# DEPARTMENT OF TRADITIONAL AND LOCAL GOVERNMENT AFFAIRS PROVINCIAL GOVERNMENT NOTICE

No, 2016									
I, under powers vested in me by section 14(2) of the Local Government: Municipal Systems Act, 2000 (Act No, 32 OF 2000), and after having consulted the Minister of the Provincial and Local Government Affairs and Organised Local Government in the Province, hereby make the standard By-Laws contained in the Schedule hereto.									
Signed at	on this	day of	Twenty Fifteen.						
N Dube									
Member of the Exelocal government.	ecutive Council of th	e Province of the K	waZulu – Natal responsible for the						

#### **ELECTRICITY SUPPLY BY-LAWS**

Be it enacted by the Council of the Mandeni Municipality, in terms of the Section 156 of the Republic of South Africa Act No. 108 OF 1996 and approval of the Member of the Executive Council responsible for the Local Government in terms of ......, in the Province of Kwa-Zulu Natal, read with section 11 of the Local Government: Municipal System Act 32 2000, as follows:

#### **TABLE OF CONTENTS**

**CHAPTER 1: GENERAL** 

- 1. Definitions
- 2. Other terms
- 3. Headings and titles

#### **CHAPTER 2: GENERAL CONDITIONS OF SUPPLY**

- 4. Supply by agreement
- 5. Serving of notice
- 6. Compliance with notices
- 7. Application for supply
- 8. Processing of requests for supply
- 9. Arbitration
- 10. Wayleaves and servitudes
- 11. Right of access to property
- 12. Refusal or failure to give information
- 13. Refusal of admittance
- 14. Improper use
- 15. Electricity tariffs and fees
- 16. General charges
- 17. Deposits
- 18. Payment of charges

- 19. Interest on overdue accounts
- 20. Resale of electricity
- 21. Right to disconnect supply
- 22. Non-liability of the service authority and the Municipality
- 23. Electricity wasted or lost
- 24. Failure of supply
- 25. Seals and locks of the Municipality
- 26. Tampering with service connection or supply mains
- 27. Protection of electricity distribution system
- 28. Prevention of tampering with service connection or supply mains
- 29. Unauthorised connections
- 30. Unauthorised reconnections
- 31. Disconnection (temporary and permanent) and reconnection
- 32. Planned maintenance and disconnection of supply
- 33. Temporary supply
- 34. Temporary work
- 35. Load reduction
- 36. MV and LV switchgear and equipment
- 37. Transformer substation accommodation
- 38. Supply feeder diagram specification
- 39. Standby supply
- 40. Consumer's emergency standby supply equipment
- 41. Installation circulars

## **CHAPTER 3: RESPONSIBILITIES OF CONSUMERS**

- 42. Consumer to erect and maintain electrical installation
- 43. Fault in electrical installation
- 44. Discontinuance of use of supply
- 45. Change of consumer

# 46. Service apparatus

# **CHAPTER 4: SPECIFIC CONDITIONS OF SUPPLY**

- 47. Service connection
- 48. Metering accommodation

#### **CHAPTER 5: SYSTEMS OF SUPPLY**

- 49. Quality of supply
- 50. Load limitations
- 51. Interference with other consumers
- 52. Supplies to motors
- 53. Power factor
- 54. Protection

# **CHAPTER 6: MEASUREMENT OF ELECTRICITY**

- 55. Metering
- 56. Accuracy of metering
- 57. Reading of conventional meters
- 58. Prepayment metering
- 59. Calculation of estimated account

## **CHAPTER 7: ELECTRICAL CONTRACTORS**

60. Requirements additional to the requirements of the regulations

# **CHAPTER 8: LEGAL MATTERS**

- 61. Domicilium
- 62. Penalties
- 63. Applicability

#### CHAPTER 1

#### **GENERAL**

#### 1. Definitions

In these By-laws, unless inconsistent with the context -

- "Accredited person" means a person registered in terms of the regulations as an electrical tester for single phase, an installation electrician or a master installation electrician, as the case may be;
- "Approved" means approved in writing by the engineer;
- "Authorised maximum demand" or "AMD" means the allocated (authorised) maximum demand allowed for any particular stand or premises determined by the engineer on the basis of the size of the particular stand and its particular use zoning;
- "Availability charge", as prescribed in the schedule of charges and fees, means a charge levied on the owner of a stand which in the opinion of the Municipality can be connected to the Municipality's supply mains but has not yet been connected;
- "Certificate of compliance" means a certificate issued by an accredited person in terms of the regulations in respect of an electrical installation or part of an electrical installation;
- "Consumer" means the occupier of any premises to which the Municipality has agreed to supply or is actually supplying electricity, or, if there is no occupier, the person who has entered into a current valid agreement with the Municipality for the supply of electricity to the premises, or, if such a person does not exist or cannot be traced or has absconded or for whatever reason is not able to pay, the owner of the premises;
- "Conventional meter" means a meter in respect of which an account is issued subsequent to the consumption of electricity;
- "Duly authorised official" means an official of the Municipality who has been authorised in writing by the Municipal Manager of the Municipality or his or her delegate and who carries at all relevant times while executing official duties an identification card on his or her person issued by the Municipality, which card reflects his or her designation;
- "Electrical contractor" means an electrical contractor as defined in the regulations;
- "Electrical installation" means an electrical installation as defined in the regulations;
- "Engineer" means the official in charge of the electricity undertaking of the Municipality or any other person duly authorised to perform this duty on the engineer's behalf;
- **"Exercise"**, in relation to the rights of the owner of a property, means to exercise the rights to the capacity of the electricity supply that has been allocated to the property
  - (a) When building approval is applied for;
  - (b) When an application for a connection is made; and

- (c) When ownership of the property is being transferred;
- "High voltage" or "HV" means the set of nominal voltage levels which is used in power systems for the bulk transmission of electricity in the range of 44 kV<Un=220 Kv in accordance with SANS 1019;
- "low voltage" or "LV" means the set of nominal voltage levels which is used for the distribution of electricity and the upper limit of which is generally accepted to be an ac voltage of 1 000 V (or a dc voltage of 1500 V) in accordance with SANS 1019;
- "Medium voltage" or "MV" means the set of nominal voltage levels which lies above low voltage and below high voltage in the range of 1 kV<Un=44 kV in accordance with SANS 1019;
- "Motor rating" means the maximum continuous kW output of a motor as stated on the maker's rating plate;
- "Motor starting current", in relation to alternating current motors, means the root mean square value of the symmetrical current taken by a motor when energised at its rated voltage with its starter in the starting position and the rotor locked;
- "Municipality" means the Mandeni Local Municipality, which may, for the purposes of these By-laws, also be the service authority;
- "NER" means the National Electricity Regulator contemplated in the Electricity Act, 1987 (Act 41 of 1987);
- "NRS 047" means the national rationalised specification NRS 047-1:1999 Electricity supply Quality of service Part 1: Minimum standards, as amended from time to time;
- "NRS 048" means the national rationalised specifications NRS 048-1:1996 Electricity supply Quality of supply Part 1, NRS 048-2:1996 Electricity supply Quality of supply Part 2, NRS 048-3:1998 Electricity supply Quality of supply Part 3, NRS 048-4:1999 Electricity supply Quality of supply Part 4, NRS 048-5:1998 Electricity supply Quality of supply Part 5, as amended from time to time;
- "NRS 057" means the national rationalised specification NRS 057-2:2000 Electricity metering Part 2: Minimum requirements, as amended from time to time;
- "Occupier", in relation to any premises, means -
  - (a) The person who actually occupies the premises;
  - (b) The person who is legally entitled to occupy the premises;
  - (c) In the case of the premises being subdivided and let to lodgers or tenants, the person who receives the rent payable by the lodgers or tenants, whether on his or her own account or as an agent for another person entitled to or interested in the rent; or

(d) The person in charge of the premises or responsible for managing the premises, and includes the agent of the person when he or she is absent from the Republic of South Africa or when his or her whereabouts are unknown;

"Owner", in relation to immovable property, means the person registered in the office of the Registrar of Deeds as the owner of the property and includes -

- (a) In the case of leased immovable property -
- (i) The lessee in whose name the lease is registered in the office of the Registrar of Deeds;
- (ii) The lessee if the immovable property is leased for a period of not less than ten years, whether or not the lease is registered in the office of the Registrar of Deeds; or
- (iii) The occupier if the immovable property is beneficially occupied under a servitude or right analogous to a servitude;
- (b) In the case of -
- (i) A deceased owner or an insolvent owner who has assigned his or her estate for the benefit of his or her creditors, has been placed under curatorship by order of court or is a company being wound up or under judicial management, the person in whom the administration of the property is vested as executor, administrator, trustee, assignee, curator, liquidator or judicial manager, as the case may be; or
- (ii) An owner who is absent from the Republic of South Africa or whose address is unknown to the Municipality, the person who as agent or otherwise receives or is entitled to receive the rent in respect of the property; and
- (c) If the Municipality is unable to determine who the owner is, the person who is the beneficial user of the property, which person is deemed to be the owner to the exclusion of the person in whom is vested the legal title to the property;
- "Person" includes, but is not limited to, a consumer, occupier or owner, as the case may be, who receives the beneficial use of the electricity supply to a specific premises;
- "Point of metering" means the point at which the consumer's consumption of electricity is metered and may be at the point of supply or at any other point on the distribution system of the service authority or the electrical installation of the consumer, as specified by the engineer, provided that at that point all of, and only, the consumer's consumption of electricity is metered;
- "Point of supply" means the point determined by the engineer at which electricity is supplied to any premises by the Municipality, and includes –
- (a) An underground domestic connection at the erf boundary or at the joint in the supply cable in the immediate vicinity of the erf boundary;
- (b) An overhead domestic connection at the terminals in the box on the roof or wall of the dwelling where the aerial conductors from the Municipality's network are terminated;

- (c) In the case of a maximum demand consumer, at the outgoing terminals of the Municipality's isolating switch;
- (d) In the case of an 11kV consumer, at the outgoing terminals of the Municipality's 11kV isolating circuit breaker; and
- (e) Any other point of supply as agreed upon in writing between the engineer and the consumer;
- "Premises" means any land or any building or structure above or below ground and includes any vehicle, aircraft, vessel or any other movable structure;
- "Prepayment meter" means a meter that can be programmed to allow the flow of prepurchased amounts of energy in an electrical circuit;
- "Quota charge" means a charge, as prescribed in the schedule of charges and fees, payable to cover the cost of extending the local distribution and reticulation network, which charge the Municipality does not recover from the tariff for the supply of electricity;
- "Registered owner" means the person in whose name the property is registered in the office of the Registrar of Deeds;
- "Regulations" means the regulations made under the Occupational Health and Safety Act, 1993 (Act 85 of 1993), or the Electricity Act, 1987 (Act 41 of 1987);
- **"SANS 10142-1"** means the code of practice *SANS 10142-1/SABS 0142-1:2003 The wiring of premises Part I: Low-voltage installations*, as issued by Standards South Africa of the South African Bureau of Standards, and as incorporated in the regulations and amended from time to time;
- "SANS 1019" means the specification SANS 1019/SABS 1019:2001 Standard voltages, currents and insulation levels for electricity supply, as issued by Standards South Africa of the South African Bureau of Standards and as amended from time to time;
- "SANS 1507" means the specification SANS 1507/SABS 1507:2002 Electric cables with extruded solid dielectric insulation for fixed installations (300/500 V to 1 900/3 300 V), as issued by Standards South Africa of the South African Bureau of Standards and as amended from time to time;
- "Safety standard" means the health and safety standard as defined in the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and includes SANS 10142-1;
- "Schedule of charges and fees" means the schedule of charges and fees payable to the Municipality for the supply of electricity, which charges and fees are from time to time determined by the Municipality and, where applicable, approved by the NER, and are published by notice in terms of section 10G (7) of the Local Government Transition Act, 1993 (Act 209 of 1993), and set out in a schedule to such notice;
- "Service authority" means the municipal authority that regulates the provision of an electricity service by a municipality;

- "Service connection" means all cables and equipment required to connect the supply mains to the electrical installation of the consumer at the point of supply;
- "Service protective device" means any fuse or circuit breaker installed for the purpose of protecting the Municipality's equipment from overloads or faults occurring on the installation or on the internal service connection;
- "Specification" means the applicable standard or specification accepted in the electricity supply industry and includes the applicable specifications of the South African Bureau of Standards (SABS) and any applicable national rationalised specification (NRS);
- "Standby supply" means an alternative electricity supply not normally used by the consumer;
- "Supply mains" means any part of the Municipality's electricity supply network;
- "Tariff" means the Municipality's tariff of charges for the supply of electricity;
- "Token" means the essential element of a prepayment metering system used to transfer information between a point of sale for electricity credit and a prepayment meter; and
- **"Voltage"** means the difference in electrical potential between any two conductors or between a conductor and the earth.

#### 2. Other terms

All other terms used in these By-laws have, unless the context indicates otherwise, the meanings assigned to them in the Electricity Act, 1987 (Act 41 of 1987), the Occupational Health and Safety Act, 1993 (Act 85 of 1993), or the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000), as well as any regulations made in terms of these Acts.

# 3. Headings and titles

The headings and titles in these By-laws do not affect the interpretation of the By-laws.

#### **CHAPTER 2**

#### **GENERAL CONDITIONS OF SUPPLY**

#### 4. Supply by agreement

- (1) No person may use and no person is entitled to use an electricity supply (new or existing) or consume electricity from the Municipality unless or until such a person has entered into an agreement in writing with the Municipality for the supply and consumption, and the agreement, together with the provisions of these By-laws, in all respects governs the supply and consumption.
- (2) If a person uses an electricity supply without entering into an agreement with the Municipality, the supply must be disconnected immediately, and the person is liable for the cost of electricity used, as provided for in section 18 of these Bylaws.

(3) If, in respect of any premises, an applicant, occupier or consumer is not the registered owner of the premises, an agreement in writing between the owner of the premises and the consumer for the rendering of a connection is required beforehand. The agreement reached binds both the consumer and the owner of the premises.

## 5. Serving of notice

- (1) A notice is deemed to have been served on a person by the Municipality when it has been served in accordance with the provisions of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000). Such a notice must be authorised by means of the signature of the engineer or an official appointed or nominated by him or her.
- (2) A notice or application referred to in sections 7, 44 and 45 of these By-laws is deemed to have been served on or submitted to the Municipality, as the case may be, if
  - (a) The notice or application has been delivered to the engineer in person;
  - (b) The notice or application has been left at the offices of the engineer with an official employed in the offices of the engineer; or
  - (c) The notice or application has been received by post by the Municipality.

# 6. Compliance with notices

Any person on whom a notice duly issued or given under these By-laws is served must, within the time specified in the notice, comply with the terms of the notice.

# 7. Application for supply

- (1) An application for a new electricity supply or for the increase in the capacity of an existing electricity supply, or for a prepayment arrangement must be made in writing by the prospective consumer on the prescribed form obtainable at the office of the Municipality, and the size (load) of the installation must be stated in the application. The application must be made as early as possible before the electricity supply is required in order to facilitate the work of the Municipality.
- (2) An application for a new electricity supply for a period of less than one year must be regarded as an application for a temporary electricity supply and must be considered at the discretion of the engineer, who may specify special conditions that are to be met. The applicable tariff for a temporary electricity supply as determined by the Municipality is payable.
- (3) No permanent installation may be supplied with a temporary electricity supply without the written approval of the engineer.
- (4) If there is a change of occupier or consumer and the new consumer wishes to continue using the existing permanent electricity supply, the new consumer must apply to the Finance Department of the Municipality on the prescribed form(s) determined by the Chief Financial Officer of the Municipality from time to time.
- (5) Only one electricity service connection must be made available to a stand.

Additional electricity service connections may be supplied at the discretion of the engineer. On approval of a second consumer right on a property, an application for an additional electricity service connection must be submitted by the applicant. When an approved second consumer unit is erected, a separate electricity service connection must be taken from the Municipality for the applicant's account.

## 8. Processing of requests for supply

Applications for the supply of electricity must be processed and the electricity supply be made available within the periods stipulated in NRS 047.

#### 9. Arbitration

If at any time any difference or dispute arises between the Municipality and the consumer about the construction, meaning or effect of these By-laws or about the rights, obligations or liabilities of the consumer or Municipality under the By-laws, the difference or dispute must be referred to the NER for a decision, failing which the difference or dispute must be settled by arbitration in terms of the provisions of the Arbitration Act, 1965 (Act 42 of 1965).

## 10. Wayleaves and servitudes

- (1) The Municipality may refuse to install an electricity service connection or supply mains above or below the ground on any private property or on land on which a thoroughfare exists that does not vest in the service authority, unless and until the prospective consumer has furnished the Municipality with written permission from the owner of the private property or from the person in whom is vested the legal title to the land on which the thoroughfare exists, as the case may be, which permission must authorise the laying or erection of an electricity service connection or supply mains on the private property or land.
- (2) If the permission referred to in subsection (1) is withdrawn at any time or if the property or land changes ownership and the new owner refuses to grant or uphold the permission, the consumer to whose premises the supply is required to be continued must bear the cost of
  - (a) Any alteration to an electricity service connection or supply mains that may become necessary in order that the supply may be continued; and
  - (b) Any removal of an electricity service connection or supply mains that may become necessary in order that the supply may be continued.
- (3) The Municipality may remove any object or rectify any activity that may endanger the integrity of the distribution system contemplated in section 27 of these By-laws.
- (4) The Municipality may enforce the requirements for wayleaves and servitudes as determined by the engineer.

# 11. Right of access to property

(1) The engineer or any duly authorised official of the Municipality may at any reasonable time or, in an emergency, at any time enter any premises when -

- (a) There are reasonable grounds for supposing that these By-laws have been or are being contravened;
- (b) Maintenance is to be done on the distribution network installed on the premises;
- (c) A general inspection is to be done for maintenance, operational or other purposes; and
- (d) The network is to be upgraded.
- (2) For the purposes of subsection (1) any earth, paving bricks, stone, ironwork or woodwork or other surface covering on any portion of the premises may be removed for the purposes of upgrading, inspection or maintenance work.
- (3) In executing any bona fide duties the Municipality must endeavour to restore the premises referred to in subsection (1) to a reasonable level should no contravention of these By-laws be discovered.

## 12. Refusal or failure to give information

No person may –

- (1) Refuse or fail to give information that may reasonably be required of him or her by a duly authorised official; or
- (2) Give any false information to a duly authorised official about any electrical installation work that is completed or is being contemplated.

## 13. Refusal of admittance

No person may wilfully hinder, obstruct, interfere with or refuse admittance to the engineer or a duly authorised official in the performance of his or her duty under these By-laws or in the performance of any duty connected with or relating to that duty.

# 14. Improper use

If the engineer has reasonable grounds to believe that the consumer uses the electricity for a purpose or deals with the electricity in a way that interferes in an improper or unsafe manner, or is calculated to interfere in an improper or unsafe manner, with the efficient supply of electricity to any other consumer, the Municipality may, without notice, disconnect the electricity supply to the consumer who uses or deals with the electricity in an improper or unsafe manner. Such supply must be restored by the Municipality as soon as the cause for the disconnection has been permanently remedied or removed. The fee as prescribed by the Municipality for the disconnection and reconnection must be paid by the consumer before the electricity supply is restored, unless it can be shown to the satisfaction of the engineer that the consumer did not use or deal with the electricity in an improper or unsafe manner. If substantiated proof exists that the consumer did use or deal with the electricity in an improper or unsafe manner, it may be required that a new certificate of compliance for the installation be submitted.

#### 15. Electricity tariffs and fees

Copies of the schedule of charges and fees may be obtained at the offices of the service authority or Municipality during office hours at the prescribed fee.

# 16. General charges

## (1) Availability charges

- (a) Availability charges as determined from time to time by the Municipality are payable to the Municipality by the owner of immovable property with or without improvements if the property is not connected to the electricity distribution system of the Municipality and if access to an electricity connection is available to the property.
- (b) The provisions of subsection (1)(a) are not applicable to
  - (i) Immovable property that belongs to the service authority; and
  - (ii) Immovable property in respect of which the Municipality has granted written exemption or partial exemption from payment of the availability charges, provided that the Municipality may at any time withdraw the exemption.

# (2) Quota charges

Quota charges, the rate of which is determined from time to time by the Municipality, are payable by developers or owners of land within the licence supply area of the Municipality when the AMD of the land is exceeded. These charges are used to cover the cost of extending the local distribution and reticulation network, which the Municipality does not recover from the tariff for the supply of electricity.

# 17. Deposits

The Municipality reserves the right to require that the consumer deposit a sum of money or submit a bank guarantee acceptable to the Municipality's Finance Department as security in payment of any charges that are due or may become due to the Municipality.

The deposit must not be regarded as payment or part-payment for any accounts due for the supply of electricity or for the purpose of obtaining a discount provided for in the electricity tariff referred to in these By-laws. On cessation of the supply of electricity, the amount of the deposit, free of interest, less any payments due to the Municipality, must be refunded to the consumer. The amount of the deposit or bank guarantee is determined by the Municipality from time to time and may be increased if necessary.

#### 18. Payment of charges

- (1) The consumer is liable for all electricity supplied, whether metered or unmetered, to his or her premises, including electricity supplied in accordance with a prepayment arrangement at the prescribed tariff, a copy of which is obtainable from the Municipality during normal office hours at the prescribed fee.
- (2) The Municipality must render an account for the amount payable on a regular basis to the consumer (excluding consumers supplied in accordance with a prepayment arrangement and consumers with other unmetered supplies in accordance with an

agreement). The Municipality must provide on the account all information (meter readings, dates, etc.) on which the account is based.

- (3) All accounts are deemed payable on or before the due date reflected on the account and, on the consumer's failure to pay, the Municipality must notify the consumer and eventually disconnect the electricity supply to the premises of the consumer. The account as issued is considered the first notification of the amount payable.
- (4) An error or omission on any account from the Municipality or failure by the Municipality to render an account does not relieve the consumer of the obligation to pay the amount due for electricity supplied to the premises. The onus is on the consumer to ensure that the account rendered is in accordance with the prescribed tariff of charges for the electricity supplied to the premises.
- (5) Where a duly authorised official has visited the premises to disconnect or audit the supply for the purposes of subsections (1) and (3), the official must not be obstructed or prevented from effecting the disconnection or audit. The prescribed fee must be paid by the consumer for each visit necessary for the purpose of the disconnection or audit.
- (6) After a consumer's electricity supply has been disconnected owing to non-payment of an account or owing to a contravention of any provision of these Bylaws or any other related by-laws, the consumer must pay the prescribed fees and any amounts due before a reconnection can be made.
- (7) If a person uses electricity without entering into an agreement with the Municipality, he or she is liable for the cost of the electricity used. This cost must be determined according to the appropriate tariff and the consumption since the last account in accordance with the latest agreement applicable to the premises.

#### 19. Interest on overdue accounts

The Municipality may charge interest on overdue accounts at a rate determined from time to time by the Municipality.

# 20. Resale of electricity

- (1) Unless otherwise authorised by the engineer, no person may sell or supply electricity that is supplied to the premises under an agreement with the Municipality to any other person or persons for use on any other premises, or permit or allow the resale or supply to take place. If electricity is resold for use on the same premises, the resale is subject to the conditions laid down in the Electricity Act, 1987 (Act 41 of 1987).
- (2) In accordance with Regulation 11 of the regulations made under the Electricity Act, 1987 (Act 41 of 1987), the reseller of electricity must render a monthly account for electricity consumed, which account must reflect the start and end reading and any applicable charges according to the approved tariffs of the Municipality, provided that -
  - (a) Only approved tariffs are reflected on the account; and
  - (b) Each individual consumer is metered and billed separately.

## 21. Right to disconnect supply

- (1) The Municipality has the right, after giving notice, to disconnect the electricity supply to any premises if
  - (a) The person liable for payment for the supply or for payment for any other municipal service fails to pay any charge due to the Municipality in respect of any service which he or she may at any time have received from the Municipality in respect of the premises; or
  - (b) Any of the provisions of these By-laws and/or the regulations are being contravened.
- (2) The Municipality has the right to disconnect the electricity supply to any premises if there has been deliberate overloading on or the illegal increase of supply or capacity of supply to the premises. The Municipality must give notice to the consumer of its intention to disconnect or, in the case of a grave risk, the Municipality may disconnect without giving notice. After a consumer's electricity supply has been disconnected for non-payment of accounts or for the improper or unsafe use of electricity or for any other related reason, the fee prescribed by the Municipality must be paid by the consumer.

# 22. Non-liability of the service authority and the Municipality

The service authority and the Municipality are not liable for any loss or damage, direct or consequential, suffered or sustained by a consumer as a result of or arising from the cessation, interruption or discontinuance of the supply of electricity, unless the loss or damage is caused by negligence on the part of the service authority or the Municipality.

#### 23. Electricity wasted or lost

Under no circumstances is any rebate allowed on the account of a consumer for electricity supplied and metered in respect of electricity wasted owing to a fault or an inappropriate use of electricity in the electrical installation of the consumer.

# 24. Failure of supply

The Municipality does not undertake to attend to a failure of supply owing to a fault in the electrical installation of the consumer, except when the failure is due to the operation of the service protective device of the Municipality. When a failure of supply is found to be due to a fault in the electrical installation of the consumer, or to the faulty operation of an apparatus used in connection with the electrical installation, the Municipality has the right to –

- (1) Charge the consumer the fee prescribed by the Municipality for each restoration of the supply; and
- (2) Recover from the consumer the cost of making good or repairing any damage which may have been done to the service mains and meter by the fault or faulty operation.

# 25. Seals and locks of the Municipality

The meter, prepayment meter, service protective devices and all apparatus belonging to the Municipality on the premises must be sealed or locked by a duly authorised official of the Municipality, and no person other than an official of the Municipality who is duly authorised to do so may in any manner or for any reason whatsoever remove, break, deface, or tamper or interfere with the seals or locks. Only duly authorised officials must be in possession of security lock keys, and any unauthorised person found in possession of the keys is guilty of an offence under these By-laws.

## 26. Tampering with service connection or supply mains

- (1) No person may in any manner or for any reason whatsoever by-pass the metering equipment of the Municipality on any premises or tamper or interfere with any meter, including a prepayment meter, or with any service connection or service protective device or supply mains or any other equipment of the Municipality on any premises. Such tampering, interference or by-passing is deemed to be an offence in terms of section 27(2) and (3) of the Electricity Act, 1987 (Act 41 of 1987), and makes the perpetrator guilty of an offence and liable on conviction to a fine and/or imprisonment.
- (2) Where prima facie evidence of tampering, interference or by-passing referred to in subsection (1) exists, the Municipality has the right to disconnect the supply immediately without prior notice to the consumer. The consumer is liable for all fees and charges levied by the Municipality for the disconnection and subsequent reconnection.
- (3) In cases where the tampering, interference or by-passing referred to in subsection (1) has resulted in the accuracy of the metering installation being compromised, the Municipality has the right to rectify the consumer's account to include circuit breaker, connection and quota charges.

#### 27. Protection of electricity distribution system

- (1) No person may, except with the written consent of the engineer and subject to the conditions that may be imposed -
  - (a) Construct, erect or permit the erection of any building, structure or other object, or plant trees or vegetation, over or in a position or in a manner that interferes with or endangers the electricity distribution system, and all clearances as prescribed in the regulations made under the Occupational Health and Safety Act, 1993 (Act 85 of 1993), must be observed;
  - (b) Excavate, open up or remove the ground above, next to or under any part of the electricity distribution system or dump anything onto, next to or under any part of the electricity distribution system;
  - (c) Damage, endanger, remove or destroy, or do any act likely to damage, endanger, destroy or effect the removal of any part of the electricity distribution system;
  - (d) Abstract, branch off or divert any electric current or cause any electric current to be abstracted, branched off or diverted, or consume or use the current that has been wrongfully or unlawfully abstracted, branched off or diverted;

- (e) Install any paving over the Municipality's cables unless adequate sleeves for the cables have been installed under the paving and marked at the edges of the paving;
- (f) Do any excavations over the Municipality's cables without a permit issued by the engineer; and
- (g) Do any excavations over the Municipality's cables with excavating or related machines, but excavations may be done by hand once permission for the excavations has been obtained from the engineer.
- (2) The owner must limit the height of trees or vegetation or the length of projecting branches in the proximity of overhead lines or provide a means of protection which in the opinion of the engineer adequately prevents the tree or vegetation from interfering with the conductors should the tree or branches or vegetation move owing to wind or fall or be cut down. Should the owner fail to observe this provision the Municipality has, in accordance with the Municipality's requirements for wayleaves and servitudes, the right, after prior written notification and within the prescribed period, or at any time in an emergency, to cut or trim the trees or other vegetation in such a manner as to comply with this subsection and is entitled to enter the property for that purpose.
- (3) If work is carried out by the Municipality in terms of subsections (1) and (2) and such work is necessary owing to the contravention of these By-laws, the cost of the work is for the account of the person who acted in contravention of these Bylaws.
- (4) The Municipality reserves the right to implement any policy in the form of regulations regarding the rights of the Municipality in respect of the protection of the electricity distribution system.
- (5) The engineer may, in respect of any premises -
  - (a) Demolish, alter or otherwise deal with any building, structure or other object that has been constructed, erected or laid in contravention of these By-laws;
  - (b) Fill in and make good any ground that has been excavated or removed in contravention of these By-laws;
  - (c) Repair and make good any damage that has been done in contravention of these By-laws or that has resulted from a contravention of these By-laws;
  - (d) Remove anything that is damaging, obstructing or endangering or that is likely to damage, obstruct, endanger or destroy any part of the electricity distribution system; and
  - (e) Provide an account for any work done in terms of this section, and the supply of electricity may be disconnected if the account is not paid on time.
- (6) All paving over the Municipality's cables must be easy to remove. The Municipality or the service authority reserves the right to excavate any cable route for any purpose whatsoever and, although the Municipality or the service authority must restore the surface reasonably

to its former condition, the Municipality is not liable for any damage to the paving in a street reserve or servitude.

# 28. Prevention of tampering with service connection or supply mains

If the engineer decides that it is necessary or desirable to take special precautions in order to prevent tampering with any portion of the supply mains, service connection or meter, the consumer must either supply and install the necessary protection or pay the costs involved where such protection is supplied by the Municipality. The engineer may replace the existing metering equipment with appropriate metering equipment.

#### 29. Unauthorised connections

No person other than a person whom the Municipality specifically authorises in writing to do so may directly or indirectly connect, attempt to connect or cause or permit the connection of a new electrical installation or part of a new installation to the supply mains or service connection. Such a connection is deemed to be an offence in terms of section 27(2) and (3) of the Electricity Act, 1987 (Act 41 of 1987), and makes the perpetrator guilty of an offence and liable on conviction to a fine and/or imprisonment.

#### 30. Unauthorised reconnections

- (1) No person other than a person whom the Municipality specifically authorises in writing to do so may reconnect, attempt to reconnect or cause or permit the reconnection of the supply mains or service connection of an electrical installation that has been disconnected by the Municipality.
- (2) Where an electricity supply that was previously disconnected is found to have been reconnected illegally, the consumer using the supply is liable for all charges for electricity consumed between the date of disconnection and the date on which the supply was found to be reconnected and for any other charges levied in this regard. Such a reconnection of the electricity supply is deemed to be an offence in terms of section 27(2) and (3) of the Electricity Act, 1987 (Act 41 of 1987), and makes the perpetrator guilty of an offence and liable on conviction to a fine and/or imprisonment.
- (3) Where the electricity supply has been disconnected owing to unsafe conditions in the consumer's installation, the supply may only be reconnected after the consumer has submitted a legal and valid certificate of compliance to the Municipality.

# 31. Disconnection (temporary and permanent) and reconnection

- (1) The engineer must, at the written request of the consumer, temporarily disconnect and subsequently reconnect the electricity supply to the consumer's electrical installation on payment by the consumer of the fee prescribed by the service authority for each disconnection and subsequent reconnection.
- (2) An electricity supply is disconnected at the written request of the person with whom the Municipality has an agreement for the supply or connection. If it becomes necessary for the engineer to effect a temporary disconnection and a subsequent reconnection of the supply

to a consumer's electrical installation and if the consumer is in no way responsible for bringing about this necessity, the engineer must waive payment of the fee referred to in subsection (1).

- (3) The engineer may, under exceptional circumstances only, temporarily disconnect the electricity supply to any premises without notice to the consumer, for the purpose of effecting repairs or carrying out tests or for any other legitimate purpose. In all other instances adequate notice must be given to the consumer.
- (4) Notice of a planned disconnection or interruption must be given to the consumer by the Municipality in accordance with NRS 047.
- (5) Disconnections contemplated in this section must be effected and handled by the Municipality in accordance with NRS 047.
- (6) Should the Municipality have to perform small tasks on the distribution network for a period not exceeding 45 minutes, the Municipality is not required to give prior notice of the interruption to the consumer, except in the case of electricity supply to consumers with special agreements with the Municipality.

# 32. Planned maintenance and disconnection of supply

Notice of the planned disconnection of an electricity supply for the purpose of maintenance, repair or construction work must be given to the consumer by the Municipality in accordance with NRS 047.

# 33. Temporary supply

- (1) A temporary electricity supply is usually valid for three months or for a period specifically agreed on in writing with the Municipality, but the period of any temporary electricity supply may not exceed one year.
- (2) If the Municipality finds that a temporary electricity supply to a consumer is interfering with the efficient and economical supply of electricity to other consumers, the engineer has the right to terminate, with notice or, under exceptional circumstances, without notice, the temporary supply at any time.
- (3) Application for a temporary electricity supply must be made in the same way as for a permanent electricity supply in accordance with section 7.

## 34. Temporary work

Electrical installations requiring a temporary electricity supply must not be connected direct or indirect to the supply mains, except with the special permission in writing of the engineer. Full information about the reasons for and nature of the work for temporary supply purposes must accompany the application for the permission, and the engineer may refuse the permission or grant the permission on the terms and conditions that may be necessary. A certificate of compliance must be submitted by the consumer to the Municipality in such cases of temporary work.

#### 35. Load reduction

- (1) At times of peak load or in an emergency or when, in the opinion of the engineer, it is necessary for any reason to reduce the load on the electricity supply system of the Municipality, the engineer may, without notice, interrupt and, for a period that the engineer may deem necessary, discontinue the electricity supply to a consumer's electrically operated thermal storage water heater or to a specific appliance or to the whole installation. The service authority, the Municipality and the engineer are not liable for any loss or damage, direct or consequential, owing to or arising from the interruption and discontinuance of the electricity supply.
- (2) The Municipality may install on the premises of the consumer the apparatus and equipment that are necessary to give effect to the provisions of subsection (1), and the engineer or any duly authorised official may at any reasonable time enter the premises for the purpose of installing, inspecting, testing, adjusting, maintaining and/or changing the apparatus and equipment.
- (3) Notwithstanding the provisions of subsection (2), the consumer or the owner, as the case may be, must, when installing an electrically operated water storage heater, provide the necessary accommodation and wiring that the engineer may require in order to facilitate the later installation of the apparatus and equipment referred to in subsection (2).

# 36. MV and LV switchgear and equipment

- (1) Where an electricity supply is given at either MV or LV, the supply and installation of the switchgear, cables and equipment forming part of the service connection must, unless otherwise approved, be paid for by the consumer.
- (2) In the case of an MV supply, all the equipment must be approved by the engineer and be installed by or under the supervision of the engineer.
- (3) No person may operate MV switchgear at the points of supply without the written authorisation of the engineer.
- (4) All MV switchgear operations at the points of supply or interconnecting the points of supply must be approved by the engineer, and all earthing and testing of MV equipment linked to the Municipality's network must be conducted by or under the supervision of the engineer.
- (5) In the case of an LV supply, the consumer must provide and install an approved LV main switch and/or any other equipment required by the engineer.

#### 37. Transformer substation accommodation

(1) The engineer may, on such conditions as he or she sees fit, require the owner of premises to provide and maintain approved accommodation which must consist of a separate room or rooms to be used exclusively for the purpose of housing MV cables and switchgear, transformers, LV cables and switchgear and other equipment necessary for the supply requested by the applicant who is applying for electricity supply to the premises.

- (2) The accommodation referred to in subsection (1) must be situated at a point to which free and unrestricted access can be had at all times for purposes connected with the operation and maintenance of the equipment.
- (3) The Municipality reserves the right to supply its own networks from its own equipment installed in the accommodation referred to in subsection (1), and if additional accommodation is required by the Municipality, the additional accommodation must be provided by the applicant at the cost of the Municipality.

## 38. Supply feeder diagram specification

When more than one electrical installation or electricity supply from a common main is required for any building or group of buildings, the design must be certified by a competent person contemplated in the regulations made under the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and the wiring diagram of the circuits starting from the main switch and the design of the internal distribution network must, on request, be submitted to the engineer in duplicate for approval before the work commences. In the case of township development, the design must comply with the specifications of the engineer.

# 39. Standby supply

No consumer is entitled to a standby supply from the Municipality for any premises, except with the written consent of the engineer and subject to the terms and conditions laid down by the engineer.

#### 40. Consumer's emergency standby supply equipment

No emergency standby supply equipment provided by a consumer in terms of any regulations or for the consumer's own operational requirements may be connected to an installation without the prior written approval of the engineer. Application for approval must be made in writing and must include a full specification of the equipment and a wiring diagram. Changeover interlocking, making it impossible to parallel the standby supply with that of the Municipality, is a non-negotiable requirement.

#### 41. Installation circulars

- (1) The engineer may from time to time issue installation circulars to all contractors and/or consulting engineers and/or architects detailing the requirements of the Municipality regarding matters that are not specifically covered in the regulations or in these By-laws but that are necessary for the safe and efficient operation and management of the supply of electricity.
- (2) Notwithstanding the provisions of subsection (1), the onus for obtaining the latest information remains on the contractors, consultants and architects.

#### **CHAPTER 3**

#### **RESPONSIBILITIES OF CONSUMERS**

#### 42. Consumer to erect and maintain electrical installation

An electrical installation connected to or to be connected to the supply mains, and any additions or alterations to an electrical installation that may be made from time to time must be provided, erected, maintained and kept in good order by the consumer at the consumer's own expense and in accordance with these By-laws and the regulations. The consumer must provide the Municipality with a copy of the required certificate of compliance for the installation in question before the connection and/or alteration is energised.

#### 43. Fault in electrical installation

The engineer may require the consumer to reimburse the Municipality for expenses incurred in respect of a fault in the electrical installation of the consumer.

# 44. Discontinuance of use of supply

If a consumer wishes to discontinue using the electricity supply, including a supply in respect of a prepayment arrangement, the consumer must give the Municipality at least two full working days' notice in writing of the intended discontinuance, and the consumer remains liable for all payments due in accordance with the tariff applicable for the supply of electricity until the notice period has expired. An application for the discontinuation of a supply must only be accepted from the person or the authorised representative of the person with whom the Municipality entered into an agreement for the supply in question.

# 45. Change of consumer

- (1) In the case of a change of occupier at any premises, the consumer, including a consumer bound by a prepayment arrangement, who is leaving must give the Municipality not less than two full working days' notice in writing of his or her intention to discontinue using the electricity supply, failing which he or she remains liable for the supply until the supply is disconnected or a new agreement is entered into.
- (2) If the new occupier or consumer at the premises wishes to continue using the electricity supply, he or she must apply in accordance with the provisions of section 4 of these By-laws.
- (3) Where premises are fitted with a prepayment meter and a change of occupier takes place, the new occupier is deemed to be the consumer. Should such a consumer fail to apply for an electricity supply in terms of section 4 of these Bylaws, he or she is liable for all charges and fees owed to the Municipality for that point of metering, as well as any outstanding charges and fees, whether accrued by that consumer or not, until such time as an application for supply is received by the Municipality.
- (4) Subject to subsections (1), (2) and (3), the registered owner of a property remains liable for any electricity consumed on the premises.

(5) A clearance certificate in terms of section 118 of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000), must not be issued and a connection must not be effected if a certified copy of the certificate of compliance is not submitted by the new owner or occupier, as the case may be.

Should it at any stage be found that a supply was given without a certificate of compliance being furnished, the Municipality is entitled to terminate the supply at any time and without prior notice to the occupier, owner or consumer, as the case may be.

## 46. Service apparatus

- (1) The consumer is liable to the Municipality for all costs arising from damage to or loss of any metering equipment, prepayment meter, service protective device, service connection or other apparatus on the premises, unless the damage or loss is shown to have been occasioned by an act of God, an act or omission of an employee or agent of the Municipality, or an abnormality in the supply of electricity to the premises.
- (2) If the service mains, metering equipment or any other service apparatus, being the property of the Municipality and having been previously used, is, during a period in which an installation is disconnected from the supply mains, removed without the permission of the Municipality or has been damaged in a way that renders the reconnection dangerous, the owner or occupier of the premises, as the case may be, must during that period bear the cost of overhauling and/or replacing the mains, equipment or apparatus.
- (3) Where there is a common metering position on the premises for more than one consumer, the liability referred to in subsection (1) devolves on the owners of the premises jointly and severally.
- (4) A certificate from the engineer reflecting the amount due is deemed prima facie evidence of the amount due in terms of subsection (1).

#### CHAPTER 4

### **SPECIFIC CONDITIONS OF SUPPLY**

#### 47. Service connection

- (1) The consumer must bear the cost of a service connection as determined by the Municipality.
- (2) Notwithstanding the fact that the consumer bears the cost of the service connection, ownership of the service connection that has been laid or erected by the Municipality vests in the Municipality, and the Municipality is responsible for the maintenance of the service connection up to the point of supply, including the meter. The consumer is not entitled to any compensation from the service authority or the Municipality in respect of the service connection.

- (3) The extent and nature of work to be carried out by the Municipality for a service connection to the consumer's premises, at the cost of the consumer, must be determined by the Municipality.
- (4) A service connection must be laid underground, irrespective of whether the supply mains are laid underground or erected overhead, unless an overhead service connection is specifically required by the engineer.
- (5) If the engineer so requires, an overhead service connection must be replaced by an underground cable connection at the expense of the consumer if
  - (a) Re-roofing is taking place;
  - (b) The connection is being upgraded; or
  - (c) The connection has to be moved for extensions or alterations to a building.
- (6) The conductor used for the service connection must be a three- or four-core steelwire armoured (SWA) PVC cable with two 1mm (fine strand) communication cores placed in the interstice of the cores (not in the armouring) in accordance with SANS 1507. The cable size must be determined in accordance with SANS 10142-1.
- (7) The conductor used for the service connection must have a cross-sectional area of not less than 10 mm2 and must be of copper or copper equivalent, and all conductors must have the same cross-sectional area, unless otherwise approved in writing by the engineer.
- (8) Unless otherwise approved in writing by the engineer, the Municipality must only provide one service connection to each erf.
- (9) Any covers of a wireway carrying the supply circuit from the point of supply to the metering equipment must be made to accept the seals of the Municipality.
- (10) The service conductor or cable within the meter box must terminate in an unobscured position, and any conductors must remain visible throughout their length.
- (11) In the case of service connections to multiple consumers on premises the Municipality must provide a bulk supply and bulk metering point on the boundary of the premises or in a substation building provided by the owner of the premises, and the owner or consumer(s), as the case may be, are responsible for the operation and maintenance of the network from that point onwards, and the owner or consumer(s) are regarded as a person who resells electricity supplied to him or her by an undertaker in terms of the Electricity Act, 1987 (Act 41 of 1987). The cost of the connection must be borne by the owner or consumer(s), as the case may be.
- (12) The consumer must, if so required, provide accommodation for the Municipality's load reduction equipment in accordance with section 35(3) and maintain the accommodation to the satisfaction of the engineer.

## 48. Metering accommodation

- (1) (a) In the case of urban domestic consumers, the Municipality must provide and install accommodation for conventional meters in an approved position, including the meter board and adequate conductors for the metering equipment, service apparatus and service protective devices, unless otherwise decided upon by the engineer. Such accommodation and protection must be maintained by the Municipality. Where existing conventional meters are installed in accommodation provided by the consumer, the consumer is responsible for the maintenance of the accommodation.
- (b) In the case of rural areas, the Municipality must provide a prescribed meter box for the account of the consumer or applicant.
- (c) In the case of maximum demand consumers, the consumer must provide accommodation. Such accommodation and protection must be provided, installed and maintained to the satisfaction of the engineer at the cost of the consumer or the owner, as the circumstances may demand, and must be situated, in the case of conventional meters, at a point to which free and unrestricted access can be had at all reasonable hours for the reading of meters but at all times for purposes associated with the operation and maintenance of the service equipment.
- (d) In the case of 11kV consumers, metering accommodation must be provided and installed as mutually agreed upon in writing between the engineer and the consumer.
- (e) Prepayment meters must be installed and maintained at the consumer's cost as determined in the Municipality's tariff. Access at all reasonable hours must be afforded for the inspection and maintenance of prepayment meters.
- (2) Where sub-metering equipment is installed, accommodation separate from the Municipality's metering equipment must be provided by the consumer for the equipment.
- (3) The consumer or, in the case of a common meter position, the owner of the premises must provide and maintain adequate electric lighting in the space and access route to areas set aside for accommodating the metering equipment and service apparatus. Should this lighting not be maintained, the Municipality must maintain it at the cost of the consumer or owner, as the case may be.
- (4) If, in the opinion of the engineer, the meter, service connection, service protective devices or main distribution board is no longer readily accessible or becomes a source of danger to life or property or is being tampered with or becomes in any way unsuitable, the owner or consumer(s), as the case may be, must be notified by the Municipality of one of the following actions which must be taken:
- (a) The owner or consumer(s), as the case may be, must move the meter, service connection, service protective devices or main distribution board to a new position.
- (b) The owner or consumer(s), as the case may be, must repair the meter, service connection, service protective devices or main distribution board to the original condition.

- (c) In the case of a single consumer on the premises, a supply and metering point must be supplied by the Municipality on the boundary of the premises.
- (d) In the case of multiple consumers on the premises, a bulk supply and bulk metering point must be supplied by the Municipality on the boundary of the premises or in a substation building provided by the owner of the premises, and the owner or consumers, as the case may be, are responsible for the operation and maintenance of the network from that point onwards, and the owner or consumers are regarded as a person who resells electricity supplied to him or her by an undertaker in terms of the Electricity Act, 1987 (Act 41 of 1987).
- (5) Should the owner or consumer(s), as the case may be, not proceed with the action contemplated in subsection (4)(a) or (b) within 14 (fourteen) days of notification or complete the action within a reasonable time, the Municipality must take the action contemplated in subsection (4)(c) or (d).
- (6) The owner or the consumer(s), or the consumer(s) with the owner's consent, may request the Municipality to proceed with the action contemplated in subsection
- (4)(c) or (d) if the owner or consumer(s), as the case may be, are unable to take the action contemplated in subsection (4)(a) or (b).
- (7) The cost of the action contemplated in subsection (4) must be borne by the owner or consumer(s), as the case may be.
- (8) The accommodation for the Municipality's metering equipment and service protective devices may, if approved, include the consumer's main switch and main service protective devices. No apparatus other than that used in connection with the supply and use of electricity may be installed or stored in the accommodation unless approved in writing by the engineer.

#### CHAPTER 5

### SYSTEMS OF SUPPLY

# 49. **Quality of supply**

Alternating current supplies must be given as prescribed by the Electricity Act, 1987 (Act 41 of 1987), and, in the absence of a quality of supply agreement, must be given as set out in NRS 048.

#### 50. Load limitations

(1) Where the estimated load, calculated in terms of the safety standard, does not exceed 15 kVA before diversity, the electrical installation must be arranged for a two-wire plus earth single-phase supply, unless otherwise approved by the engineer.

- (2) Where a three-phase four-wire plus earth supply is provided, the load must be balanced approximately over the three phases, but the maximum out-of-balance load must not exceed 30 per cent, unless otherwise approved by the engineer.
- (3) No current-consuming appliance, inherently single phase in character, with a rating that exceeds 15 kVA may be connected to the electrical installation without the prior approval of the engineer.

# 51. Interference with other consumers

- (1) No consumer may operate electrical equipment having load characteristics which, singly or collectively, give rise to voltage variations, harmonic currents or voltages, or unbalanced phase currents that fall outside the standards determined by NRS 048.
- (2) The assessment of interference with other consumers must be carried out by means of a measurement taken at the point of common coupling as described in NRS 048.

# 52. Supplies to motors

The following limitations are given as a guide for the purposes of compliance with section 50:

# (1) Limited size for LV motors

The rating of an LV single-phase motor must be limited to a starting current not exceeding the capacity of the consumer's main supply. All motors exceeding these limits must be wound for three phases at low voltage or at such higher voltage as may be required.

# (2) Maximum starting and accelerating currents of three-phase alternating current motors

The permissible starting current of three-phase LV motors must be related to the capacity of the consumer's service connection, as follows:

Insulated	Maximum	Suggested maximum motor rating in Kw			
service	permissible				
cable, size in	starting current				
mm2,	Α				
copper					
equivalent					
mm2					
		Direct on line (6	Star/ Delta (2,5	Other means	
		x full-load	x full-load	(1,5 x full-load	
		current)	current)	current)	
		KW	kW	kW	
16	72	6	13,5	23	
25	95	7,5	18	30	
35	115	9	22	36,5	
50	135	10	25	45	
70	165	13	31	55	
95	200	16	38	67	

120	230	18	46	77
150	260	20	52	87

# (3) Consumers supplied at medium voltage

In an installation supplied at medium voltage the starting current of an LV motor must be limited to 1,5 times the rated full-load current of the transformer supplying the motor.

#### 53. Power factor

- (1) The power factor must under all load conditions not be leading, unless otherwise agreed to by the engineer.
- (2) If the engineer so requires, the power factor of any load may not be less than 0,85 lagging.
- (3) If, for the purpose of complying with subsection (1), it is necessary to install power factor correction devices, the correction devices must be connected to the individual appliance terminals unless the correction of the power factor is automatically controlled.

#### 54. Protection

Electrical protective devices for motors must be of a design that effectively prevents sustained overcurrent and single phasing, where applicable, in accordance with SANS 10142-1.

#### **CHAPTER 6**

## **MEASUREMENT OF ELECTRICITY**

#### 55. Metering

- (1) The Municipality must, at the consumer's cost in the form of a direct charge or prescribed fee, provide, install and maintain appropriately rated metering equipment at the point of metering for measuring the electricity consumed. Such metering equipment remains the property of the Municipality.
- (2) Except in the case of prepayment meters, the electricity used by a consumer during a metering period must be determined by the reading of the appropriate meter or meters that are supplied and installed by the Municipality and read at the beginning and end of the period. If a meter cannot be read or if metering equipment is found to be defective, the consumption must be estimated.
- (3) Where the electricity used by a consumer is charged at different tariffs, the consumption must be metered for each tariff. Adequate metering equipment must be installed on application by and for the account of the consumer.

- (4) The engineer reserves the right to meter the supply to blocks of shops and flats, tenement houses and similar buildings for the buildings as a whole, or for individual units, or for groups of units.
- (5) No alterations or additions or electrical connections of any description may be made on the supply side of the meter by the consumer.

## 56. Accuracy of metering

- (1) A meter must be presumed conclusively to be registering accurately if its error, when tested in the manner prescribed in subsection (5), is found to be within the limits of error laid down in NRS 057. If any of the seals of the meter are found to be broken, the meter is deemed to have been tampered with.
- (2) The Municipality has the right to test its metering equipment. If it is established by a test or otherwise that the metering equipment is defective, the Municipality must, in accordance with the provisions of subsection (6) -
  - (a) In the case of a conventional meter, adjust the account rendered; or
  - (b) In the case of a prepayment meter, recover an amount if the meter has been under-registering or issue a free token if the meter has been over-registering.
- (3) The consumer is entitled to have the metering equipment, including a prepayment meter, which is sealed according to the Municipality's standards, tested by the Municipality on payment of the prescribed fee to the Municipality. If the metering equipment is found not to comply with the system accuracy requirements laid down in NRS 057, an adjustment in accordance with the provisions of subsections (2) and (6) must be made and the fee must be refunded.
- (4) In case of a dispute, the consumer has the right at his or her own cost to have the metering equipment in dispute tested by an independent testing authority accredited by the South African Accreditation System, and the result of the test is final and binding on both parties, and the cost of the testing is non-refundable.
- (5) Meters must be tested in the manner prescribed by NRS 057.
- (6) When an adjustment is made to the electricity consumption registered on a meter in terms of subsection (2) or (3), the adjustment must be based either on the percentage error of the meter as determined by the test referred to in subsection (5) or on a calculation by the engineer from consumption data in his or her possession. Where applicable and where possible, due allowance must be made for seasonal or other variations that may affect the consumption of electricity.
- (7) When an adjustment contemplated in subsection (6) is made, the adjustment may not apply to a period exceeding three years preceding the date on which the metering equipment was found to be inaccurate.
- (8) Where the actual load of a consumer differs from the initially required load provided for under section 7(1) to the extent that the Municipality deems it necessary to alter or replace

its metering equipment to match the load, the cost of the alteration or replacement and other costs incurred in correcting the supply must be borne by the consumer.

- (9) (a) Prior to the Municipality making any upward adjustment to an account in terms of subsection (6), the engineer must
  - (i) Notify the consumer in writing of the monetary value of the adjustment to be made and the reasons for the adjustment;
  - (ii) In the notice, provide sufficient particulars to enable the consumer to submit representations on the adjustment; and
  - (iii) In the notice, call on the consumer to provide the engineer with reasons, if any, in writing why the consumer's account should not be adjusted as notified, and these reasons must be submitted to the engineer within 21 days or within a longer period that the engineer may permit.
- (b) The engineer must consider any reasons provided by the consumer in terms of subsection (9)(a) and must, if satisfied that a valid case exists, adjust the account accordingly.
- (c) Should the consumer fail to make any representations during the prescribed period or should the engineer not be satisfied that a case exists for the variation of the account, the Municipality is entitled to adjust the account as notified in terms of subsection (9)(a)(i).
- (10) When the Municipality is satisfied that a prepayment meter has ceased to register correctly, the prepayment meter must be replaced immediately and any credits still registered in favour of the consumer on the faulty meter must be carried over to the new prepayment meter.

# 57. Reading of conventional meters

- (1) Unless otherwise prescribed, conventional meters must be read at fixed cycles of approximately one month, and the fixed or minimum charges due in terms of the tariff must be assessed accordingly. The Municipality is not obliged to effect any adjustments to the charges. The minimum number of meter readings per annum must be in accordance with NRS 047.
- (2) If for any reason the conventional meter cannot be read, the Municipality may render an estimated account. The energy consumption must be adjusted in a subsequent account according to the energy consumption actually used.
- (3) When a consumer vacates a property and a final reading is not available, the Municipality must make an estimation of the consumption and render the final account accordingly.
- (4) If a special reading of the meter is desired by a consumer, the consumer may obtain the reading from the Municipality on payment of the prescribed fee.

- (5) If any calculation, reading or metering error is discovered in respect of any account rendered to a consumer, the Municipality must correct the error in subsequent accounts. In respect of any such corrected accounts
  - (a) The correction must apply only to accounts for a period of three years preceding the date on which the error in the accounts was discovered;
  - (b) The amount of the corrected accounts must be free of interest up to the date on which the correction is found to be necessary; and
  - (c) The amount of the corrected accounts must be based on the actual tariffs applicable during the period in question.
- (6) No person may influence or try to influence or interfere with the metering process.

# 58. Prepayment metering

- (1) No refund of the amount tendered for the purchase of electricity credit may be given to the consumer at the point of sale after initiation of the process by which the prepayment meter token is produced.
- (2) Copies of previously issued tokens for the transfer of credit to the prepayment meter may be issued to the consumer at his or her request.
- (3) When a consumer vacates any premises where a prepayment meter is installed, no refund for the credit remaining in the meter may be made to the consumer.
- (4) The Municipality is not liable for the reinstatement of credit in a prepayment meter that has been lost because the prepayment meter and/or identity card has been tampered with, incorrectly used or abused.
- (5) Where a consumer is indebted to the Municipality for electricity consumed or to the service authority or Municipality for any other service supplied by the service authority or Municipality (including assessment rates) or for any charges previously raised against him or her in connection with any service rendered, the Municipality may deduct a percentage from the amount tendered to offset the amount owing to the service authority and/or the Municipality in terms of the agreement for the supply of electricity contemplated in section 4.
- (6) The Municipality may, at its discretion, appoint vendors for the sale of credit for prepayment meters and may not guarantee the continued operation of any vendor.
- (7) Should a consumer making use of a prepayment meter fail to purchase electricity from the Municipality for a continuous period of six months, the Municipality is entitled to discontinue the supply of electricity forthwith to the consumer and remove the connection to the premises.
- (8) The owner of any premises or the consumer making use of a prepayment arrangement on the premises may not erect any structures or allow any vegetation on the premises

within a safe distance of the Municipality's equipment, which distance is determined by the Municipality from time to time.

#### 59. Calculation of estimated account

- (1) Where a meter is found to have ceased registering correctly, the Municipality must repair or replace the meter as soon as possible.
- (2) Where a meter has been replaced or repaired in accordance with subsection (1), the Municipality must estimate the quantity of electricity that is to be paid for by the consumer, unless it can be proved to the satisfaction of the engineer that a lesser or greater quantity of electricity has been consumed. The Municipality's estimate must be for the period from the date of the last reading of the meter prior to the meter's repair or replacement and must be based on the following:
  - (a) The average monthly consumption of electricity on the premises served by the meter during the three months prior to the last registration;
  - (b) The consumption of electricity on the premises for the corresponding months of the previous year; or
  - (c) The average monthly consumption on the premises served by the meter over a period of three successive months after the repair or replacement of the meter.

#### **CHAPTER 7**

#### **ELECTRICAL CONTRACTORS**

# 60. Requirements additional to the requirements of the regulations

- (1) Where an application for a new or increased supply of electricity has been made to the Municipality, the engineer may at his or her discretion accept notification 31 of the completion of any part of the electrical installation, the circuit arrangements of which permit the electrical installation to be divided up into well-defined separate portions. Any part of the electrical installation may, at the discretion of the engineer, be inspected, tested and connected to the supply mains as though that part of the electrical installation were a complete installation, subject to the submission by the owner, consumer or applicant, as the case may be, of a certificate of compliance for that part of the installation.
- (2) The inspection and testing referred to in subsection (1) may be carried out at the discretion of the Municipality and must not in any way relieve the electrical contractor or accredited person or the user or occupier, as the case may be, from his or her liability for any defect in the installation. The inspection and testing must not be taken in any circumstance, even where the electrical installation has been connected to the supply mains, to indicate or guarantee in any way that the electrical installation has been carried out efficiently with the most suitable materials for the purpose or that the electrical installation is in accordance with these By-laws or the safety standard, and the service

authority and the Municipality are not liable for any defect or fault in the electrical installation.

- (3) Neither the service authority nor the Municipality are liable for -
  - (a) The work done by the electrical contractor or accredited person on a consumer's premises; and
  - (b) Any loss or damage which may be occasioned by fire or by an accident arising from the state of the wiring or an act of the electrical contractor or accredited person on the premises.

#### **CHAPTER 8**

#### **LEGAL MATTERS**

#### 61. Domicilium

The street, building or flat address of the point of supply is deemed to be the *domicilium citandi et executandi* of the consumer for the purpose of the serving of any documents in accordance with section 115 of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000).

#### 62. Penalties

- (1) Any person who contravenes any of the provisions of these By-laws is guilty of an offence and, if found guilty by a court of law, may be sentenced to a fine not exceeding an amount stipulated in the schedule of charges and fees.
- (2) Any person who contravenes any of the provisions of these By-laws is liable to compensate the service authority or the Municipality, as the case may be, for the loss or damage suffered or sustained by the service authority or the Municipality in consequence of the contravention.

## 63. Applicability

These By-laws are applicable to the supply of electricity by the Municipality within the supply area of the Municipality as defined and licensed by the NER, irrespective of whether or not the locus of consumption falls within the judicial boundaries of the Municipality.