

**BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION
BAYS No. 33-36, SECTOR-4, PANCHKULA- 134112, HARYANA**

DATE OF HEARING : 20.02.2019

DATE OF ORDER : 22.04.2020

IN THE MATTER OF

Haryana Electricity Regulatory Commission (Standards of Performance of Distribution licensees and Determination of Compensation) Regulations, 2020.

Petitioner SUO MOTO

PRESENT

Shri. Randeep Singh S.E. HPPC

Shri. Rajiv Mishra Xen HPPC

Shri. Manoj Garg Xen Commercial UHBVN

Shri. Rajesh Goyal Xen HVPN

ORDER

1. Brief Background of the Case

The Commission received a report, on Power Quality of Electricity Supply to the Consumers, dated 14.9.2018 from Forum of Regulators which lay emphasis on the need for Regulations on Power Quality which define the Power Quality indices, role and responsibilities of various entities, Standards/ limits of the various parameters to be followed, incentive/ disincentive mechanism and procedure for monitoring, management and control of all aspects of Power Quality while exploring the present legal frame work and the global regulatory scenario.

In view of above, the Commission considered to make appropriate provisions of Power Quality standards in its Standards of Performance Regulations and prepared the Draft Discussion Paper "Haryana Electricity Regulatory Commission (Standards of Performance of Distribution licensees and Determination of Compensation) Regulations, 2019", by considering the various Power Quality Parameters.

The Commission ensured that the Standards of Performance Regulations are aligned with the Power Quality of Electricity Supply to Consumers Regulations drafted by Forum of Regulators to cover all aspects of Power Quality in these Regulations. The Discussion Paper /Draft SOP Regulations were approved by the Commission on 07.12.2018 and uploaded on the Commission's website, for inviting comments/suggestions from the public as well as stake holders by 14.01.2019 which was further extended upto 01/02/2019. The Public Notice was placed on the website as well as inserted in the

two National Dailies in English as well as Hindi for holding public hearing on 20.02.2019.

Proceedings:

The Public Hearing was held on 20.02.2019 as scheduled.

- 1) **Sh. Pankaj Bhalotia from Faridabad, offered his comments as under:**
- i. The Consumer Sh. Pankaj Bhalotia asked to clarify whether the Distribution Licensees in the State pay any compensation as per existing Regulations and how much is the compensation, the Distribution Licensees pays each year as per the Regulation.
 - ii. He further enquired that whether a resident of a Group Housing Society having single point supply is eligible and entitled to receive compensation. He requested to provide the methodology and procedure to file claim for compensation and the obligation of the distribution licensees to provide information to the consumers with regard to its offices/competent authority to settle claims for compensation.
 - iii. Sh. Pankaj Bhalotia mentioned that the schedule-1 of the regulations provides that maximum penalty shall be limited to Rs. 10,000/- and asked whether it will be applicable to each individual consumer of the Society.
 - iv. The objector requested to categorize the feeder on which a consumer is located, as rural/ urban feeder.
 - v. He further asked the procedure to register complaint, for compensation and the authority to decide that whether particular complaint falls within preview of compensation or not?
 - vi. He requested that the provisions should be made to lodge complaint for compensation online with the respective office or the call center and there should also be provision to levy penalty on SDO/XEN/SE of Discoms who fail to work within the service level prescribed and address the grievances of the consumer.

Commission's Observation

The Commission examined the comments offered by Sh. Pankaj Bhalotia and observes as under:

- i. The Commission observes that the Regulations provides for guaranteed/overall standard of performance by the distribution licensee. In case of failure in providing service within time lines prescribed for various activities by the distribution licensee, penalty provision has been made. The complainant has to be specific and approach the licensee with complete details of violation of the time lines to seek compensation.

In case the Group Housing Society has been provided a single point supply connection and the Society supplies power to its individual members/residents, the GHS shall be the affected person being consumer of the licensee and not the individual consumers. However, in case the supply has been given to the individual consumers under second option of Single Point Supply Regulations, the individual consumer having connection from the distribution licensee shall be the affected person in this case for all intents and purposes. The affected person is the person who is a consumer of the distribution licensee and he has to apply to the in-charge of the sub division (SDO) of the area of supply for seeking any compensation under the Regulations. The relevant provisions in the Regulations 13.1 & 13.2 addresses this issue adequately.

Commission further observes that the supply for independent feeder of the societies will be governed as applicable under urban area. Further, as regards compensation, the affected person shall be required to register his/her complaint online in call center. However, the application for compensation is to be made with SDO concerned along with relevant documents. The SDO in-charge shall decide the compensation as per Regulations on the application made by the affected person.

- 2) Further, SE/RA, UHBVN, Panchkula vide memo No. Ch-11/SE/RA/N/F-194/Vol.II dated 05.04. 2019 submitted comments on behalf of UHBVN. The Commission accordingly modified draft Regulations and uploaded on its website again, inviting the comments/suggestions of the stakeholders by 21/05/2019.

UHBVNL and DHBVNL supplied their comments vide letter Ch-20/SE/RA/F-194 dt 21-05-2019 and CH-19/SE/RA-452/Vol-IV dated 13.06.2019 respectively which are discussed as under:

Regulation 3.3.2 Standards of Performance of Distribution Licensee

The officer /official who fails to comply with the time-lines for rendering services as mandated under this regulation and the concerned officer in charge who fails to supervise to get complied the time-lines for rendering services, without prejudice to any penalty which may be imposed or prosecution be initiated, shall be liable to pay a fine of Rs 6000 (Rupees six thousand) per day per person for each day of delay subject to Rs 1,00,000 (Rupees one Lakh) maximum, in each case and such fine shall be payable by officers in equal proportion out of their own pockets. The concerned Drawing & Disbursing Officer (DDO) of the Licensee to ensure that fine is deducted from the salary of officer/official and deposited with the DDO of the Commission. The Licensee shall institute a mechanism to

monitor the standard of performance at the circle level and impose such penalty on the default of officer/official(s) concerned and to deposit the amount so recovered from the erring officer/official(s) with the Commission within two months. Further, in case the delay is on account of reasons not attributable to the officers concerned, the licensee shall file consolidated petition of such cases in the Commission quarterly.

Comments by UHBVN and DHBVN

UHBVN & DHBVN has submitted that the compliance of any Rules, Orders and Regulations of the Hon'ble Commission is the responsibility of Distribution Licensee. In case of any non-compliance, the Commission can take action against the Utility. It is beyond the jurisdiction of the Commission to take action against the officers/officials of the Utility or to impose any monetary penalty for any non-compliance.

It has been further submitted that it is the Utility only which can take action under the Haryana Civil Services Punishment and Appeal Rules 2016 and punish its employee for any non-compliance.

The provision of compensation to consumers for delay in services has been provided in the Electricity Act, 2003 under section 57. Therefore, additional provision of penalty would be contrary to the provisions of the Act.

The licensee(s) further submitted that the delay in services is due to various reasons, which are beyond their control, like the areas where the infrastructure is old, the norms of reliable power supply could not be met properly, due to various geographical and other related issues like technology /software bugs and service provider issues etc. there would be some delay in some of the cases. It has been proposed that the deficiency in service should not attract any penalty but for every deficiency the licensee should be directed to submit the reports along with the reasons and wherever there is any genuine deficiency on part of any official/officer action should be taken as per the service rules of the corporation.

Commission's Observations

Commission considers the comments/suggestion of the distribution licensee and modify the Regulation as under:

“3.3.2 *The concerned officer (SDO in charge, who fails to comply with the time-lines for rendering services as mandated under this regulation, without prejudice to any penalty which may be imposed or prosecution to be initiated, he shall be liable to pay a fine of Rs 1000 (Rupees one thousand) per day for each day of delay subject to Rs 10,000 (Rupees ten thousand) maximum, in each case and such fine shall be payable by both SDO and XEN in charge of the sub division concerned in equal proportion.*

Provided that the complaint against non-compliance of the time-lines shall have to be filed by aggrieved person before the Commission and the Commission may after providing an opportunity of being heard to the parties shall impose the penalty thereafter.”

Regulation 3.5

New connections under agriculture category

“3.5 In case of the applicants requiring supply under agriculture category (Agriculture Pump sets), Licensee’s obligation shall be limited to the number of connections that can be covered within the target fixed by the State Government for release of agricultural connections for a financial year. The target for an ensuing year shall be fixed and made public at least 2 months before the start of the year. The licensee shall inform the applicants through speaking order within 15 days of receipt of applications, if the applicant’s case cannot be covered in the programme of release of Agriculture Pump set connections fixed for the year. In case of delay by the licensee beyond 15 days in informing the applicant the non-release of Agriculture Pump set connection, the security deposit along with interest at the Bank rate as determined by the Reserve Bank of India on 1st April of each applicable year shall be payable to the consumer.”

Comments of UHBVN and DHBVN:

The licensees have submitted that the release of every agriculture connection depends on the availability of material and Right of Way. Moreover, it is not possible to release tubewell connections during the paddy season. Recently, the DISCOMs have issued demand notices to approx. 85000 applicants who had applied for release of tubewell connection upto 31.12.2018. It would not be possible, as provided in the draft Regulation to intimate each consumer individually whether his application would be covered in the list of applicants to whom connection shall be released. The consumers, if required, can get the requisite information from the concerned subdivision at any time or at the time of submission of application itself.

Commission’s Observations

Commission observes that the Discoms are obliged to provide connections in a time bound manner. However, reasons for delay in providing the connection or the inability to provide the connection with in the specified period needs to be stated through speaking orders. Thus, no change is required in the Regulation.

Regulation 3.6 Defective/dead/burnt meters replacement

“3.6 The Licensees shall ensure 100% correct metering and replace the defective/dead/burnt meters within the prescribed period as mandated in these Regulations. In case, the consumer desires to install its own meter then he shall be allowed to install the Smart Meter, compliant to the approved specifications.”

Comments by UHBVN and DHBVN:

The licensee(s) have submitted that the defective meters and their replacement is a continuous process in the Discoms. The Hon'ble Commission therefore, should set a reasonable percentage of defective meters in terms of the total meters installed, beyond which the number of defective meters should not increase at any point of time. The Commission has fixed the percentage of defective meters at any time in terms of no. of installed meters as 2 % as per clause 7.5. Clause 3.6 therefore should be suitably modified.

Commission's Observations

Commission observes that it is the prime responsibility of the Discoms to ensure correct metering and billing so as to avoid revenue loss. The clause 10 of schedule I (Guaranteed Standards of Performance) specifies that on receipt of complaint for replacement of defective/dead/burnt meters, the same shall be replaced within 72 hours of the complaint. In view of the above, Commission is of the opinion that no change is required.

Regulation 5.10 (4) Monitoring of Power Quality

“5.10(4) In the first phase, the distribution licensee shall install Power Quality meters for 1% of 33kV/11kV feeders, 2.5% of DTRs above 400 KVA and at 1% designated customers supply terminals or at point of common coupling (PCC), with load more than 1MW. In the second phase, Distribution Licensee shall cover %age of the 33kV/11kV feeders and DTRs in consultation with the commission.

Comments by UHBVN and DHBVN

The licensee(s) have submitted that as per the regulation, they shall be required to install around 250 meters, the cost of the PQ meter is around Rs 7 lac/per meter and as such an investment of around Rs 20 Cr would be required without any apparent benefit to the licensee. The DISCOMs should be asked to install PQ meters on 5-6 outgoing feeders catering to prominent consumers responsible for polluting power quality and a few designated consumers.

It has been submitted that the PQ metering technology being restricted technology is costlier. It is too early to notify PQ Regulations in such scenario.

They further submitted that with huge capacity of Renewable Energy generation, particularly Solar Power and Wind Power, connected to the interstate grid in the last few years and with coming up of power electronics-based loads and other nonlinear loads in the system, it is very much likely that the power being drawn by DISCOMs against their share in the ISGs through Interstate system or intrastate system may not be meeting Power Quality Standards which are sought to be implemented by the DISCOMs. Further, the working group in its report has also recommended installation of PQ meters at transmission and sub-transmission level. It has been suggested that measurement of power quality parameters and enforcement of PQ standards should first start from Interstate transmission system, so as to ensure that the power drawl by DISCOMs from the interstate system against their share in ISGs, meet the specified PQ standards.

Commission's Observations

Commission observes that the installation of PQ meters at transmission and sub transmission level and enforcement of PQ standards at interstate transmission system is in the purview of CERC. However, Commission considered to modify the Regulation accordingly as under:

5.10(4) In the first phase, the distribution licensee(s) shall install Power Quality meters at 5 locations each in their area of supply on pilot basis covering the 11 KV/33KV feeders, the DTs and designated customers with load more than 1MW and scale up there-after in consultation with the commission.

Regulation 6.1(v)

Restoration of Power Supply

“6.1(v) The Distribution Licensee shall restore the power supply caused by distribution transformer failure within twenty-four (24) hours in urban areas and within forty-eight (48) hours of the receipt of a complaint in rural areas. Licensee shall also maintain the transformer damage rate below 3% p.a. in urban area and 6% p.a. in rural area.”

Comments by UHBVN and DHBVN

The licensee(s) submitted that it is provided in the National Tariff Policy under clause 5.7 (f) that the norms to be fixed should be efficient, relatable to past performance and capable of achievement. The average DT damage rate for both the Utilities combined for the last 5 year is 10% for rural areas and 5% for urban areas. The norms fixed by the Commission is too stringent and needs to be suitably revised. They further submitted that for the end consumers the only classification is “no supply complaint”, which may be due to blowing of fuse of distribution transformer or breakdown of lines/cable or breakage of poles or failure of Power Transformer or any scheduled outage so, there should be only category of “no supply complaint”, for which the timelines should be 4 hrs in urban areas and 8 hrs in rural areas.

Commission's Observations

In view of the fact that huge investment has been made in the distribution system by the licensees for its improvement, the Discoms are expected to improve its performance for supply of reliable and quality power to the consumers. Commission observes that the average DT damage rate for the Discoms for the last 5 years is 5% in urban areas and 10% in rural area. This cannot be fixed as benchmark for the future. Thus, no change is required in the Regulation.

Regulation 6.2 Scheduled Outages

“6.2 The period of interruption as a result of any scheduled outage shall be specified in the public notice at least 24 hours in advance of such scheduled outage. Provided that such scheduled outage shall not normally exceed eight (8) hours on any day and supply shall preferably be restored by 1800 hours on any day. Total number of scheduled outages for any 11/33kV feeder, shall not exceed more than four (4) in a year.”

Comments by UHBVN and DHBVN.

The licensee has submitted that number of scheduled outages on 11/33kV feeders are planned in accordance with the maintenance schedule of the manufacturer of the equipment. Besides, there are other site requirement as well, such as tree cutting, loose connection, low sag etc. which needs to be carried out from time to time, so, there should not be any ceiling on the scheduled outages. Further, there should not be specific timelines in case of major power failure due to breakdown of overhead lines, as these are beyond the control of licensee. The restoration time should be on actual basis, as the time taken to restore supply is based on the extent of damage caused in the breakdown of lines/poles etc.

Commission’s Observations

Commission observes that schedule outages should be availed as per manufacturer’s recommendations/Preventive Schedule. Commission further observes that if the preventive maintenance is carried out earnestly, the outages due to breakdown can be avoided. Regulation is modified as under: 6.2 The period of interruption as a result of any scheduled outage shall be specified in the public notice at least 24 hours in advance of such scheduled outage. Provided that such scheduled outage shall not normally exceed eight (8) hours on any day and supply shall preferably be restored by 6:00 PM in the evening.

Regulation 6.5 Reconnection of supply following disconnection due to non-payment of bills

“6.5 Where the Distribution Licensee has disconnected supply to a consumer for a period of not more than six months, then if such consumer pays all amounts due and payable by him to the Distribution Licensee or, in case of a dispute, pays such amount under protest, the Distribution Licensee shall reconnect supply within-

- (i) six (6) hours from the payment of dues by the consumer in urban areas;
- (ii) twelve (12) hours from the payment of dues by the consumer in rural areas.

Provided that, where the period of disconnection exceeds six months, an application for reconnection of supply shall, after either payment of amounts due or upon settlement of dispute, be treated as a

fresh application for supply of electricity under the provisions of the Act.

Payments made under protest in these Regulations shall be in accordance with the requirements of the proviso to sub-section (1) of Section 56 of the Act”

Comments by UHBVN and DHBVN.

When the consumer is permanently disconnected, he is eligible for reconnection upto 6 months. However, on permanent disconnection, the meter is removed and line is also removed. Therefore, the existing provisions are not applicable when permanent disconnection takes place. The existing timelines are applicable in case of temporary disconnection when the jumpers have been disconnected. For permanent disconnection the applicant has to apply again and the connection will be released as a normal consumer within 30 days and the service connection charges will not be levied for the applicant if already paid.

Commission’s Observations

Commission observes that in case, permanent disconnection of supply of a consumer has been for less than 6 months and the line is not yet dismantled, the reconnection of supply is possible within the time lines as provided in the Regulations. However, reconnection of supply after the expiry of 6 months from the date of disconnection of supply, whereby the service lines etc. have been dismantled, the time lines for the reconnection should be as per time line for the new connection. The comments supplied by the licensee do not find any merit. Thus, no change is required in the Regulation 6.5

Schedule -1 Standard of performance (11)

Application for new connection/ Additional load/ reduction in load

Comments by UHBVN and DHBVN

Discoms have submitted that the reduction of load should be kept separate from new connection and extension of load, as there is no requirement of charges except processing charges and there is no requirement of issue of demand notice, as no charges are required. Wherever there is no change in voltage, no change in CT is required. In view of the above, for reduction of load only regularization is required by M&P wing. Therefore, the timelines for reduction of load should be only 7 days from the date of receipt of complete application i.e. submission of processing charge and proper authority to file application for reduction of load by applicant. The Discom has suggested that the procedure of issue of demand notice upto 50 KW should be done away and the provision of demand notice be kept only for applicants applying on HT and agriculture consumer.

Further the existing clause of demand notice validity for 2 Months for LT connection needs to be deleted as there is no issue of network congestion in LT case. And for HT consumer the validity of demand notice should be limited to only 15 days only.

Commission’s Observations

Commission observes that in case of release of new or extension of load or reduction of load the procedure for issue of

demand notice has been laid considering the requirement of such intimation to the applicant about the readiness of the licensee for providing such service subject to the conditions in the demand notice, during the process of release of such loads or reduction of load.

Commission further observe that there could be cases where only paper formalities are required for reduction/extension of load or in other case the change of equipments like CTs or transformer etc. may be required. However, the Commission feels that in case of reduction of load where no physical change in the existing connection is required, only paper transactions are required, the timelines as suggested by the license be considered.

The Regulations are modified as under.

Sr. No.	Nature of Service	Standard (Including Time Limit for rendering Service)	Compensation Payable
11	Application for new connection / Additional load/ reduction in load	Inspection of applicant's premises	Rs. 200 per day or part thereof in case of delay subject to Section 44 of the Act.
		Issue of demand notice	
		Release of Supply on compliance of demand notice and receipt of payment	
		<p>Within 7 days of receipt of application complete in all respect along with prescribed charges</p> <p>No. of days from the date of inspection of premises.</p> <p>a) 7 days in case supply to be extended from existing network</p> <p>b) In case extension/ augmentation of existing network is required.</p> <p>i. within 7 days in case of LT supply;</p> <p>ii. within 14 days in case of 11 kV supply;</p> <p>iii. within 20 days in case of HT at 33 kV supply;</p> <p>iv. within 25 days in case of supply above 33 kV;</p> <p>c) 7 days in case of reduction of load.</p> <p>No. of days after the compliance of demand notice.</p> <p>i. within 23 days in case of LT supply;</p> <p>ii. within 57 days in case of 11 kV supply;</p> <p>iii. within 77 days in case of HT at 33 kV supply;</p> <p>iv. within 142days in case of supply above 33 kV;</p> <p>v. within 7 days where no change in CT, PT or any other equipment is required. Provided in case the CTs/PTs/ Transformers etc. are to be replaced then time lines as in case of extension of load shall be applicable.</p>	

Schedule -1 Change of Name (13)

Intimation of Charges within 7 days of receipt of application complete in all respect along with prescribed charges

Comments by UHBVN and DHBVN

The Discoms have submitted that for change of name there is only requirement of processing fee and documents, which is charged at the time of application. Therefore, the clause of intimating charges is not required. The approval of change of name is proposed to be given within 7 days from the date of complete application and in the next bill the same is proposed to be effected

Commission's Observations

Commission observes that as per Supply Code Regulation 2014 and its amendments thereof, the Change of Name is to be

effected within 2 billing cycles after the acceptance of application. Thus, the Commission is of the view that the approval of change of name should be given within 7 days from the date of receipt of complete application, and same should be effected within 2 billing cycles after acceptance of application. The Regulation is modified as under.

Sr.No.	Nature of Service	Standard (Including Time Limit for rendering Service)	Compensation Payable
13	Change of Name	Approval and intimation of charges	Rs. 100 per day or part thereof in case of delay.
		Effecting of change of name	

**Schedule -1 Re-Classification of consumer category (14)
Comments by UHBVN**

The licensee has proposed that the change of consumer category/classification is not to be specified as a separate service rather it should be covered under new connection/ extension of load and further submitted that the reclassification of consumer category needs to be provided in supply code on consumer request, as if a consumer opts for change in voltage from LT to HT for less than 50 KW, the same cannot be entertained and vice versa. Similarly, when a domestic consumer applies for change in category to non-domestic, a demand notice is required to be issued to deposit the service connection charges for non-domestic category.

Commission's Observations

Commission observes that the appropriate provisions has been made in the Regulations for reclassification of category. The reclassification/ change in category shall be effected from the date of issue of orders (service connection order) after the compliance of the demand notice and inspection if any. The Regulation is modified as under.

Sr. No.	Nature of Service	Standard (Including Time Limit for rendering Service)	Compensation Payable
14	Reclassification of consumer category/ change of tariff category	Inspection of applicants' premises	Rs. 100 per day or part thereof in case of delay.
		Issue of demand notice	
		Effecting of reclassification/ change in category	

Schedule -1 Shifting or meter/service connection/lines /equipment (18)

Shifting of LT/HT lines to be undertaken within 15 days after receipt of necessary charges and clearance and shifting of transformer to be undertaken within 25 days after receipt of necessary charges and clearance

Comments by UHBVN and DHBVN

The Discoms have submitted that the shifting of lines should not be covered under guaranteed standard of performance as such shifting depends upon the technical feasibility, availability of right of way etc. Besides, it involves erection of new LT/HT lines which could not be completed in 15 days as proposed. Similarly, the shifting of transformer may also require extension or shifting of 11 KV lines. Therefore, the request for shifting of lines and transformers needs to be kept out of the purview of guaranteed standard of performance.

Commission's Observations

Commission observes that the comments offered by the Discom(s) are not tenable as the provision of necessary time lines in the performance of the above services by the licensees is essentially required to avoid undue delays. Thus, the Regulations do not call for any modification.

Commission analysis and order

Commission has carefully examined the comments/suggestion provided by the stakeholders in their submissions made in writing as well as orally during the course of public hearing. The Commission considered the comments of the stakeholders and placed its observations while discussing the comments on the Regulations in the Order.

In view of the above, the Commission finalizes the Regulations "Haryana Electricity Regulatory Commission (Standards of Performance of Distribution Licensees and Determination of Compensation) Regulations, 2020 as per Annexure-A. This Order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 22/04/2020.

Date: 22/04/2020 **(Naresh Sardana)** **(Pravindra Singh)** **(D.S. Dhesi)**
Place: Panchkula **Member** **Member** **Chairman**

HARYANA ELECTRICITY REGULATORY COMMISSION
BAYS NO. 33-36, SECTOR-4, PANCHKULA- 134112, HARYANA
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Notification

The 24th April, 2020
Standards of Performance of Distribution Licensees and Determination of
Compensation Regulations, 2020

Statement of Objects and Reasons

In exercise of the powers conferred under Section 57 and 59 read with subsection 2(za) and 2(zb) of section 181 of the Electricity Act 2003 (Act No.: 36 of 2003) and all other powers enabling in this behalf, the Haryana Electricity Regulatory Commission specified the Standards of Performance for the Distribution Licensee through The Haryana Electricity Regulatory Commission Regulation No. HERC/04/2004: *Haryana Electricity Regulatory Commission (Standards of Performance for the Distribution Licensee) Regulations, 2004.*

Thereafter an amendment to these Regulations was issued on 11th September 2007 as *Haryana Electricity Regulatory Commission (Standards of Performance for the Distribution Licensee) 1st Amendment, Regulation, 2007.*

Commission further received, a report, on Power Quality of Electricity Supply to the Consumers, dated 14.9.2018 from Forum of Regulators for consideration of the State Regulatory Commissions to frame such regulations. The report lay emphasis on the need for Regulations on Power Quality which define the Power Quality indices, role and responsibilities of various entities, Standards/ limits to be followed, incentive/ disincentive mechanism and procedure for monitoring, management and control of all aspects of Power Quality while exploring the present legal frame work and the global regulatory scenario.

In view of above, the Draft Discussion Paper for the Regulations "*Haryana Electricity Regulatory Commission (Standards of Performance of Distribution licensees and Determination of Compensation) Regulations, 2018*" was prepared considering the various Power Quality Parameters. The last date of filing suggestions/comments/objections on the said draft Regulations was 01/02/2019 and the Public hearing was held on 20/02/2019.

Thereafter, based on the suggestions/comments/objections, the Commission prepared Draft Regulations "*Haryana Electricity Regulatory Commission (Standards of Performance of Distribution licensees and Determination of Compensation) Regulations, 2019*" and uploaded the same on its website for seeking comments on the said draft Regulations by 21/05/2019. The Distribution Licensees submitted their comments on the same.

The Commission, after due consideration of the written comments/objections received from public, Haryana Power Utilities and other stake holders and views expressed/issues raised in the Public Hearing, have accordingly made the necessary amendments in the draft regulations and have finalized the Draft for *Haryana Electricity Regulatory Commission (Standards of Performance of Distribution licensees and Determination of Compensation) Regulations, 2020.*

Regulation No. HERC/50/ 2020.— In exercise of powers conferred by the proviso of clause (za) of sub-section (2) of Section 181 and clause (zp) of sub-section (2) of

Section 181 read with sub-section(1) of Section 57, sub-section (2) of Section 57, sub-section (1) of Section 59 and clause (i) of sub-section (1) of Section 86 of the Electricity Act, 2003 (36 of 2003), the Haryana Electricity Regulatory Commission hereby makes the following Regulations:-

1. Short Title, Commencement and Scope Extent

- 1.1. These Regulations may be called the “Haryana Electricity Regulatory Commission (Standards of Performance of Distribution Licensees and Determination of Compensation) Regulations, 2020”.
- 1.2. These Regulations shall come into force from the date of their publication in the *Official Gazette* of Haryana.
- 1.3. These Regulations shall be applicable to all Distribution and Retail Supply Licensee(s) including Deemed Licensee(s) and consumer(s) of electricity in the State of Haryana.

2. Definitions and Interpretations

2.1 In these Regulations unless the context otherwise requires.

- a) **“Act”** means the Electricity Act, 2003 (36 of 2003) as amended from time to time;
- b) **“Applicant”** means an owner or occupier of any land/premises who files an application with a Licensee for supply of electricity, increase or reduction in sanctioned load/contract demand, change in title, shifting of meter/connection/line/distribution transformer etc., disconnection or restoration of supply, or termination of agreement, as the case may be, in accordance with the provisions of the Act and the Codes, Rules and Regulations made there under or other services;
- c) **“Area of Supply”** means the area within which a Licensee is authorized by his Licence to supply electricity;
- d) **“Authorised Representative”** of any person/entity means all officers, staff, representatives or persons discharging functions under the general or specific authority of the person concerned /entity;
- e) **“Billing cycle or billing period”** means the period for which regular electricity bills as specified by the Commission, are prepared for different categories of consumers by the Licensee. This is the period between two consecutive meter reading dates;
- f) **“Call Centre”** means the office set up by the distribution licensee(s) (may be at back end or customer interfacing front end) with adequate technology and systems for registering complaints round the clock;
- g) **“Clearance(s)”** means necessary approval(s) / No Objection Certificate(s) (NOC) sought from all relevant persons or authorities including Municipal Authorities which is required for the execution of work(s) by the Distribution Licensee(s);
- h) **“Commission”** means the Haryana Electricity Regulatory Commission;
- i) **“Days ”** means working days i.e excluding gazetted holidays and Sundays.
- j) **“Fuse-off”** means fuse blown off because of overloading/ageing or for any other reasons.
- k) **“Harmonics”** means a component of a periodic wave having frequency that is an integral multiple of the fundamental power line frequency of 50 Hz causing distortion to pure sinusoidal waveform of voltage or current, and as governed by IEEE STD 519-1992, namely “IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems” and corresponding standards as may be specified by the CEA;
- l) **“Load Shedding”** means a period during which the SLDC has directed the Licensee to reduce the load in order to ensure the safety of Grid

and reasons attributed to the same. A period of Grid failure due to force majeure event will not be covered under it;

- m) **“Meter”** means an equipment used for measuring, indicating and recording quantities including energy in kWh or kVAh, maximum demand in kW or kVA, reactive energy in kVARh and accessories including Current Transformer (CT), Voltage Transformer (VT) / Potential Transformer (PT) / Capacitor Voltage Transformer (CVT), where used in conjunction with such meter. It shall also include necessary wiring, any seal or sealing arrangement and other associated equipment provided by the Distribution Licensee for sealing, reliability and for preventing theft/unauthorized use of electricity;
- n) **‘Continuous Phenomenon’** means deviations from the nominal values that occur continuously over a long period of time;
- o) **‘Contract Demand’** means demand in kilowatt (kW)/kilovolt ampere (kVA)/Horse Power (HP) as mutually agreed between Distribution Licensee and the Consumer and as entered into in the agreement for which Distribution Licensee makes specific commitment to supply from time to time in accordance with the governing terms and conditions contained therein or equal to the sanctioned load, where the contract demand has not been provided through /i the agreement.
- p) **‘Declared Supply Voltage (Uc)’** means the voltage at the consumers supply terminals declared by the supplier of electrical energy. Declared supply voltage is usually equal to the nominal voltage;
- q) **‘Designated Customers’** means the customers identified as major power quality polluters due to their installed non-linear loads or generation or otherwise under these Regulations and shall interalia include commercial buildings (Healthcare, Hotels, Airports, malls etc.), IT/ITES and Banking, Finance & Service Industries (BFSI), Automobiles, Iron & Steel, Aluminium, Textile, Paper & Pulp, Chlor-Alkali, Petro-Chemical, Cement, Pharmaceuticals, Fertiliser, Food Processing, Plastic & Rubber and Railways/Metros, grid connected distributed generating resource and Electric Vehicle Charging infrastructure etc.;
- r) **‘Flicker’** means the impression of unsteadiness of visual sensation induced by a light stimulus whose luminance or spectral distribution fluctuates with time. It is caused under certain conditions by voltage fluctuation changing the luminance of lamps;
- s) **‘Flicker Severity’** means intensity of flicker annoyance evaluated by the following quantities:
 - i. Short term severity (Pst) measured over a period of 10 min;
 - ii. Long term severity (Plt) calculated from a sequence of twelve Pst-values over a 2 hour time interval;
- t) **‘Forum’** means as defined under Haryana Electricity Regulatory Commission (Consumer Grievance Redressal Forum & Electricity Ombudsman) Regulations including any amendment thereto in force from time to time ;
- u) **‘Frequency’** means the number of alternating cycles per second [expressed in Hertz (Hz)];
- v) **‘Grid Code’** means the Grid/Distribution Code as specified by the Haryana Electricity Regulatory Commission;
- w) **‘Grid Standards’** means the Grid Standards specified by the Authority;
- x) **‘Harmonics’** means the sinusoidal component of a periodic wave, either Voltage or Current waveform, having a frequency that is an integral multiple of the fundamental frequency of 50 Hz;
- y) **‘High Voltage’** means the voltage whose nominal r.m.s. value is more than 33000 volts but less than or equal to 150000 volts as per IS 12360:1988 standard;

- z) 'Indian Standards (IS)'** means standards specified by Bureau of Indian Standards;
- aa) 'IEC Standard'** means a standard approved by the International Electro technical Commission;
- bb) 'Interconnection Point (Distribution System)'** a point on the electricity system, including a sub-station or switchyard, where the interconnection is established between the customer and the electricity system of the distribution licensee and where electricity injected into or drawn from the electricity system can be measured unambiguously for the customer;
- cc) 'licensee'** means the distribution licensee;
- dd) 'Low Voltage (LV)'** means the voltage whose nominal r.m.s. value is less than or equal to 1000 Volts as per IS 12360:1988 standard;
- ee) 'Medium Voltage (MV)'** means the voltage whose nominal r.m.s. value is more than 1000 volts but less than or equal to 33000 volts as per IS 12360:1988 standard;
- ff) 'Maximum demand load current'** means the current value at the point of common coupling calculated as the sum of the currents corresponding to the maximum 15 minute demand during each of the twelve previous months divided by 12;
- gg) 'Nominal voltage (of the Distribution System) (Un)'** means the value of voltage by which the electrical installation or part of the electrical installation is designated and identified;
- hh) 'Normal Operating Condition'** means operating condition for an electricity network, where generation and load demands meet, system switching operations are concluded, faults are cleared by automatic protection systems and in the absence of:
- i. temporary supply arrangement;
 - ii. exceptional situations such as:
 - a. exceptional weather conditions and other natural disasters;
 - b. force majeure;
 - c. third party interference;
 - d. acts by public authorities;
 - e. industrial actions (subject to legal requirements);
 - f. power shortages resulting from external events
- ii) 'Nominal Frequency'** means the frequency of 50.00 Hz of the supply voltage.
- jj) 'Point of Common Coupling (PCC)'** means the point of metering, or any other point on supply system of distribution licensee, electrically nearest to the particular load at which other loads are, or could be, connected. For service to industrial users (i.e., manufacturing plants) via a dedicated service transformer, the PCC is usually at the HV side of the transformer. For commercial users (office parks, shopping malls, etc.) supplied through a common service transformer, the PCC is commonly at the LV side of the service transformer.
- kk) 'Power Factor' or 'Displacement Power Factor'** means the cosine of the electrical angle between the voltage and current vectors in an AC electric circuit;
- ll) 'Power Quality Meter'** means a device suitable for monitoring and recording of power quality. It shall be capable of accurate measurement, monitoring and recording of harmonics, sags, swells, flickers and other power quality parameters;
- mm) 'Rural areas'** mean the areas covered by Gram Panchayats, including major and minor Panchayats;
- nn) 'r.m.s. (root-mean-square) value'** means square root of the arithmetic mean of the squares of the instantaneous values of a

- quantity taken over a specified time interval and a specified bandwidth;
- oo) 'Sanctioned load'** means load in kilowatt (kW)/kilovolt ampere (kVA)/Horse Power (HP) for which the Distribution Licensee had agreed to supply from time to time subject to governing terms and conditions;
- pp) 'Supply Area'** means the area within which a Distribution Licensee is authorized by his License to supply electricity;
- qq) 'Supply Terminals'** means point in a distribution system designated as such and contractually fixed, at which electrical energy is exchanged between the Customer and distribution licensee. This point can differ from the electricity metering point or the point of common coupling.
- rr) 'Supply Voltage'** means the r.m.s. value of the voltage at a given time at the supply terminal, measured over a given interval;
- ss) 'Supply Voltage Interruption'** is a condition in which the voltage at the supply terminals is completely lost or lower than 10% of the nominal voltage condition. It can be classified as:
- a. Planned or Prearranged Supply Interruptions means a supply interruption when network users are informed in advance;
 - b. Forced or Accidental Supply Interruptions, caused by permanent or transient faults, mostly related to external events, equipment failures or interference.
 - c. A Planned or forced supply interruption is classified as:
 - i. Sustained or long interruption means supply interruption is longer than 3 min;
 - ii. Short interruption means supply interruption is from 20ms to 3 min;
 - d. For poly-phase systems, a supply interruption occurs when the voltage falls below 10% of the nominal voltage on all phases (otherwise, it is considered to be a dip).
- tt) 'Supply voltage dip'** means a temporary reduction of the r.m.s. supply voltage at a given point in the electrical supply system of 10 to 90% of the declared voltage for a duration from 10 ms up to and including 1 min. Typically a dip is associated with the occurrence and termination of a short-circuit or other extreme current increase on the system or installation connected to it;
- uu) 'Supply voltage dip duration'** means time between the instant at which the r.m.s. voltage falls below the start threshold and the instant at which it rises to the end threshold. For poly-phase events, a dip begins when one voltage falls below the dip start threshold and ends when all voltages are equal to or above the dip end threshold.
- vv) 'Supply voltage dip end threshold'** means r.m.s. value of the supply voltage specified for the purpose of defining the end of a supply voltage dip;
- ww) 'Supply voltage dip start threshold'** means r.m.s. value of the supply voltage specified for the purpose of defining the start of a supply voltage dip;
- xx) 'Supply voltage dip Residual Voltage'** means minimum value of r.m.s. voltage recorded during a voltage dip;
- yy) 'Supply voltage swells (temporary Power Frequency Overvoltage)'** means temporary increase in the r.m.s. supply voltage at a given point in the electrical supply system above 110 of the declared voltage for a duration from 10 ms up to and including 1 min;
- zz) 'Supply voltage swell duration'** means time between the instant at which the r.m.s. voltage exceed the start threshold and the instant at which it falls below the end threshold;

- aaa) 'Supply voltage swell end threshold'** means r.m.s. value of the supply voltage specified for the purpose of defining the end of a supply voltage swell;
- bbb) 'Supply voltage swell start threshold'** means r.m.s. value of the supply voltage specified for the purpose of defining the start of a supply voltage swell;
- ccc) 'System Average Interruption Duration Index' (SAIDI)** means the average duration of sustained interruptions per consumer occurring during the reporting period, determined by dividing the sum of all sustained consumer interruptions durations, in minutes, by the total number of consumers;
- ddd) 'System Average Interruption Frequency Index' (SAIFI)** means the average frequency of sustained interruptions per consumer occurring during the reporting period, determined by dividing the total number of all sustained consumer interruption by the total number of consumers;
- eee) 'True Power Factor'** means the ratio between total active power used in a circuit (including harmonics) and the total apparent power (including harmonics) supplied from the source. True power factor is always less than displacement power factor if harmonics are present in the system;
- fff) 'Transient over voltages'** means short duration oscillatory or non-oscillatory over voltages usually highly damped and with duration of few ms or in microseconds;
- ggg) 'Total Demand Distortion (TDD)'** means the ratio of the root mean square of the harmonic content, considering harmonic components up to the 50th order, expressed as a percent of the maximum demand current;
- hhh) 'Total Harmonic Distortion' or 'THD'** means the ratio of the root mean square of the current harmonic content, considering harmonic components up to the 50th order, expressed as a percent of the fundamental;
- iii) 'Voltage Events'** means sudden and significant deviations from normal or desired wave shape. Voltage events typically occur due to unpredictable events (e.g. faults) or due to external causes (e.g. weather conditions);
- jjj) 'Voltage Fluctuation' or 'Voltage Variations'** means series of voltage changes or a cyclic variation of the voltage envelope, the magnitude of which does not normally exceed the specified voltage ranges;
- kkk) 'Voltage unbalance'** means a condition in a poly-phase system in which the r.m.s. values of the line-to-line voltages (fundamental component), or the phase angles between consecutive line voltages, are not all equal. The degree of inequality is usually expressed as the ratios of negative and zero sequence components to the positive sequence component;
- III) 'Urban Areas'** means the areas covered by all Municipal Corporations and other Municipalities including the areas falling under the various Urban Development Authorities, Cantonment Authorities and Industrial Estate and Townships including those specified by the Haryana Government;
- mmm) "Voltage"** means, the difference of Electric potential measured in volts between any two conductors or between any part of either conductor and the earth, as measured by a Voltmeter meeting Indian Standards;
"Low voltage", where the voltage does not exceed 250 volts,
"Medium voltage", where the voltage exceeds 250 volts but does not exceed 650 volts,
"High voltage", where the voltage exceeds 650 volts but does not exceed 33,000 volts,
"Extra High voltage", where the voltage exceeds 33,000 volts :

nnn) “voltage unbalance” means the ratio of the maximum voltage deviation of the phase voltage from the average phase voltage to the average phase voltage of the three phases;

2.2 Words, terms and expressions defined in the Electricity Act, 2003, as amended from time to time and used in these Regulations, shall have and carry the same meaning as defined and assigned in the said Act.

All other expressions used herein but not specifically defined in these Regulations or in the Act but defined under the Haryana Electricity Reform Act, 1997 shall have the meaning assigned to them under the same Act, provided that such definitions in the Haryana Electricity Reform Act, 1997 are not inconsistent with the provisions of the Electricity Act, 2003.

2.3 In interpretation of these Regulations, unless the context otherwise requires:

- (1) Words in the singular or plural term, as the case may be, shall also be deemed to include the plural or the singular term, respectively;
- (2) References to any statutes, regulations or guidelines shall be construed as including all statutory provisions consolidating, amending or replacing such statutes, Regulations or guidelines, as the case may be, referred to;
- (3) Terms "include" or "including" shall be deemed to be followed by "without limitation" or "but not limited to" regardless of whether such terms are followed by such phrases or words of like import.

2.4 Any reference to Regulations without any qualification shall be considered as reference to these Regulations.

3. Standards of Performance of Distribution Licensees

3.1 The Standards of Performance specified herein shall be the minimum acceptable standard of service with reference to quality, continuity and reliability of services that a Licensee shall achieve and maintain in discharge of his obligations as a Distribution Licensee. The Standards of Performance may be different across the area of a Distribution Licensee and across the Distribution Licensees based on the concentration of population, local environment and conditions. The categorization shall be applicable to both Urban as well as rural areas;

3.2 Any failure by the Distribution Licensee to achieve and maintain the standards of performance specified in these Regulations shall render the Distribution Licensee liable to payment of compensation under the Act, as specified in Schedule I, to an affected person claiming such compensation.

3.3.1 Standards of Performance specified in Schedule-I relates to Guaranteed Standards of Performance for which consumers against whom no arrear other than of billing current cycle is pending on the date of violation are eligible for claiming the compensation in the manner provided in the Schedule-I in case the Licensee fails to provide services as per the Standards of Performance.

3.3.2 The concerned officer (SDO in charge, who fails to comply with the time-lines for rendering services as mandated under this regulation, without prejudice to any penalty which may be imposed or prosecution be initiated, he shall be liable to pay a fine of Rs 1000 (Rupees one thousand) per day for each day of delay subject to Rs 10,000 (Rupees ten thousand) maximum, in each case and such fine shall be payable by both SDO and XEN in charge of the sub division concerned in equal proportion.

Provided that complaint against non-compliance of the time-lines have to be filed by aggrieved person before the Commission and the Commission may after providing an opportunity of being heard to the parties shall impose the penalty thereafter.

- 3.4 Provided that any time limits set out in these Regulations shall refer to the maximum time permitted for performing the activities to which they relate to.
- 3.5 In case of applications requiring supply under agriculture category (Agriculture Pump sets) Licensee's obligation shall be limited to the number of connections that can be covered within the target fixed by the State Government for release of agricultural connections for a financial year. The target for an ensuing year should be fixed and made public at least 2 months before the commencement of the year. The licensee shall inform the applicants in writing within 15 days of receipt of applications, if the applicant's case cannot be covered in the programme of release of Agriculture Pump set connections fixed for the year.
- 3.6 The Licensees shall ensure 100% correct metering and replace the defective/dead/burnt meters within the prescribed period as mandated in these Regulations. In case, the consumer desires to install its own meter then he shall be allowed to install the Smart Meter, compliant to the approved specifications.
- 3.7 The standards specified in Schedule-II shall be the overall standards of performance which the Licensee shall seek to achieve in discharge of its obligations. However, against violation of any such overall/general standards, any claim of compensation will not be admissible.

4. Period for Giving Supply

4.1 New Connection/Additional Load/ Reduction in Load/Temporary Connection/Shifting of meters/service lines/Equipment

The Distribution Licensee shall follow the procedure and timelines specified under Electricity Supply Code, Regulations, 2014 including any amendments thereto in force from time to time for effecting services including new connection/additional load/reduction in load/ temporary connection/Shifting of meters / service lines/Equipment.

4.2 Change of name/Reclassification of consumer category/change of tariff category

The Distribution Licensee shall effect change of name/reclassification of consumer category/change of category as per the procedure and timelines specified under Electricity Supply Code, Regulations, 2014 including any amendments thereto in force from time to time. The change shall be reflected in the electricity bill of applicant within the second billing cycle.

5. Standard of Power Quality

5.1 Supply Voltage Variations

(1) The supply voltage variations in LV and MV networks from declared voltage shall comply with Table given below and specified with reference to mean r.m.s. values of supply voltage measured over 10 min.

Table 1 – Supply Voltage Variation Limits for LV Systems Interconnected with Transmission System.

Supply Voltage Characteristic	Reference Time Frame	Limits
Mean r.m.s. value of the Supply voltage over 10 min	95% of each period of one week	Un ± 10 %
	100% of time	Un + 10 % / - 15%

Table 2 – Supply Voltage Variation Limits for MV Systems Interconnected with Transmission System.

Supply Voltage Characteristic	Reference Time Frame	Limits
Mean r.m.s. value of the Supply voltage over 10	99% of each period of one week	Un ± 10 %

min	100% of time	Un ± 15%
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Table 3 – Supply Voltage Variation Limits for LV and MV Systems not interconnected with Transmission System

Supply Voltage Characteristic	Reference Time Frame	Limits
Mean r.m.s. value of the supply voltage over 10 Min	100% of time	Un +10 % / -15 %

Provided that:

The measurements shall be undertaken in accordance with applicable notified IS and in absence of IS, IEC 61000-4-30:2015 as amended from time to time;

For statistical evaluation, voltage variations shall be assessed for the period not less than 7 continuous days. The short time 10 min values (measured as per IEC) are accumulated over periods of one week and the 95th and 99th percentile values (i.e., those values that are exceeded for 5% and 1% of the measurement period) are calculated for each 7-day period for comparison with the recommended limits. The values are measured in normal operating condition.

For poly-phase systems, the voltage variations shall be measured in all phases of supply.

5.2 Supply Voltage Flicker (Pt)

- (1) The voltage flicker shall be assessed in two different severity level: Long-Term severity (Plt) and Short-Term severity (Pst). Short term severity shall be measured over a period of 10 min and long-term severity shall be calculated from a sequence of twelve Pst-values over a 2-hour time interval, according to the following expression:

$$Plt = 3\sqrt{\sum_{l=1}^{12} P3St/12}$$

The permissible limits of short-term voltage flicker and long-term voltage flicker severity for distribution licensee shall be 1.0 and 0.8 at all supply terminals 100% of the time respectively.

Provided that:

The measurements shall be undertaken in accordance with IEC 61000-4-30;

For statistical evaluation, voltage flicker shall be assessed for the period not less than 7 continuous days. The short time 10 min values are accumulated over periods of one week and the 95th percentile values (i.e., those values that are exceeded for 5% of the measurement period) are calculated for each 7-day period for comparison with the recommended limits. The values are measured in normal operating condition excluding the time period of a voltage dip.

For poly-phase systems, the voltage flicker shall be measured in all phases of supply.

5.3 Supply Voltage Unbalance (UB)

- (1) The supply voltage unbalance in respect of three phase supply shall be assessed from the ratio of rms value of negative phase sequence component (fundamental) to the rms value of positive phase sequence component (fundamental) of the supply voltage. The supply voltage unbalance shall be maintained less than or equal to 2% by the distribution licensee.

Provided that:

For statistical evaluation, voltage unbalance shall be assessed for the period not less than 7 continuous days. The short time 10 min values are accumulated over periods of one week and the 95th percentile values (i.e., those values that are exceeded for 5% of the measurement period) are calculated for each 7-day period for comparison with the recommended limits. The values are measured in normal operating condition.

5.4 Voltage Dip or Sag

- (1) The Supply voltage dips shall comply with Table given below and are specified with reference to:
- i. Number of events per year
 - ii. Event duration (t)
 - iii. Residual Voltage (u)
 - iv. Declared voltage (Uc)

Table 4: Supply Voltage Dip Limits for LV and MV Networks in Terms of Number of Events per Year

Residual Voltage (%)	Duration t (ms)				
	$10 \leq t \leq 200$	$200 < t \leq 500$	$500 < t \leq 1000$	$1000 < t \leq 5000$	$5000 < t \leq 60000$
$90 > u \geq 80$	30	40	10	5	5
$80 > u \geq 70$	30	40	5	5	5
$70 > u \geq 40$	10	40	5	5	5
$40 > u \geq 5$	5	20	5	5	5

Provided that:

The voltage dips shall be measured in accordance with IEC 61000-4-30 and shall not fall outside the duration from 10 ms up to and including 1 min;

The voltage dips shall be measured in all phases of supply.

5.5 Voltage Swells

- (1) The Supply voltage swell shall comply with Table given below and are specified with reference to:
- i. Number of events per year
 - ii. Event duration (t)
 - iii. Swell Voltage (u)
 - iv. Declared voltage (Uc)

Table 5: Supply Voltage swell Limits for LV and MV Networks in Terms of Number of Events per Year

Swell Voltage u (%)	Duration t (ms)		
	$10 \leq t \leq 500$	$500 < t \leq 5000$	$5000 < t \leq 60000$
$u \geq 120$	--	--	--
$120 > u \geq 110$	--	--	--

Values may be as per relevant

IEC/IEEE Standard Provided

that:

The voltage swell shall be measured in accordance with IEC 61000-4-30 and shall not fall outside the duration from 10 ms up to and including 1 min;

The voltage swell shall be measured in all phases of supply.

5.6 Voltage Harmonics

- (1) The voltage harmonic distortion of the supply voltage shall be

assessed in terms of the Total Harmonic Distortion (THDV) considering harmonic components up to the 50th order. THDV shall be taken as square root of the sum of squares of all voltage harmonics expressed as a percentage of the magnitude of the fundamental measured with following formula: -

$$THD_V = \sqrt{\sum_{(h=2)}^N V^2_h}$$

Where,

V_h represents the percent rms value of the hth harmonic voltage component, and N represents the highest harmonic order considered in the calculation.

The distribution licensee shall control the value of THDV measured at Point of Common Coupling (PCC) for LV and MV network to less than or equal to 8% and 5% respective for 100% of time.

The Distribution licensee shall also control the mean rms values of each individual harmonic order component to the values as given in table below:

Fundamental Voltage

Odd Harmonics (%)						Even Harmonics (%)		
Not Multiple of 3			Multiple of 3					
Harmonic	LV	MV	harmonic	LV	MV	harmonic	LV	MV
5	6	6	3	5	5	2	2	1.9
7	5	5	9	1.5	1.5	4	1	1
11	3.5	3.5	15	0.5	0.5	6 to 24	0.5	0.5
13	3	3	21	0.5	0.5			
17	2	2						
19	1.5	1.5						
23	1.5	1.5						
25	1.5	1.5						

(2) For statistical evaluation, voltage harmonics shall be assessed for the period not less than 7 continuous days. The short time 10 min values are accumulated over periods of one week and the 95th percentile values (i.e., those values that are exceeded for 5% of the measurement period) are calculated for each 7-day period for comparison with the recommended limits. The values are measured at PCC in normal operating condition. Provided that:

The limits of each individual voltage harmonics by the distribution licensee in its electricity system, point of harmonic measurement i.e. Point of Common Coupling (PCC), method of harmonic measurement and other matters shall be in accordance with per applicable notified IS and in absence of IS, the IEEE 519-2014 namely 'IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems', as modified from time to time.

5.7 Current Harmonics

(1) The designated customers shall limit the value of harmonic currents measured at Point of Common Coupling (PCC) measured over 10 minutes period to the values as given in table below:

Table 7: Values of Current distortion limits (TDD)

Maximum harmonic current distortion in percent of IL						
Individual harmonic order (odd harmonics) a, b						
ISC/IL	$3 \leq h < 11$	$11 \leq h < 17$	$17 \leq h < 23$	$23 \leq h < 35$	$35 \leq h \leq 50$	TDD
< 20*	4.0	2.0	1.5	0.6	0.3	5.0
20 < 50	7.0	3.5	2.5	1.0	0.5	8.0
50 < 100	10.0	4.5	4.0	1.5	0.7	12.0
100 < 1000	12.0	5.5	5.0	2.0	1.0	15.0
> 1000	15.0	7.0	6.0	2.5	1.4	20.0

Note: * All power generation equipment is limited to these values of current distortion, regardless of actual ISC/IL;

A Even harmonics are limited to 25% of the odd harmonic limits above;

B Current distortions that result in a dc offset, e.g., half-wave converters, are not allowed; where

Isc = maximum short-circuit current at PCC;

IL = maximum demand load current (fundamental frequency component);

(2) For statistical evaluation, current harmonics shall be assessed for the period not less than 7 continuous days. The short time 10 min values are accumulated over periods of one week and the 95th and 99th percentile values (i.e., those values that are exceeded for 5% and 1% of the measurement period) are calculated for each 7-day period for comparison with the recommended limits. The values of TDD are measured at PCC in normal operating condition.

Provided that:

The weekly 95th percentile short time 10 min harmonic current values should be less than the value given in above Table-7. However, the weekly 99th percentile short time 10 min harmonic current values should be less than 1.5 times the value given in above Table-7.

The limits of current harmonics injected by the designated customer, point of harmonic measurement i.e. Point of Common Coupling (PCC), method of harmonic measurement and other matters shall be in accordance with per applicable notified IS and in absence of IS, the IEEE 519-2014 namely 'IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems', as modified from time to time. The measurements undertaken to determine compliance shall be carried out in accordance with the requirements as specified in IEC 61000-4-7 and IEC 61000-4-30.

5.8 Short Supply Voltage Interruptions

- (1) Short voltage interruptions shall comply with Table given below and are specified with reference to:
 - i. Number of events per year
 - ii. Event duration (t)
 - iii. Declared voltage (U_c)

Table 8: Short Voltage Interruptions Limits (number of events per year) for LV and MV Networks.

Residual Voltage (%)	Duration t (ms)				
	$10 \leq t \leq 200$	$200 < t \leq 500$	$500 < t \leq 1000$	$1000 < t \leq 5000$	$5000 < t \leq 60000$
$5 > u$	5	20	30	10	10

Provided that:

The short voltage interruptions shall be measured in accordance with IEC 61000-4-30 and shall not fall outside the duration from 10 ms up to and including 1 min;

The voltage swell shall be measured in all phases of supply.

5.9 Long or Sustained Supply Voltage Interruptions

(1) The Distribution Licensee shall calculate the reliability of its distribution system on the basis of number and duration of sustained or long supply voltage interruptions (longer than 3 min) in a reporting period, using the following indices:

- i. System Average Interruption Frequency Index (SAIFI);
- ii. System Average Interruption Duration Index (SAIDI);

(2) The Indices shall be computed for the distribution licensees for each month for all the 11kV and 33kV feeders in the supply area, and then aggregating the number and duration of all interruptions in that month for each feeder. The Indices shall be computed using the following formulae:

$$SAIFI = \frac{\sum_{i=1}^N A_i * N_i}{N_i}$$

$$SAIDI = \frac{\sum_{i=1}^N B_i * N_i}{N_i}$$

Where,

A_i = Total number of sustained interruptions (each longer than 3 min) on ith feeder for the month;

B_i = Total duration in minutes of all sustained interruptions (longer than 3 min) on ith feeder for the month;

N_i = Number of Customers on ith feeder affected due to each sustained interruption; N_t = Total number of customers served by the Distribution Licensee in the supply area;

n = number of 11kV and 33kV feeders in the licensed area of supply;

(3) The distribution licensee shall maintain the reliability on monthly basis within the limits specified in table below:

Table 9: Limits for Reliability indices

Reliability Indices	Limits *
SAIDI	600 Minutes per customer
SAIFI	15 interruptions per customer

*Limits may be decided based on area on supply and local conditions by SERC.

Provided that:

The feeders must be segregated into rural and urban and the value of the indices must be reported separately for each month.

While calculating the given reliability indices, the following types of interruptions shall not be taken into account:

- i. Momentary outages of duration less than three minutes.
- ii. Outages due to Force Majeure events such as cyclone, floods, storms, war, mutiny, civil commotion, riots, lightning, earthquake, lockout, grid failure, fire affecting licensee's installations and activities;
- iii. Outages that are initiated by the National Load Despatch Centre/ Regional Load Despatch Centre/State Load Despatch Centre during the occurrence of failure of their facilities;

While calculating the given reliability indices, the interruptions due to scheduled or planned outages shall be taken into account.

The distribution licensee shall capture reliability indices data directly from the feeder monitoring system and there should not be any manual interventions as far as possible.

The Distribution Licensee shall maintain data on the reliability indices specified above for each zone/circle/division/sub-division on a monthly basis.

The Distribution Licensee shall put up, at the end of each month, such monthly information on reliability indices, on website of the Distribution Licensee and shall submit such report quarterly to the Commission

MONITORING AND REPORTING OF THE POWER QUALITY

5.10 Monitoring of Power Quality

- (1) PQ measurement shall be implemented in phased manner and during first phase, PQ meters shall be installed at selective representative locations based on voltage level, type of consumers and significance of the power quality in such a way that such measurements should adequately represent the Power Quality and Reliability in the area of supply.
- (2) The distribution licensee for the purpose of requirements for the quality of electricity supplied shall identify the locations of 33kV/11kV feeders, Distribution Transformers (DTRs) and designated customers to ensure the measurement of the power quality parameters at sufficient locations in their electrical networks to adequately characterize and report performance in terms of these Regulations. The feeders and DTRs should be identified for PQ monitoring based on type of load connected. The utilities shall prepare blue print for implementation of

the above and submit the same to the commission within three months.

- (3) The distribution licensee shall enforce the continuous monitoring of power quality standards at the inter-connection point of identified locations at or below 33kV voltage level for development of profile of power quality measurement in the area of supply;
- (4) In the first phase, the distribution licensee(s) shall install Power Quality meters at 5 locations each in their area of supply on pilot basis covering the 11 KV/33KV feeders, the DTs and designated customers with load more than 1MW and scale up there-after in consultation with the commission.
- (5) The measurements undertaken to determine compliance shall be carried out in accordance with the requirements as specified in IEC 61000-4-7 and IEC 61000-4-30. There shall be continuous metering of harmonics with permanent Power Quality meters complying with the IEC 61000-4-30 Class-A meters for all new installations/connections of identified locations. For existing installations/ connections at identified locations where CTs/PTs are of lower accuracy class than mandated by IEC 61000-4-30 Class-A meters, the meters complying with the IEC 61000-4-30 Class-B may be installed. These meters should be capable of detecting direction of Harmonics (whether it is upstream or downstream) for all new installations at identified locations.
- (6) In the event when the distribution licensee receives a customer complaint concerning Power Quality, the distribution licensee shall deploy power quality meter for a particular period for the purpose of verification. Distribution licensee can also measure the level of harmonics generation at PCC of any consumer(s) on receipt of complaint(s) from other affected consumer(s).
- (7) These Regulations specifies the minimum requirements for Power Quality meters for measurement at sites directly affecting the quality of the power supplied to the consumer(s). The distribution licensee may require the additional PQ meters to establish the power quality at other bulk supply points and at other major network nodes and to investigate consumer(s) complaints, for which these additional PQ meters may be installed temporarily.
- (8) The distribution licensee may opt to integrate the smart grid meters compatible for measurement of the PQ parameters for economic and operational optimization.

5.11 Compliance of the Power Quality and Reliability Standards

- (1) The distribution licensee shall submit the quarterly report of information collected on PQ parameters extracted from power quality meters and machine-based reliability data in standard formats (as specified separately) to the Commission.

- (2) It shall be the prime responsibility of the distribution licensee to comply with these Regulations and submit the compliance report every 6 months in standard formats (as specified separately), including transparent data disclosure regarding electrical system, to the Commission. The Commission may direct designated agencies to be notified separately, to carry out PQ audit on the basis of compliance reports filed by distribution licensee for verification. The distribution company shall carry out 100% audit once a year and 5% random audit by independent agency and shall file the audit report along with ARR petition.
- (3) The distribution licensee shall publish the reports indicating the compliance with the standards under these Regulations and post all the reports on its website. The distribution licensee shall also seek comments, if any, on the same from the customers availing supply from the distribution licensee.
- (4) The Commission from time to time may seek reports on PQ improvements from distribution licensee.
- (5) The distribution licensee shall make efforts to improve power quality in their supply area by deploying devices to mitigate power quality issues such as filters or controllers etc. The expenses incurred towards deploying these devices by the distribution licensee shall be considered in the ARR.
- (6) The distribution companies shall ensure the data security and the data should only be used for identified purpose and should not be transferred to any other person without the consent of the specific consumer.

INCENTIVE / DIS-INCENTIVE MECHANISM FOR POWER QUALITY

5.12 Incentive/dis-incentive mechanism for Power Quality

- (1) During the first year after notification of Power Quality Regulations, there shall be monitoring and reporting of power quality parameters by distribution licensee in prescribed standard formats at regular intervals. Therefore, there shall not be any incentive/dis-incentive for the stakeholders during the first year after notification or as may be specified by SERCs.
- (2) The expenses incurred towards implementation and monitoring of power quality parameters by the distribution licensee shall be considered in the ARR.
- (3) From the second year after notification of PQ Regulations, an incentive/dis-incentive mechanism shall be implemented for distribution licensees and for designated customers. The distribution licensees or designated customers shall be liable to pay compensation. Provided that the Distribution Licensee shall compensate the affected person(s) in second- next billing cycle. In

case the Distribution Licensee fails to pay the compensation or if the affected person is aggrieved by non-redressal of his grievances, he may make a representation for the redressal of his grievance to the concerned Consumer Grievance Redressal Forum.

Provided further that such compensation shall be based on the classification of such failure as determined by the Commission and the payment of such compensation shall be made or adjusted in the consumer's future bills (issued subsequent to the award of compensation) within thirty (30) days of a direction issued by the Forum or by the Ombudsman, as the case may be.

- (3) The Distribution Licensee shall not be excused from failure to maintain the power quality parameters under these Regulations, where such failure can be attributed to negligence or deficiency or lack of preventive maintenance of the distribution system or failure to take reasonable precaution on the part of the Distribution Licensee.
- (4) The designated customers shall be liable to pay compensation for injecting current harmonics in to the supply system beyond the specified limits as given in Table below. In case the designated customer does not take measures to reduce the level of current harmonics (which is measured in terms of total demand distortion), he shall be made liable to pay higher compensation progressively on each continued violation as decided by the Commission separately. When there is no improvement in power quality even after 6 months, such consumers shall be served notice of dis-connection from the supply network and shall be disconnected after approval of the Commission.
- (5) Level of compensation payable for failure to meet power quality standards are given in table below:

Level of compensation

PQ Parameter	Standard	Compensation Payable	Compensation Payable by
Voltage Variation	As per Table-1, 2 and 3	Rs.100/- per week or part thereof for which voltage variation was beyond the specified limits	Distribution Licensee to each consumer connected on the feeder/ designated DTR. These compensations shall be cumulative for each violation.
Voltage unbalance		Rs.100/- per week or part thereof for which voltage unbalance was beyond the specified limits	
Voltage dips or swells	Number of events per year as per Table- 4 and 5	Rs.50/- per event for which voltage dips or swell was beyond the specified limits	
Voltage Harmonics	for LV for MV and as per Table - 6	Rs.100/- per week or part thereof for which voltage harmonics was beyond the specified limits	
Current Harmonics	As per Table-7	Compensation shall be 50 paise per unit for the duration for which current harmonics was beyond the specified limits.	
			Designated Customer to distribution licensee

Short Voltage Interruptions	Number of events per year as per Table- 8	Rs.50/- per instance for which voltage dips or swell was beyond the specified limits	Distribution Licensee to each consumer connected on the feeder/ designated DTR. These compensations shall be cumulative for each violation.
Long Supply Voltage Interruptions	SAIDI in Minutes per Customer as per Table- 9	5 paisa/min/kW of contract demand for which SAIDI was beyond the specified limits	
Long Supply Voltage Interruptions	SAIFI in interruption per customer as per Table- 9	Rs.50/- per interruption for which SAIFI was beyond the specified limits	

Provided that such compensation as given in above Table-10 shall not be claimed in ARR by distribution licensee and further the compensation received by the distribution licensee from the designated customers shall be utilized only on the measures taken to improve power quality such as installation of filters, controllers etc.;

Provided further that the compensation payable under these Regulations shall be recovered from the officers concerned of the distribution licensees and the same should also be necessarily reflected in the ACRs of the erring officers / officials for their relevant year.

6. Restoration of Power Supply

6.1 Restoration of supply on failure

- (i) The Distribution Licensee, within two hours of receipt of complaint shall inform the complainant about the likely time to be taken for restoration of supply.
- (ii) The Distribution Licensee shall restore the power supply in the case of normal fuse-off calls within four (4) hours in urban areas and within eight (8) hours in Rural Areas of the receipt of a complaint.
- (iii) The Distribution Licensee shall, in the case of 33 kV/ 11 kV/ 415 V/230 V overhead line breakdowns, restore the power supply to the consumer within eight (8) hours in urban areas and within sixteen (16) hours of the receipt of a complaint in rural areas. However, in case break down is due to broken pole, power supply to the consumer shall be restored within twelve (12) hours in urban areas and within twenty-four (24) hours of the receipt of a complaint in rural areas.
- (iv) The Distribution Licensee shall restore the power supply caused by underground cable faults including service connection within twenty-four (24) hours in urban area and rural areas after obtaining the necessary clearances, if any.
- (v) The Distribution Licensee shall restore the power supply caused by distribution transformer failure within twenty-four (24) hours in urban areas and within forty-eight (48) hours of the receipt of a complaint in rural areas. Licensee shall also maintain the transformer damage rate below 3% p.a. in urban area and 6% p.a. in rural area.
- (vi) The Distribution Licensee shall restore the power supply caused by major power failure involving Power Transformer/Equipment etc within seven (7) days on receipt of a complaint. Till than the Licensee shall

ensure alternate arrangement to restore the supply to the affected area within 24 hours wherever technically feasible.

6.2 Scheduled Outages

The period of interruption, as a result of any scheduled outage, shall be specified in the public notice and may also be informed through SMS at least 24 hours in advance of such scheduled outage. Provided that such scheduled outage shall not normally exceed eight (8) hours on any day and supply shall preferably be restored by 6:00 PM in the evening.

6.3 Unscheduled Load Shedding

The period of interruption as a result of any unscheduled outage shall not normally exceed four (4) hours on any day in a particular area subject to safety of the Grid.

6.4 Disconnection of supply

- (i) The Distribution Licensee shall disconnect the supply on receipt of request for disconnection within twenty four (24) hours from the receipt of application.
- (ii) The Distribution Licensee shall intimate the consumer of any amount outstanding against the consumer whose supply has been disconnected within seven (7) days from the date of disconnection. "No- Dues certificate" shall be issued by the Distribution Licensee within thirty (30) days from the date of application and payment of outstanding dues.
- (iii) In case of closure of account (permanent disconnection), refund of credit amount (if any), advance consumption deposits / consumption security and meter security shall be made by the Distribution Licensee within thirty (30) days from the date of application for closure of account.

6.5 Reconnection of supply following disconnection due to non-payment of bills

Where the Distribution Licensee has disconnected supply to a consumer for a period of not more than six months, then if such consumer pays all amounts due and payable by him to the Distribution Licensee or, in case of a dispute, pays such amount under protest, the Distribution Licensee shall reconnect supply within—

- (i) six (6) hours from the payment of dues by the consumer in urban areas;
- (ii) twelve (12) hours from the payment of dues by the consumer in rural areas.

Provided that, where the period of disconnection exceeds six months, an application for reconnection of supply shall, after either payment of amounts due or upon settlement of dispute, be treated as a fresh application for supply of electricity under the provisions of the Act.

Payments made under protest in these Regulations shall be in accordance with the requirements of the proviso to sub-section (1) of Section 56 of the Act.

7. Metering

- 7.1 The Distribution Licensee shall perform the meter related activities in accordance with the Electricity Supply Code, Regulations, 2014 read with amendment thereto, in force from time to time and also in accordance with other allied Regulations and Codes.
- 7.2 The Distribution Licensee shall inspect and check the correctness of the meter within three days of receiving the request or complaint.
- 7.3 Licensee shall replace the non-working (stuck up, running slow, fast or creeping) meter within three days in urban areas and seven days in rural areas after its being so established on checking.
- 7.4 The Distribution Licensee shall restore the power supply caused by a burnt meter as per the procedure and timelines stipulated under Electricity Supply Code, Regulations, 2014, and its amendments thereof.
- 7.5 The Distribution Licensee shall ensure that at no point of time the percentage of defective meters to the total number of meters in service exceeds 2%.

Provided in case of new connection is not released within the timeline specified in supply code, the officer/official responsible shall be penalized @Rs. 1000 per day of delay subject to maximum of Rs. 10000. Thereafter the matter shall be brought before the Commission.

8. Complaints about Consumer's Bills

- 8.1 The Distribution Licensee shall immediately acknowledge a consumer's complaint by providing unique complaint number, if the complaint is filed / lodged in person or telephonically and within seven (7) days if the complaint is received by post.
- 8.2 The Distribution Licensee shall resolve consumer complaints with regard to non-receipt of a bill for payment or inadequate time being made available for payment thereof or otherwise, within twenty-four (24) hours of the receipt. In other cases where additional information is required, the complaint shall be resolved within seven (7) days.
- 8.3 Licensee shall ensure that at any point of time the percentage of bills requiring modifications following complaints to the total number of bills issued does not exceed 0.1%.

Provided that in case a wrong electricity bill for sale of power is issued by the licensee, the same shall be corrected and a revised bill shall be issued to the consumer by the SDO in-charge within 3 days. Further, the adjustment of any amount on account of correction made in the bill shall be reflected in the next bill. In case the future bill (the second bill after the correction of the wrong bill), is found to be wrong the SDO in-charge shall be liable to pay a penalty of Rs 500/- per

default. Provided further in case such default is found to occur thrice, the defaulting officer shall be proceeded under the Punishment and Appeal Rules for this act of omission.

9. Compliance of Orders passed by the CGRF and Electricity Ombudsman

The Distribution Licensee, unless and otherwise stayed by court/forum of competent jurisdiction shall implement the decision rendered by the CGRF or the Electricity Ombudsman within the period stipulated in such Order.

10. Complaint Registration and Complaint Handling

10.1 Establishment of Call centre(s)

- (i) The Distribution Licensee within the following time limits, from the date of commencement of these Regulations, establish/strengthen the Call Centre facility(s) for redressal of complaints of its consumers. Access to such Call Centre facilities shall be established to its consumers round the clock (24x7) during all days of the week: -
 - (a) for "Urban Areas" within two (2) months; and
 - (c) for "Rural Areas" within three (3) months.
- (ii) The Distribution Licensee shall use the existing channels for recording the consumer complaints as per the specified procedure till the establishment of Call Centre(s).
- (iii) Every Distribution Licensee shall ensure that sufficient number of persons are at the disposal of the Call centre(s) and also earmark or allot or establish a basic telephone or cellular mobile telephone number having sufficient communication lines or connections to be called as the "toll free number" or "consumer care number" or "help line number" as the case may be, at Call centre(s). The call response time shall not be more than three (3) minutes and the registration of consumer call after the first response shall be completed in five (5) minutes. Any delay shall attract compensation as specified in Schedule-I.
- (iv) The Commission, at any point of time, may review the adequacy of the complaint handling centre(s) set-up by the Distribution Licensee and direct the Distribution Licensee to establish additional center(s) in the area not being adequately served.
- (v) The call charges or short message service charges shall not be levied upon, or made payable by the consumers, for calls made, or, short messages sent, to the " toll free number " or " consumer care number " or " help line number ", as the case may be.
- (vi) Every Distribution Licensee shall, immediately upon establishment of Call Centre(s), inform through a public notice in newspapers in circulation in the area of supply, by uploading on internet website of the Distribution Licensee and should also ensure proper circulation of information to the consumers in case of any changes in the contact numbers.
- (vii) The Distribution Licensee shall ensure the availability of electronic data base to record the complaints, redressal time, feedback from

consumers etc. which will help in finalization of compensation and reporting of the performance to the Commission.

- (viii) The Distribution Licensee shall convey information about the name of office(s), address(es) and telephone numbers wherein the consumer can lodge the complaints, in the form of additional information printed on the electricity bills and shall also display it at the sub-division offices and on the internet website of that Distribution Licensee.

10.2 Process of handling complaints

- (i) The Distribution Licensee shall devise its own processes at Complaint Handling Centers / Call Centre(s) / Customer Care Centre(s) / Service Centre(s) or any other customer interface channels to handle consumer complaints.
- (ii) The Distribution Licensee shall register all complaint made by a consumer (either verbally or in writing) in a manual register or in electronic format to be maintained for this purpose. The complaints shall be recorded in the approved format. The Distribution Licensee shall allot a unique identification number to each complaint which shall be duly communicated to the consumer along with the expected complaint resolution time.
- (iii) The Distribution Licensee shall intimate contact details of the next higher authority (including his name, telephone number and address) to the consumer in case the consumer is not satisfied with the complaint handling or when requested by him.
- (iv) The Distribution Licensee shall update and record feedback of the consumer on the action taken along with the total time taken for resolution of the complaint.

11. Reliability Indices

11.1 The Distribution Licensee shall calculate and report the following reliability indices of its distribution system separately for 11 kV feeders and consumers, covering all cities and towns up to the District Headquarter towns and also for rural areas: -

- (i) System Average Interruption Frequency Index (SAIFI);**
- (ii) System Average Interruption Duration Index (SAIDI); and**
- (iii) Reliability Indices (RI)**

Provided that the above categorization should cover the whole area of the licensee and should include all the 11kV feeders in its area of operation. Licensee shall also calculate and report the Reliability Indices of agriculture feeders separately. The indices shall be computed as per the prescribed formats annexed as **Annexure-VI to VII**.

11.2 The Distribution Licensee shall segregate all 11 kV feeders in its supply area into urban, rural and agricultural tube well categories. The category shall comprise of all feeders where the agricultural load exceeds 90% of the total load on the feeder.

- 11.3 The Distribution Licensee shall make concerted efforts to achieve the standards of reliability fixed by the Commission from time to time.
- 11.4 The Distribution Licensee shall maintain data on the reliability indices specified in Regulation 11.1 above for each zone/circle/division/sub-division on a monthly basis.
- 11.5 The Distribution Licensee shall post, at the end of each month, such monthly information on reliability indices, on website of the Distribution Licensee and shall submit such report quarterly to the Commission within 30 days after the expiry of respective quarter.
- 11.6 Based on the information submitted by licensees, the Commission shall notify annually the targeted levels of these indices to be achieved by the Licensee. In the event, the Distribution Licensee persistently neglects and fails to improve its performance, the Commission may take action against the Distribution Licensee as per provision under Section 24 or any other provision of the Act.

12. Exemptions

- 12.1 Standards of Performance specified in these Regulations shall remain suspended in case of the following events and the Distribution Licensee is prevented from meeting his obligations under these Regulations by-
- (i) force majeure events such as cyclone, floods, storms, pandemic, war, mutiny, civil commotion, riots, lightning, earthquake, lockout, fire affecting Licensee's installations and activities;
 - (ii) outages due to generation failure or transmission network failure;
 - (iii) outages that are initiated by the National Load Despatch Centre/ Regional Load Despatch Centre/ State Load Despatch Centre during the occurrence of failure of their facilities;
 - (iv) or other occurrences beyond the control of the Distribution Licensee;

Provided that the Distribution Licensee shall not be exempted from failure to maintain the Standards of Performance under these Regulations, where such failure can be attributed to negligence or deficiency or lack of preventive maintenance of the distribution system or failure to take reasonable precaution on the part of the Distribution Licensee.

- 12.2 The Commission may, by general or special order, exempt the Distribution Licensee from any or all of the standards specified in these Regulations for such period as may be specified in the said Order.

13. Determination of Compensation

- 13.1 If the Distribution Licensee fails to meet the Guaranteed Standards of Performance as specified in Schedule-I, Licensee shall pay compensation to the affected person;
- Provided that any person who is affected by the failure of the Distribution Licensee to meet the Standards of Performance

specified under these Regulations and who seeks to claim compensation shall file his claim with such a Distribution Licensee within a maximum period of thirty (30) days from the time such a person is affected by such failure of the Distribution Licensee to meet the Standards of Performance;

Provided further that the Distribution Licensee shall provide information to consumers with regard to its offices/ competent authority to settle claims for compensation;

Provided further that the Distribution Licensee shall compensate the affected person(s) within a maximum period of ninety (90) days from the date of filing his claim.

- 13.2 In case the Distribution Licensee fails to pay the compensation or if the affected person is aggrieved by non-redressal of his grievances, he may make a representation for the redressal of his grievance to the concerned Consumer Grievance Redressal Forum in accordance with the provisions of Haryana Electricity Regulatory Commission (Consumer Grievances Redressal Forum and Electricity Ombudsman) Regulations, 2004 including any amendment or revisit thereto.

Provided that in case the claim for compensation is upheld by the Consumer Grievances Redressal Forum, the compensation determined by the Commission in Schedule-I to these Regulations will be implemented by the Forum or by the Ombudsman, in case of an appeal filed against order of the Forum before him and is to be paid by the concerned Distribution Licensee.

Provided further that such compensation shall be based on the classification of such failure as determined by the Commission under the provisions of Section 57 of the Act and the payment of such compensation shall be paid or adjusted in the consumer's future bills (issued subsequent to the award of compensation) within ninety (90) days of a direction issued by the Forum or by the Ombudsman, as the case may be.

14. Information with respect to Level of Performance

- 14.1 The Distribution Licensee shall submit the information to the Commission on the matters covered under clauses (a) and (b) of sub-section (1) of Section 59 of the Act on quarterly basis, within a period of thirty (30) days from the end of the quarter in the forms shown in Annexure I to Annexure-VII and put up such information on the internet website of the Distribution Licensee, within a period of thirty days from the end of the quarter. The consolidated yearly information shall also be supplied at the end of each financial year by the 15th May of prospective year.

Provided that the information shall be with respect to the total number of cases of failure to meet each of the standards specified in these Regulations.

Provided further that the Distribution Licensee shall separately state the total number of cases where compensation has been paid by it without dispute and the total number of cases where compensation has been paid in compliance with an order or direction of the Forum or Ombudsman, along with the total amount of compensation in each category.

Provided further that Distribution Licensee shall intimate the measures taken by Licensee to improve performance in the areas of his License;

- 14.2 The Commission may authorize its Officers or any independent agency(s) to conduct annual checks, in order to monitor the compliance of the standards of performance by the Distribution Licensee(s) and submit a report to the Commission.

15. Power to give direction

The Commission may, from time to time, issue directions and orders as considered appropriate for implementation of these Regulations.

16. Power to relax

The Commission may by general or special order, for reasons to be recorded in writing, may relax any of the provisions of these Regulations.

17. Power to Remove Difficulties.

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.

18. Power to Amend

The Commission may at any time, add to, vary, alter, modify or amend any provisions of these Regulations after following due process including affording an opportunity to the stakeholders / public.

19. Repeal and Saving

19.1 The "Haryana Electricity Regulatory Commission (Standards of Performance of Distribution Licensees) Regulations, 2004" issued vide Regulation No. HERC/04/2004 and notified on 16th July, 2004 including the amendments thereof issued subsequently are hereby repealed.

19.2 Notwithstanding the repeal anything done or any action taken or purported to have been done or taken under the repealed regulations, in so far as it is not inconsistent with the provisions of the Act or rules and regulations made there under, shall be deemed to have been taken under these Regulations.

By Order of the Commission

Secretary
Haryana Electricity Regulatory Commission

Schedule-I

Guaranteed Standards of Performance

Sr.No	Nature of Service	Standard (Including Time Limit for rendering Service)	Compensation Payable
1	Response time for the consumer call	Maximum 3 minutes	Rs. 50 in each case of default
2	Registration of consumer call and issue of complaint number	Within 5 minutes	Rs. 50 in each default
3	Normal fuse-off	Urban Area	Within 2 hrs. of receipt of complaint, complainant shall be informed about the likely time to be taken for restoration of supply if asked for by the complainant
		Rural Area	
4	Line Break Down	Urban Area	Within 8 hrs (12 hrs. if pole gets broken)
		Rural Area	
5	Underground Cable fault	Urban Area	Within 48 hrs after obtaining necessary clearances
		Rural Area	
6	Distribution Transformer Failure	Urban Area	Within 24 hrs
		Rural Area	
7	Major Power Failure involving Power Transformer/ Equipment etc.	Urban Area	Within 7 days Alternate arrangement to restore the supply to the affected area to be made within 24 hrs. wherever technical feasible.
		Rural Area	
8	Un-scheduled load Shedding	Not to exceed 4hrs on any day.	Rs. 100 per day or part thereof in case of delay to each affected consumer

9	Period of Scheduled outage	Maximum duration at a stretch	Not to exceed 8 hours on any day	Consumers to be informed through public notice at least 24 hours in advance	Rs. 100 per day or part thereof in case of delay to each affected consumer
		Restoration of Supply	By 6:00 PM in the evening.		
10	Meter Complaints	Inspect and check correctness	Within 7 days of receipt of request/complaint along with the requisite fee.	Rs. 100 per day or part thereof in case of delay.	
		Replace slow/ fast meters/ creeping or stuck meters	Within 7 days after its being so established on checking		
		Replace burnt meters	The burnt meter should be replace within 24 hours subject to maximum of 72 hours as per Supply Code Regulation 5.8	Rs. 100 per day or part thereof in case of delay.	
11	Application for new connection/ Additional load/ reduction in load	Inspection of applicants' premises	Within 7 days of receipt of application complete in all respect along with prescribed charges	Rs. 200 per day or part thereof in case of delay subject to Section 44 of the Act.	
		Issue of demand notice	No. of days from the date of inspection of premises. a) 7 days in case supply to be extended from existing network b) In case extension/ augmentation of existing network is required. i. within 7 days in case of LT supply; ii. within 14 days in case of 11 kV supply; iii. within 20 days in case of HT at 33 kV supply; iv. within 25 days in case of supply above 33 kV; c) 7 days in case of reduction of load.		

		<p>Release of Supply on compliance of demand notice and receipt of payment</p>	<p>No. of days after the compliance of demand notice.</p> <ul style="list-style-type: none"> i. within 23 days in case of LT supply; ii. within 57 days in case of 11 kV supply; iii. within 77 days in case of HT at 33 kV supply; iv. within 142days in case of supply above 33 kV; v. with in 7 days where no change in CT, PT or any other equipment is required. Provided in case the CTs/PTs/ Transformers etc. are to be replaced then time lines as in case of extension of load shall be applicable. 	
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12	Release of Temporary Connection	Inspection of applicants' premises	Within 7 days of receipt of application complete in all respect along with prescribed charges	Rs. 200 per day or part thereof in case of delay subject to Section 44 of the Act.
		Issue of demand notice	No. of days from the date of inspection of premises. a) 7 days in case supply to be extended from the existing network b) in case extension/ augmentation of existing network is required. i. within 7 days in case of LT supply; ii. within 14 days in case of 11 kV supply; iii. within 20 days in case of 33 kV supply; iv. within 25 days in case of supply above 33 kV; In case connection not feasible technically, applicant shall be informed within 7 days in case of LT and 15 days in case of HT, giving reasons for the same.	
		Release of Supply on compliance of demand notice and receipt of payment	No. of days after the compliance of demand notice. a) 5 days in case supply to be extended from the existing network b) in case extension/ augmentation of existing network is required. i. within 30 days in case of LT supply; iii. within 90 days in case of HT supply upto 33 kV; iv. within 180 days in case of HT supply above 33 kV;	

13	Change of Name	Approval and intimation of charges	Within 7 days of receipt of application complete in all respect along with prescribed charges	Rs. 100 per day or part thereof in case of delay.
		Effecting of change of name	Within two billing cycle after acceptance of application.	
14	Reclassification of consumer category/ change of tariff category	Inspection of applicants' premises	Within 7 days of receipt of application complete in all respect along with prescribed charges	Rs. 100 per day or part thereof in case of delay.
		Issue of demand notice	a) 7 days in case supply to be extended from existing network b) in case extension/ augmentation of existing network is required. i. within 7 days in case of LT supply; ii. within 14 days in case of 11 kV supply; iii. within 20 days in case of 33 kV supply; iv. within 30 days in case of supply above 33 kV;	
		Effecting of reclassification/change in category	From the date of inspection and after compliance of demand notice and issue of service connection order.	
15	Redressal of consumer's complaint regarding billing i.e. non receipt, wrong bill, etc.	In case requires no additional information	Within 24 hours of receipt of Complaint	Rs. 50 per hour or part thereof in case of delay.
		If additional information is required	Within 7 days of receipt of Complaint	Rs. 100 per day or part thereof in case of delay
16	Reconnection of Supply following disconnection due to nonpayment of bills (disconnection less than 6 months old)	Urban Area	Within 6 hours of receipt of payment from consumer	Rs. 100 per day or part thereof in case of delay.
		Rural Areas	Within 12 hours of receipt of payment from consumer	
17	Refund of Advance Consumption Deposit/ Consumption Security, meter Security on closure of account		Within 30 days of adjustment of all dues.	Rs. 100 per day or part thereof in addition to interest @18 % p.a. on the security.
18	Shifting of meter/ Service connection/	Inspection of applicants' premises	Within 7 days of receipt of application complete in all respect along with prescribed charges	Rs. 200 per day or part thereof in case of delay

	Lines/ Equipments	Issue of demand notice	No. of days from the date of inspection. a) 7 days in case supply to be extended from existing network b) in case extension/ augmentation of existing network is required. i. within 7 days in case of LT supply; ii. within 14 days in case of 11 kV supply; iii. within 20 days in case of 33 kV supply; iv. within 25 days in case of supply above 33 kV;	
Shifting of meter/ Service Connection		Within 7 days after receipt of necessary charges and clearances.		
Shifting of LT/ HT Lines		Within 20 days after receipt of necessary charges and clearances.		
Shifting of Transformer		Within 30 days after receipt of necessary charges and clearances.		
19	Issue of No Dues Certificates		Within 2 days from the date of application and clearance of outstanding dues, if any.	Rs. 100 per day or part thereof in case of delay
20	Compliance of Orders pronounced by CGRF and Electricity Ombudsman		Within the time frame defined in such order or the regulations specified by the Commission in this regard.	Rs. 100 per day or part thereof in case of delay

Note: - Maximum penalty shall be limited to Rs. 10,000.00/- in each case.

Schedule-II

General/Overall Standards of Performance

Sr.No	Nature of Service	Standard (Including Time Limit for rendering Service)		Overall Standards of performance of performance (%)
1	Response time for the consumer call	Maximum 3 minutes		99.0
2	Registration of consumer call and issue of complaint number	Within 5 minutes		99.0
3	Normal fuse-off	Urban Area	Within 4 hrs	99.0
		Rural Area	Within 16 hrs	
4	Line Break Down	Urban Area	Within 8 hrs (12 hrs. if pole gets broken)	95.0
		Rural Area	Within 16 hrs (48 hrs. if pole gets broken)	
5	Underground Cable fault	Urban Area	Within 48 hrs after obtaining necessary clearances	95.0
		Rural Area	Within 48 hrs after obtaining necessary clearances	
6	Distribution Transformer Failure	Urban Area	Within 24 hrs	95.0
		Rural Area	Within 48 hrs	
7	Major Power Failure involving Power Transformer/ Equipment etc.	Urban Area	Within 7 days Alternate arrangement to restore the supply to the affected area to be made within 24 hrs. wherever technical feasible.	95.0
		Rural Area		
8	Un-scheduled load Shedding	Not to exceed 4hrs on any day.		95.0

9	Period of Scheduled outage	Maximum duration at a stretch	Not to exceed 8 hours on any day	Consumer s to be informed through public notice at least 24 hours in advance	95.0
		Restoration of Supply	By 6:00 PM in the evening.		
10	Meter Complaints	Inspect and check correctness	Within 7 days of receipt of request/complaint along with the requisite fee.	95.0	
		Replace slow/ fast meters/ creeping or stuck meters	Within 7 days after its being so established on checking		
		Replace burnt meters	Within 72 hours of receipt of complaint. However, supply should be restored within 24 hrs as per the provisions of Electricity Supply Code.		
11	Application for new connection/ Additional load/ reduction in load	Inspection of applicants' premises	Within 7 days of receipt of application complete in all respect along with prescribed charges	98.0	
		Issue of demand notice	No. of days from the date of inspection of premises. a) 7 days in case supply to be extended from existing network b) In case extension/ augmentation of existing network is required. i. within 7 days in case of LT supply; ii. within 14 days in case of 11 kV supply; iii. within 20 days in case of HT at 33 kV supply; iv. within 25 days in case of supply above 33 kV;		
		Release of Supply on compliance of demand notice and receipt of payment	No. of days after the compliance of demand notice. i. within 23 days in case of LT supply; ii. within 57 days in case of 11 kV supply; iii. within 77 days in case of HT at 33 kV supply; iv. within 142days in case of supply above 33 kV;		
		Agriculture Pump Sets	As per Regulations		
12	Release of Temporary Connection	Inspection of applicants' premises	Within 7 days of receipt of application complete in all respect along with prescribed charges	98.0	

		Issue of demand notice	No. of days from the date of inspection of premises. a) 7 days in case supply to be extended from the existing network b) in case extension/ augmentation of existing network is required. i. within 7 days in case of LT supply; ii. within 14 days in case of 11 kV supply; iii. within 20 days in case of 33 kV supply; iv. within 25 days in case of supply above 33 kV; In case connection not feasible technically, applicant shall be informed within 7 days in case of LT and 15 days in case of HT, giving reasons for the same.	
		Release of Supply on compliance of demand notice and receipt of payment	No. of days after the compliance of demand notice. a) 5 days in case supply to be extended from the existing network b) in case extension/ augmentation of existing network is required. i. within 30 days in case of LT supply; iii. within 90 days in case of HT supply upto 33 kV; iv. within 180 days in case of HT supply above 33 kV;	
13	Change of Name	Intimation of charges	Within 7 days of receipt of application complete in all respect along with prescribed charges	98.0
		Effecting of change of name	Within two billing cycle after acceptance of application.	
14	Reclassification of consumer category/	Inspection of applicants' premises	Within 7 days of receipt of application complete in all respect along with prescribed charges	98.0

	change of tariff category	Issue of demand notice	a) 7 days in case supply to be extended from existing network b) in case extension/ augmentation of existing network is required. i. within 7 days in case of LT supply; ii. within 14 days in case of 11 kV supply; iii. within 20 days in case of 33 kV supply; iv. within 30 days in case of supply above 33 kV;	98.0
		Effecting of reclassification/change in category	From the date of inspection.	
15	Redressal of consumer's complaint regarding billing i.e. non-receipt, wrong bill, etc.	In case requires no additional information	Within 24 hours of receipt of Complaint	99.0
		If additional information is required	Within 7 days of receipt of Complaint	
16	Reconnection of Supply following disconnection due to nonpayment of bills (disconnection less than 6 months old)	Urban Area	Within 6 hours of receipt of payment from consumer	95.0
		Rural Areas	Within 12 hours of receipt of payment from consumer	
17	Refund of Advance Consumption Deposit/ Consumption Security, meter Security on closure of account		Within 30 days of adjustment of all dues.	99.0
18	Shifting of meter/ Service connection/ Lines/ Equipments	Inspection of applicants premises	Within 7 days of receipt of application complete in all respect along with prescribed charges	Rs. 200 per day or part there of delay
		Issue of demand notice	No. of days from the date of inspection. a) 7 days in case supply to be extended from existing network b) in case extension/ augmentation of existing network is required. i. within 7 days in case of LT supply; ii. within 14 days in case of 11 kV supply; iii. within 20 days in case of 33 kV supply; iv. within 25 days in case of supply above 33 kV;	
		Shifting of meter/ Service Connection	Within 7 days after receipt of necessary charges and clearances.	

		Shifting of LT/ HT Lines	Within 20 days after receipt of necessary charges and clearances.	
		Shifting of Transformer	Within 30 days after receipt of necessary charges and clearances.	
19	Issue of No Dues Certificates		Within 7 days from the date of application and clearance of outstanding dues, if any.	Rs. 100 per day or part thereof in case of delay
20	Compliance of Orders pronounced by CGRF and Electricity Ombudsman		Within the time frame defined in such order or the regulations specified by the Commission in this regard.	Rs. 100 per day or part thereof in case of delay
21	Distribution Transformer failure rate	Urban Areas	Shall not exceed 3 % p.a.	
		Rural Areas	Shall not exceed 6 % p.a.	
22	Faulty Meters (MNR, Burnt, Sticky, etc.)		Shall not exceed 1 % of metered installation	
23	Billing Mistakes		Shall not exceed 0.1% of consumers billed	
24	Reliability Indices	The reliability indices mentioned hereunder shall be computed For all 11 kV feeders and consumers as per Regulation 11 using the following indices: - (i) System Average Interruption Frequency Index (SAIFI); (ii) System Average Interruption Duration Index (SAIDI); and (iii) Reliability Indices (RI)		Limits shall be defined separately based on data submitted by the licensee.

Reporting formats for reporting the quarterly performance

Annexure-I

Format for reporting the performance levels for Guaranteed standards of performance on a quarterly basis to the Commission

Name of Distribution Licensee:

Period of report :

Sr.No.	Nature of Service		Pending Complaint from previous quarter (nos.)	Complaint during current quarter (nos.)	Total Complaint (nos.)	No. of Complaints addressed (nos.)			Pending complaint at the end of Quarter (nos.)	% age addressed within time
						Within SOP time	More than SOP time	Total Complaint addressed		
1	2		3	4	5=3+4	6	7	8=6+7	9=8-5	10= $\frac{6*100}{5}$
1	Response time for the consumer call									
2	Registration of consumer call and issue of complaint number									
3	Normal fuse-off	Urban Area								
		Rural Area								
4	Line Break Down	Urban Area								
		Rural Area								
5	Underground Cable fault	Urban Area								
		Rural Area								
6	Distribution Transformer Failure	Urban Area								
		Rural Area								
7	Major Power Failure involving Power Transformer/ Equipment etc.	Urban Area								
		Rural Area								
8	Un scheduled load Shedding									
9	Period of Scheduled outage	Maximum duration at a stretch								
		Restoration of Supply								
10	Meter Complaints	Inspect and check correctness								
		Replace slow/ fast / creeping or stuck meters								
		Replace burnt meters								
11	Application for new connection/ Additional load/ reduction in load	Inspection of applicants premises								
		Issue of demand notice								
		Release of Supply on compliance of demand notice and receipt of requisite charges.								
		Agriculture Pump Sets								

12	Release of Temporary Connection	Inspection of applicants premises								
		Issue of demand notice								
		Release of Supply on compliance of demand notice and receipt of payment								
13	Change of Name	Intimation of charges								
		Effecting of change of name								
14	Reclassification of consumer category/ change of tariff category	Inspection of applicants premises								
		Issue of demand notice								
		Effecting of reclassification/change in category								
15	Redressal of consumer's complaint regarding billing i.e. non receipt, wrong bill, etc.	In case requires no additional information								
		If additional information is required								
16	Reconnection of Supply following disconnection due to nonpayment of bills (disconnection less than 6 month old)	Urban Area								
		Rural Areas								
17	Refund of Advance Consumption Deposit/ Consumption Security and meter Security on closure of account									
18	Shifting of meter/ Service connection/ Lines/ Equipments	Inspection of applicants premises								
		Issue of demand notice								
		Shifting of meter/ Service Connection								
		Shifting of LT/ HT Lines								
		Shifting of Transformer								
19	Issue of No Dues Certificates									
20	Compliance of Orders pronounced by CGRF and Electricity Ombudsman									

Information regarding faulty meters

Format for quarterly return to be submitted to the Commission by the Distribution Licensee.

Name of Distribution Licensee:

Period of report :

Reference overall standard	No. of faulty meters at the start of the quarter	No. of faulty meters added during the quarter	Total no. of faulty meters	No. of meters rectified/replaced	No. of faulty meters pending at the end of the quarter

Annexure-III

Format regarding Compensation paid to the individual complaint

Name of Distribution Licensee:

Period of report :

Sr. No.	Complaint number	Date of filing of complaint	Consumer number	Name and address of complainant	Nature of complaint	Reference of SOP	Amount of compensation paid (in Rs.)	Date of payment of compensation (dd/mm/yyyy)

NOTE –

1. The report shall be prepared as per category of item for which the compensation is paid for non-adherence of Standards of Performance.
2. Separate report be furnished where claims of complainant have been rejected by the Licensee.

Format regarding damage of distribution transformers

Name of Distribution Licensee:

Period of report :

Reference overall standard	Population of distribution transformers at the start of the quarter	Population of distribution transformers at the end of the quarter	Average population of distribution transformers during the quarter	No. of distribution transformers damaged during the Quarter	Percentage of damaged transformer
1	2	3	4=avg. (2+3)	5	6=5*100/4

Format regarding Billing mistakes

Name of Distribution Licensee:

Period of report :

Reference overall standard	Total No. of bills issued during the quarter	Total No. of billing complaints/ mistakes received/ noticed during the quarter	Percentage of billing mistakes
1	2	3	$4=3*100/2$

Format regarding Reliability Indices (11 kV Feeders)

Name of Distribution Licensee:

Period of report:

Sl No.	Name of Villages	Type of Villages	No. of Feeders on last day of the Month	Total No. of Outages of feeders during the Month	Total Duration of Outages of Feeders during the Month (in Minutes)	Cumulative No. of Outages w.e.f 1st April till the last day of the month	Cumulative Duration of Outages w.e.f 1st April till the last day of the month (Minutes)	Monthly Average No. of Outages of Feeder (Col 5/ Col4)	Monthly Average Duration of Outages of Feeder (Minutes) (Col 6/ Col4)	Monthly Feeder Reliability Index*	Cumulative Avg. No. of Outages of Feeder (Col 7/ Col4)	Cumulative Avg. Duration of Outages of Feeder (Minutes) (Col 8/ Col4)	Cumulative Feeder Reliability /index**
1	2	3	4	5	6	7	8	9= (5)/ (4)	10=(6))/(4)	11	12= (7)/ (4)	13= (8)/ (4)	14

* Monthly Feeder Reliability Index = $\frac{\{Col.4 * Total\ minutes\ in\ the\ month\} - Col.6}{\{Col.4 * Total\ minutes\ in\ the\ month\}} * 100$

*Shall include all outages due to grid constraints, planned shutdowns, unplanned shutdown or forced shutdown including momentary interruptions

Should be highlighted

** Cumulative Feeder Reliability Index = $\frac{\{Col.4 * Total\ minutes\ in\ the\ cumulative\ period\} - Col.8}{\{Col.4 * Total\ minutes\ in\ the\ cumulative\ period\}} * 100$

$\{Col.4 * Total\ minutes\ in\ the\ cumulative\ period\}$

Note-Type of Villages

RV→ Remote Villages, MV→ Main Villages,

Periodicity- Monthly

Annexure-VII

Format regarding Reliability Indices (Consumer)

Name of Distribution Licensee:

Period of report:

Sl. No.	Name of City/Towns	Type of City/Town	No. of Consumers on last day of the Month	Total No. of Consumers Interruption during the Month	Total Duration of Consumer Interruption during the Month (in Minutes)	Cumulative No. of Consumers Interruption w.e.f 1st April till the last day of the month	Cumulative Duration of Outages w.e.f 1st April till the last day of the month (Minutes)	Monthly Average No. of Consumer Interruption (Col 5/ Col4)	Monthly Average Duration of Consumer Interruption (Minutes) (Col 6/ Col 4)	Monthly Consumer Reliability Index*	Cumulative Avg. No. of Consumer Interruption (Col 7/ Col 4)	Cumulative Avg. Duration of Consumer Interruption (Minutes) (Col 8/ Col 4)	Cumulative Consumer Reliability /index*
1	2	3	4	5	6	7	8	9=(5)/(4)	10=(6)/(4)	11	12=(7)/(4)	13=(8)/(4)	14

* Monthly Feeder Reliability Index = $\frac{\{Col.4 * Total\ minutes\ in\ the\ month\} - Col.6}{Col.4 * Total\ minutes\ in\ the\ month} * 100$

** Cumulative Feeder Reliability Index = $\frac{\{Col.4 * Total\ minutes\ in\ the\ cumulative\ period\} - Col.8}{Col.4 * Total\ minutes\ in\ the\ cumulative\ period} * 100$

Note-Type of Town

SC→ State Capital

MT→ Town with more than 8 lakh population

DH→ District Headquarter

OT→ Other Town

*Shall include all outages due to grid constraints, planned shutdowns, unplanned shutdown or forced shutdown including momentary interruptions should be highlighted