



**HARYANA ELECTRICITY REGULATORY COMMISSION**  
**Bays No. 33 - 36, Sector - 4, Panchkula-134109**  
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**Discussion Paper for inviting comments/objections from stakeholders/general public for finalization of the Haryana Electricity Regulatory Commission (Prepaid Smart Metering) Regulations, 2021.**

**Background:**

The Haryana Electricity Regulatory Commission (HERC or “The Commission”) in exercise of the powers under Section 181 of the Electricity Act, 2003 and all other powers enabling it in this behalf had notified Haryana Electricity Regulatory Commission (Prepaid Metering), Regulations, 2014 on 3<sup>rd</sup> September, 2015 aiming that both the consumers and the distribution licensee could reap the benefits of the new system of metering & payment (Prepaid Metering) for supply of electricity. Subsequently, DISCOMs have initiated the Smart Metering Projects which also have the prepaid functionality/facility to the consumers through smart meters. Additionally, the existing National tariff policy and Electricity (Rights of Consumers) Rules, 2020 also mention about the Smart metering including prepaid facilities.

In view of enabling provision in National tariff policy and Electricity (Rights of Consumers) Rules, 2020 in the rules 5(5), 9(3) and 16 (e) which mentions about smart meters/any new technology meters. However, the existing Regulations i.e. Haryana Electricity Regulatory Commission (Prepaid Metering), Regulations, 2014 notified on 3<sup>rd</sup> September, 2015 doesn't have provision related to smart metering, hence necessitated the need to modification/revision of existing prepaid metering regulations.

**In view of above the following discussion paper has been prepared for public / Stakeholders consultations. The last date of submission of objections/ comments/ suggestions is 25.05.2021 till 05:00 P.M. and the**

**public hearing in the matter will be held on 03.06.2021 at 11:30 A.M. through virtual court.**

**Based upon the feedback received on the discussion paper, the Haryana Electricity Regulatory Commission (Prepaid Smart Metering) Regulations, 2021 shall be given the final shape by the Commission.**

**Regulation No. HERC/ /2021** — In exercise of the powers conferred by Sections 61,66, 86(1)(e) and 181 of the Electricity Act, 2003 (Act 36 of 2003) and all other powers enabling it in this behalf, the Haryana Electricity Regulatory Commission hereby makes the following Regulations.

## **Chapter — I General**

### **1. Short Title, Extent, and Commencement**

- 1.1 These Regulations shall be called ‘The Haryana Electricity Regulatory Commission(Prepaid Smart Metering), Regulations, 2021’
- 1.2 These Regulations shall come into force from the date of publication in the Official Gazette of Haryana.
- 1.3 These Regulations shall extend to the whole of the State of Haryana.

## **Chapter — II**

### **General Definitions and Interpretations**

### **2. Definitions and Interpretations**

- 2.1. In these Regulations, unless the context otherwise requires,
  - a) **“Act”** means the Electricity Act, 2003 (36 of 2003) and subsequent amendments thereof;
  - b) **“Advance Consumption Deposit (ACD)”** means deposit prescribed to cover the estimated power consumption charges for two billing cycles in case of existing consumers with post-paid metering connection
  - c) **“Agreement”** means an agreement entered into by the licensee and consumer for the services including supply of electricity by the licensee to such consumer.

- d) **“Area of supply”** means the area within which a licensee is authorized to supply electricity and shall include such areas where a franchisee(s) may be deployed.
- e) **“Commission”** means the Haryana Electricity Regulatory Commission.
- f) **“Connected Load”** expressed in kW, means aggregate of the manufacturer’s rated capacities or in its absence assessed capacities of all energy consuming devices or apparatus connected with the distribution licensee’s service line on the consumer’s premises which can be simultaneously used and shall be determined as per the procedure laid down in the Regulations.
- g) **“Consumption Charges”** means the consumption of electrical energy in kWh or kVAh multiplied by applicable energy charges including demand charges/fixed charges, fuel surcharge adjustment (FSA), peak load exemption charges, whichever applicable. These exclude all types of duties and taxes, service charges and rentals. Consumption charges may also be called the Sale of Power (SOP) charges.
- h) **“Contract Demand”** means the maximum demand in kW or kVA (within a consumer’s sanctioned load) agreed to be supplied by the licensee and indicated in the agreement executed between the licensee and the consumer.
- i) **“Disconnection”** means the non-continuance of the electricity supply to the consumer from the licensee’s system.
- j) **“Licensee”** or **“Distribution Licensee”** means a licensee authorized to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply and includes his authorized representative.
- k) **“Low Voltage (LV)”** means a voltage not exceeding 250 volts.
- l) **“Maximum demand”** means the highest load measured in average kVA or kW at the point of supply of a consumer during any continuous period of thirty minutes during the billing period.
- m) **“Meter”** means a device installed for measuring, indicating and recording consumption of electricity or any other quantity related with

electrical system and shall include, where ever applicable, other equipment such as Current Transformer (CT), Voltage Transformer (VT) or Capacitor Voltage Transformer (CVT), necessary for such purpose

- n) **“Minimum Charge”** means the minimum monthly charges as approved by the Commission in the prevailing tariff order for the licensee.
  - o) **“Minimum Balance”** means the minimum amount in the account of the consumer with pre-paid metering connection which shall trigger disconnection of supply of electricity to the consumer premises.
  - p) **“Sanctioned Load”** means the approved connected load in kW.
  - q) **“Security Deposit”** means deposit made by a consumer to cover the payment due to the licensee for electric meter and metering equipment
  - r) **“Smart meter”** means an ac static watt-hour meter with time of use registers, internal connect and disconnect switches with two-way communication capability. It is designed to measure the flow of forward (import) or both forward (import) and reverse (export), store and communicate the same along with other parameters defined in this standard. It shall be remotely accessed for collecting data/events, programming for select parameters that is to be provided by the distribution utility for supplying electricity to a premises.
  - s) **“Tariff”** means a schedule of prices or charges including fixed charges and monthly minimum charges for supply of electrical energy and services as approved by the Commission, which are applicable to all such services provided to the consumers by the licensee.
- 2.2. All other words and expressions used in these Regulations although not specifically defined herein above, but defined in the Act, shall have the meaning assigned to them in the Act.
- 2.3. All other words and expressions used herein but not specifically defined in these Regulations or in the Act but defined under any law passed by the Parliament/State Legislation applicable to the electricity industry in the State shall have the meaning assigned to them in such law.

## **Chapter — III**

### **Applicability**

#### **3. Applicability:**

- 3.1. The Smart Metering Regulations shall cover all types government and private consumers i.e. Domestic, Industrial, NDS, mobile towers and Temporary connections irrespective of the connected load whether new or existing, who install such prepaid smart meters including those in areas availing single point connection/supply.
- 3.2. The distribution licensee shall arrange to install smart meters, in its area, in a phased manner as specified in the National Tariff Policy, 2016.
- 3.3. The distribution licensee, on an application made by a consumer covered under 'T' above shall provide electricity supply through prepaid smart meter subject to feasibility of providing prepaid smart meter in that area/consumer category & as per the relevant provisions of the Haryana Electricity Supply Code and the other Regulations in force.
- 3.4. In case the existing consumer opts for prepaid smart meter and the meter under postpaid arrangement was owned by the consumer, the licensee shall return the meter to the consumer after change-over of the connection to prepaid smart meter.

Provided further if the meter belongs to licensee the same shall be retained by the licensee and the security deposit, if any, shall be adjusted in the consumer account and such working meters taken out from consumers premises shall be used by the distribution licensee for replacement or providing new connections or as deemed fit by the distribution licensee.

- 3.5. The distribution licensee may also introduce smart prepaid metering scheme to such other category of consumers and in such areas of supply, where it is felt necessary to implement smart prepaid metering scheme.
- 3.6. The provisions of Section 56 of the Act which apply to supply of electricity through post-payment mechanism shall not be applicable to supply through prepaid smart meters.
- 3.7. The prepaid smart consumer shall not be required to be billed. However, in case of smart meters, the meters shall be read remotely at least once

in every month and in case of other pre-payment meters, the meters shall be read by an authorized representative of the distribution licensee at least once in every three months. The data regarding energy consumption shall be made available to the consumer, through website or mobile App or SMS, etc. Consumers having smart prepayment meters may also be given the data access for checking their consumption on real time basic.

#### **4. Migration to prepaid smart meter**

Migration from postpaid to prepaid shall be as per the Standard Operating Procedure (SOP) decided by the licensee.

#### **5. Rebate for prepaid smart meter**

A rebate of 5% shall be allowed on the applicable tariff (SoP of current bill) for the consumers of upto 20 kW connected load availing supply through prepaid smart meters.

#### **6. Security/ACD**

In case of new connection with prepaid smart meter the distribution licensee shall not require security, in pursuance of clause (a) of sub section (1) and sub section (5) of Section 47 of the Electricity Act, 2003. The consumer shall not be required to deposit any Advance Consumption Deposit (ACD) as part of security.

Provided further that for existing consumer shifting to smart prepaid metering arrangement, the ACD deposited with the licensee shall be adjusted against the last bill including arrears if any and the balance if any payable to the consumer shall be adjusted as per the arrear adjustment methodology already in force.

In case of prepaid to postpaid conversion again ACD will be paid by the consumer in addition to other formalities, if any.

#### **7. Metering:**

- 7.1. The licensee shall approve vendor for prepaid smart meters (meters shall be certified as per the relevant IS16444) and shall make arrangement for recharge of the credit in the meter by the consumer through online and offline (cash collection centers of the distribution utilities) modes.
- 7.2. The licensee/consumer shall install prepaid smart meters conforming to the technical requirement as per Discoms approved specifications only.

The prepaid smart meter shall be provided by licensee at the cost of the consumer or on monthly rental basis (meter rent, if applicable, charged to the consumer on daily basis). Further, the energy charge, meter rent and fixed charges or any other charge as determined by the Commission shall be deducted on the daily basis from the consumer recharge amount only in case of any discrepancy, CC&B bill will be treated as final bill.

7.3. The prepaid metering solution shall have the facility of online recharge and shall also be capable of sending a notification to the consumer via message on his/her registered mobile phone in case of low credit (negative balance) and disconnection on overload or Minimum Balance.

7.4. The meter shall be communicable and compatible with AMI applications.

Provided further that the meter shall have adequate number of registers and the facility for Time of Day (TOD) and kVAh based tariff application.

7.5. The consumer can recharge his prepaid smart meter account as and when require in multiple of Rs.100/- with a minimum amount of Rs 500/- as per the multi recharge facilities/options being provided by the DISCOMs. There shall be no maximum limit for recharge amount.

7.6. In case the consumer fails to recharge his prepaid smart meter account and his balance runs out, the meter shall disconnect the supply of the consumer as per the provisions of Clause 7.9.

7.7. The AMI solution shall have the provision for ensuring recovery of monthly minimum charges, fixed charges and the consumption charges or any other charge including meter rent, if applicable, as per the applicable tariff schedule.

Provided further that the software solution (MDMS and Integration with the existing system) shall be capable of deductions of the consumption charges according to the slab system in the tariff from the consumer.

7.8. The tariff revision in case of prepaid smart meter consumer shall be done in Meter Data Management System(MDMS) System or in the licensee's billing system.

7.9. Smart meter disconnection process:

- a) The energy, rental charge and fixed charge/Monthly Minimum Charge calculation of consumers shall take place on a daily basis based on the applicable tariff of that particular consumer
- b) Daily charge calculation/deduction shall be done in MDMS system or billing system based on the data collected from Head End System (HES) (daily profile, load profile and billing profile). The balance and consumption data shall be updated on daily basis against each consumer, which can be readily viewed by the consumer via dedicated mobile app and web portal
- c) When the consumer's account balance falls below 30%, 20%, 10% & zero, the notification/alert shall be sent to the consumer to avoid disconnection.
- d) In case the consumer fails to recharge the prepaid smart meter account and the balance reaches to zero, the meter shall disconnect the supply of consumer.
- e) Disconnection process shall be scheduled only between 10 AM to 3 PM of any particular day to avoid discomfort to consumers.
- f) In case the minimum balance of a consumer is attained between 10 AM to 3 PM of a given day, disconnection will take place at 3 PM or when the account balance becomes nil, whichever is earlier.
- g) Disconnection shall not be scheduled on gazette public holidays.
- h) Post disconnection, consumers shall be notified about the same along with the details of negative balance amount.
- i) In case of temporary disconnection, the consumer can recharge the meter and restore the electricity supply without any additional cost or penalty.
- j) In case of permanent disconnection, new connection shall be applied as per existing service code rules.

7.10. Consumers can recharge online through mobile application, web application or digital payment systems such as e-wallet, V-wallet, web portal etc. or off-line through collection counters.

7.11. AMI application should initiate auto reconnection after successful recharge of the meter.

## **8. Arrear adjustment methodology**

8.1. The arrears, if any, shall be first adjusted against the Advance Consumption Deposit (ACD) lying with the licensee.

8.2. In case of defaulting consumers, the consumer shall not be accorded the facility of pre-paid smart meters

## **9. Physical Disconnection**

- 9.1. In case, the consumer does not recharge his/her account after temporary disconnection as elaborated in Clause 8.9, the account may reach zero balance or negative balance on account of applicability of Monthly Minimum Charges, meter rental or any other similar charge as decided by the Commission even if there is no electricity consumption by the consumer.
- 9.2. The notification in form of message for 30%, 20%, 10%, zero/negative balance will be considered as notice for recharging the account & licensee may disconnect the supply on failure to recharge the account by consumer without any further notice.
- 9.3. The connection shall be permanently disconnected, and the meter shall be physically removed from the consumer premises if the consumer fails to recharge the account after thirty (30) days of temporary disconnection.
- 9.4. In case the consumer wishes to get the supply re-connected, the distribution licensee shall ensure re-connection of such a consumer as per the Haryana Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2014 and amendments thereof.

## **10. Replacement of meters**

- 10.1. In case the prepaid smart meter installed by the licensee gets damaged due to overloading or any other reason related to consumer, the same shall be replaced at the cost of the consumer in case the consumer requests the licensee for a replacement.
- 10.2. In case of damage to the meter due to any reason other than that due to any reason as specified in Clause no. 11.1, the same shall be dealt with in accordance with the relevant provisions of the Haryana Electricity Regulatory Commission (Electricity Supply Code) Regulations, 2014 and amendments thereof.

## **11. Procurement**

- 11.1. The distribution licensee shall procure the smart meters after following due process as per the general procurement guidelines issued by the government in a transparent and fair manner. The procurement

process should ensure sufficient competition to realize the most competitive prices and should not be in violation of the guidelines of the government and the licensee.

- 11.2. The consumer may also purchase his own meter of approved make and specifications from the vendor(s) approved by the licensee. The consumer shall get such meter tested at the licensee's meter testing lab after payment of the requisite fee. The licensee shall install the meter outside the consumer premises.
- 11.3. Provided also that these meters of various manufacturers shall have the inter-operability for ease of operation
- 11.4. Provision of spare meters for replacement. The distribution licensee shall keep adequate stock of spare prepaid smart meters duly tested for replacement of defective meters immediately without any waiting and additional charges to avoid inconvenience to the consumer and to meet the requirement of new incumbents to the scheme.

## **12. Training**

The meter vendor or the entity implementing the installation of prepaid smart meters in the State shall provide training to the staff of licensee to facilitate smooth/proper implementation of prepaid metering scheme.

Provided further that the server for the proposed metering system, software shall be maintained and operated by the licensee to eliminate any problem at later stage.

## **Chapter - IV**

### **Miscellaneous**

- 13. Interpretation.** - If any question arises relating to the interpretation of any provision of these regulations, the decision of the Commission shall be final.
- 14. Power to amend.** - The Commission, for reasons to be recorded in writing, may at any time vary, alter or modify any of the provision of these Regulations by specific order.

**15. Power to remove difficulties.** - If any difficulty arises in giving effect to any of the provisions of these Regulations, the Commission may, by a general or special order, not being inconsistent with the provisions of these Regulations or the Act, do or undertake to do things or direct to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.

**16. Power of relaxation:** The Commission may in public interest and for reasons to be recorded in writing, relax any of the provisions of these regulations.

**By Order of the Commission**

**Secretary  
Haryana Electricity Regulatory Commission**