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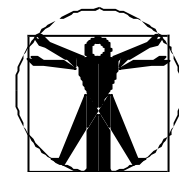
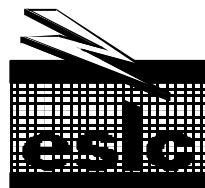
First edition

NRS 047-2:1999

**ELECTRICITY SUPPLY —
QUALITY OF SERVICE**

Part 2: Reporting guidelines

For application by the National Electricity
Regulator



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Foreword

This part of NRS 047 has been prepared for the National Electricity Regulator by a working group appointed by the Electricity Suppliers Liaison Committee (ESLC) and an interest group of stakeholders recommended by the NER.

The working group comprised the following members:

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The interest group comprised the following members:

| | |
|---------------|--|
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| H Boesenberg | Iscor Limited |
| J de Wet | Energy Intensive User Group |
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| J Hees | FEEU (Energy End Users) |
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At the time that the ESLC accepted this edition of NRS 047-2, the ESLC comprised the following members:

| | |
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| P J S van Niekerk | Executive Officer, Greater Johannesburg Metropolitan Electricity |
| H R Whitehead | Executive Director, Durban Metropolitan Electricity |

Introduction

The preparation of this part of NRS 047 on quality of service in the Electricity Supply Industry (ESI) has been driven by the National Electricity Regulator (NER) to facilitate liaison between customers and the licensed suppliers of electricity (licensees).

In order to assess the quality of the service provided, the NER will require licensees to provide as much information as is practical. However, this will incur costs, which will ultimately be passed on to the customer. In terms of the needs and principles of economical and affordable electricity supply in South Africa, it is essential that a balance be maintained between these costs and the service activities measured.

This specification consists of two parts. This part of NRS 047 is restricted to recommending reporting formats for the various service activities detailed in NRS 047-1. The reporting formats contained in this part of NRS 047 have been agreed upon by the ESI, various customer organizations and the NER.

Explanatory notes are included to assist the licensee in completing the reports.

It is recognized that not all aspects are addressed in detail and it is noted that the missing information will be included in future revisions of this part of NRS 047.

Key words

Electricity supply; Quality of service; Guidelines; Reporting format.

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SPECIFICATION

Electricity supply – Quality of service

Part 2: Reporting guidelines

For application by the National Electricity Regulator

1 Scope

This part of NRS 047 contains recommended reporting formats for the quality-of-service activities stipulated in NRS 047-1, which the licensees in South Africa should use to report to the National Electricity Regulator.

2 Normative references

The following standards and specifications contain provisions, which, through reference in this text, constitute provisions of this part of NRS 047. At the time of publication, the editions indicated were valid.

All standards and specifications are subject to revision, and parties to agreements based on this part of NRS 047 are encouraged to investigate the possibility of applying the most recent editions of the documents listed below. Information on currently valid national and international standards and specifications can be obtained from the South African Bureau of Standards.

SABS ISO 9004-1:1994, *Quality management and quality system elements – Part 1: Guidelines.*

SABS ISO 9004-2:1991, *Quality management and quality system elements – Part 2: Guidelines for services.*

NRS 047-1:1999, *Electricity supply – Quality of service – Part 1: Minimum standards.*

NRS 048-2:1996, *Electricity supply – Quality of supply – Part 2: Minimum standards.*

3 Terms, definitions and abbreviated terms

For the purpose of this part of NRS 047, the definitions and abbreviations given in NRS 047-1 apply.

4 Requirements

4.1 General

A section for comments is included in each reporting format, to enable the utility to provide any additional, relevant information to the NER in the report. The licensee could use this section to indicate reasons for not meeting the minimum standards, or to provide details on when the licensee will meet the minimum standards.

Licensees shall not be selective or biased in their reports to the NER. Licensees shall ensure that their quality-of-service report to the NER is freely available to any customer or prospective customer.

4.2 Processing of requests for supply

4.2.1 Recommended reporting format for providing quotations to customers

| 1 | 2 | 3 | 4 | 5 |
|---|-------------------------|-----------------------------------|---|---------------------------|
| Status of network/ Customer classification | Minimum standard | Total number of quotations | Number of quotations within minimum standard | Percentage success |
| Existing infrastructure can be used | 10 working days | | | |
| Network extensions required | 1 month | | | |
| New network installation required | By agreement | | | |
| Industrial and commercial customers | By agreement | | | |
| Comments: | | | | |
| NOTE 1 In column 3, list for each status of the network or customer classification shown in column 1 the total number of quotations for supply in the year. | | | | |
| NOTE 2 In column 4, list the total number of quotations that were within the period prescribed as the minimum standard in column 2. | | | | |
| NOTE 3 The value in column 5 is the value in column 4 divided by the value in column 3 multiplied by 100. | | | | |

4.2.2 Recommended reporting format for providing supply

| 1 | 2 | 3 | 4 | 5 |
|---|-------------------------|--------------------------------------|---------------------------------------|---------------------------|
| Status of network/ Customer classification | Minimum standard | Total number of new customers | Number within minimum standard | Percentage success |
| Existing infrastructure can be used | 30 working days | | | |
| L V network extensions required | 2 months | | | |
| MV network extensions required | 3 months | | | |
| New network installation required | By agreement | | | |
| Industrial and commercial customers | By agreement | | | |
| Comments: | | | | |
| NOTE 1 In column 3, list for each status of the network or customer classification shown in column 1 the total number of customers that have received supply in the year. | | | | |
| NOTE 2 In column 4, list the total number of customers that have received supply within the period prescribed as the minimum standard in column 2. | | | | |
| NOTE 3 The value in column 5 is the value in column 4 divided by the value in column 3 multiplied by 100. | | | | |

4.3 Credit metering

4.3.1 Recommended reporting format for meter readings

In the case of reporting on meter readings, the licensee is required to report separately on the meter readings for small business and residential customers that consume less than 50kVA (see 4.3.1.1) and the meter readings of maximum demand customers (see 4.3.1.2).

4.3.1.1 Recommended reporting formats for meter readings for residential customers and small business customers

For the sake of convenience, there are three reporting formats for meter readings for residential customers and small business customers:

- a) a format for monthly meter readings (see 4.3.1.1.1);
- b) a format for three-monthly meter readings (see 4.3.1.1.2); and
- c) a format for annual meter readings (see 4.3.1.1.3).

4.3.1.1.1 Recommended reporting format for monthly meter readings for residential and small business customers

| 1 | 2 | 3 | 4 | 5 |
|----------------|--|--|---|--------------------|
| Month | Number of metering points to be read every month | Number of metering points actually read in the month | Number of meter readings received telephonically in the month | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |

NOTE 1 In column 2, write the total number of small business and residential metering points that are to be read every month.

NOTE 2 In column 3, write the total number of metering points that were actually read in the month.

NOTE 3 In column 4, write the total number of the meter readings that were received telephonically.

NOTE 4 The value in column 5 is the sum of the values in columns 3 and 4, divided by the value in column 2, multiplied by 100.

NOTE 5 Calculate the average of column 5.

4.3.1.1.2 Recommended reporting format for three-monthly meter readings for residential and small business customers

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|--|--------------------|
| Month | Number of metering points to be read once in three months | Number of metering points actually read | Number of meter readings received telephonically | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |
| NOTE 1 In column 2, write the total number of small business and residential metering points that are to be read once in three months, in the months shown in column 1. | | | | |
| NOTE 2 In column 3, write the total number of metering points that were actually read. | | | | |
| NOTE 3 In column 4, write the total number of the meter readings that were received telephonically. | | | | |
| NOTE 4 The value in column 5 is the sum of the values in columns 3 and 4, divided by the value in column 2, multiplied by 100. | | | | |
| NOTE 5 Calculate the average of column 5. | | | | |

4.3.1.1.3 Recommended reporting format for annual meter readings for residential and small business customers

| 1 | 2 | 3 | 4 | 5 |
|--|--|---|--|--------------------|
| Month | Number of metering points to be read once a year | Number of metering points actually read | Number of meter readings received telephonically | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |
| <p>NOTE 1 In column 2, write the total number of small business and residential metering points that are to be read once a year, in the month shown in column 1.</p> <p>NOTE 2 In column 3, write the total number of metering points that were actually read.</p> <p>NOTE 3 In column 4, write the total number of the meter readings that were received telephonically.</p> <p>NOTE 4 The value in column 5 is the sum of the values in columns 3 and 4, divided by the value in column 2, multiplied by 100.</p> <p>NOTE 5 Calculate the average of column 5.</p> | | | | |

4.3.1.2 Recommended reporting format for meter readings of customers consuming more than 50 kVA

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|--------------------|
| Month | Total number of maximum demand metering points in service | Number of faulty maximum demand metering points | Number of maximum demand metering points actually read in the month | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |
| NOTE 1 In column 2, write the total number of maximum demand metering points that are in service each month. | | | | |
| NOTE 2 In column 3, write the total number of the metering points that are faulty. | | | | |
| NOTE 3 In column 4, write down the total number of the metering points that were actually read in the month. | | | | |
| NOTE 4 The value in column 5 is the value in column 4 divided by the difference between the values in column 2 and column 3 (i.e. the value in column 2 minus the value in column 3) multiplied by 100. | | | | |
| NOTE 5 Calculate the average of column 5. | | | | |

4.3.2 Penalties for non-payment

4.3.2.1 Reporting on disconnections and reconnections

In the case of reporting on disconnections, the licensee is required to report separately on the disconnection of credit meter customers outside prescribed times (see 4.3.2.2) and the disconnection of commercial and industrial customers without giving the required 24 hours notice (see 4.3.2.3).

Reconnections of credit meter customers are reported as shown in 4.3.2.4.

4.3.2.2 Recommended reporting format for disconnection of credit meter customers

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|-------------------------------------|-----------------------------------|--|---|--|--------------------|
| Month | Total number of disconnections done | Number of disconnections done: | | | Total number of disconnections done within the minimum standards | Percentage success |
| | | within 14 days after the due date | on or a day before weekends* and public holidays | within 2 hours of closure of payment venues | | |
| January | | | | | | |
| February | | | | | | |
| March | | | | | | |
| April | | | | | | |
| May | | | | | | |
| June | | | | | | |
| July | | | | | | |
| August | | | | | | |
| September | | | | | | |
| October | | | | | | |
| November | | | | | | |
| December | | | | | | |
| Average | | | | | | |
| Comments: | | | | | | |
| <p>NOTE 1 In column 2, write the total number of disconnections done each month.</p> <p>NOTE 2 In columns 3, 4 or 5, as applicable, write the number of disconnections that were done contrary to the requirements of this specification. If a particular disconnection qualifies to be included in two or more of the columns 3, 4 and 5, it should be recorded only once.</p> <p>* Note that disconnections are allowed on a Friday provided that normal payment and reconnection facilities are available on Saturday mornings.</p> <p>NOTE 3 The value in column 6 is the value in column 2 minus the value in column 3 minus the value in column 4 minus the value in column 5.</p> <p>NOTE 4 The value in column 7 is the value in column 6 divided by the value in column 2 multiplied by 100.</p> <p>NOTE 5 Calculate the average of column 7.</p> | | | | | | |

4.3.2.3 Recommended reporting format for disconnection of commercial/industrial customers

| 1 | 2 | 3 | 4 | 5 |
|---|--|--|--|--------------------|
| Month | Total number of commercial/industrial customers disconnected | Number disconnected within 24 h of notice being served | Number disconnected at least 24 h after notice has been served | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |
| <p>NOTE 1 In column 2, write the total number of disconnections done each month.</p> <p>NOTE 2 In column 3, write the number of disconnections that were done within 24 h of notice being served.</p> <p>NOTE 3 The value in column 4 is the value in column 2 minus the value in column 3.</p> <p>NOTE 4 The value in column 5 is the value in column 4 divided by the value in column 2 multiplied by 100.</p> <p>NOTE 5 Calculate the average of column 5.</p> | | | | |

4.3.2.4 Recommended reporting format for the reconnection of credit meter customers

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|--------------------|
| Month | Total number of customers to be reconnected | Number of customers not reconnected within minimum standard | Number of customers reconnected within minimum standard | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |
| <p>NOTE 1 In column 2, write the total number of credit meter reconnections that have been carried out each month.</p> <p>NOTE 2 In column 3, write the number not reconnected within the first working day after the account has been settled and the reconnection fees has been paid.</p> <p>NOTE 3 The value in column 4 is the value in column 2 minus the value in column 3.</p> <p>NOTE 4 The value in column 5 is the value in column 4 divided by the value in column 2 multiplied by 100.</p> <p>NOTE 5 Calculate the average of column 5.</p> | | | | |

4.3.3 Recommended reporting format for account queries

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|--|---|--------------------|-----------------------------------|--|--------------------|
| Month | Number of personal/ telephonic account queries | Number responded to within three working days | Percentage success | Number of written account queries | Number responded to within five working days | Percentage success |
| January | | | | | | |
| February | | | | | | |
| March | | | | | | |
| April | | | | | | |
| May | | | | | | |
| June | | | | | | |
| July | | | | | | |
| August | | | | | | |
| September | | | | | | |
| October | | | | | | |
| November | | | | | | |
| December | | | | | | |
| Average | | | | | | |
| Comments: | | | | | | |
| <p>NOTE 1 In column 2, write, for each month, the total number of account queries received in person or telephonically.</p> <p>NOTE 2 In column 3 write the number of the queries in column 2 that have been responded to within three working days.</p> <p>NOTE 3 The value in column 4 is the value in column 3 divided by the value in column 2 multiplied by 100.</p> <p>NOTE 4 Repeat the procedure for the written account queries (columns 5, 6, and 7).</p> <p>NOTE 5 Calculate the average of column 4 and column 7.</p> | | | | | | |

4.3.4 Recommended reporting format for credit meter accuracy queries

| 1 | 2 | 3 | 4 | 5 |
|--|--|---|---|--------------------|
| Month | Total number of meter accuracy queries | Number not resolved within fifteen working days | Number resolved within fifteen working days | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |
| NOTE 1 In column 2, write the total number of credit meter accuracy queries received each month. | | | | |
| NOTE 2 In column 3, write the number of queries that have not been resolved within fifteen working days of the receipt of the prescribed fees. | | | | |
| NOTE 3 The value in column 4 is the value in column 2 minus the value in column 3. | | | | |
| NOTE 4 The value in column 5 is the value in column 4 divided by the value in column 2 multiplied by 100. | | | | |
| NOTE 5 Calculate the average of column 5. | | | | |

4.4 Prepayment metering

4.4.1 Recommended reporting format for the provision of vending stations

The reporting format on the evaluation of a vending station within a 5 km radius of any customer is not given in this part of NRS 047. However, licensees who would like to report on this service activity could do so in one of the following two ways:

- a) all the vending stations could be plotted on a large-scale map and then compliance could be manually evaluated on an individual basis; or
- b) the area of supply (in square kilometres) covered by the vending stations could be divided by the number of vending stations. The area per vending station should not exceed 80 km². This method could be inaccurate if there are numerous vending stations in a small area.

NOTE 1 In column 1, list the vending stations.

NOTE 2 In column 2, state the actual hours of business on weekdays for each vending station. The acceptable hours of business for weekdays are 08:00 to 18:00.

NOTE 3 In column 3, state the actual hours of business over weekends and on public holidays for each vending station. The acceptable hours of business for weekends and public holidays are 08:00 to 12:00.

4.4.3 Recommended reporting format for prepayment meter accuracy queries

| 1 | 2 | 3 | 4 | 5 |
|---|--|---|---|--------------------|
| Month | Total number of meter accuracy queries | Number not resolved within fifteen working days | Number resolved within fifteen working days | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |
| <p>NOTE 1 In column 2, write the total number of prepayment meter accuracy queries received each month.</p> <p>NOTE 2 In column 3, write the number of queries that have not been resolved within fifteen working days of the receipt of the prescribed fees.</p> <p>NOTE 3 The value in column 4 is the value in column 2 minus the value in column 3.</p> <p>NOTE 4 The value in column 5 is the value in column 4 divided by the value in column 2 multiplied by 100.</p> <p>NOTE 5 Calculate the average of column 5.</p> | | | | |

4.4.4 Recommended reporting format for the reconnection of prepayment meter customers

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|--------------------|
| Month | Total number of customers to be reconnected | Number of customers not reconnected within minimum standard | Number of customers reconnected within minimum standard | Percentage success |
| January | | | | |
| February | | | | |
| March | | | | |
| April | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| August | | | | |
| September | | | | |
| October | | | | |
| November | | | | |
| December | | | | |
| Average | | | | |
| Comments: | | | | |
| NOTE 1 In column 2, write the total number of prepayment meters reconnected each month (exclude hard disconnections or service removals after tampering has taken place). | | | | |
| NOTE 2 In column 3, write the number not reconnected within 48 working hours of the request for the reconnection and the payment of the reconnection fees. | | | | |
| NOTE 3 The value in column 4 is the value in column 2 minus the value in column 3. | | | | |
| NOTE 4 The value in column 5 is the value in column 4 divided by the value in column 2 multiplied by 100. | | | | |
| NOTE 5 Calculate the average of column 5. | | | | |

4.5.3 Recommended reporting format for the restoration of supply after a forced interruption

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|------------------------------|------------|------------------------------|------------|------------------------------|------------|-----------------------------|------------|
| Month | Total number of forced interruptions after which supply is restored | Supply restored within 1,5 h | | Supply restored within 3,5 h | | Supply restored within 7,5 h | | Supply restored within 24 h | |
| | | Actual | Percentage | Actual | Percentage | Actual | Percentage | Actual | Percentage |
| January | | | | | | | | | |
| February | | | | | | | | | |
| March | | | | | | | | | |
| April | | | | | | | | | |
| May | | | | | | | | | |
| June | | | | | | | | | |
| July | | | | | | | | | |
| August | | | | | | | | | |
| September | | | | | | | | | |
| October | | | | | | | | | |
| November | | | | | | | | | |
| December | | | | | | | | | |
| Average | | | | | | | | | |
| Comments: | | | | | | | | | |
| NOTE 1 In column 2, state the total number of forced interruptions after which supply was restored each month. | | | | | | | | | |
| NOTE 2 In column 3, write the actual number of forced interruptions after which supply was restored within 1,5 h. | | | | | | | | | |
| NOTE 3 The value in column 4 is the value in column 3 divided by the value in column 2 multiplied by 100. Calculate the average of column 4. | | | | | | | | | |
| NOTE 4 In column 5, write the actual number of forced interruptions after which supply was restored within 3,5 h. This would include those forced interruptions where supply was restored within 1,5 h. | | | | | | | | | |
| NOTE 5 The value in column 6 is the value in column 5 divided by the value in column 2 multiplied by 100. Calculate the average of column 6. | | | | | | | | | |
| NOTE 6 Similarly, in column 7 and column 9, write the actual number of forced interruptions after which supply was restored within 7,5 h (will include the forced interruptions where supply was restored within 1,5 h and 3,5 h) and the actual number of forced interruptions after which supply was restored within 24 h (will include the forced interruptions after which supply was restored within 1,5 h, 3,5 h and 7,5 h) respectively. | | | | | | | | | |
| NOTE 7 The value in column 8 is the value in column 7 divided by the value in column 2 multiplied by 100. Calculate the average of column 8. | | | | | | | | | |
| NOTE 8 The value in column 10 is the value in column 9 divided by the value in column 2 multiplied by 100. Calculate the average of column 10. | | | | | | | | | |

4.5.4 Number and duration of planned interruptions

4.5.4.1 Reporting on planned interruptions

The licensee shall report on the planned interruptions on overhead networks (see 4.5.4.2) and the planned interruptions on underground networks (see 4.5.4.3).

NOTE 1 For the purposes of this part of NRS 047, the categories listed in column 1 of the tables in 4.5.4.2 and 4.5.4.3 are categories of network, not of customer. (For example, a customer operating a commercial enterprise could be located in an area that has been designed to serve residential customers.)

NOTE 2 The number and duration of planned interruptions for overhead distribution assume bare conductor. These figures will also apply when aerial bundled conductors (ABC) are being assessed but, in general, better percentage success can be expected from ABC systems.

NOTE 3 A simple test can be used to determine if an interruption should be classified as forced or planned (see 3.1.3 and 3.1.6 of NRS 047-1 for definitions of a forced interruption and a planned interruption). If it is possible to defer the interruption when such deferment is desirable, the interruption is a planned interruption; otherwise, the interruption is a forced one. Deferring an interruption might be desirable, for example, to prevent overload of facilities.

NOTE 4 A mixed overhead and underground network should be regarded as an overhead network for the purpose of determining the allowed number of forced or planned interruptions.

4.5.4.2 Planned interruptions on overhead networks

| 1 | 2 | 3 | 4 | 5 | 6 |
|--|-------------------|------------------|---------------------------------|--|--------------------|
| Category of network | Minimum standards | | Total No. of customers affected | No. of customers within minimum standard | Percentage success |
| | No. | Total duration h | | | |
| Residential established | 2 per year | 6 per year | | | |
| Residential developing | 3 per year | 6 per year | | | |
| Commercial/small to medium industrial | 2 per year | 6 per year | | | |
| Comments: | | | | | |
| NOTE 1 In column 4, state how many customers (for each of the categories stated in column 1) were affected by planned interruptions. | | | | | |
| NOTE 2 In column 5, state how many customers were within the minimum standards for both the number of planned interruptions (column 2) and the duration of planned interruptions (column 3). | | | | | |
| NOTE 3 The value in column 6 is the value in column 5 divided by the value in column 4 multiplied by 100. | | | | | |

4.5.4.3 Planned interruptions on underground networks

| 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------------------------|-------------------|------------------|---------------------------------|--------------------------------------|--------------------|
| Category of network | Minimum standards | | Total No. of customers affected | Total number within minimum standard | Percentage success |
| | No. | Total duration h | | | |
| Residential established | 1 per 2 years | 6 per 2 years | | | |
| Residential developing | 1 per year | 6 per year | | | |
| Commercial/small-to-medium industrial | 1 per 2 years | 6 per 2 years | | | |

Comments:

NOTE 1 In column 4, state how many customers (for each of the categories stated in column 1) were affected by planned interruptions.

NOTE 2 In column 5, state how many customers were within the minimum standards for both the number of planned interruptions (column 2) and the duration of planned interruptions (column 3).

NOTE 3 The value in column 6 is the value in column 5 divided by the value in column 4 multiplied by 100.

4.5.5 Recommended reporting format for notice of planned interruptions

| 1 | 2 | 3 | 4 | 5 | 6 |
|----------------|---------------------------------|---|---|--------------------|----------|
| Month | Number of planned interruptions | Number of customers to receive notification | Number of customers that actually received at least 48 hours notification | Percentage success | Comments |
| January | | | | | |
| February | | | | | |
| March | | | | | |
| April | | | | | |
| May | | | | | |
| June | | | | | |
| July | | | | | |
| August | | | | | |
| September | | | | | |
| October | | | | | |
| November | | | | | |
| December | | | | | |
| Average | | | | | |

NOTE 1 In column 2, write the number of planned interruptions per month.

NOTE 2 In column 3, write, for each month, the number of customers that should receive written notification.

NOTE 3 In column 4, write the number of customers that actually received the notification at least 48 hours before the planned interruptions.

NOTE 4 The value in column 5 is the value in column 4 divided by the value in column 3 multiplied by 100.

NOTE 5 Calculate the average of column 5.

4.6 Customer complaints, enquiries and requests

4.6.1 Recommended reporting format for customer complaints

Telephonic customer complaints are covered in 4.7.2.

| 1 | 2 | 3 | 4 | 5 |
|--|---------------------------------------|-----------------|---------------------------------|--------------------|
| Service activity | Minimum standards | Number received | Number within minimum standards | Percentage success |
| Customer complaints received in person | Handled immediately, without referral | | | |

| | | | | |
|---|----------------|--|--|--|
| Response time for written customer complaints | 2 working days | | | |
| Time to resolve written customer complaints | 2 weeks | | | |
| Comments: | | | | |
| NOTE 1 In column 3, write the number of complaints received for each of the activities in column 1. | | | | |
| NOTE 2 In column 4, state how many complaints were dealt with within the period prescribed as the minimum standard in column 2. | | | | |
| NOTE 3 The value in column 5 is the value in column 4 divided by the value in column 3 multiplied by 100. | | | | |

4.6.2 Recommended reporting format for customer enquiries

| 1 | 2 | 3 | 4 | 5 |
|--|-------------------|-----------------|---------------------------------|--------------------|
| Service activity | Minimum standards | Number received | Number within minimum standards | Percentage success |
| Response time for customer enquiries requiring investigative work | 5 working days | | | |
| Response time for written enquiries | 5 working days | | | |
| Time to resolve enquiries | 3 weeks | | | |
| Comments: | | | | |
| NOTE 1 In column 3, write the number of enquiries received for each of the activities in column 1. | | | | |
| NOTE 2 In column 4, state how many enquiries were dealt with within the period prescribed as the minimum standard in column 2. | | | | |
| NOTE 3 The value in column 5 is the value in column 4 divided by the value in column 3 multiplied by 100. | | | | |

4.6.3 Recommended reporting format for customer requests

| 1 | 2 | 3 | 4 | 5 |
|--|------------------------|-----------------------------|---------------------------------|--------------------|
| Service activity | Minimum standards | Number of requests received | Number within minimum standards | Percentage success |
| Time to respond to general customer requests | 2 weeks | | | |
| Time to carry out customer requests | Stipulated in response | | | |
| Comments: | | | | |

NOTE 1 In column 3, write the number of requests received for each of the activities in column 1.

NOTE 2 In column 4, state how many requests were dealt with within the period prescribed as the minimum standard in column 2.

NOTE 3 The value in column 5 is the value in column 4 divided by the value in column 3 multiplied by 100.

4.7 Telephone services

4.7.1 Recommended reporting format for the provision of essential telephone services

The provision of a telephone service for fault reporting is dealt with in 4.5.2 of NRS 047-1.

| 1 | 2 | 3 | 4 |
|---|------------------|----------------------|----------|
| Service activity | Minimum standard | Performance (Yes/No) | Comments |
| Hours when emergencies can be reported telephonically | 24 h | | |
| Hours when complaints, requests and queries can be reported telephonically | Office hours | | |
| NOTE In column 3, answer the question for each of the service activities in column 1, either yes or no. | | | |

4.7.2 Recommended reporting format for the provision and performance of specific telephone services

The licensee will only report if the facility to measure the activities in column 1 exists.

| 1 | 2 | 3 | 4 |
|---|-------------------------------|-------------------|----------|
| Service activity | Acceptable minimum percentage | Actual percentage | Comments |
| Percentage of queries for information handled without referral | 90 % | | |
| Percentage of payments handled on a one stop basis without referral | 100 % | | |
| Percentage of faults reports not resolved telephonically but referred to the dispatcher as part of the customer contact | 100 % | | |
| Percentage of claims referred to the responsible person as part of customer contact | 100 % | | |
| Percentage of general complaints handled on a one-stop basis without referral | 90 % | | |
| Percentage of meter readings recorded accurately and allocated to correct point of delivery | 100 % | | |
| Percentage of emergency reports acted on immediately | 100 % | | |
| NOTE In column 3, state the actual percentage for each service activity in column 1. | | | |

4.7.3 Recommended reporting format for call handling

The licensee will only report if the facility to measure the activities in column 1 exists.

| 1 | 2 | 3 | 4 |
|---|-----------------------------|--------------------|----------|
| Service activity | Acceptable minimum standard | Actual performance | Comments |
| Percentage of incoming calls answered within 15 s | 85 % | | |
| Average response time | < 10 s | | |
| Lost call rate | < 2 % | | |
| Percentage of incoming calls dealt with within 5 min | 90 % | | |
| Percentage of calls not referred | 90 % | | |
| Percentage of misdirected calls closed within 30 s | 90 % | | |
| Emergency and fault reporting telephone service downtime | < 1 h per year | | |
| NOTE In column 3, state the actual performance for each service activity in column 1. | | | |

4.8 Non-compliance with NRS 048-2

The recommended reporting format for the restoration of supply after a forced interruption is given in 4.5.3 and that for the restoration of supply after a planned interruption is given in 4.5.4.

| 1 | 2 | 3 | 4 | 5 |
|---|--------------------------|--------------------------------------|---|---------------------------|
| Service activity | Minimum standards | Number of complaints received | Number of complaints resolved within minimum standards | Percentage success |
| Time to resolve to NRS 048 complaints | Negotiated with customer | | | |
| Comments: | | | | |
| NOTE 1 In column 3, write the number of NRS 048-2 complaints received. | | | | |
| NOTE 2 In column 4, state how many complaints were resolved within the time span negotiated. | | | | |
| NOTE 3 The value in column 5 is the value in column 4 divided by the value in column 3 multiplied by 100. | | | | |

4.9 Customer education and customer forums

Under consideration.

4.10 Recommended questionnaire to be completed by a sample of key customers and included in the reporting to the NER

Name of key customer:.....

The key customer should provide a rating of between 1 and 10 in column 2. A rating of 1 would signify bad quality of service and a rating of 10 would signify excellent quality of service.

| 1 | 2 |
|-------------------------|---------------|
| Service activity | Rating |
| Interruptions | |
| Equipment maintenance | |
| Account queries | |
| Technical assistance | |
| Tariff negotiations | |

