

# **HORIZON ENERGY DISTRIBUTION LIMITED**

## **ANNUAL COMPLIANCE STATEMENT**

### **FOR THE ASSESSMENT PERIOD TO 31 MARCH 2017**

Pursuant to the Electricity Distribution Services Default Price-Quality  
Path Determination 2015 (“Determination 2015”)

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## 1) Compliance with the Price Path (Clause 11.2(a)(i))

Horizon Energy Distribution Limited does comply with the price path at the assessment date, 31 March 2017, as specified in the *Electricity Distribution Services Default Price-Quality Path Determination 2015*.

**Clause 8.3** - The notional revenue (NR) of a Non-exempt EDB in an Assessment Period must not exceed the allowable notional revenue (ANR) for the Assessment Period.

Compliance is demonstrated in the following table, which shows that notional revenue during the Assessment Period does not exceed allowable notional revenue.

|                          |   |
|--------------------------|---|
| Test:                    | $\frac{NR_{2016/17}}{ANR_{2016/17}} \leq 1$ |
| NR <sub>2016/17</sub> :  | \$ 21,983,396                               |
| ANR <sub>2016/17</sub> : | \$ 21,992,125                               |
| Result:                  | 0.9996 < 1                                  |
| Result:                  | <i>Price Path has not been breached</i>     |

Supporting evidence is presented in Appendices A, B, C and D.

## 2) Compliance with the Quality Standards (Clause 11.2(a)(ii))

Horizon Energy Distribution Limited does comply with all requirements of the quality standards at the assessment date, 31 March 2017, as specified in the *Electricity Distribution Services Default Price-Quality Path Determination 2015*.

### 2017 Reliability Assessment

**Clause 9.1(a) requires compliance with Clause 9.2:** A Non-exempt EDB's SAIDI Assessed Value and SAIFI Assessed Value for the Assessment Period must not exceed the SAIDI Limit and SAIFI Limit specified in Schedule 4A.

In this current assessment period, the SAIDI Assessed Value exceeds the SAIDI Limit as specified in Schedule 4A. The SAIFI Assessed Value for the Assessment Period does not exceed the SAIFI Limit as specified in Schedule 4A.

|                                 |  |
|---------------------------------|--|
| Test:                           | $\frac{SAIDI_{Assess\ 2016/17}}{SAIDI_{Limit}} \leq 1$ |
| SAIDI <sub>Assess 2016/17</sub> | 218.8319   |
| SAIDI <sub>Limit</sub>          | 175.8270   |
|                                 | 1.2446 > 1   |
| <b>Clause 9.1(a) Result:</b>    | <i>Exceeds Limit</i>                                   |

|                                 |  |
|---------------------------------|--|
| Test:                           | $\frac{SAIFI_{Assess\ 2016/17}}{SAIFI_{Limit}} \leq 1$ |
| SAIFI <sub>Assess 2016/17</sub> | 2.1673   |
| SAIFI <sub>Limit</sub>          | 2.2150   |
|                                 | 0.9785 < 1   |
| <b>Clause 9.1(a) Result:</b>    | <i>Does Not Exceed Limit</i>                           |

Supporting evidence is presented in Appendices E and F.

### Prior Period Reliability Assessment (9.1(b))

**Clause 9.1(b)** Compliance with the annual reliability assessment in each of the two preceding Assessment Periods.

Compliance is demonstrated in the following tables, which shows that the SAIDI Assessed Value and SAIFI Assessed Value for the Assessment Periods does not exceed the SAIDI Limit and SAIFI Limit as calculated.

|                                 |          |                                 |        |
|---------------------------------|----------|---------------------------------|--------|
| SAIDI <sub>Assess 2015/16</sub> | 127.6788 | SAIFI <sub>Assess 2015/16</sub> | 1.5768 |
| SAIDI <sub>Limit 2015/16</sub>  | 175.8270 | SAIFI <sub>Limit 2015/16</sub>  | 2.2150 |
| 0.7262                          | < 1      | 0.7119                          | < 1    |
| <i>Does Not Exceed Limit</i>    |          | <i>Does Not Exceed Limit</i>    |        |

|                                 |          |                                 |        |
|---------------------------------|----------|---------------------------------|--------|
| SAIDI <sub>Assess 2014/15</sub> | 160.0159 | SAIFI <sub>Assess 2014/15</sub> | 1.8470 |
| SAIDI <sub>Limit 2014/15</sub>  | 175.8270 | SAIFI <sub>Limit 2014/15</sub>  | 2.2150 |
| 0.9101                          | < 1      | 0.8339                          | < 1    |
| <i>Does Not Exceed Limit</i>    |          | <i>Does not Exceed Limit</i>    |        |

### Compliance Summary

**Clause 9.1** A Non-exempt EDB must, in respect of each Assessment Period, either:

(a) comply with the annual reliability assessment specified in clause 9.2 for that Assessment Period; or

(b) have complied with the annual reliability assessment in each of the two preceding Assessment Periods.

|                               | SAIDI  | SAIFI                 | Compliance                    |
|-------------------------------|--|-----------------------|-------------------------------|
| <b>Compliance with 9.1(a)</b> | Exceeds Limit                                | Does Not Exceed Limit | <b><i>Does not Comply</i></b> |
| or                            |  |                       |                               |
| <b>Compliance with 9.1(b)</b> |  |                       | <b><i>Complies</i></b>        |
| 2015/16 Assessment Period     | Does Not Exceed Limit                        | Does Not Exceed Limit | <i>Complies</i>               |
| 2014/15 Assessment Period     | Does Not Exceed Limit                        | Does not Exceed Limit | <i>Complies</i>               |
| <b>Clause 9.1 Result:</b>     | <b><i>Complies with Quality Standard</i></b> |                       |                               |

### 3) Director's Certificate (Clause 11.3(a))

We, Anthony De Farias and John McDonald, being directors of Horizon Energy Distribution Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached Annual Compliance Statement of Horizon Energy Distribution Limited, and related information, prepared for the purposes of the *Electricity Distribution Services Default Price-Quality Path Determination 2015* are true and accurate.



Anthony De Farias



John McDonald

30 May 2017



# Independent Reasonable Assurance Report to the Directors of Horizon Energy Distribution Limited and to the New Zealand Commerce Commission

## Conclusion

We conclude that, in all material respects, the Annual Compliance Statement of Horizon Energy Distribution Limited has been prepared in accordance with clause 11 of the Electricity Distribution Services Default Price-Quality Path Determination 2015 ("the Determination") for the assessment period ended on 31 March 2017.

We also conclude that, from our examination, in all material respects, the information used in the preparation of the Annual Compliance Statement of Horizon Energy Distribution Limited has been properly extracted from Horizon Energy Distribution's accounting and other records, sourced from its financial and non-financial systems.

## Information subject to assurance

We have performed an engagement to provide reasonable assurance in relation to Horizon Energy Distribution Limited's Annual Compliance Statement for the Assessment period ended 31 March 2017.

## Criteria

We have performed an engagement to provide reasonable assurance in relation to the attached statement, which is an Annual Compliance Statement in respect of the default price-quality path prepared by Horizon Energy Distribution Limited for the period 31 March 2017 and dated 30 May 2017 for the purposes of clause 11 of the Electricity Distribution Services Default Price-Quality Path Determination 2015 ("the Determination").

In relation to the price path set out in clause 8 of the Determination, our assurance engagement included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on page 2 of the Annual Compliance Statement.

In relation to the SAIDI and SAIFI statistics for the Reference Period and the Assessment Period ended on 31 March 2017, including the calculation of the Assessed Values, which are relevant to the quality standards set out in clause 9 of the Determination, our assurance engagement included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 3 and 4 of the Annual Compliance Statement.

## Standards we followed

We conducted our reasonable assurance engagement in accordance with International Standard on Assurance Engagements (New Zealand) ISAE (NZ) 3000 (Revised) Assurance Engagements other than audits or reviews of historical financial information (ISAE (NZ) 3000) and Standard on Assurance Engagements SAE 3100 Compliance Engagements. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion. In accordance with ISAE (NZ) 3000 we have:

- used our professional judgement to assess the risk of material misstatement and plan and perform the engagement to obtain reasonable assurance that the [information subject to assurance] is free from material misstatement, whether due to fraud or error;



- considered relevant internal controls when designing our assurance procedures, however we do not express a conclusion on the effectiveness of these controls; and
- ensured that the engagement team possesses the appropriate knowledge, skills and professional competencies.

## How to interpret reasonable assurance and material misstatement

Reasonable assurance is a high level of assurance, but is not a guarantee that it will always detect a material misstatement when it exists.

Misstatements, including omissions, within the Annual Compliance Statement are considered material if, individually or in the aggregate, they could reasonably be expected to influence the relevant decisions of the intended users taken on the basis of the Annual Compliance Statement.

## Use of this assurance Report

Our report should not be regarded as suitable to be used or relied on by any party other than Horizon Energy Distribution Limited and the New Zealand Commerce Commission in relation to section 11.3(b) of the Electricity Distribution Services Default Price-Quality Path Determination 2015 for any purpose or in any context. Any party other than Horizon Energy Distribution Limited and the New Zealand Commerce Commission who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, we accept or assume no responsibility and deny any liability to any party other than Horizon Energy Distribution Limited and the New Zealand Commerce Commission for our work, for this independent reasonable assurance report, or for the conclusions we have reached.

Our report is released to Horizon Energy Distribution Limited and the New Zealand Commerce Commission on the basis that it shall not be copied, referred to or disclosed, in whole (except for Horizon Energy Distribution's own internal purposes) or in part, without our prior written consent.

## Directors' responsibility for the Annual Compliance Statement

The directors of Horizon Energy Distribution Limited are responsible for the preparation and fair presentation of the Annual Compliance Statement in accordance with the Determination. This responsibility includes such internal control as the directors determine is necessary to enable the preparation of the Annual Compliance Statement that is free from material misstatement whether due to fraud or error.

## Our responsibility

Our responsibility is to express a conclusion to the directors on the preparation and presentation of the Annual Compliance Statement in accordance with the Determination.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our reasonable assurance conclusion.

## Our independence and quality control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 (Revised) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 (Amended) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.



Our firm has also provided other services to Horizon Energy Distribution Limited such as the annual audit and half-year review of the financial statements, auditors pursuant to the Electricity Distribution Information Disclosure Determination 2015, staff secondment and taxation compliance services and advice. Subject to certain restrictions, partners and employees of our firm may also deal with Horizon Energy Distribution Limited on normal terms within the ordinary course of trading activities of the business of Horizon Energy Distribution Limited. These matters have not impaired our independence as assurance providers of Horizon Energy Distribution Limited for this engagement. The firm has no other relationship with, or interest in, the Horizon Energy Distribution Limited.

A handwritten signature in black ink, appearing to read 'KPMG.' with a period at the end.

KPMG  
Auckland  
30 May 2017



## Appendix A – Price Path Compliance (Clauses 11.4)

### Price Path Calculations (Clause 11.4 (c))

#### Clause 8.5

| Notional Revenue 2016/17           |   |            |
|------------------------------------|---|------------|
| Term                               | Description   | Value \$   |
| $\Sigma P_{2016/17} * Q_{2014/15}$ | Prices at 31 March 2017 multiplied by 31 March 2015 Base Quantities | 21,983,396 |
| $NR_{2016/17}$                     | Notional Revenue for the year ending 31 March 2017                  | 21,983,396 |

Supported by P\*Q schedules presented in Appendix B

#### Clause 8.4

| Allowable Notional Revenue 2016/17 |   |            |
|------------------------------------|---|------------|
| Term                               | Description   | Value \$   |
| $\Sigma P_{2015/16} * Q_{2014/15}$ | Prices at 31 March 2016 multiplied by 31 March 2015 Base Quantities | 21,155,163 |
| $R_{2015/16} - NR_{2015/16}$       | Revenue differential for year ending 31 March 2016                  | 736,080    |
| $X$                                | X Factor  | 0%         |
| $(1 + \Delta CPI_{2016/17})$       | Average change in Consumer Price Index                              | 1.0046     |
| $ANR_{2016/17}$                    | Allowable Notional Revenue for the year ending 31 March 2017        | 21,992,125 |

Supported by P\*Q schedules presented in Appendix B

# Price and Quantity Schedule - Distribution Prices (Clause 11.4(c))

## Notional Revenue 2016/17

Horizon P X Q SCHEDULE  
 Prices at 31 March 2017  
 Period: Annual  
 365 Days

| Consumer Groups                     | BASE QUANTITIES 31 March 2015 |                             |                    | 2016/17 Prices      |                   | (P2017 X Q2015)     |                   |                          |
|-------------------------------------|-------------------------------|-----------------------------|--------------------|---------------------|-------------------|---------------------|-------------------|--------------------------|
|                                     | ICPs                          | Ave Capacity/<br>MD per ICP | kWh                | Line Charges        |                   | Line Charges        |                   | Total<br>Revenue<br>(\$) |
|                                     |                               |                             |                    | Fixed<br>\$ per day | Variable<br>c/kWh | Fixed<br>\$ per day | Variable<br>c/kWh |                          |
| <b>RETAIL</b>                       |                               |                             |                    |                     |                   |                     |                   |                          |
| <b>DOMESTIC</b>                     |                               |                             |                    |                     |                   |                     |                   |                          |
| LUDU                                | 7,578                         |                             | 36,809,662         | -                   | 8.988             | -                   | 3,308,452         | 3,308,452                |
| LUDR                                | 3,629                         |                             | 18,317,834         | -                   | 8.988             | -                   | 1,646,407         | 1,646,407                |
| NDU                                 | 5,417                         |                             | 38,066,969         | 1.528               | 1.623             | 3,021,169           | 617,827           | 3,638,996                |
| NDR                                 | 4,614                         |                             | 32,124,886         | 1.528               | 1.623             | 2,573,320           | 521,387           | 3,094,707                |
| <b>TOTAL DOMESTIC</b>               | <b>21,238</b>                 |                             | <b>125,319,351</b> |                     |                   | <b>5,594,489</b>    | <b>6,094,073</b>  | <b>11,688,562</b>        |
| <b>GENERAL</b>                      |                               |                             |                    |                     |                   |                     |                   |                          |
| <b>Specials</b>                     |                               |                             |                    |                     |                   |                     |                   |                          |
| U/Verandah Lights                   | 14                            |                             |                    | \$0.717/day         |                   | 3,664               | -                 | 3,664                    |
| Electric Fence                      | 16                            |                             |                    | \$0.729/day         |                   | 4,257               | -                 | 4,257                    |
| Lanark                              | 1                             |                             |                    | \$293.83/mth        |                   | 3,526               | -                 | 3,526                    |
| Street Lights                       | 22                            | 4,676 street lights         | 2,240,297          | 4.681 \$/light/mth  |                   | 262,660             | -                 | 262,660                  |
| Telecom - PCM 24 hour               | 77                            |                             |                    | \$48.498/mth        |                   | 44,812              | -                 | 44,812                   |
| Telecom - controlled                | 17                            |                             |                    | \$24.651/mth        |                   | 5,029               | -                 | 5,029                    |
| <b>Total Specials</b>               | <b>147</b>                    |                             | <b>2,240,297</b>   |                     |                   | <b>323,948</b>      | <b>-</b>          | <b>323,948</b>           |
| <b>Capacity Groups</b>              |                               |                             |                    |                     |                   |                     |                   |                          |
| N2U                                 | 797                           |                             | 13,328,088         | 0.967               | 3.973             | 281,305             | 529,525           | 810,830                  |
| N2R                                 | 1,724                         |                             | 25,063,772         | 2.030               | 6.616             | 1,277,398           | 1,658,219         | 2,935,617                |
| N3U                                 | 269                           |                             | 10,266,388         | 1.542               | 4.368             | 151,401             | 448,436           | 599,837                  |
| N3R                                 | 316                           |                             | 14,363,786         | 3.955               | 5.678             | 456,170             | 815,576           | 1,271,745                |
| N4U                                 | 45                            |                             | 2,699,363          | 3.678               | 5.942             | 60,411              | 160,396           | 220,807                  |
| N4R                                 | 38                            |                             | 2,406,671          | 5.705               | 6.166             | 79,128              | 148,395           | 227,524                  |
| N5U                                 | 31                            | 173 kVA                     | 2,335,787          | 3.848c/kVA/day      | 5.367             | 75,107              | 125,362           | 200,468                  |
| N5R                                 | 26                            | 185 kVA                     | 1,763,337          | 4.840c/kVA/day      | 9.265             | 84,969              | 163,373           | 248,342                  |
| <b>Total Capacity Groups</b>        | <b>3,246</b>                  |                             | <b>72,227,193</b>  |                     |                   | <b>2,465,889</b>    | <b>4,049,282</b>  | <b>6,515,171</b>         |
| <b>Network Maximum Demand (NMD)</b> |                               |                             |                    |                     |                   |                     |                   |                          |
| NMD - Variable                      |                               |                             | 46,044,819         |                     | 2.154             | -                   | 991,805           | 991,805                  |
| NMD - Capacity                      | 141                           | 261 kVA                     |                    | \$1.174/kVA/mth     |                   | 518,631             | -                 | 518,631                  |
| NMD - Maximum Demand                | 141                           | 177 kW                      |                    | \$3.062/kW/mth      |                   | 917,434             | -                 | 917,434                  |
| <b>Total NMD</b>                    | <b>141</b>                    |                             | <b>46,044,819</b>  |                     |                   | <b>1,436,066</b>    | <b>991,805</b>    | <b>2,427,871</b>         |
| <b>TOTAL GENERAL</b>                | <b>3,534</b>                  |                             | <b>120,512,309</b> |                     |                   | <b>4,225,903</b>    | <b>5,041,087</b>  | <b>9,266,991</b>         |
| <b>TOTAL RETAIL</b>                 | <b>24,772</b>                 |                             | <b>245,831,660</b> |                     |                   | <b>9,820,392</b>    | <b>11,135,161</b> | <b>20,955,553</b>        |
| <b>MAJORS - REGULATED</b>           |                               |                             |                    |                     |                   |                     |                   |                          |
| <b>Customers</b>                    |                               |                             |                    |                     |                   |                     |                   |                          |
| Fonterra (BoPE)                     | 1                             |                             |                    | \$35,056.92/mth     |                   | 420,683             | -                 | 420,683                  |
| Fonterra Lipid & Distillery         | 1                             |                             |                    | \$3,279.60/mth      |                   | 39,355              | -                 | 39,355                   |
| SCA Hygiene (TP)                    | 1                             |                             |                    | \$1,643.11/mth      |                   | 19,717              | -                 | 19,717                   |
| CHH Whakatane (TP)                  | 1                             |                             |                    | \$13,848.80/mth     |                   | 166,186             | -                 | 166,186                  |
| Kaingaroa Timberlands (TP)          | 1                             |                             |                    | \$15,267.18/mth     |                   | 183,206             | -                 | 183,206                  |
| CHH - Kawerau (TP)                  | 1                             |                             |                    | \$2,104.94/mth      |                   | 25,259              | -                 | 25,259                   |
| Norske Skog Oxidation Ponds (TP)    | 1                             |                             |                    | \$4,353.34/mth      |                   | 52,240              | -                 | 52,240                   |
| Sequal Investments                  | 1                             |                             |                    | \$8,264.66/mth      |                   | 99,176              | -                 | 99,176                   |
| Fonterra Assets                     | 1                             |                             |                    | \$1,250.00/mth      |                   | 15,000              | -                 | 15,000                   |
| GDL Breaker Contract                | 1                             |                             |                    | \$585.00/mth        |                   | 7,020               | -                 | 7,020                    |
| BOPE TG1 & TG2                      | 1                             |                             |                    | \$0.00/mth          |                   | -                   | -                 | -                        |
| <b>TOTAL MAJORS - REGULATED</b>     | <b>11</b>                     |                             |                    |                     |                   | <b>1,027,843</b>    | <b>-</b>          | <b>1,027,843</b>         |
| <b>GRAND TOTAL</b>                  | <b>24,783</b>                 |                             | <b>245,831,660</b> |                     |                   | <b>10,848,235</b>   | <b>11,135,161</b> | <b>21,983,396</b>        |

# Price and Quantity Schedule - Distribution Prices (Clause 11.4(c))

## Allowable Notional Revenue 2016/17

Horizon P X Q SCHEDULE  
Prices at 31 March 2016  
Period: Annual  
365 Days

| Consumer Groups                     | BASE QUANTITIES 31 March 2015 |                             |                    | 2015/16 Prices           |                   | (P2016 X Q2015)      |                   |                   |
|-------------------------------------|-------------------------------|-----------------------------|--------------------|--------------------------|-------------------|----------------------|-------------------|-------------------|
|                                     | ICPs                          | Ave Capacity/<br>MD per ICP | kWh                | Distribution Line Prices |                   | Distribution Revenue |                   |                   |
|                                     |                               |                             |                    | Fixed<br>\$ per day      | Variable<br>c/kWh | Fixed<br>\$ per day  | Variable<br>c/kWh | Total<br>(\$)     |
| <b>RETAIL</b>                       |                               |                             |                    |                          |                   |                      |                   |                   |
| <b>DOMESTIC (Low Fixed Charge)</b>  |                               |                             |                    |                          |                   |                      |                   |                   |
| LUDU                                | 7,578                         |                             | 36,809,662         | -                        | 8.560             | -                    | 3,150,907         | 3,150,907         |
| LUDR                                | 3,629                         |                             | 18,317,834         | -                        | 8.560             | -                    | 1,568,007         | 1,568,007         |
| SDU                                 | 4,518                         |                             | 33,654,547         | 1.218                    | 2.820             | 2,008,567            | 949,058           | 2,957,625         |
| SDR                                 | 3,286                         |                             | 28,062,061         | 1.218                    | 2.820             | 1,460,857            | 791,350           | 2,252,207         |
| NSDU                                | 286                           |                             | 981,780            | 1.406                    | 2.562             | 146,772              | 25,153            | 171,926           |
| NSDR                                | 416                           |                             | 986,430            | 1.406                    | 2.562             | 213,487              | 25,272            | 238,759           |
| <b>TOTAL DOMESTIC</b>               | <b>19,713</b>                 |                             | <b>118,812,314</b> |                          |                   | <b>3,829,684</b>     | <b>6,509,748</b>  | <b>10,339,431</b> |
| <b>GENERAL</b>                      |                               |                             |                    |                          |                   |                      |                   |                   |
| <b>Specials</b>                     |                               |                             |                    |                          |                   |                      |                   |                   |
| U/Verandah Lights                   | 14                            |                             |                    | \$0.682/day              |                   | 3,485                | -                 | 3,485             |
| Electric Fence                      | 16                            |                             |                    | \$0.696/day              |                   | 4,065                | -                 | 4,065             |
| Lanark                              | 1                             |                             |                    | \$293.83/mth             |                   | 3,526                | -                 | 3,526             |
| Street Lights                       | 22                            | 4,676 street lights         | 2,240,297          | 4.431 \$/light/mth       |                   | 248,632              | -                 | 248,632           |
| Telecom - PCM24 hour                | 77                            |                             |                    | \$45.843/mth             |                   | 42,359               | -                 | 42,359            |
| Telecom - controlled                | 17                            |                             |                    | \$25.611/mth             |                   | 5,225                | -                 | 5,225             |
| <b>Total Specials</b>               | <b>147</b>                    |                             | <b>2,240,297</b>   |                          |                   | <b>307,291</b>       | <b>-</b>          | <b>307,291</b>    |
| <b>Capacity Groups</b>              |                               |                             |                    |                          |                   |                      |                   |                   |
| N1U                                 | 613                           |                             | 3,430,642          | 1.406                    | 2.562             | 314,585              | 87,893            | 402,479           |
| N1R                                 | 912                           |                             | 3,076,395          | 1.406                    | 2.562             | 468,029              | 78,817            | 546,847           |
| N2U                                 | 797                           |                             | 13,328,088         | 0.890                    | 3.747             | 258,905              | 499,403           | 758,309           |
| N2R                                 | 1,724                         |                             | 25,063,772         | 1.890                    | 6.479             | 1,189,301            | 1,623,882         | 2,813,183         |
| N3U                                 | 269                           |                             | 10,266,388         | 1.387                    | 4.105             | 136,183              | 421,435           | 557,618           |
| N3R                                 | 316                           |                             | 14,363,786         | 3.485                    | 5.235             | 401,960              | 751,944           | 1,153,904         |
| N4U                                 | 45                            |                             | 2,699,363          | 3.835                    | 5.230             | 62,990               | 141,177           | 204,167           |
| N4R                                 | 38                            |                             | 2,406,671          | 4.729                    | 5.227             | 65,591               | 125,797           | 191,388           |
| N5U                                 | 31                            | 173 kVA                     | 2,335,787          | 3.815c/kVA/day           | 5.013             | 74,463               | 117,093           | 191,556           |
| N5R                                 | 26                            | 185 kVA                     | 1,763,337          | 4.572c/kVA/day           | 8.497             | 80,264               | 149,831           | 230,095           |
| <b>Total Capacity Groups</b>        | <b>4,771</b>                  |                             | <b>78,734,229</b>  |                          |                   | <b>3,052,272</b>     | <b>3,997,272</b>  | <b>7,049,544</b>  |
| <b>Network Maximum Demand (NMD)</b> |                               |                             |                    |                          |                   |                      |                   |                   |
| NMD - Variable                      |                               |                             | 46,044,819         |                          | 2.240             | -                    | 1,031,404         | 1,031,404         |
| NMD - Capacity                      | 141                           | 261 kVA                     |                    | \$1.150/kVA/mth          |                   | 508,029              | -                 | 508,029           |
| NMD - Maximum Demand                | 141                           | 177 kW                      |                    | \$3.050/kW/mth           |                   | 913,839              | -                 | 913,839           |
| <b>Total NMD</b>                    | <b>141</b>                    |                             | <b>46,044,819</b>  |                          |                   | <b>1,421,868</b>     | <b>1,031,404</b>  | <b>2,453,272</b>  |
| <b>TOTAL GENERAL</b>                | <b>5,059</b>                  |                             | <b>127,019,346</b> |                          |                   | <b>4,781,431</b>     | <b>5,028,676</b>  | <b>9,810,107</b>  |
| <b>TOTAL RETAIL</b>                 | <b>24,772</b>                 |                             | <b>245,831,660</b> |                          |                   | <b>8,611,115</b>     | <b>11,538,424</b> | <b>20,149,538</b> |
| <b>MAJORS - REGULATED</b>           |                               |                             |                    |                          |                   |                      |                   |                   |
| <b>Customers</b>                    |                               |                             |                    |                          |                   |                      |                   |                   |
| Fonterra (BoPE)                     | 1                             |                             |                    | \$31,274.69/mth          |                   | 375,296              | -                 | 375,296           |
| Fonterra Lipid & Distillery         | 1                             |                             |                    | \$6,539.66/mth           |                   | 78,476               | -                 | 78,476            |
| SCA Hygiene (TP)                    | 1                             |                             |                    | \$1,623.96/mth           |                   | 19,487               | -                 | 19,487            |
| CHH Whakatane (TP)                  | 1                             |                             |                    | \$13,920.72/mth          |                   | 167,049              | -                 | 167,049           |
| Kaingaroa Timberlands (TP)          | 1                             |                             |                    | \$15,492.79/mth          |                   | 185,913              | -                 | 185,913           |
| CHH - Kawerau (TP)                  | 1                             |                             |                    | \$2,109.97/mth           |                   | 25,320               | -                 | 25,320            |
| Norske Skog Oxidation Ponds (TP)    | 1                             |                             |                    | \$4,318.36/mth           |                   | 51,820               | -                 | 51,820            |
| Sequal Investments                  | 1                             |                             |                    | \$6,686.93/mth           |                   | 80,243               | -                 | 80,243            |
| Fonterra Assets                     | 1                             |                             |                    | \$1,250.00/mth           |                   | 15,000               | -                 | 15,000            |
| GDL Breaker Contract                | 1                             |                             |                    | \$585.00/mth             |                   | 7,020                | -                 | 7,020             |
| BOPE TG1 & TG2                      | 1                             |                             |                    | \$0.00/mth               |                   | -                    | -                 | -                 |
| <b>TOTAL MAJORS - REGULATED</b>     | <b>11</b>                     |                             |                    |                          |                   | <b>1,005,625</b>     | <b>-</b>          | <b>1,005,625</b>  |
| <b>GRAND TOTAL</b>                  | <b>24,783</b>                 |                             | <b>245,831,660</b> |                          |                   | <b>9,616,740</b>     | <b>11,538,424</b> | <b>21,155,163</b> |

## Distribution Prices and Pass-through Prices (Clause 11.4(d))

### Price Schedule Effective 1 April 2015

| Consumer Group<br>(Note 1)                                      | 2015/16 Tariffs (excluding Goods and Services Tax) |                     |                                  |                   | 2015/16 Tariffs (excluding Goods and Services Tax)  |                   |                             |                   |
|---|--|---------------------|----------------------------------|-------------------|---|-------------------|-----------------------------|-------------------|
|   | Line Charges (including Pass-Through Costs)        |                     |                                  |                   | Distribution Charges (excluding Pass-Through Costs) |                   | Pass-Through Costs (Note 3) |                   |
|   | Fixed Tariff Code<br>(Note 2)                      | Fixed<br>\$ per day | Variable Tariff Code<br>(Note 2) | Variable<br>c/kWh | Fixed<br>\$ per day                                 | Variable<br>c/kWh | Fixed<br>\$ per day         | Variable<br>c/kWh |
|   |  |                     |                                  |                   |   |                   |                             |                   |
| <b>DOMESTIC</b>   |  |                     |                                  |                   |   |                   |                             |                   |
| (LUDU) Domestic LFC Urban                                       | HET001   | 0.150               | HET012                           | 9.983             | 0.000   | 8.560             | 0.150                       | 1.423             |
| (LUDR) Domestic LFC Rural                                       | HET003   | 0.150               | HET013                           | 9.983             | 0.000   | 8.560             | 0.150                       | 1.423             |
| (SDU) Domestic Standard - Urban                                 | HET030   | 1.720               | HET050                           | 2.820             | 1.218   | 2.820             | 0.502                       | 0.000             |
| (SDR) Domestic Standard - Rural                                 | HET031   | 1.720               | HET051                           | 2.820             | 1.218   | 2.820             | 0.502                       | 0.000             |
| (NSDU) Domestic Non-Standard - Urban                            | HET032   | 1.823               | HET052                           | 2.562             | 1.406   | 2.562             | 0.416                       | 0.000             |
| (NSDR) Domestic Non-Standard - Rural                            | HET033   | 1.823               | HET053                           | 2.562             | 1.406   | 2.562             | 0.416                       | 0.000             |
| <b>GENERAL</b>  |  |                     |                                  |                   |   |                   |                             |                   |
| <b>Specials</b>   |  |                     |                                  |                   |   |                   |                             |                   |
| (UV) UV/Veranda Lights- Not available for new connections       | HET009   | 0.703               |                                  |                   | 0.682   | 0.000             | 0.021                       | 0.000             |
| (EF) Electric Fence - Not available for new connections         | HET006   | 0.716               |                                  |                   | 0.696   | 0.000             | 0.021                       | 0.000             |
| (SL) Street Lights  | HET131   | 5.174 \$/light/mth  |                                  |                   | 4.431 \$/light/mth                                  | 0.000             | 0.743 \$/light/mth          | 0.000             |
| (PCM 24) PCM 24 hour - Not available for new connections        | HET115   | \$55.344 /mth       |                                  |                   | \$45.843 /mth                                       | 0.000             | \$9.500 /mth                | 0.000             |
| (PCMN) PCM Night only - Not available for new connections       | HET116   | \$28.778 /mth       |                                  |                   | \$25.611 /mth                                       | 0.000             | \$3.167 /mth                | 0.000             |
| <b>Capacity Groups</b>  |  |                     |                                  |                   |   |                   |                             |                   |
| (N1U) 1ø 60A (0 - 14 kVA)                                       | HET016   | 1.823               | HET040                           | 2.562             | 1.406   | 2.562             | 0.416                       | 0.000             |
| (N1R) 1ø 60A (0 - 14 kVA)                                       | HET022   | 1.823               | HET045                           | 2.562             | 1.406   | 2.562             | 0.416                       | 0.000             |
| (N2U) 3ø 60A (15 - 42 kVA)                                      | HET017   | 2.033               | HET041                           | 3.747             | 0.890   | 3.747             | 1.143                       | 0.000             |
| (N2R) 3ø 60A (15 - 42 kVA)                                      | HET023   | 3.032               | HET046                           | 6.479             | 1.890   | 6.479             | 1.143                       | 0.000             |
| (N3U) 3ø 100A (43 - 70 kVA)                                     | HET018   | 4.094               | HET042                           | 4.105             | 1.387   | 4.105             | 2.707                       | 0.000             |
| (N3R) 3ø 100A (43 - 70 kVA)                                     | HET024   | 6.192               | HET047                           | 5.235             | 3.485   | 5.235             | 2.707                       | 0.000             |
| (N4U) 3ø 150A (71 - 100 kVA) Not available for new connections  | HET019   | 9.040               | HET043                           | 5.230             | 3.835   | 5.230             | 5.206                       | 0.000             |
| (N4R) 3ø 150A (71 - 100 kVA) Not available for new connections  | HET025   | 9.934               | HET048                           | 5.227             | 4.729   | 5.227             | 5.206                       | 0.000             |
| (N5U) > 3ø 150A (> 100 kVA) Not available for new connections   | HET020   | 7.990 c/kVA/day     | HET044                           | 5.013             | 3.815 c/kVA/day                                     | 5.013             | 4.175 c/kVA/day             | 0.000             |
| (N5R) > 3ø 150A (> 100 kVA) Not available for new connections   | HET026   | 8.747 c/kVA/day     | HET049                           | 8.497             | 4.572 c/kVA/day                                     | 8.497             | 4.175 c/kVA/day             | 0.000             |
| (CCU) Capacity Concession (U) Not available for new connections | HET021   |                     |                                  |                   | 0.000   | 0.000             | 0.000                       | 0.000             |
| (CCR) Capacity Concession (R) Not available for new connections | HET027   |                     |                                  |                   | 0.000   | 0.000             | 0.000                       | 0.000             |
| <b>Network Maximum Demand (NMD)</b>                             |  |                     |                                  |                   |   |                   |                             |                   |
| Variable Charge   |  |                     | HET077                           | 2.240             |   | 2.240             |                             | 0.000             |
| Capacity Charge   | HET074   | \$1.901 /kVA/mth    |                                  |                   | \$1.150 /kVA/mth                                    |                   | \$0.751 /kVA/mth            |                   |
| Demand Charge   | HET076   | \$5.042 /kW/mth     |                                  |                   | \$3.050 /kW/mth                                     |                   | \$1.992 /kW/mth             |                   |

## Distribution Prices and Pass-through Prices (Clause 11.4(d))

### Price Schedule Effective 1 April 2016

| Consumer Group<br>(Note 1)                                     | 2016/17 Tariffs (excluding Goods and Services Tax) |                     |                                  |                   |                                  |                   | 2016/17 Tariffs (excluding Goods and Services Tax)  |                   |                             |                   |
|--|--|---------------------|----------------------------------|-------------------|----------------------------------|-------------------|---|-------------------|-----------------------------|-------------------|
|  | Line Charges (including Pass-Through Costs)        |                     |                                  |                   | Distributed Generation           |                   | Distribution Charges (excluding Pass-Through Costs) |                   | Pass-Through Costs (Note 3) |                   |
|  | Fixed Tariff Code<br>(Note 2)                      | Fixed<br>\$ per day | Variable Tariff Code<br>(Note 2) | Variable<br>c/kWh | Variable Tariff Code<br>(Note 4) | Variable<br>c/kWh | Fixed<br>\$ per day                                 | Variable<br>c/kWh | Fixed<br>\$ per day         | Variable<br>c/kWh |
|  |  |                     |                                  |                   |                                  |                   |   |                   |                             |                   |
| <b>DOMESTIC</b>  |  |                     |                                  |                   |                                  |                   |   |                   |                             |                   |
| (LUDU) Domestic LFC Urban                                      | HET001   | 0.150               | HET012                           | 10.265            | HET152                           | 0.000             | 0.000   | 8.988             | 0.150                       | 1.278             |
| (LUDR) Domestic LFC Rural                                      | HET003   | 0.150               | HET013                           | 10.265            | HET153                           | 0.000             | 0.000   | 8.988             | 0.150                       | 1.278             |
| <b>STANDARD</b>  |  |                     |                                  |                   |                                  |                   |   |                   |                             |                   |
| (NDU) Standard User - Urban                                    | HET034   | 2.044               | HET054                           | 1.623             | HET154                           | 0.000             | 1.528   | 1.623             | 0.516                       | 0.000             |
| (NDR) Standard User - Rural                                    | HET035   | 2.044               | HET055                           | 1.623             | HET155                           | 0.000             | 1.528   | 1.623             | 0.516                       | 0.000             |
| <b>GENERAL<br/>Specials</b>                                    |  |                     |                                  |                   |                                  |                   |   |                   |                             |                   |
| (UV) U/Veranda Lights- Not available for new connections       | HET009   | 0.737               |                                  |                   |                                  |                   | 0.717   | 0.000             | 0.021                       | 0.000             |
| (EF) Electric Fence - Not available for new connections        | HET006   | 0.750               |                                  |                   |                                  |                   | 0.729   | 0.000             | 0.021                       | 0.000             |
| (SL) Street Lights   | HET131   | 5.380 \$/light/mth  |                                  |                   |                                  |                   | 4.681 \$/light/mth                                  | 0.000             | 0.699 \$/light/mth          | 0.000             |
| (PCM24) PCM 24 hour - Not available for new connections        | HET115   | \$57.865 /mth       |                                  |                   |                                  |                   | \$48.498 /mth                                       | 0.000             | \$9.368 /mth                | 0.000             |
| (PCMNI) PCM Night only - Not available for new connections     | HET116   | \$27.774 /mth       |                                  |                   |                                  |                   | \$24.651 /mth                                       | 0.000             | \$3.123 /mth                | 0.000             |
| <b>Capacity Groups</b>   |  |                     |                                  |                   |                                  |                   |   |                   |                             |                   |
| (N2U) 3ø 60A (15 - 42 kVA)                                     | HET017   | 2.196               | HET041                           | 3.973             | HET141                           | 0.000             | 0.967   | 3.973             | 1.229                       | 0.000             |
| (N2R) 3ø 60A (15 - 42 kVA)                                     | HET023   | 3.259               | HET046                           | 6.616             | HET146                           | 0.000             | 2.030   | 6.616             | 1.229                       | 0.000             |
| (N3U) 3ø 100A (43 - 70 kVA)                                    | HET018   | 4.622               | HET042                           | 4.368             | HET142                           | 0.000             | 1.542   | 4.368             | 3.080                       | 0.000             |
| (N3R) 3ø 100A (43 - 70 kVA)                                    | HET024   | 7.035               | HET047                           | 5.678             | HET147                           | 0.000             | 3.955   | 5.678             | 3.080                       | 0.000             |
| (N4U) 3ø 150A (71 - 100 kVA) Not available for new connections | HET019   | 9.324               | HET043                           | 5.942             |                                  |                   | 3.678   | 5.942             | 5.646                       | 0.000             |
| (N4R) 3ø 150A (71 - 100 kVA) Not available for new connections | HET025   | 11.351              | HET048                           | 6.166             |                                  |                   | 5.705   | 6.166             | 5.646                       | 0.000             |
| (N5U) > 3ø 150A (> 100 kVA) Not available for new connections  | HET020   | 8.192 c/kVA/day     | HET044                           | 5.367             |                                  |                   | 3.848 c/kVA/day                                     | 5.367             | 4.343 c/kVA/day             | 0.000             |
| (N5R) > 3ø 150A (> 100 kVA) Not available for new connections  | HET026   | 9.184 c/kVA/day     | HET049                           | 9.265             |                                  |                   | 4.840 c/kVA/day                                     | 9.265             | 4.343 c/kVA/day             | 0.000             |
| <b>Network Maximum Demand (NMD)</b>                            |  |                     |                                  |                   |                                  |                   |   |                   |                             |                   |
| Variable Charge  |  |                     | HET077                           | 2.154             | HET177                           | 0.000             |   | 2.154             |                             | 0.000             |
| Capacity Charge  | HET074   | \$1.931 /kVA/mth    |                                  |                   |                                  |                   | \$1.174 /kVA/mth                                    |                   | \$0.757 /kVA/mth            |                   |
| Demand Charge  | HET076   | \$5.036 /kW/mth     |                                  |                   |                                  |                   | \$3.062 /kW/mth                                     |                   | \$1.973 /kW/mth             |                   |

## **Pricing Methodology for Distribution Prices and Pass-through Prices (Clause 11.4(e))**

The methodology used to calculate Distribution Prices and Pass-through prices is available on the Horizon Networks website and can be found using the below link –

The methodology used to calculate Distribution Prices and Pass-through prices apportions costs for a given year that are attributable to each revenue type, and divides the costs by the expected quantities for a given year, to arrive at the calculated price.

The distribution revenue is made up of operating expenditure, tax outgoings, the return of assets, and the return on assets.

The pass-through revenue is made up of recoverable costs and pass-through costs; including Transpower charges, levies and local authority rates.

The details on how each of the Distribution Prices and Pass-through prices are calculated is contained in the Pricing Methodology.

### **Pricing Methodology for 2016/17**

[http://horizonnetworks.nz/sites/default/files/Horizon%20Energy%20Pricing%20Methodology%20for%20Pricing%20introduced%201%20April%202016%20%28Published%20v2%29\\_0.pdf](http://horizonnetworks.nz/sites/default/files/Horizon%20Energy%20Pricing%20Methodology%20for%20Pricing%20introduced%201%20April%202016%20%28Published%20v2%29_0.pdf)

### **Pricing Methodology for 2015/16**

[http://www.horizonnetworks.nz/sites/default/files/Horizon%20Energy%20Pricing%20Methodology%20for%20Line%20Charges%20introduced%201%20April%202015\\_0\\_0.pdf](http://www.horizonnetworks.nz/sites/default/files/Horizon%20Energy%20Pricing%20Methodology%20for%20Line%20Charges%20introduced%201%20April%202015_0_0.pdf)

## Appendix B – Price Path Compliance (Clause 11.4)

### Pass-through Balance Calculation (Clause 8.6)

| Pass-through Balance               |  |           |
|------------------------------------|--|-----------|
| Term                               | Description  | Value \$  |
| $\Sigma P_{2016/17} * Q_{2016/17}$ | Pass-through prices at 31 March 2017 multiplied by 31 March 2017 Quantities                                    | 9,235,634 |
| $K_{2016/17}$                      | Rates on system fixed assets for year ending 31 March 2017   | 225,298   |
|                                    | Commerce Act levies for year ending 31 March 2017  | 47,695    |
|                                    | Electricity Authority levies for year ending 31 March 2017   | 89,367    |
|                                    | EGCC levies for year ending 31 March 2017  | 12,375    |
|                                    | Transpower transmission charges for year ending 31 March 2017  | 5,675,353 |
|                                    | Transpower New Investment Contract charges for the year ending 31 March 2017                                   | -         |
|                                    | System Operator charges for year ending 31 March 2017  | -         |
|                                    | Avoided transmission charges resulting from purchase of Transpower assets for year ending 31 March 2017        | -         |
|                                    | Avoided transmission charges resulting from connection of distributed generation for year ending 31 March 2017 | 3,439,911 |
|                                    | Claw-back applied under sections 54k(3) or 53ZB(3) of the Act  | -         |
|                                    | Energy efficiency and demand side management incentive allowance for the year ending 31 March 2017             | -         |
|                                    | Quality incentive allowance for the year ending 31 March 2017  | 206,339   |
|                                    | Capex wash-up adjustment for the year ending 31 March 2017   | (161,058) |
|                                    | Indirect Transmission Charges for the year ending 31 March 2017  | -         |
| $PTB_{2015/16}$                    | Pass-through balance for the year ending 31 March 2016   | 44,573    |
| $r$                                | Cost of Debt   | 6.09%     |
| $PTB_{2016/17}$                    | Pass-through balance for the year ending 31 March 2017   | (252,359) |

## Price and Quantity Schedule – Pass-through Prices (Clause 11.4(f))

Horizon P X Q SCHEDULE  
 Prices at 31 March 2017  
 Period: Annual  
 365 Days

| Consumer Groups                     | BASE QUANTITIES 31 March 2017 |                             |                    | 2016/17 Tariffs     |                   | Regulatory Revenue (P X Q) |                   |                          |
|-------------------------------------|-------------------------------|-----------------------------|--------------------|---------------------|-------------------|----------------------------|-------------------|--------------------------|
|                                     | ICPs                          | Ave Capacity/<br>MD per ICP | kWh                | Pass Through        |                   | Pass Through               |                   | Total<br>Revenue<br>(\$) |
|                                     |                               |                             |                    | Fixed<br>\$ per day | Variable<br>c/kWh | Fixed<br>\$ per day        | Variable<br>c/kWh |                          |
| <b>RETAIL</b>                       |                               |                             |                    |                     |                   |                            |                   |                          |
| <b>DOMESTIC</b>                     |                               |                             |                    |                     |                   |                            |                   |                          |
| LUDU                                | 7,951                         |                             | 40,093,841         | 0.150               | 1.278             | 435,317                    | 512,399           | 947,717                  |
| LUDR                                | 3,779                         |                             | 20,115,103         | 0.150               | 1.278             | 206,900                    | 257,071           | 463,971                  |
| NDU                                 | 5,157                         |                             | 36,809,240         | 0.516               | -                 | 971,269                    | -                 | 971,269                  |
| NDR                                 | 4,600                         |                             | 32,327,676         | 0.516               | -                 | 866,364                    | -                 | 866,364                  |
| <b>TOTAL DOMESTIC</b>               | <b>21,487</b>                 |                             | <b>129,345,860</b> |                     |                   | <b>2,479,851</b>           | <b>769,470</b>    | <b>3,249,321</b>         |
| <b>GENERAL</b>                      |                               |                             |                    |                     |                   |                            |                   |                          |
| <b>Specials</b>                     |                               |                             |                    |                     |                   |                            |                   |                          |
| U/Verandah Lights                   | 18                            |                             |                    | \$0.021/day         |                   | 138                        | -                 | 138                      |
| Electric Fence                      | 14                            |                             |                    | \$0.021/day         |                   | 107                        | -                 | 107                      |
| Lanark                              | 1                             |                             |                    | (\$302.47)/mth      |                   | (3,630)                    | -                 | (3,630)                  |
| Street Lights                       | 16                            | 4,687 street lights         | 2,196,662          | 0.699 \$/light/mth  |                   | 39,315                     | -                 | 39,315                   |
| Telecom - PCM 24 hour               | 75                            |                             |                    | \$9.368/mth         |                   | 8,431                      | -                 | 8,431                    |
| Telecom - controlled                | 3                             |                             |                    | \$3.123/mth         |                   | 112                        | -                 | 112                      |
| <b>Total Specials</b>               | <b>127</b>                    |                             | <b>2,196,662</b>   |                     |                   | <b>44,474</b>              | <b>-</b>          | <b>44,474</b>            |
| <b>Capacity Groups</b>              |                               |                             |                    |                     |                   |                            |                   |                          |
| N2U                                 | 811                           |                             | 13,419,293         | 1.229               | -                 | 363,802                    | -                 | 363,802                  |
| N2R                                 | 1,667                         |                             | 24,081,040         | 1.229               | -                 | 747,791                    | -                 | 747,791                  |
| N3U                                 | 272                           |                             | 10,551,923         | 3.080               | -                 | 305,782                    | -                 | 305,782                  |
| N3R                                 | 318                           |                             | 15,358,683         | 3.080               | -                 | 357,496                    | -                 | 357,496                  |
| N4U                                 | 43                            |                             | 2,509,958          | 5.646               | -                 | 88,614                     | -                 | 88,614                   |
| N4R                                 | 35                            |                             | 1,806,499          | 5.646               | -                 | 72,128                     | -                 | 72,128                   |
| N5U                                 | 28                            | 179 kVA                     | 2,198,541          | 4.343c/kVA/day      | -                 | 79,610                     | -                 | 79,610                   |
| N5R                                 | 22                            | 196 kVA                     | 1,208,558          | 4.343c/kVA/day      | -                 | 68,340                     | -                 | 68,340                   |
| UCC                                 |                               |                             |                    |                     |                   | -                          | -                 | -                        |
| RCC                                 |                               |                             |                    |                     |                   | -                          | -                 | -                        |
| <b>Total Capacity Groups</b>        | <b>3,196</b>                  |                             | <b>71,134,496</b>  |                     |                   | <b>2,083,563</b>           | <b>-</b>          | <b>2,083,563</b>         |
| <b>Network Maximum Demand (NMD)</b> |                               |                             |                    |                     |                   |                            |                   |                          |
| NMD- Variable                       |                               |                             | 49,505,652         |                     |                   |                            |                   |                          |
| NMD - Capacity                      | 151                           | 256 kVA                     |                    | \$0.757/kVA/mth     |                   | 351,083                    | -                 | 351,083                  |
| NMD - Maximum Demand                | 151                           | 174 kW                      |                    | \$1.973/kW/mth      |                   | 623,207                    | -                 | 623,207                  |
| <b>Total NMD</b>                    | <b>151</b>                    |                             | <b>49,505,652</b>  |                     |                   | <b>974,290</b>             | <b>-</b>          | <b>974,290</b>           |
| <b>TOTAL GENERAL</b>                | <b>3,474</b>                  |                             | <b>122,836,811</b> |                     |                   | <b>3,102,326</b>           | <b>-</b>          | <b>3,102,326</b>         |
| <b>TOTAL RETAIL</b>                 | <b>24,961</b>                 |                             | <b>252,182,671</b> |                     |                   | <b>5,582,177</b>           | <b>769,470</b>    | <b>6,351,647</b>         |
| <b>MAJORS - REGULATED</b>           |                               |                             |                    |                     |                   |                            |                   |                          |
| <b>Customers</b>                    |                               |                             |                    |                     |                   |                            |                   |                          |
| Fonterra (BoPE)                     | 1                             |                             |                    | \$6,317.18/mth      |                   | 75,806                     | -                 | 75,806                   |
| Fonterra Lipid & Distillery         | 1                             |                             |                    | \$6,256.19/mth      |                   | 75,074                     | -                 | 75,074                   |
| SCA Hygiene (TP)                    | 1                             |                             |                    | \$84,252.58/mth     |                   | 1,011,031                  | -                 | 1,011,031                |
| CHH Whakatane (TP)                  | 1                             |                             |                    | \$85,792.88/mth     |                   | 1,029,515                  | -                 | 1,029,515                |
| Kaingaroa Timberlands (TP)          | 1                             |                             |                    | \$7,035.72/mth      |                   | 84,429                     | -                 | 84,429                   |
| CHH - Kawerau (TP)                  | 1                             |                             |                    | \$28,805.74/mth     |                   | 345,669                    | -                 | 345,669                  |
| Norske Skog Oxidation Ponds (TP)    | 1                             |                             |                    | \$12,613.01/mth     |                   | 151,356                    | -                 | 151,356                  |
| Sequal Investments                  | 1                             |                             |                    | \$9,258.89/mth      |                   | 111,107                    | -                 | 111,107                  |
| Fonterra Assets                     | 1                             |                             |                    | \$0.00/mth          |                   | -                          | -                 | -                        |
| GDL Breaker Contract                | 1                             |                             |                    | \$0.00/mth          |                   | -                          | -                 | -                        |
| <b>TOTAL MAJORS - REGULATED</b>     | <b>10</b>                     |                             |                    |                     |                   | <b>2,883,986</b>           | <b>-</b>          | <b>2,883,986</b>         |
| <b>GRAND TOTAL</b>                  | <b>24,971</b>                 |                             | <b>252,182,671</b> |                     |                   | <b>8,466,163</b>           | <b>769,470</b>    | <b>9,235,634</b>         |



## Appendix C – Pass Through and Recoverable Costs (Clause 11.4(g-j))

| Pass-through Costs for year ending March 2017 |             |               |               |              |
|---|-------------|---------------|---------------|--------------|
| K <sub>2016/17</sub>                          | Actual (\$) | Forecast (\$) | Variance (\$) | Variance (%) |
| Rates on system fixed assets                  | 225,298     | 215,993       | 9,305         | 4.3%         |
| Commerce Act levies                           | 47,695      | 50,000        | (2,305)       | (4.6%)       |
| Electricity Authority levies                  | 89,367      | 89,760        | (393)         | (0.4%)       |
| EGCC levies                                   | 12,375      | 11,997        | 378           | 3.2%         |
| Total Pass-through Costs                      | 374,735     | 367,750       | 6,985         | 1.9%         |

### Rates on System Fixed Assets

The rates on system fixed assets were \$9,305 above forecast due to higher than expected charges from the local territorial authorities.

### Commerce Act Levies

The Commerce Act levies were \$2,305 below forecast due to lower than expected levies charged by the Ministry of Business, Innovation & Employment.

### Electricity Authority Levies

The Electricity Authority levies were \$393 below forecast due to lower than expected levies charged by the Electricity Authority.

### Electricity and Gas Complaints Commissioner Scheme Levies

The Electricity and Gas Complaints Commissioner scheme levies were \$378 above forecast due to higher than expected levies charged.

| Recoverable Costs for year ending March 2017          |             |               |               |              |
|---|-------------|---------------|---------------|--------------|
| V <sub>2016/17</sub>                                  | Actual (\$) | Forecast (\$) | Variance (\$) | Variance (%) |
| Transpower transmission charges                       | 5,675,353   | 5,694,351     | (18,998)      | (0.3%)       |
| Avoided transmission charges - distributed generation | 3,439,911   | 3,439,910     | 1             | 0.0%         |
| Total Recoverable Costs                               | 9,115,264   | 9,134,261     | (18,997)      | (0.2%)       |

### Transpower Transmission Charges

Transmission charges payable to Transpower were \$18,998 below forecast due to lower connection charges payable at Edgumbe.

**Appendix D – Restructuring of Prices, Transactions involving Non-Exempt EDBs, Amalgamation or Mergers, or Major Transactions (Clauses 11.2((d)(i) – (iv)))**

**Clause 11.2 ((d)(i))** - Horizon Energy Distribution Limited did restructure its Prices that applied during the Assessment Period; therefore clauses 8.8 and 8.9 were applied during the Assessment Period.

The following information is disclosed in accordance with clause 11.7;

The Domestic Standard, Domestic Non-Standard and low Capacity (0 – 14 kVA) groups were consolidated into a new Standard Domestic User group. The 2015 quantities were combined to produce the consolidated Standard Domestic User quantities when calculating the Notional Revenue 2016/17 figure.

**Clause 11.2 ((d)(ii))** - Horizon Energy Distribution Limited did not receive a transfer of transmission assets that became System Fixed Assets from Transpower during the Assessment Period, nor did Horizon Energy Distribution Limited transfer System Fixed Assets to Transpower; therefore clause 10.6 did not apply during the Assessment Period.

**Clauses 11.2 ((d)(iii)-(iv))** - Horizon Energy Distribution Limited did not enter into transactions resulting in an Amalgamation or Merger or Major Transaction; therefore clauses 10.1 to 10.5 did not apply for the Assessment Period.

## Appendix E – Quality Standard Compliance (Clause 11.5(c))

### Quality Metrics

| <b>Limits</b>      |          |   |
|--------------------|----------|---|
| <i>SAIDI</i> Limit | 175.8270 | As per Table 4A.1 of the Determination 2015 |
| <i>SAIFI</i> Limit | 2.2150   |   |

| <b>Unplanned Boundary Values</b> |         |   |
|----------------------------------|---------|---|
| <i>SAIDI</i> Boundary Value      | 10.7700 | As per Table 4A.1 of the Determination 2015 |
| <i>SAIFI</i> Boundary Value      | 0.1000  |   |

### Incentive Measures

| <b>SAIDI</b>  |          |   |
|---------------|----------|---|
| <i>Cap</i>    | 175.8269 | As per Table 5B.1 of the Determination 2015 |
| <i>Collar</i> | 124.4211 |   |
| <i>Target</i> | 150.1240 |   |

| <b>SAIFI</b>  |        |   |
|---------------|--------|---|
| <i>Cap</i>    | 2.2149 | As per Table 5B.2 of the Determination 2015 |
| <i>Collar</i> | 1.6306 |   |
| <i>Target</i> | 1.9228 |   |

## Reliability Assessment Calculations (2017 Assessment Period)

| <b>Assessed SAIDI Value 2016/17</b> |          |   |
|-------------------------------------|----------|---|
| SAIDI <sub>2016/17</sub>            | 218.8319 | The sum of daily SAIDI Values in the 1 April 2016 - 31 March 2017 Normalised Assessment Dataset |

| <b>Assessed SAIFI Value 2016/17</b> |        |   |
|-------------------------------------|--------|---|
| SAIFI <sub>2016/17</sub>            | 2.1673 | The sum of daily SAIFI Values in the 1 April 2016 - 31 March 2017 Normalised Assessment Dataset |

### Prior Period Assessed Values

| <b>Assessed SAIDI Value 2015/16</b> |          |   |
|-------------------------------------|----------|---|
| SAIDI <sub>2015/16</sub>            | 127.6788 | The sum of daily SAIDI Values in the 1 April 2015 - 31 March 2016 Normalised Assessment Dataset |

| <b>Assessed SAIFI Value 2015/16</b> |        |   |
|-------------------------------------|--------|---|
| SAIFI <sub>2015/16</sub>            | 1.5768 | The sum of daily SAIFI Values in the 1 April 2015 - 31 March 2016 Normalised Assessment Dataset |

| <b>Assessed SAIDI Value 2014/15</b> |          |   |
|-------------------------------------|----------|---|
| SAIDI <sub>2014/15</sub>            | 160.0159 | The sum of daily SAIDI Values in the 1 April 2014 - 31 March 2015 Normalised Assessment Dataset |

| <b>Assessed SAIFI Value 2014/15</b> |        |   |
|-------------------------------------|--------|---|
| SAIFI <sub>2014/15</sub>            | 1.8470 | The sum of daily SAIFI Values in the 1 April 2014 - 31 March 2015 Normalised Assessment Dataset |

## Major Event Days (Clause 11.5(f))

| <b>Major Event Days within the Assessment Period</b> |                      |                      |                  |                  |
|--|----------------------|----------------------|------------------|------------------|
| Date   | Pre-Normalised SAIDI | Pre-Normalised SAIFI | Normalised SAIDI | Normalised SAIFI |
| 10-Apr-16  | 20.1316              | 0.0691               | 10.7700          | 0.0691           |
| 17-Feb-17  | 12.0835              | 0.0230               | 10.7700          | 0.0230           |

The cause of the Major Event Day(s) on -

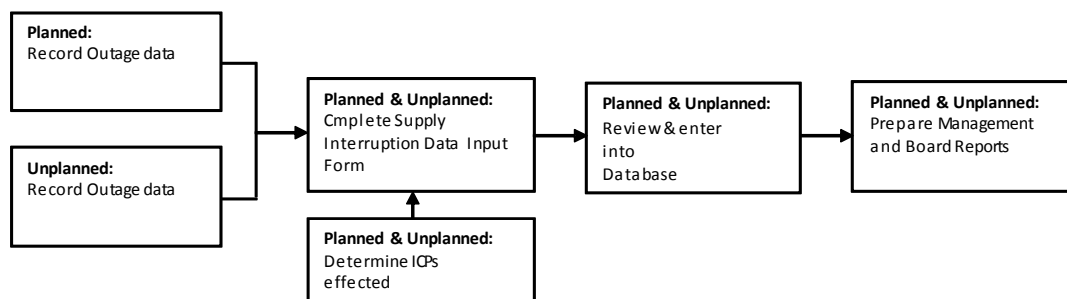
- 10 April 2016 was due to lightening arresstor fault in Galatea (Snake Hill) area affecting 1,713 ICPs for nearly 5 hours.
- 17 February 2017 was due to insulation fault in Waitohi / Te Kaha area affecting 571 ICPs for nearly 9 hours.

## Appendix F – Policies and Procedures for Recording SAIDI and SAIFI (Clause 11.5(e))

Horizon Energy captures outage data following planned and unplanned outages. Control Room staff follow a written procedure to record network outage data. This data is then entered into a database to facilitate fortnightly, monthly and yearly reporting.

### Capture of Statistical Information

The procedures followed to capture statistical information for planned outages and unplanned outages (less than 24 hours' notice) are very similar and rely on the accurate recording of the timing and sequence of operations carried out on the network. The following diagram sets out the procedural flow for the recording of planned and unplanned outage data. Each flow is also discussed in detail below.



### Planned Outages – Initial Recording of Outage Data

The sequence of operations for all planned outages are recorded on a Network Switching Schedule

This schedule records:

- Outage dates
- Outage location and equipment
- Outage type
- Switching instructions
- Mechanism for notification of outages
- Issuing of permits
- The exact time of each operation from the SCADA screen

### Unplanned Outages – Initial Recording of Outage Data

The sequence of operations for all unplanned outages are recorded on an unplanned outage instruction sheet, similar details as above are recorded as the instructions are carried out.

### **Planned and Unplanned Outages – Supply Interruption Data Input Form**

Following the completion of the switching, information is transferred to a Supply Interruption Data Input Form. Relevant switching operations are recorded along with customer numbers (discussed below) and length of time before restoration. This data is used to calculate the SAIDI and SAIFI impact of the outage.

### **Planned and Unplanned Outages – Customer Numbers**

Customer numbers (ICPs) for both unplanned and planned outages are sourced from the Network Management System (NMS) database. ICPs are counted between isolation points on the network to determine the impact of an outage. The NMS database is updated regularly to the national registry with new and disconnected customers.

### **Planned and Unplanned Outages – Collation of Data**

On completion of the Supply Interruption Data Input form it is entered into the Horizon Energy Support Systems Database. The information is reviewed for accuracy and completeness before it is reported against. This database contains data for all outages in the current year and prior years.

### **Planned and Unplanned Outages – Management and Board Reports**

From the database reports are generated containing statistics on SAIDI and SAIFI. SAIDI and SAIFI calculations are performed based on Schedule 4A of the Electricity Distribution Services Default Price-Quality Path Determination 2015. Reporting based on these calculations are provided to Management and the Board of Directors to drive performance and network improvements.

### ***Disclaimer***

*The information presented in this Default Price-Quality Path Compliance Statement has been prepared solely for the purpose of complying with the requirements of the Electricity Distribution Services Default Price-Quality Path Determination 2015. This statement has not been prepared for any other purpose and Horizon Energy Distribution Limited expressly disclaims any liability to any other party who may rely on this statement for any other purpose.*