate-resilient and energy secure future and meet India's commitments to the 2030 nationally determined goals (NDC) and UN sustainable development goals (SDG).

Introduction

The Ministry of Power has proposed a new set of rules for the rights of consumers and prosumers. The powers conferred by Section 176 of the Electricity Act (EA), 2003 enables the central government to make rules for carrying out the provisions under the Act. While every distribution licensee (DISCOM) has the duty to supply electrical power to the consumer, every consumer has a right to have minimum standards of service for the electrical power supplied. The draft rules specify a common minimum standard of performance for the utilities across the nation, with an objective to provide consumers better services. The rules, in principle, recognise the electricity consumer as an important stakeholder in the electricity sector and declares the basic rights available to a consumer for getting a connection and ensuring a reliable power supply.

However, there is already an existing regulatory practice governing the standards of performance (SoP) of DISCOMs. Currently, the State Regulatory Commissions (SERCs) are responsible for setting the SoP for the distribution licensees. In exercise of powers conferred under Section 181 read with Section 57, 58, and 43 of the EA 2003, respective regulators in consultation with the DISCOMs are allowed to specify the SoP of licensees. Most of the SERCs have already notified the Standards of Performance Regulations for the distribution licensees. These regulations are supplemented with the provisions under the respective State Electricity Grid Code to guide the operation of a DISCOM. The regulations are detailed in nature and cover multiple aspects of DISCOM-consumer including the release of a new electricity connection, reliability of the power supply, safety, complaints on metering, harmonics, interruptions in the power supply. It is important for the proposed rules to be clear on its standing given the existence of State SoP regulations, and if the existing regulations, will be superseded by these rules.

There are similarities and differences between the SoP regulations across states. The model SoP regulations developed by the Forum of Regulators in 2010 is a significant factor that has contributed to the similarity in regulatory provisions. There are multiple reasons which have led to the subtle differences in the regulatory provisions as they are customised to suit the requirements of the States. Section 58 of EA allows regulators to specify different standards for different classes of DISCOMs.

The draft right document is important from two aspects.

- » Firstly, it brings standardisation to the rules of consumers all over India. If the consumer rules document is adopted the same set of rules will be applicable to all the electricity consumers.
- » Secondly, the document also has new provisions that addresses the changing needs of the sector which is in transition. The provisions surrounding prosumers and prepaid meters etc. are reflective of the newer trends in the sector.

To ensure that the consumer rules are effective in achieving their objective, there are multiple factors to consider. The scope and objective of the draft consumer rights document and the State SoPs intersect. Although the provisions under the EA, and the State SoP regulations defines the rights of consumers, the implementation of the provisions has often fallen short. It is important to ensure that the provisions in the consumer rules remain consistent with the provisions of the EA. The progressive nature of the provisions in the consumer rights document should be reflected in subsequent amendments of the EA.

Summary of Recommendations



Active participation of consumers is a primary requisite to support the ongoing transition of the electricity sector. One of the key barriers to encourage active consumer participation is awareness. An effective pathway to improve consumer awareness and encourage active participation is by providing consumers access to their own energy consumption. With the smart meter technology, it is easier to achieve this and encourage energy conservation measures. In case consumers have the chance to understand their consumption pattern, and make decisions that will result in savings. This would also help design tariffs, which capture the time value of electricity reflective of the varying cost of generation. This would benefit both DISCOMs and consumers.

In this section a summary of suggestive changes to the draft rules based on the discussion above is presented.

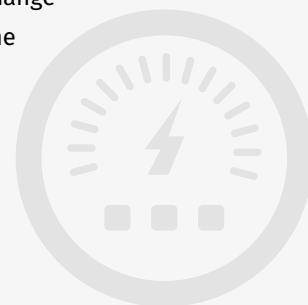
| Section/Clause | Comment |
|-------------------------------|--|
| Section 2 (b) and 2(h) | <ul style="list-style-type: none"> » Appropriate changes to be added in subsequent sections to improve the participation of the real electricity consumer » The definition of applicant and occupier to be included in EA |
| Section 5 (1) | <ul style="list-style-type: none"> » The meter shall be a smart prepayment meter or a prepayment meter. » Consumers should be given a choice for selecting prepayment or post payment plan. » Smart metering should be mandated above a certain connected load. |
| Section 13 | <ul style="list-style-type: none"> » The consumers need to be given access to their own energy consumption data. » Consumers should be the decision maker for data sharing |
| Section 4 (2) j) | <ul style="list-style-type: none"> » The maximum lead time for connection should be presented by categories, differentiating it for High Tension (HT) and Low Tension (LT) connections. » The decision making should be left to the respective state regulators. |
| Section 7 | <ul style="list-style-type: none"> » There should be a warning provided to prepaid consumers before disconnection. » For both postpaid and prepaid meters the delay between the payment of the bill and reconnection should be minimized |
| Section 9 | <ul style="list-style-type: none"> » Definition of prosumer should be added to EA » The provisions of the prosumer connections with respect to net/gross metering should be consistent with Solar GRPV regulations » Rights of prosumers should be extended to consumers having behind the meter energy storage and electric vehicles |

The major comments on the draft electricity rules is presented in the subsequent sections.

Consumer, Applicant and Occupier

One of the first questions to be examined is the scope of the rights document, and answer who the consumer is. “Consumer“ is defined as any person who is supplied with electricity for his own use and includes any person whose premises are for the time being connected for the purpose of receiving electricity. Electricity consumers include ‘regular’ consumers supplied by the DISCOM, and the open access consumers who procure electricity from the power market. The scope of the rules appears limited to the ‘regular’ consumers, and is silent on open access. Most importantly, the rules should also be examined based on their relevance to both current and future consumers. It is vital to ensure that the rules are defined such that it is applicable for the existing consumers as well as the future electricity consumers.

The noticeable new additions in the draft rules is the inclusion of definitions for applicant and occupier in section 2(b) and 2(k). An occupier who apart from the owner of the premises can be an applicant to get a power connection, reduction of connected load, change of title change of consumer category etc. Occupier could be the tenant or the person occupies the premises. This could be a very promising solution to some of the existing problems of electricity consumers who are renting a property. Currently as connections are typically issued in the name of the absentee landlord, the tenant is not legally the consumer of the DISCOM. For example, many residential consumers, who are tenants face a challenge in getting reduction in the connected load even though their maximum demand is lesser than the connected load. This results in additional payment as fixed charges by the consumer. The unused capacity available in the network is also not visible, and has implications in the planning and the investments in the upstream system.



Most importantly, the duality created by the existence of a legal and a real consumer can continue to create a barrier for DISCOMs to tap into the demand side resources. In essence, though absentee landlord remains as the legal consumer, the real consumer is the occupier. The real consumers who pays the electricity bill can be nudged to adopt demand management practices and savings associated with it. This dichotomy will continue to remain as a hurdle for undertaking awareness and energy savings campaigns. Lack of active participation from the real consumer, an existing deep rooted problem in the sector will compound the challenges in the transition to a cleaner and flexible electricity system.

Even with benefits that would arise from adopting an inclusive approach by allowing occupiers as applicants, the practical legal challenges for implementation of such provisions should not be overlooked. The subsequent sections of the document hardly have any specific provisions highlighting the how the addition of occupier will impact the existing processes. Most importantly, unless the definition and the changes are embedded in the EA itself, the addition might fail short of its promise to solve the existing issues.

Metering

Under section 5 (1), rules specify that no connection shall be given without a meter, the mandate of metering is a very important and welcoming step. But only two types of meters are specified, which are prepaid meters or smart prepaid meters. The document also specifies that any exceptions to smart/ prepayment meters must be approved by commission with proper justification.

Prepaid meters are currently popular in India as a solution for the structural challenges in the system including the improvement of billing and collection efficiency and the transfer of subsidies. Prepaid meters are presently installed in small numbers, and not adopted as a defacto requirement. Smart metering application is not limited to smart prepayment meters. The choice of prepayment or post

Payment of bill should be a choice left to the consumer. To avail the best value proposition from the demand side measures in the smarter grid, smart metering is important. It makes sense to promote use of smart metering to improve the monitoring and operation of the network. As there are distinct levels of smartness and multiple applications to smart technology to metering, the specifications and guidelines for the smart metering applications shall be developed by a competent authority such as Central Electricity Authority (CEA). Perhaps, the time is ripe to develop the guidelines should be developed such that beyond a certain connected load, all meters should be smart meters.

Access and Ownership of Data

In order to make sustainable changes in the energy use, the consumers should have access to data on their energy consumption. Section 13 articulates that data should be made available to the consumer through website/mobile app/SMS. The temporal resolution of the data to be shared with the consumer is not specified. It has already been proven globally with behavioural measures can assist in significant energy savings for distribution. To implement scalable solutions and influence consumer behaviour it is vital to increase the awareness of consumers for their own consumption. In order to nudge consumers to reduce load at times of network congestion periods, or shift load of periods of low demand, the consumers need to be given access to their own energy consumption data.

There is a lack of clarity on the rules governing the ownership and sharing of electricity consumption data in India. The consumer rights document fails to shed light into this important issue. The right of the consumer to the data as the owner of the data needs to be recognized. Once this is done, the consumer must have access to his consumption data in its entirety. The consumption data is generated by the consumer, and thus belongs to the consumer. The utility collects revenues for the electricity sold and not for the data generated. There is no doubt that the consumer should have unfettered ownership of data. Currently, only distribution utilities have access to read the meter data. With the advances



in technology, it is easier to give individual consumer access to their energy consumption data. For better decision making, and bottom up analysis the aggregation of the consumer data is essential component. Apart from the distribution companies, the ecosystem needs intermediaries who can collect, analyse and share anonymous data would be important. The role of data intermediaries who are experts in data, is limited currently as it is no clear who is the ultimate owner of consumer data. The process for obtaining the consent of consumers to share data with intermediaries is also not well defined. Consumers should be given rights, which should allow them the power to make decision to share data.

Process of Application



The consumer rights document in section 4 simplifies the process of application and brings transparency to the process of application. The utilities are mandated to notify procedures for granting new connection, shifting of meter, change of consumer category, enhancement/reduction of load, change in name, transfer of ownership, and shifting of premises on their website. This is a much-appreciated step by in bringing transparency by making information related to different procedures available to everyone through web portals.

Apart from the application at the local office, the distribution licensee is required to create a web portal and mobile application to enable submission, tracking and status check of applications. Hard copies must be digitized and upload by local office along with registration number. The progressive step is utilizing the overall focus of the government to promote digitization make the process easier for consumers.

Only two documents are required to get a connection for loads up to 10kW or a higher load specified by commission. The norms around the time period for getting connection is tightened as mention in section 4 (2 j). The numbers of days specified to provide a new connection within 7 days (for metro cities), 15 days (municipal areas), 30 days (rural) areas. Though they are proactive in nature, it is more ideal to specify the lead time for connection by categories, especially differentiating it for High Tension (HT) and Low Tension (LT) connections. It might be more appropriate to specify the maximum time for the connection, and leave the decision making to the respective state regulators.

Billing and Payments

Under section 6 there are many progressive provisions related to billing and payments. In case the meter is not accessible such as the situation caused by the pandemic the consumers have option for sending picture of the meter. Consumers also have the option to submit a self-assessed bill as per procedure by the commission. In case of prepayment metering, the distribution licensee is also asked to issue the bill, to the consumer, on request. Consumers can complain if they doesn't receive the bill within 7 days of complaint and the details of

complaints must be available on the website. Consumer is also entitled to a rebate of 2-5% in case the billing is not done for more than 60 days. All of the above directions given in the rules are effective in protecting the consumers and help in smoothening the rough edges of the revenue collection process.

The DISCOMs are obligated to make the details of tariff for each consumer category public and available on the webpage of distribution licensee. It is also mandated to notify the consumer of any changes in the tariff, a full billing cycle ahead of time. Payments can be made both online and offline, but to encourage digitalisation any bill amount of more than ₹ 1000 is mandated to be paid online. The recommendation in the document is that the billing cycle should be monthly, thereby standardizing billing time period across all DISCOMs. Observably, there is no standardization on the billing cycle across states.

Disconnection and Reconnection

Though the rules are clear on disconnection in Section 7, the statutes surrounding the reconnection is not clear. Ensuring continuity of reliable electricity supply for consumers with minimal downtime should be a norm of the future for both pre-paid and post-paid connections. Pre-payment meters are designed to cut off supply in case the credit limit is exhausted. There should be a warning provided to prepaid consumers before disconnection. For both post-paid and pre-paid meters the delay between the payment of the bill and reconnection should be minimized. With the advancement of technology, such as the use of smart meters with in-built capabilities, immediate reconnection is practicable.

Reliability of Supply

Under section 8, it is explained that to continue the reliable power supply of 24x7 to all consumers, the DISCOMs have to provide information on the outages, System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency India (SAIFI). Both SAIFI and SAIDI are system average indexes, to capture the reliability other recommended indices can be used. For example, Momentary Average Interruption Frequency Index (MAIFI) helps to capture impact of interruptions less than five minutes. It also specified automated tools shall be put by distribution licensees for monitoring and restoring outages. This will result in better visibility across the network and proper decision can be made from the collected data for future planning as well. Furthermore, it will be helpful that customers can get the SAIDI/SAIFI/MAIFI data of individual feeders which they are connected to.



Consumer as Prosumer



Section 9 of the draft rules is dedicated to the rights of prosumers. Though prosumer is not defined in EA, the draft document specifies the rights of prosumers, who will enjoy the benefit as a consumer. Though by definition of prosumers is a person who consumes electricity and can inject power into the grid, the provisions in Section 9 are quite narrow in scope as it is limited to solar generation only. With the improving economics and electrification, behind the meter storage and electric vehicles could also enable consumers to become prosumers. There is no specific provisions of prosumers other than rooftop solar.

The draft rules specify net-metering for loads up to 5 kW and gross-metering beyond 5 kW. However, currently gross metering is not allowed by current Grid Interactive rooftop Solar PV regulations, and net metering is allowed till 1 MW or above. The rules include a separate metering infrastructure for Solar rooftop generation beyond 5 kW. Without generation metering distribution companies have no visibility of the true demand, which will lead to under reporting of consumption if only net meters are used.

Standards of Performance

In section 10, the rules refer to the SoPs notified by respective State Regulators for the DISCOMs. This includes references to provisions such as the compensation amount to be paid by distribution licensee to the consumers in case of violations of SoP. Consumer is automatically compensated for parameters monitored including 1) no supply beyond a particular duration, 2) interruptions beyond limits, 3) time taken (connection, disconnected, reconnection, shifting, change of consumer category, load, consumer details, replacement of meters, billing period). Compensation amount can be claimed online and will be adjusted with the current/future bills. The application of penalties will encourage the DISCOMs to perform better, and will benefit the consumers. Care should be taken not to allow recoveries of such penalties paid by the DISCOM by passing it through the consumer in subsequent tariff petitions.

Consumer Services

In Section 11 and 12, the rules iterate the role of call center and grievance redressal forum to resolve issues. The call center for any consumer related service must be run 24x7. Consumer Grievance Redressal Forum (CGRF) shall be headed by officer of licensee of appropriate seniority. Both are progressive and welcome steps, the call center is not part of current EA, but CGRF is specified in EA.



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