# Bhopal Dated: 12<sup>th</sup> November, 2012

No. 3148/ MPERC/2012 - In exercise of the powers conferred by Sections 181 (1) and 181 (2) (za & zb) read with section 57, 59 and 86 (1) (i) of the Electricity Act, 2003 (36 of 2003), the Madhya Pradesh Electricity Regulatory Commission hereby revises the Madhya Pradesh Electricity Regulatory Commission (Distribution Performance Standards) (Revision-I) Regulations, 2005 notified on 28.10.2005:

# MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION (DISTRIBUTION PERFORMANCE STANDARDS) (REVISION-II) REGULATIONS, 2012 (No. RG-8 (II) of 2012)

## **CHAPTER I**

## **PRELIMINARY**

- 1. Short title and Commencement: 1.1 These Regulations may be called "Madhya Pradesh Electricity Regulatory Commission (Distribution Performance Standards) (Revision-II) Regulations, 2012 [No. RG-8(II) of 2012]".
- 1.2 These Regulations shall be applicable to all Licensees engaged in distribution of electricity in the State of Madhya Pradesh.
- 1.3 These Regulations extend to whole of the State of Madhya Pradesh.
- 1.4 They shall come into force on the date of their publication in the Madhya Pradesh Gazette.

## **CHAPTER II**

## **DEFINITIONS AND OBJECTIVES**

## 2. **DEFINITIONS**

- 2.1 In these standards, unless the context otherwise requires:
  - (a) "Act" means the Electricity Act 2003 (Central Act No. 36 of 2003);
  - (b) "Applicant" means a person, company, firm or establishment who makes an application for supply of electricity, increase or reduction in contract demand / sanctioned load, change of name, disconnection or restoration of supply or termination of agreement, as the case may be, in accordance with the provisions of the Act and the Rules and Regulations made thereunder;
  - (c) "Authorised Representative" refers to all officers, staff or representatives of the Distribution Licensee, discharging functions under the general or specific authority of the Distribution Licensee;
  - (d) "Area of supply" means the area within which a Licensee is authorized by his License to supply electricity;

- (e) "Audit Report" means the report to be submitted for each financial year by the Distribution Licensee to the Commission containing details and confirming to methodology specified in the Regulations.
- (f) "Commission" means Madhya Pradesh Electricity Regulatory Commission;
- (g) "Consumer" means any person who is supplied with electricity for his own use by a Licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a Licensee, the Government or such other person, as the case may be;
- (h) "Distribution Licensee" means a Licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;
- (i) "Distribution System" means the system of wires and associated facilities between the delivery points on the transmission lines or the generating station connection and the point of connection to the installation of the consumers;
- (j) "EHV/EHT" means Extra High Voltage/Extra High Tension (voltage level above 33,000 volts);
- (k) "Electricity Supply Code", means the Madhya Pradesh Electricity Supply Code, 2004 as amended from time to time;
- (l) "Forum" means 'Forum for Redressal of Grievances of consumers', constituted by each Licensee in terms of Sub-section (5) of Section 42 of the Act;
- (m) "Fuse-off call" refers to a complaint on account of reasons mentioned in these Regulations with regard to an individual consumer and involving restoration of supply as per directions given in these Regulations;
- (n) "Grievance" means a complaint filed by the affected person.
- (o) "Grievance Redressal Regulation" means 'MPERC (Establishment of Forum and Electricity Ombudsman for redressal of grievances of the consumers) (Revision-I) Regulations, 2009' as amended from time to time;
- (p) "Grid Code" means the set of principles and guidelines prepared in accordance with the terms of Section 86 (1) (h) of the Act;
- (q) "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 standard as may be specified in accordance with clause (c) of Subsection (2) of Section 185 of the Act.

- (r) "HV/HT" means High Voltage/High Tension (voltage level above 650 volts but does not exceed 33,000 volts);
- (s) "IEGC" means the Indian Electricity Grid Code approved by Central Electricity Regulatory Commission (CERC) and shall include any Grid Code specified by Central Commission under Clause (h) of Subsection (1) of Section 79 of the Act;
- (t) "Intra State Transmission System" means any system for transmission of electricity other than an inter-State transmission system;
- (u) "Licensee" means a person who has been granted a License by the Commission under the Act and includes a deemed Licensee;
- (v) "LT" means Low Tension (voltage does not exceed 650 volts under normal condition);
- (w) "MP Act" means The Madhya Pradesh Vidyut Sudhar Adhiniyam, 2000 (No 4 of 2001);
- (x) "Rural areas" means those areas notified by Government of Madhya Pradesh;
- (y) "SLDC" means the centre established under Sub-section (1) of Section 31 of the Act and includes State Load Despatch Centre already functioning in the State having its control room at Jabalpur, an apex body to ensure integrated operations of the power system in the state;
- (z) "State Transmission Utility" means the Government Company specified as such by the State Government under Sub-section (1) of Section 39 of the Act;
- (aa) "Towns and cities" means areas other than Rural Areas; and
- (bb) "User" means a person, including generating companies, Distribution Licensee and open access Consumers in the State of Madhya Pradesh who uses the State Transmission System and who must comply with the provisions of the Grid Code.
- 2.1.1 Words and expressions used but not defined herein shall have meaning assigned to them in Electricity Act 2003, Indian Electricity Grid Code, Madhya Pradesh Electricity Grid Code and CEA (Measures relating to safety and electricity supply) Regulations, 2010.

## 2.2 OBJECTIVE

These standards lay down the guidelines to maintain certain critical distribution system parameters within the permissible limits. These standards shall serve as guidelines for Distribution Licensee to operate their Distribution System for providing an efficient, reliable, coordinated and economical system of electricity distribution and retail supply. The objectives of these performance standards are:

- (a) To ensure that the Distribution System performance meets a minimum standard which is essential for the Users' installation to function properly.
- (b) To enable the Users to design their systems and equipment to suit the electrical environment that they operate in.
- (c) To enhance the quality of standards of the Distribution System and services to meet acceptable standards in the short term and gradually moving towards improved standards in the long term.

#### CHAPTER III

## SUBMISSION OF INFORMATION

- 3. Information with respect to level of Performance:
- 3.1 For Guaranteed Standards, each Licensee shall furnish to the Commission, in a quarterly report and in a consolidated annual report, the following information:

The levels of performance achieved by the Licensees with reference to those specified in these Regulations on the following points;

- (i) Number of instances in the quarter when the particular event has occurred.
- (ii) Number of cases in which achievement is within specified limits.
- (iii) Number of cases in which achievement is not within specified limits.
- (iv) Number of consumers who were affected due to failure in meeting the standards.
- (v) Number of cases in which compensation was made and the aggregate amount of the compensation.
- (vi) Measures taken by the Licensee to improve performance in the areas covered by Guaranteed Standards and Licensee's assessment of the targets to be imposed for the ensuing year.
- For Overall Standards, each Licensee shall furnish to the Commission, in a report for every quarter and in a consolidated annual report, the following information:

- (a) The level of performance achieved with reference to those specified in Chapter IX of these Regulations; and,
- (b) The measures taken by the Licensee to improve performance in the areas covered by Overall Standards and Licensee's assessment of the targets to be imposed for the ensuing year.
- 3.3 The last date of submission of each report shall be 30 days from the end of the reporting quarter. The Commission may impose penalty for non-submission of reports by the Licensee.
- 3.4 All information that is submitted to the Commission shall also be submitted by each Licensee to the Electricity Ombudsman appointed or designated by the Commission.

## CHAPTER IV

## **SAFETY**

- 4.1 The construction, operation and maintenance of the distribution lines shall be carried out strictly in accordance with the CEA (Measures relating to safety and electricity supply) Regulations, 2010.
- 4.2 Distribution Licensee may disconnect supply to such consumer, in the event of any consumer's non-compliance which persists even after due notice, of any specific condition or direction if such non-compliance can reasonably be expected to affect system operations and safety. In cases of emergency, disconnection may be affected immediately in the interest of system operations and safety. The connection should be immediately restored as soon as the originating causes leading to the disconnection are removed or rectified.

#### CHAPTER V

## STANDARDS OF PERFORMANCE

- 5.1 The standards specified in Appendix-A shall be the guaranteed standards of performance, which are the minimum standards of service that a Distribution Licensee shall achieve.
- 5.2 The failure of Licensee to achieve the guaranteed standards of service shall entail payment of compensation to the consumer as per Appendix-A.
- 5.3 The standards specified in Chapter IX shall be overall standards of performance which shall seek to achieve in the discharge of its obligation.

## CHAPTER VI

## **QUALITY OF SUPPLY**

## 6.1. Voltage Variations

- (a) The Licensee shall maintain the voltages at the point of commencement of supply to a consumer within the limits stipulated hereunder, with reference to declared voltage:
  - (i) In the case of Low Voltage, +6% and -6%;
  - (ii) In the case of High Voltage, +6% and -9%; and,
  - (iii) In the case of Extra High Voltage, +10% and -12.5%. (In case of 400kV the allowed voltage variation is +5% and -5%)

The above standards are applicable subject to voltage availability at transmission-distribution interfaces are within specified limits.

(b) On receipt of a voltage variation complaint, the Licensee shall verify if the voltage is varying outside the limits specified in sub-clause (i) above and if confirmed, the Licensee shall resolve the complaint within 10 days in case no expansion / enhancement of network is involved and within 180 days or such longer period as the Commission may approve on request of the Licensee in such cases where upgradation of network is involved.

#### 6.2. Harmonics

- 6.2.1. Licensee shall monitor harmonics at regular interval at strategic points in respect of HT consumers, which it considers prone to harmonic voltage generation and ask the user to comply with the specified standards.
- 6.2.2. The harmonic currents drawn by various consumers shall be measured and its records shall be maintained. The following is a non-exhaustive list of harmonic generating equipment:
  - a) Salient pole synchronous generating units
  - b) Transformers operated with core saturation
  - c) Rolling mills
  - d) Induction furnaces
  - e) Welding equipment
  - f) Static power loads incl. computers & television sets
  - g) Inverters/Power Rectifiers
  - h) Railway Traction Loads
- 6.2.3. The Distribution Licensee shall follow the Voltage and Current Harmonics Distortion Limit as specified by the Authority in the Grid Connectivity Standards applicable to the Distribution Systems.

## CHAPTER VII

## RELIABILITY OF SYSTEM

- 7.1 The Distribution Licensee shall provide the following monthly information in respect of all 11 KV feeders in each Commissionary Headquarter, District Headquarter and Industrial Growth Centre within 15 days from the end of each reporting month:
  - (i) Total number of 11KV feeders feeding complete geographical area of Headquarter.
  - (ii) Total number of 11KV feeders affected.
  - (iii) Sum of Outage duration of all feeders (in Hours).
  - (iv) Outage duration per feeder in hours and minutes
  - (v) No. of outages per feeder.
  - (vi) Total No. of trippings (interruption less than 5 minutes).
  - (vii) Total No. of trippings (interruption less than 5 minutes) per feeeder.
  - (viii) Feeder Reliability Index of area under report.

## Feeder Reliability Index (%) =

## (Total No. of 11 KV feeders\*Total hours in the month) – (Sum of outage duration of all feeders in hours)\* 100 (Total No. of 11 KV feeders \* Total hours in the month)

- 7.2 The outages should include all outages due to breakdowns, grid constraints, planned—shutdowns—and—unplanned—or—forced—shutdowns.—For—such—places—where—feeders—supplying to urban and rural areas are emanating from common or different 33/11KV Sub-stations, the Licensee shall compute the value of indices for cluster of feeders serving urban areas and rural areas separately.
- 7.3 The Commission has initially fixed the following levels of Supply Interruption Parameters:

## **Level of Supply Interruption Parameters**

Particulars	Commissionary	District	Industrial Growth
	Headquarters	Headquarters	Centers
No. of outages per feeder per month.	5*	25*	5*
Outage duration per feeder per month in hours and minutes	300 minutes/	900 minutes/	300 minutes/
	5 hours*	15 hours*	5 hours*
Reliability Index in %	99.5%	98%	99.5%

<sup>\*</sup> Prior approval of Commission shall not be required for duration of interruptions up to this limit and the Licensee must obtain approval beyond this limit within 15 days from the end of the relevant month.

#### CHAPTER VIII

## COMPENSATION IN CASE OF UNDER PERFORMANCE

8.1 If a Licensee fails to meet the standards specified in this Regulation, without prejudice to any penalty, which may be imposed, he shall be liable to pay such compensation to the affected consumer through a rebate in the bill. This rebate shall be admissible at a rate determined by the Commission in Appendix-A to such consumers who have regularly paid their bills in the preceeding six months:

Provided the actual compensation may be decided by the Commission considering the following factors:

- (a) hardship caused to the consumer; and
- (b) average monthly bill of the consumer.
- 8.2 Consumer will be required to make such a claim within 30 days of violation of the guaranteed standards.
- 8.3 In case of events affecting more than one consumer, the provisions for payment of compensation specified in Appendix-A of these Regulations shall be applicable to all concerned consumers when the data on consumer indexing is available.
- 8.4 The Licensee shall not be liable to pay compensation if it gets delayed in providing due services to the consumer due to non-accessibility of the premises and the Licensee proves that it had served due notice, to the consumer, as per the procedure provided in the MP Electricity Supply Code, 2004.
- 8.5 The compensation paid by the Licensee under Regulation 8.1 for the respective parameter, may be allowed to be recovered partly or fully in the revenue requirement of Licensee, keeping in view the extent to which the Licensee is able to achieve the overall standards of performance, as measured through Audit Report as contained in following Regulations.

## **Contents of Audit Report**

- 8.6 The Audit Report shall address the following specific matters:
  - (a) Adherence to procedures and formats as per Regulations;
  - (b) Assessing staff engaged in call centres/complaints handling centres/customer care centres for their understanding of complaint handling procedures, quality parameters, and training adequacy for their tasks;
  - (c) Method of data collection and management procedures; and
  - (d) Review of relevant records (as per appropriate sampling procedures) for reliability and accuracy across quality parameters.

- 8.7 The Commission may authorize the Commission staff or any independent agency (ies) to conduct annual checks, in order to monitor the compliance of the standards by Licensees and submit audit report to the Commission.
- 8.8 The following procedure shall be adopted for engaging agency(ies):
  - (a) audit scope and the methodology for carrying out the audit to be set by Commission;
  - (b) the Commission will identify and publish panel of approved agency(ies);
  - (c) Licensee shall nominate an agency from the notified panel of agencies;
  - (d) Licensees shall not engage an agency consecutively for more than two years. They shall also not engage an agency which is currently their statutory auditor or internal auditor or has been engaged as a consultant;
  - (e) audit shall be conducted under an agreement between the nominated agency and Licensee; and
  - (f) remuneration of the audit agency will be paid by the Licensees.

## Auditing methodology

- 8.9 Grading of the audit report on performance standards submitted by the Licensee shall be done in two parts reliability and accuracy of the data.
- 8.10 The grading system for reporting the reliability of the performance standards shall be set as under:

Reliability Grade	Assessment of reliability grade	
A	Based on proper records with adequate procedures	
В	Data has significant procedural deviations	
С	Unsatisfactory data	

8.11 Only if the reliability is of the Grade A, further analysis will be carried out to measure claims on achievement.

## Accuracy grading

- 8.12 If the data submitted has reliability of Grade A, then further analysis of data will be carried out to assess accuracy of information provided.
- 8.13 Based on the accuracy grade assessment of the information provided on the achievement on Overall Standards, certain percentage of compensation paid may be allowed in the ARR of Licensee by the Commission, set as under:

Accuracy Grade	Assessed accuracy level	Percentage of compensation paid to be recovered through Aggregate Revenue Requirement
1	+/-2%	100%
2	+/-5%	85%
3	+/-10%	70%

#### Technical Standards:

8.14 The Licensee shall draw a scheme for ensuring voltage reliability in a phased manner in his area of operation selected by him. This scheme shall be submitted and got approved by the Commission within six months. The Commission may consider a voltage reliability charge from the consumers. The compensation on account of voltage variations and Harmonics shall be applicable after a year from the date of notification of these Regulations. Thereafter, the Commission may consider relating the compensation to the damage suffered by the consumer's equipment on the basis of verification by the third party.

## **CHAPTER IX**

## OVERALL STANDARDS OF PERFORMANCE

- 9.1 Normal Fuse-off Calls: The Licensee shall ensure rectification of fuse-off calls rectified within the time limits specified in these Regulations. The Licensee shall achieve this standard of performance in at least 95% of the cases.
- 9.2 **Line Breakdowns:** In case of line breakdowns, the Licensee shall ensure restoration of power supply within the time period as specified in these Regulations. The Licensee shall achieve this standard of performance in at least 95% of the cases.
- 9.3 **Response to Consumer query:** The response to any query by the consumer about status of his dues or supply interruption should be made by the utility within five days time from the date of the query. The letter should be responded cogently by the Licensee. The Licensee shall achieve this standard of performance in at least 99% of the cases.
- 9.4 **Distribution Transformer Failures:** The Licensee shall maintain the percentage of distribution transformers replaced within the time period as specified in Appendix A.
- 9.5 **Period of Scheduled Outages:** Interruption in power supply due to scheduled outages have to be published in advance and shall not exceed such number of hours in a day as specified in Appendix A and the Licensee has to ensure that the supply is restored by such time as specified in the same schedule.
- 9.6 **Street light faults:** The Licensee shall as soon as possible, attend to complaints relating to non working of street lights or not operating properly, to the extent the matter lies within the purview of the Licensee.

- 9.7 **Billing mistakes:** At least 99% of the cases related to billing mistakes should be resolved within time limits.
- 9.8 **Faulty meters:** At least 99.5% cases in urban areas and 98% cases in rural areas should be resolved within time limits.
- 9.9 Time taken for releasing New connections/Temporary supply/Additional load: All cases (100%) related to time taken in releasing new connection, temporary supply and additional load on application by the applicant/consumer should be resolved within time limits.
- 9.10 **Transfer of ownership and conversion of service:** At least 98% of the cases related to transfer of ownership and conversion of service should be resolved within time limits.

## CHAPTER X

## INCLUSIONS AND EXCLUSIONS OF EVENTS

- 10.1 A power interruption shall include any outage in the distribution system, extending from the distribution substation to the consumer meter, which may be due to the tripping action of protective devises during faults or the failure of distribution lines and/or transformers, and which results in the loss of power supply to one or more consumers.
- 10.2 The application of the standard of performance specified in these Regulations shall remain suspended in case of the following events:
  - (a) force majeure events such as war, mutiny, civil commotion, riots, flood, cyclone, lightning, earthquake or other force and strike, lockout, fire affecting Licensee's installations and activities;
  - (b) outages due to generation failure or transmission network failure;
  - 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; and
  - (d) outages due to other events that the Commission shall approve after due notice and hearing.
- 10.3 All Force Majeure conditions should be reported to the Commission within 30 days from the date on which such condition first occurred.

## CHAPTER XI

## MISCELLANEOUS

#### Power to Amend

- The Commission may at any time, add, vary, alter, modify or amend any provisions of these Regulations.
- In the event of any dispute, the matter shall be referred to the Commission whose decision in this regard shall be final.

#### **Power to Remove Difficulties**

- 11.3 The Commission may suo moto or on an application from any person review these Regulations and pass appropriate orders to remove any difficulty in implementing the provisions of these Regulations.
- 11.4 The Commission may by a general or special order issued for the purpose and after hearing the Licensee and the affected consumer group release the Licensee from the liability to compensate the consumers for any default in the performance of any standard if the Commission is satisfied that such default is for reasons other than those attributable to the Licensee and further that the Licensee has otherwise made efforts to fulfil his obligations.
- Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary to meet the ends of justice or to prevent abuses of the process of the Commission.
- 11.6 Nothing in these Regulations shall bar the Commission from adopting in conformity with the provisions of the Electricity Act, 2003 (36 of 2003) a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing deems it necessary or expedient for dealing with such a matter or class of matters.
- 11.7 Nothing in these Regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Electricity Act, 2003 (36 of 2003) for which no Regulations have been framed, and the Commission may deal with such matters, power and functions in a manner it thinks fit.

## Repeal and Saving

The Madhya Pradesh Electricity Regulatory Commission (Distribution Performance Standards) (Revision-I) Regulations, 2005 published vide notification No. 2320 MPERC-2005 dated 26.09.2005 and notified in the M.P. Gazette dated 28.10.2005 and read with all amendments thereto, as applicable to the subject matter of this Regulation are hereby superceded.

By order of the Commission, P. K. CHATURVEDI, Commission Secretary.

# APPENDIX A

GUARANTEED STANDARDS OF PERFORMANCE AND LEVEL OF COMPENSATION PAYABLE TO CONSUMERS FOR DEFAULT IN EACH CASE

Service area	Guaranteed Standards	Compensation payable to affected consumer	
(i). Responding to Norma	al Fuse-off Call and Rectification	is	
Cities and towns	Within 4 hours in all working days and Within 5 hours in all non working days.	Rs. 100 for each day (or part thereof) of delay in rectification of complaint.	
Rural areas	Within 24 hours		
(ii). Restoration of breaking/uprooting of po	* * *	ne Breakdowns (not including	
Cities and towns	Within 12 daylight hours	Rs. 100 for each day (or part	
Rural areas	Within 3 days	thereof) of delay in restoration of supply.	
(iii). Distribution Tran	sformer failure		
Replacement of transformer or restoration of supply in Commissionary head quarters	Within 12 hours	Rs. 100 each to all consumers served through the particular	
Replacement of transformer or restoration of supply in urban areas other than Commissionary head quarters	Within 24 hours	transformer.	
Replacement of transformer or restoration of supply in rural areas	Within 72 hours during dry weather and within seven days during monsoon season (July to September)		
(iv). Period of scheduled	outages (not exceeding four time	es a year).	
Maximum duration in a single stretch	Not to exceed 12 hours	Rs. 100 for each day (or part thereof) of delay.	
(v). Meter Complaints			
Inspect and check correctness	Within 7 days	Rs. 100 per week (or part thereof) of delay.	
Replace slow, creeping or stuck up meters	Within 30 days in case of rural areas and within 15 days in case of urban areas		
Replace burnt meters if	Within 7 days of receipt of		

cause not attributable to	complaint		
Replace burnt meters in all other cases	Within 7 days of payment of charges by consumer		
(vi). Application for n contract demand	ew connection/enhancement o	f contract demand/reduction in	
Deviation from target in case of LT	As notified under Electricity Supply Code	Rs. 100 per day (or part thereof) of delay.	
Deviation from target in case of HT and EHT	As notified under Electricity Supply Code	Rs. 200 per day (or part thereof) of delay.	
(vii). Conversion of servi	ce		
Change of category	Within 10 days after completion of formalities	Rs. 100 per day (or part thereof) of delay.	
Conversion from LT 1- ph to LT 3-ph and vice- versa	Within 30 days from the date of payment of charges and submission of test report and within 90 days if extension of line is required.		
(viii). Resolution of comp	laints on consumer's bills		
If no additional information is required	Same day of its receipt (except for HT consumers)	Rs. 100 per day (or part thereof) of delay.	
If no additional information is required to be collected	Within 5 days in case of Urban areas and 10 days in case of Rural areas after receipt of complaint.		
(ix). Reconnection of sup	ply following disconnection	,	
Towns and cities	Within 4 hours of receipt of due payment from consumer	Rs. 100 per day (or part thereof) of delay.	
Rural areas	Within 48 hours of receipt of due payment from consumer		
(x). Release of Temporar	y connections		
LT, HT and EHT consumers	As notified under Electricity Supply Code	Rs. 100 per day (or part thereof) of delay.	