| -   |    |      |    |    | -  |     |      |
|-----|----|------|----|----|----|-----|------|
| 100 | mm | icci | Λn | 00 | Λс | CO. | ar e |
|     |    |      |    |    |    |     |      |

#### Notes

#### **Capitalisation policy**

Consistent with IM 5.3.11, CPP capex, including for spares, is capitalised in accordance with GAAP and WE's accounting policies. Consistent with IM 5.3.7 (3)(a)(iii), spares are depreciated for the purposes of GAAP consistent with the WE's accounting policies.

In accordance with NZ International Accounting Standards (NZ IAS) 16 - Property, Plant and Equipment paragraph 8, WE recognises items such as spare parts, stand-by equipment and servicing equipment as property, plant and equipment when they meet the definition of property, plant and equipment. Otherwise such items are classified as inventory. The spare parts and stand-by equipment purchased as part of the earthquake readiness capital expenditure meet the definition of property, plant and equipment as these spare parts and stand-by equipment are tangible items that are held for use in the production or supply of goods and services and that are expected to be used during more than one financial year.

#### **Asset allocation**

Assets are 100% directly attributable to regulated electricity distribution services consistent with IM 5.3.6 (2) and 2.1.1 and the current information disclosures.

#### Commissioning

Assets are expected to be commissioned on average at 31 December in each regulatory year or 75% through the regulatory disclosure year. This impacts the calculation of RAB Proportionate Investment under IM 5.3.16 (3) and PV-vca under IM 5.3.2 (4)(d). To determine this assumption, the expected timing for when each class of asset will be ready for use (ie commissioned) has been estimated. Emergency hardware, critical emergency spares, seismic reinforcements, and communications equipment are generally expected to be commissioned in the September quarter of each year. Mobile substations and switchgear as well as data centres are expected to be commissioned in the March quarter of each year. These assumptions derive expenditure weighted average commissioning dates which fall in the December quarter. A 31 December commissioning date has been conservatively applied, as this allows for minor delays in the delivery and construction assumptions.

Annual works under construction balances are expected to be nil given the assets have limited construction timeframes. Accordingly, all assets are assumed to be commissioned in the year of purchase.

#### **Asset lives**

Useful lives are determined consistent with IM Schedule A Table A.2 "Asset lives for CPP commissioned assets" as defined in IM 1.1.4. See Asset Category Summary sheet column C for categorisation by asset category

#### Cost escalation

Real capital expenditure forecasts (RY18 dollars) are converted into nominal forecasts using the costs escalators applied in the 2017 asset management plan.

### Other adjustments

No other adjustments are made under IM 5.3.11. No assets are purchased from other regulated businesses or from related parties. No capital contributions or vested asets are expected in relation to the earthquake readiness expenditure.

### **Operating Expenditure**

### Note

### **Expenditure policy**

Forecast operating expenditure, including for storage of assets and IT related expenditure, is expensed for GAAP purposes consistent with the accounting policies.

### **Cost allocation**

Operating expenditure is 100% directly attributable to regulated electricity distribution services consistent with IM 5.3.5(1) and 2.1.1 and the current information disclosures.

### Cost escalation

Real operating expenditure forecasts (RY18 dollars) are converted into nominal forecasts using the costs escalators applied in the 2017 asset management plan.

### Tax

### Notes

## **Capitalisation Policy**

All assets related to earthquake readiness expenditure are capitalised for tax purposes consistent with the applicable tax rules. All operating expenditure related to the earthquake readiness expenditure is expensed for tax purposes consistent with the tax rules.

### **Tax Depreciation**

All earthquake readiness capital expenditure, including in relation to spares (as per IM 5.3.7 (3)), are depreciated for tax purposes, except for buildings which are not depreciated under the tax rules. Diminishing Value (DV) tax depreciation rates are applied consistent with tax depreciation rules (as defined in IM 1.1.4). See Column R of the 'CPP Capex' sheet for DV rates applied under IM 5.3.20 (3).

### **Tax Adjustments**

Tax adjustments expected in relation to earthquake readiness expenditure include differences in the treatment of depreciation on buildings and RAB revaluations (which are both not deductible for tax purposes). Both are adjusted for in the IM's through the amortisation of revaluations under IM 5.3.18 and calculation of depreciation temporary differences under IM 5.3.20 (2). No other temporary or permanent tax differences are expected in relation to earthquake readiness expenditure under Part 5 Subpart 3 of the IMs.

### Readiness Expenditure - Split of Cost by Asset Category (Detailed info)

#### Emergency hardware (33kV faults)

| 33kV cables - O | ption 2 - Carry | O/H line spares | for vulnerable routes |
|-----------------|-----------------|-----------------|-----------------------|

|                           |                        |           | split by financial year |                  |           |        |  |
|---------------------------|------------------------|-----------|-------------------------|------------------|-----------|--------|--|
| Capex Costs               | Asset Category         | Cost      | 2017                    | 2018             | 2019      | 202    |  |
| Design                    |                        |           |                         |                  |           |        |  |
| Civil Works               |                        |           |                         |                  |           |        |  |
| Poles                     | Subtransmission Lines  | 160,274   |                         | 160,274          |           |        |  |
| Poles - Already Purchased | Subtransmission Lines  | -         | -                       | -                | -         |        |  |
| Conductor                 | Subtransmission Lines  | 443,949   | -                       | 221,975          | 221,975   |        |  |
| Post insulators           | Subtransmission Lines  | 196,467   | -                       | 98,234           | 98,234    |        |  |
| Strain insulators         | Subtransmission Lines  | 14,626    | -                       | 7,313            | 7,313     |        |  |
| Crossarms                 | Subtransmission Lines  | 35,609    | -                       | 17,805           | 17,805    |        |  |
| Heavy Bases               | Subtransmission Lines  | 1,649,000 | -                       | 824,500          | 824,500   |        |  |
| Light Bases               | Subtransmission Lines  | 1,368,000 | -                       | 684,000          | 684,000   |        |  |
| Base support blocks       | Subtransmission Lines  | 249,120   | -                       | 249,120          | -         |        |  |
| connector link            | Subtransmission Lines  | 4,007     | -                       | 2,004            | 2,004     |        |  |
| angle braces              | Subtransmission Lines  | 9,049     | _                       | 4,525            | 4,525     |        |  |
| Dead end                  | Subtransmission Lines  | 5,022     | _                       | 2,511            | 2,511     |        |  |
| 33kV Terminations ID      | Subtransmission Cables | 23,161    | _                       | -                | 23,161    |        |  |
| 33kV Terminations OD      | Subtransmission Cables | 38,672    | _                       | _                | 38,672    |        |  |
| 33kV Interrupter Cable    | Subtransmission Cables | 120,000   | _                       | _                | 120,000   |        |  |
| Transport                 |                        | -         | _                       | _                | -         |        |  |
| Protection                |                        | -         | _                       | _                | _         |        |  |
| SCADA                     |                        | -         | _                       | _                | _         |        |  |
| Communications            |                        | _         | _                       | _                | _         |        |  |
| Project Management        | Subtransmission Lines  | 179,078   | _                       | 94,090           | 84,988    |        |  |
| Storage                   | Subtransmission Lines  | 160,000   | _                       | 80,000           | 80,000    |        |  |
| Decommissioning           | Subtration Enter       | -         |                         | -                | -         |        |  |
| Environmental             |                        |           |                         |                  |           |        |  |
| Freight                   |                        |           |                         |                  |           |        |  |
| riegit                    |                        |           |                         |                  |           |        |  |
| subtotal                  |                        | 4,656,036 | -                       | 2,446,349        | 2,209,686 |        |  |
| Opex Costs (3 years)      |                        |           |                         | split by regulat | ory year  |        |  |
|                           |                        | Cost      | 2017/18                 | 2018/19          | 2019/20   | 2020/2 |  |
| Storage                   |                        | 670,125   |                         | 223,375          | 223,375   | 223,37 |  |
| subtotal                  |                        | 670,125   |                         | 223,375          | 223,375   | 223,37 |  |

|                                      |                        |        | split by financial year |        |      |      |  |
|--------------------------------------|------------------------|--------|-------------------------|--------|------|------|--|
| Capex Costs                          | Asset Category         | Cost   | 2017                    | 2018   | 2019 | 2020 |  |
| Design                               |                        | -      | -                       | -      | -    |      |  |
| Civil Works                          |                        | -      | -                       | -      | -    |      |  |
| Cable joints                         | Subtransmission Cables | 32,400 | -                       | 32,400 | -    |      |  |
| 33kV Cable - 630mm                   | Subtransmission Cables | 47,780 | -                       | 47,780 | -    |      |  |
| <secondary equipment=""></secondary> |                        | -      | -                       | -      | -    |      |  |
| <other equipment=""></other>         |                        | -      | -                       | -      | -    |      |  |
| Transport                            |                        | -      | -                       | -      | -    |      |  |
| Protection                           |                        | -      | -                       | -      | -    |      |  |
| SCADA                                |                        | -      | -                       | -      | -    |      |  |
| Communications                       |                        | -      | -                       | -      | -    |      |  |
| Project Management                   | Subtransmission Cables | 3,207  | -                       | 3,207  | -    |      |  |
| Storage                              |                        | -      | -                       | -      | -    |      |  |
| Decommissioning                      |                        | -      | -                       | -      | -    |      |  |
| Environmental                        |                        | -      | -                       | -      | -    |      |  |
| subtotal                             |                        | 83,387 | -                       | 83,387 | -    |      |  |

| Opex Costs (3 years)  |      |         |         |         |         |
|-----------------------|------|---------|---------|---------|---------|
|                       | Cost | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| Storage               |      |         |         |         |         |
| Testing               |      |         |         |         |         |
| Storage Testing O & M | -    |         |         |         |         |
| subtotal              |      |         |         |         |         |

### Mobile Substations and Switchboards

## Portable Switchboard located in Lower Hutt (sub-option B)

|                      |                            |              | split by financial year |                   |          |         |  |
|----------------------|----------------------------|--------------|-------------------------|-------------------|----------|---------|--|
| Capex Costs          | Asset Category             | Cost         | 2017                    | 2018              | 2019     | 2020    |  |
| Switchboard          | Zone substations           | 613,000      | -                       | 183,900           | 245,200  | 183,900 |  |
| 11kV Cable           | Distribution and LV Cables | 22,131       | -                       | 6,639             | 8,852    | 6,639   |  |
| Terminations         | Distribution and LV Cables | 16,800       | -                       | 5,040             | 6,720    | 5,040   |  |
| Joints               | Distribution and LV Cables | 12,084       | -                       | 3,625             | 4,834    | 3,625   |  |
| Container Trailer    | Zone substations           | 202,950<br>- | -                       | 60,885            | 81,180   | 60,885  |  |
|                      |                            | -            |                         |                   |          |         |  |
| Project Management   | Zone substations           | 34,679       | -                       | 10,404            | 13,871   | 10,404  |  |
| subtotal             |                            | 901,644      | -                       | 270,493           | 360,657  | 270,493 |  |
| Opex Costs (3 years) |                            |              |                         | split by regulato | ory year |         |  |
|                      |                            | Cost         | 2017/18                 | 2018/19           | 2019/20  | 2020/21 |  |
| Testing              |                            | -            |                         |                   |          |         |  |
| Total                |                            |              | -                       | -                 | -        | -       |  |

## Mobile Substation in Hutt (sub-option C)

|                             |                            |           | split by financial year |         |         |         |  |
|-----------------------------|----------------------------|-----------|-------------------------|---------|---------|---------|--|
| Capex Costs                 | Asset Category             | Cost      | 2017                    | 2018    | 2019    | 2020    |  |
| Design                      | Zone substations           | 136,000   | -                       | 136,000 | -       | -       |  |
| Mobile Substation - Primary |                            |           |                         |         |         |         |  |
| Construction                | Zone substations           | 680,000   | _                       | -       | 340,000 | 340,000 |  |
| Equipment                   | Zone substations           | 884,000   | -                       | -       | 442,000 | 442,000 |  |
| 33kV Cable                  | Subtransmission Cables     | 14,336    | -                       | -       | 7,168   | 7,168   |  |
| 11kV Cable                  | Distribution and LV Cables | 22,131    | -                       | -       | 11,066  | 11,066  |  |
| Terminations - 11kV         | Distribution and LV Cables | 16,800    | -                       | -       | 8,400   | 8,400   |  |
| Terminations - 33kV         | Subtransmission Cables     | 23,203    | -                       | -       | 11,602  | 11,602  |  |
| Joints - 11kV               | Distribution and LV Cables | 12,084    | -                       | -       | 6,042   | 6,042   |  |
| Project Management          | Zone substations           | 68,000    |                         | 5,440   | 31,280  | 31,280  |  |
| Storage                     |                            | -         | -                       | -       | -       | -       |  |
| Decommissioning             |                            | -         | -                       | -       | -       | -       |  |
| Environmental               |                            | -         | -                       | -       | -       | -       |  |
| Freight                     |                            |           | -                       | -       | -       |         |  |
| subtotal                    |                            | 1,856,554 | -                       | 141,440 | 857,557 | 857,557 |  |

| Opex cost (3 years) |      | split by regulatory year |         |         | ear     |  |  |
|---------------------|------|--------------------------|---------|---------|---------|--|--|
|                     | Cost | 2017/18                  | 2018/19 | 2019/20 | 2020/21 |  |  |
| Testing             | -    |                          |         |         |         |  |  |
| Testing O & M       | -    |                          | -       | -       | -       |  |  |
| subtotal            | -    |                          | -       | -       | -       |  |  |

### Readiness Expenditure - Split of Cost by Asset Category (Detailed info)

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|---------------|----|
| Sheet Check > |    |

| Mobile Substation in CBD | (sub-ontion a) |
|--------------------------|----------------|
|                          |                |

|                             |                            |           | split by financial yea |         |         | l year  |  |  |
|-----------------------------|----------------------------|-----------|------------------------|---------|---------|---------|--|--|
| Capex Cost                  | Asset Category             | Cost      | 2017                   | 2018    | 2019    | 2020    |  |  |
| Design                      | Zone substations           | 136,000   | -                      | 136,000 | -       | -       |  |  |
| Mobile Substation - Primary |                            |           |                        |         |         |         |  |  |
| Construction                | Zone substations           | 680,000   | -                      | -       | 340,000 | 340,000 |  |  |
| Equipment                   | Zone substations           | 884,000   | -                      | -       | 442,000 | 442,000 |  |  |
|                             |                            | -         | -                      | -       | -       | -       |  |  |
| 11kV Cable                  | Distribution and LV Cables | 22,131    | -                      | -       | 11,066  | 11,066  |  |  |
| Terminations - 11kV         | Distribution and LV Cables | 16,800    | -                      | -       | 8,400   | 8,400   |  |  |
| Joints - 11kV               | Distribution and LV Cables | 12,084    | -                      | -       | 6,042   | 6,042   |  |  |
| Project Management          | Zone substations           | 70,041    | -                      | 5,440   | 32,300  | 32,300  |  |  |
| Storage                     | Zone substations           | 150,000   | -                      | -       | 75,000  | 75,000  |  |  |
| Decommissioning             |                            | -         | -                      | -       | -       | -       |  |  |
| Environmental               |                            | -         | -                      | -       | -       | -       |  |  |
| Freight                     |                            | -         | -                      | -       | -       | -       |  |  |
| subtotal                    |                            | 1,971,056 | -                      | 141,440 | 914,808 | 914,808 |  |  |

| Opex cost (3 years)   |      | split by regulatory year |         |         |         |  |  |
|-----------------------|------|--------------------------|---------|---------|---------|--|--|
|                       | Cost | 2017/18                  | 2018/19 | 2019/20 | 2020/21 |  |  |
| Storage               | -    |                          |         |         |         |  |  |
| Storage Testing O & M | -    |                          |         |         |         |  |  |
| O & M                 | -    |                          | -       | -       | -       |  |  |
|                       |      |                          |         |         |         |  |  |
| subtotal              | -    |                          | -       | -       | -       |  |  |

#### Critical Emergency Spares (11kV cable faults)

#### 11kV Emergency Spares Option 2

|                                      |   |           |         | split by finance | cial year |           |
|--------------------------------------|---|-----------|---------|------------------|-----------|-----------|
| Capex Costs                          | Asset Category                            | Cost      | 2017    | 2018             | 2019      | 2020      |
| Design                               |   |           |         |                  |           |           |
| Civil Works                          |   |           |         |                  |           |           |
| <primary equipment=""></primary>     |   |           |         |                  |           |           |
| Wellington Special - 500 kVA         | Distribution Substations and Transformers | 45,746    | -       | 45,746           | -         | -         |
| Transformer - 500 kVA                | Distribution Substations and Transformers | 98,198    | -       | 98,198           | -         | -         |
| Transformer - 750 kVA                | Distribution Substations and Transformers | 56,005    | -       | 56,005           | -         | -         |
| Ringmaster RMU                       | Distribution Switchgear                   | 729,929   | -       | 243,310          | 243,310   | 243,310   |
| Transformer - Gen Connection         | Distribution Substations and Transformers | 98,198    | -       | -                | 98,198    | -         |
| Cable joints -Wellington             | Distribution and LV Cables                | 271,008   | -       | 90,336           | 90,336    | 90,336    |
| Cable joints - Hutt Valley           | Distribution and LV Cables                | 2,602,806 | -       | 867,602          | 867,602   | 867,602   |
| Cable - Wellington                   | Distribution and LV Cables                | 36,154    | -       | 36,154           | -         | -         |
| Cable - Hutt Valley                  | Distribution and LV Cables                | 235,372   | -       | 78,457           | 78,457    | 78,457    |
| Fault location equipment             | Other Network Assets                      | 580,383   | -       | -                | 580,383   | -         |
|                                      | 0   |           |         |                  |           |           |
|                                      | 0   |           |         |                  |           |           |
|                                      | 0   |           |         |                  |           |           |
|                                      | 0   |           |         |                  |           |           |
| <secondary equipment=""></secondary> |   | -         | -       | -                | -         | -         |
| <other equipment=""></other>         |   | -         | -       | -                | -         | -         |
| Transport                            |   | -         | -       | -                | -         | -         |
| Protection                           |   | -         | -       | -                | -         | -         |
| SCADA                                |   | -         | -       | -                | -         | -         |
| Communications                       |   | -         | -       | -                | -         | -         |
| Project Management                   | Distribution and LV Cables                | 190,152   | -       | 60,632           | 78,331    | 51,188    |
| Storage                              |   | -         | -       | -                | -         | -         |
| Decommissioning                      |   | -         | -       | -                | -         | -         |
| Environmental                        |   | -         | -       | -                | -         | -         |
| Freight                              |   | -         | -       | -                | -         | -         |
| Total                                |   | 4,943,951 | -       | 1,576,440        | 2,036,618 | 1,330,893 |
| Opex cost (3 years)                  |   |           |         | split by regulat | tory year |           |
|                                      |   | Cost      | 2017/18 | 2018/19          | 2019/20   | 2020/21   |
| Storage - Wellington                 |   | -         |         |                  |           |           |
| subtotal                             |   |           |         |                  |           |           |

## Seismic reinforcement of critical buildings (priority 1)

|              |                                      |            | split by financial year |           |           |           |  |
|--------------|--------------------------------------|------------|-------------------------|-----------|-----------|-----------|--|
| Capex Costs  | Asset Category                       | Cost       | 2017                    | 2019      | 2020      |           |  |
|              |                                      | 10,395,000 |                         | 2,687,368 | 3,443,618 | 4,264,015 |  |
| split by:    |                                      |            |                         |           |           |           |  |
| Zone         | Zone Substations (buildings)         | 4,170,000  |                         | 1,078,049 | 1,381,422 | 1,710,528 |  |
| Distribution | Distribution Substations (buildings) | 6,225,000  |                         | 1,609,318 | 2,062,195 | 2,553,487 |  |

### **Communication Systems**

## Data Centres

|  | split by financial year                  |           |         |           | ial year  |         |  |  |
|--|--|-----------|---------|-----------|-----------|---------|--|--|
| Capex Costs  | Asset Category                           | Cost      | 2017    | 2018      | 2019      | 2020    |  |  |
| Newtown Data Centre - Container                        | Non-network assets - Containers          | 635,000   | -       | -         | 635,000   | -       |  |  |
| Newtown Data Centre - Network and Data Equipment       | Non-network assets - IT equipment        | 872,288   | -       | 27,456    | 25,400    | 819,432 |  |  |
| Haywards Data Centre                                   | Non-network assets - IT equipment        | 880,568   | -       | 27,456    | 853,112   | -       |  |  |
| Porirua Data Centre - Container                        | Non-network assets - Containers          | 635,000   | -       | -         | 635,000   | -       |  |  |
| Porirua Data Centre - Network and Data Equipment       | Non-network assets - IT equipment        | 872,688   | -       | 27,456    | 845,232   | -       |  |  |
| Communication systems - Phone exchange and NCR upgrade | Non-networks assets - Telecommunications | 856,486   | -       | 856,486   | -         | -       |  |  |
| Communication systems - Voice Radio                    | Non-network assets - Radio               | 506,109   |         | 506,109   |           |         |  |  |
| Subtotal   |  | 5,258,139 | -       | 1,444,963 | 2,993,744 | 819,432 |  |  |
| Opex cost (3 years)                                    |  |           |         |           |           |         |  |  |
|  |  | Cost      | 2017/18 | 2018/19   | 2019/20   | 2020/21 |  |  |
| Local provider   |  | 151,536   |         |           | -         | 151,536 |  |  |
| Connection between Petone and Haywards                 |  | 39,000    |         |           | -         | 39,000  |  |  |
| Phone exchange on-going cost                           |  | 69,768    |         |           | 34,884    | 34,884  |  |  |
| NCR Phone system on-going cost                         |  | 37,440    |         |           | 18,720    | 18,720  |  |  |
| Radio Monthly on-going cost                            |  | 205,200   |         |           | 102,600   | 102,600 |  |  |
| subtotal   |  | 502,944   |         |           | 156,204   | 346,740 |  |  |

#### Readiness Expenditure - Split of Cost by Asset Category (Summary info)

| Model Check > | Ok |
|---------------|----|
| Sheet Check > | Ok |

| Short Term Initiative  | Project  | Asset Category  | Capex (\$)                  | Opex (\$) (3 years)                   | 2017 | split of capex -<br>2018    | - financial year<br>2019    | 2020                 | sı<br>RY17/18 | plit of capex - r<br>RY18/19 | egulatory year<br>RY19/20   | RY20/21                     | RY17/18 | split of opex - re<br>RY18/19 |         | RY20/2 |
|--|--|---|-----------------------------|---------------------------------------|------|-----------------------------|-----------------------------|----------------------|---------------|------------------------------|-----------------------------|-----------------------------|---------|-------------------------------|---------|--------|
|  | <u> </u>   |   | ,                           | - pa (4) (5 jame)                     |      |                             |                             |                      |               |                              | -                           |                             | ,       |                               |         |        |
| Emergency hardware (33kV faults)   | 33kV cables - Option 2 - Carry O/H line spares for vulnerable routes             | Subtransmission Lines   | 4,474,203                   |                                       | -    | 2,446,349                   | 2,027,853                   | -                    |               | 2,446,349                    | 2,027,853<br>181.833        |                             |         |                               |         |        |
| Emergency hardware (33kV faults)   | 33kV cables - Option 2 - Carry O/H line spares for vulnerable routes<br>subtotal | Subtransmission Cables  | 181,833                     | 670,125                               |      | 2 446 240                   | 181,833<br>2,209,686        |                      |               | 2,446,349                    | 2,209,686                   |                             |         | 223,375                       | 223,375 | 223,37 |
| Emergency hardware (33kV faults)   | Subtotal   |   | 4,656,036                   | 6/0,125                               | -    | 2,446,349                   | 2,209,686                   | -                    | -             | 2,446,349                    | 2,209,686                   | -                           | -       | 223,375                       | 223,375 | 223,37 |
| Emergency hardware (33kV faults)   | Carry 33 kV XLPE cable spares including jointing kits - option 4                 | Subtransmission Lines   |                             |                                       | _    | -                           | -                           | -                    |               |                              |                             |                             |         |                               |         |        |
| Emergency hardware (33kV faults)   | Carry 33 kV XLPE cable spares including jointing kits - option 4                 | Subtransmission Cables  | 83,387                      |                                       | -    | 83,387                      | -                           | -                    |               | 83,387                       |                             |                             |         |                               |         |        |
| Emergency hardware (33kV faults)   | subtotal   |   | 83,387                      | -                                     | -    | 83,387                      | -                           | -                    | -             | 83,387                       | -                           | -                           | -       | -                             | -       |        |
| Emergency hardware (33kV faults)   | total  |   | 4,739,423                   | 670,125                               | -    | 2,529,737                   | 2,209,686                   | -                    | -             | 2,529,737                    | 2,209,686                   | -                           | -       | 223,375                       | 223,375 | 223,37 |
|  |  |   |                             |                                       |      |                             |                             |                      |               |                              |                             |                             |         |                               |         |        |
| Mobile stations and switchboards   | Portable Switchboard located in Lower Hutt (sub-option B)                        | Zone substations  | 850,629                     |                                       | -    | 255,189                     | 340,251                     | 255,189              |               |                              |                             | 850,629                     |         |                               |         |        |
| Mobile stations and switchboards   | Portable Switchboard located in Lower Hutt (sub-option B)                        | Subtransmission Lines   | -                           |                                       | -    | -                           | -                           | -                    |               |                              |                             | -                           |         |                               |         |        |
| Mobile stations and switchboards   | Portable Switchboard located in Lower Hutt (sub-option B)                        | Subtransmission Cables  | -                           |                                       | -    | -                           | -                           | -                    |               |                              |                             | -                           |         |                               |         |        |
| Mobile stations and switchboards   | Portable Switchboard located in Lower Hutt (sub-option B)                        | Distribution and LV Cables  | 51,015                      |                                       | -    | 15,305                      | 20,406                      | 15,305               |               |                              |                             | 51,015                      |         |                               |         |        |
| Mobile stations and switchboards   | Portable Switchboard located in Lower Hutt (sub-option B)                        | Distribution Switchgear   |                             |                                       |      | -                           | -                           | -                    |               |                              |                             | -                           |         |                               |         |        |
| Mobile stations and switchboards   | subtotal   |   | 901,644                     | -                                     | -    | 270,493                     | 360,657                     | 270,493              | -             | -                            | -                           | 901,644                     | -       | -                             | -       |        |
| Mobile stations and switchboards   | Mobile Substation in Hutt (sub-option C)   | Zone substations  | 1,768,000                   |                                       | -    | 141,440                     | 813,280                     | 813,280              |               |                              |                             | 1,768,000                   |         |                               |         |        |
| Mobile stations and switchboards   | Mobile Substation in Hutt (sub-option C)   | Subtransmission Cables  | 37,539                      |                                       | _    | , -                         | 18,769                      | 18,769               |               |                              |                             | 37,539                      |         |                               |         |        |
| Mobile stations and switchboards   | Mobile Substation in Hutt (sub-option C)   | Distribution and LV Cables  | 51,015                      |                                       | _    | _                           | 25,508                      | 25,508               |               |                              |                             | 51,015                      |         |                               |         |        |
| Mobile stations and switchboards   | subtotal   | Distribution and Ev capies  | 1,856,554                   |                                       |      | 141.440                     | 857,557                     | 857,557              |               |                              |                             | 1,856,554                   |         |                               |         |        |
| mostic stations and switchboards   |  |   | 1,030,331                   |                                       |      | 112,110                     | 037,537                     | 037,337              |               |                              |                             | 1,030,331                   |         |                               |         |        |
| Mobile stations and switchboards   | Mobile Substation in CBD (sub-option g)  | Zone substations  | 1,920,041                   |                                       | -    | 141,440                     | 889,300                     | 889,300              |               |                              |                             | 1,920,041                   |         |                               |         |        |
| Mobile stations and switchboards   | Mobile Substation in CBD (sub-option g)  | Subtransmission Lines   | -                           |                                       | -    | -                           | -                           | -                    |               |                              |                             | -                           |         |                               |         |        |
| Mobile stations and switchboards   | Mobile Substation in CBD (sub-option g)  | Subtransmission Cables  | -                           |                                       | -    | -                           | -                           | -                    |               |                              |                             | -                           |         |                               |         |        |
| Mobile stations and switchboards   | Mobile Substation in CBD (sub-option g)  | Distribution and LV Cables  | 51,015                      |                                       | -    | -                           | 25,508                      | 25,508               |               |                              |                             | 51,015                      |         |                               |         |        |
| Mobile stations and switchboards   | Mobile Substation in CBD (sub-option g)  | Distribution Switchgear   | -                           |                                       | -    | -                           | -                           | -                    |               |                              |                             | -                           |         |                               |         |        |
| Mobile stations and switchboards   | subtotal   |   | 1,971,056                   | -                                     | -    | 141,440                     | 914,808                     | 914,808              | -             | -                            | -                           | 1,971,056                   | -       | -                             | -       |        |
| Mobile Substations and switchboards  | total  |   | 4,729,253                   | -                                     | •    | 553,373                     | 2,133,022                   | 2,042,858            | -             |                              | -                           | 4,729,253                   | -       | -                             | -       |        |
| Carrie Committee (1971)  | 4411/5   | Professional Community of the Community | 298,147                     |                                       |      | 199.949                     | 98,198                      |                      |               | 199,949                      | 98,198                      |                             |         |                               |         |        |
| Critical Emergency Spares (11kV cable faults)  | 11kV Emergency Spares (Option 2)   | Distribution Substations and Transformers   |                             |                                       | -    |                             |                             | -                    |               |                              |                             | 4 007 504                   |         |                               |         |        |
| Critical Emergency Spares (11kV cable faults)  | 11kV Emergency Spares (Option 2)   | Distribution and LV Cables  | 3,335,492                   |                                       | -    | 1,133,181                   | 1,114,727                   | 1,087,584            |               | 1,133,181                    | 1,114,727                   | 1,087,584                   |         |                               |         |        |
| Critical Emergency Spares (11kV cable faults)  | 11kV Emergency Spares (Option 2)   | Other Network Assets  | 580,383                     |                                       | -    |                             | 580,383                     |                      |               |                              | 580,383                     |                             |         |                               |         |        |
| Critical Emergency Spares (11kV cable faults)  Critical Emergency Spares (11kV cable faults) | 11kV Emergency Spares (Option 2) total   | Distribution Switchgear   | 729,929<br><b>4,943,951</b> |                                       | -    | 243,310<br><b>1,576,440</b> | 243,310<br><b>2,036,618</b> | 243,310<br>1,330,893 |               | 243,310<br><b>1,576,440</b>  | 243,310<br><b>2,036,618</b> | 243,310<br><b>1,330,893</b> | -       | -                             | -       |        |
| Citical Lineigency Spares (11kV cable faults)  |  |   | 4,543,531                   | · · · · · · · · · · · · · · · · · · · |      | 1,370,440                   | 2,030,018                   | 1,330,693            |               | 1,370,440                    | 2,030,018                   | 1,330,633                   |         |                               |         |        |
| Seismic reinforcement of critical buildings  | Seismic Reinforcement - zone substations   | Zone Substations (buildings)  | 4,170,000                   |                                       | -    | 1,078,049                   | 1,381,422                   | 1,710,528            | -             | 1,078,049                    | 1,381,422                   | 1,710,528                   |         |                               |         |        |
| Seismic reinforcement of critical buildings  | Seismic Reinforcement - distribution substations                                 | Distribution Substations (buildings)  | 6,225,000                   |                                       | -    | 1,609,318                   | 2,062,195                   | 2,553,487            | -             | 1,609,318                    | 2,062,195                   | 2,553,487                   |         |                               |         |        |
| Seismic reinforcement of critical buildings  | total  |   | 10,395,000                  |                                       | -    | 2,687,368                   | 3,443,618                   | 4,264,015            | -             | 2,687,368                    | 3,443,618                   | 4,264,015                   | -       | -                             | -       |        |
| Communication Systems  | Data Centres   | Non-network assets - Containers   | 1,270,000                   |                                       |      |                             | 1,270,000                   |                      |               |                              | 1,270,000                   |                             |         |                               |         |        |
| Communication Systems Communication Systems  | Data Centres  Data Centres   | Non-network assets - Containers  Non-network assets - IT equipment  | 2,625,544                   |                                       | -    | 82,368                      | 1,723,744                   | 819,432              |               |                              | 1,753,256                   | 872,288                     |         |                               |         |        |
| •  | Comms  | • •   | 2,625,544<br>856,486        |                                       | -    | 82,368<br>856,486           | 1,/23,/44                   | 819,432              |               | 856,486                      | 1,753,256                   | 872,288                     |         |                               |         |        |
| Communication Systems Communication Systems  | Comms  | Non-networks assets - Telecommunications<br>Non-network assets - Radio  | 506,486<br>506.109          |                                       | -    | 506.109                     | -                           | -                    |               | 506,109                      |                             |                             |         |                               |         |        |
| Communication Systems  | total  | NOII-HELWOIK assets - Radio   | 5,258,139                   | 502,944                               | -    | 1,444,963                   | 2,993,744                   | 819,432              |               | 1,362,595                    | 3,023,256                   | 872,288                     | -       |                               | 156,204 | 346,74 |
| Communication Systems  |  |   | 3,230,133                   | 302,344                               |      | 1,444,503                   | 2,553,744                   | 015,432              |               | 1,302,333                    | 3,023,230                   | 072,200                     |         |                               | 130,204 | 340,74 |
| Total  |  |   | 30,065,766                  | 1,173,069                             | -    | 8,791,880                   | 12,816,688                  | 8,457,198            | •             | 8,156,139                    | 10,713,178                  | 11,196,449                  | -       | 223,375                       | 379,579 | 570,11 |
| Check >  |  |   | Ok                          | Ok                                    |      |                             |                             | Ok                   |               |                              |                             | Ok                          |         |                               |         | (      |
| Circuit -  |  |   |                             |                                       |      |                             |                             |                      |               |                              |                             |                             |         |                               |         |        |
|  |  |   |                             |                                       |      |                             |                             |                      |               |                              |                             |                             |         |                               |         |        |
| Reconciliation to Jacobs version Total per version sent to Jacobs                            |  |   | 30,065,766                  | 1,173,069                             |      |                             |                             |                      |               |                              |                             |                             |         |                               |         |        |

# Readiness Expenditure - CPP capital expenditure

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Sheet Check > Ok

# Summary

| RAB                                       | No      |         |         |             |      |
|---|---------|---------|---------|-------------|------|
|   | 2018/19 | 2019/20 | 2020/21 | Asset lives | Flag |
| Subtransmission Lines                     | 2,495   | 2,110   | -       | 55.00       | 1    |
| Subtransmission Cables                    | 85      | 189     | 40      | 55.00       | 2    |
| Zone Substations                          | 1,100   | 1,437   | 6,632   | 45.00       | 3    |
| Distribution and LV Lines                 | -       | -       | -       | 60.00       | 4    |
| Distribution and LV Cables                | 1,156   | 1,160   | 1,317   | 55.00       | 5    |
| Distribution Substations and Transformers | 1,845   | 2,248   | 2,710   | 45.00       | 6    |
| Distribution Switchgear                   | 248     | 253     | 258     | 40.00       | 7    |
| Other Network Assets                      | -       | 604     | -       | 25.00       | 8    |
| Non-network assets                        | 1,390   | 3,145   | 926     | 15.00       | 9    |
| Total                                     | 8,319   | 11,146  | 11,882  |             |      |

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|---------|----|----|----|

| INU     |                                       |   |   |  |
|---------|---------------------------------------|---|---|--|
| 2018/19 | 2019/20                               | 2020/21   | Asset lives   | Flag   |
| 2,741   | 3,583                                 | 4,525   | -   | 1  |
| 4,188   | 3,814                                 | 6,431   | 8.0%  | 2  |
| -       | 1,925                                 | -   | 10.0%   | 3  |
| 874     | -                                     | -   | 20.0%   | 4  |
| 516     | -                                     | -   | 25.0%   | 5  |
| -       | 1,824                                 | 926   | 50.0%   | 6  |
| 8,319   | 11,146                                | 11,882  |   |  |
|         | 2018/19  2,741  4,188  -  874  516  - | 2,741 3,583 4,188 3,814 - 1,925 874 - 516 - 1,824 | 2018/19         2019/20         2020/21           2,741         3,583         4,525           4,188         3,814         6,431           -         1,925         -           874         -         -           516         -         -           -         1,824         926 | 2018/19         2019/20         2020/21         Asset lives           2,741         3,583         4,525         -           4,188         3,814         6,431         8.0%           -         1,925         -         10.0%           874         -         -         20.0%           516         -         -         25.0%           -         1,824         926         50.0% |

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|---------|----|----|----|
|---------|----|----|----|

### Inflation

|           | Inflation |         |         | Index   |         |         |  |
|-----------|-----------|---------|---------|---------|---------|---------|--|
|           | 2018/19   | 2019/20 | 2020/21 | 2018/19 | 2019/20 | 2020/21 |  |
| Inflation | 2.00%     | 2.00%   | 2.00%   | 1.02    | 1.04    | 1.06    |  |

# **Capital expenditure**

|   | Rea     | l RY18, \$000 |         |         | Index   |         | No      | minal, \$000 |         | Asset li | ves   | Flags |     |
|---|---------|---------------|---------|---------|---------|---------|---------|--------------|---------|----------|-------|-------|-----|
|   | 2018/19 | 2019/20       | 2020/21 | 2018/19 | 2019/20 | 2020/21 | 2018/19 | 2019/20      | 2020/21 | RAB      | Tax   | RAB   | Tax |
| Subtransmission Lines                     | 2,446   | 2,028         | -       | 1.02    | 1.04    | 1.06    | 2,495   | 2,110        | -       | 55       | 8.0%  | 1     | 2   |
| Subtransmission Cables                    | 83      | 182           | 38      | 1.02    | 1.04    | 1.06    | 85      | 189          | 40      | 55       | 8.0%  | 2     | 2   |
| Zone Substations                          | -       | -             | 4,539   | 1.02    | 1.04    | 1.06    | -       | -            | 4,816   | 45       | 8.0%  | 3     | 2   |
| Zone Substations (buildings)              | 1,078   | 1,381         | 1,711   | 1.02    | 1.04    | 1.06    | 1,100   | 1,437        | 1,815   | 45       | -     | 3     | 1   |
| Distribution and LV Lines                 | -       | -             | -       | 1.02    | 1.04    | 1.06    | -       | -            | -       | 60       | 8.0%  | 4     | 2   |
| Distribution and LV Cables                | 1,133   | 1,115         | 1,241   | 1.02    | 1.04    | 1.06    | 1,156   | 1,160        | 1,317   | 55       | 8.0%  | 5     | 2   |
| Distribution Substations and Transformers | 200     | 98            | -       | 1.02    | 1.04    | 1.06    | 204     | 102          | -       | 45       | 8.0%  | 6     | 2   |
| Distribution Substations (buildings)      | 1,609   | 2,062         | 2,553   | 1.02    | 1.04    | 1.06    | 1,642   | 2,146        | 2,710   | 45       | -     | 6     | 1   |
| Distribution Switchgear                   | 243     | 243           | 243     | 1.02    | 1.04    | 1.06    | 248     | 253          | 258     | 40       | 8.0%  | 7     | 2   |
| Other Network Assets                      | -       | 580           | -       | 1.02    | 1.04    | 1.06    | -       | 604          | -       | 25       | 10.0% | 8     | 3   |
| Non-network assets - Containers           | -       | 1,270         | -       | 1.02    | 1.04    | 1.06    | -       | 1,321        | -       | 15       | 10.0% | 9     | 3   |
| Non-network assets - IT equipment         | -       | 1,753         | 872     | 1.02    | 1.04    | 1.06    | -       | 1,824        | 926     | 15       | 50.0% | 9     | 6   |
| Non-networks assets - Telecommunications  | 856     | -             | -       | 1.02    | 1.04    | 1.06    | 874     | -            | -       | 15       | 20.0% | 9     | 4   |
| Non-network assets - Radio                | 506     | -             | -       | 1.02    | 1.04    | 1.06    | 516     | -            | -       | 15       | 25.0% | 9     | 5   |
| Total                                     | 8,156   | 10,713        | 11,196  |         |         |         | 8,319   | 11,146       | 11,882  |          | ·     |       |     |
| Check >                                   | Ok      | Ok            | Ok      |         |         |         | Ok      | Ok           | Ok      |          |       |       |     |

# **Readiness Expenditure - CPP operating expenditure**

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Sheet Check >

# Inflation

|           |         | Inflation |         | Index   |         |         |  |
|-----------|---------|-----------|---------|---------|---------|---------|--|
|           | 2018/19 | 2019/20   | 2020/21 | 2018/19 | 2019/20 | 2020/21 |  |
| Inflation | 2.00%   | 2.00%     | 2.00%   | 1.02    | 1.04    | 1.06    |  |

# Operating expenditure

|                       | Real RY18, \$000 |         | Index   |         | Nominal, \$000 |         |         |         |         |
|-----------------------|------------------|---------|---------|---------|----------------|---------|---------|---------|---------|
|                       | 2018/19          | 2019/20 | 2020/21 | 2018/19 | 2019/20        | 2020/21 | 2018/19 | 2019/20 | 2020/21 |
| Operating expenditure | 223              | 380     | 570     | 1.02    | 1.04           | 1.06    | 228     | 395     | 605     |

# **Readiness Expenditure - Output for CPP Model**

| Model Check > | Ok |
|---------------|----|
| Sheet Check > | Ok |

## Operating expenditure

|                       | Nominal, \$000 |         |         |  |
|-----------------------|----------------|---------|---------|--|
|                       | 2018/19        | 2019/20 | 2020/21 |  |
| Operating expenditure | 228            | 395     | 605     |  |

# Capital expenditure

|                     | Nominal, \$000 |         |         |  |  |
|---------------------|----------------|---------|---------|--|--|
|                     | 2018/19        | 2019/20 | 2020/21 |  |  |
| Capital expenditure | 8,319          | 11,146  | 11,882  |  |  |

### Commissioned asset - tax

|        | No      | Nominal, \$000 |         |  |
|--------|---------|----------------|---------|--|
|        | 2018/19 | 2019/20        | 2020/21 |  |
| -      | 2,741   | 3,583          | 4,525   |  |
| 8.00%  | 4,188   | 3,814          | 6,431   |  |
| 10.00% | -       | 1,925          | -       |  |
| 20.00% | 874     | -              | -       |  |
| 25.00% | 516     | -              | -       |  |
| 50.00% | -       | 1,824          | 926     |  |
| Total  | 8,319   | 11,146         | 11,882  |  |
|        |         |                |         |  |

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### **Commissioned asset - RAB**

|  | Nominal, \$000 |         |         | Remaining life |         |         |      |
|--|----------------|---------|---------|----------------|---------|---------|------|
|  | 2018/19        | 2019/20 | 2020/21 | 2018/19        | 2019/20 | 2020/21 | Flag |
| RY19 readiness expenditure - Subtransmission lines                     | 2,495          | -       | -       | -              | 55      | 54      | 1    |
| RY20 readiness expenditure - Subtransmission lines                     | -              | 2,110   | -       | -              | -       | 55      | 1    |
| RY21 readiness expenditure - Subtransmission lines                     | -              | -       | -       | -              | -       | -       | 1    |
| RY19 readiness expenditure - Subtransmission cables                    | 85             | -       | -       | -              | 55      | 54      | 2    |
| RY20 readiness expenditure - Subtransmission cables                    | -              | 189     | -       | -              | -       | 55      | 2    |
| RY21 readiness expenditure - Subtransmission cables                    | -              | -       | 40      | -              | -       | -       | 2    |
| RY19 readiness expenditure - Zone substations                          | 1,100          | -       | -       | -              | 45      | 44      | 3    |
| RY20 readiness expenditure - Zone substations                          | -              | 1,437   | -       | -              | -       | 45      | 3    |
| RY21 readiness expenditure - Zone substations                          | -              | -       | 6,632   | -              | -       | -       | 3    |
| RY19 readiness expenditure - Distribution and LV lines                 | -              | -       | -       | -              | 60      | 59      | 4    |
| RY20 readiness expenditure - Distribution and LV lines                 | -              | -       | -       | -              | -       | 60      | 4    |
| RY21 readiness expenditure - Distribution and LV lines                 | -              | -       | -       | -              | -       | -       | 4    |
| RY19 readiness expenditure - Distribution and LV cables                | 1,156          | -       | -       | -              | 55      | 54      | 5    |
| RY20 readiness expenditure - Distribution and LV cables                | -              | 1,160   | -       | -              | -       | 55      | 5    |
| RY21 readiness expenditure - Distribution and LV cables                | -              | -       | 1,317   | -              | -       | -       | 5    |
| RY19 readiness expenditure - Distribution substations and transformers | 1,845          | -       | -       | -              | 45      | 44      | 6    |
| RY20 readiness expenditure - Distribution substations and transformers | -              | 2,248   | -       | -              | -       | 45      | 6    |
| RY21 readiness expenditure - Distribution substations and transformers | -              | -       | 2,710   | -              | -       | -       | 6    |
| RY19 readiness expenditure - Distribution swirchgear                   | 248            | -       | -       | -              | 40      | 39      | 7    |
| RY20 readiness expenditure - Distribution swirchgear                   | -              | 253     | -       | -              | -       | 40      | 7    |
| RY21 readiness expenditure - Distribution swirchgear                   | -              | -       | 258     | -              | -       | -       | 7    |
| RY19 readiness expenditure - Other network assets                      | -              | -       | -       | -              | 25      | 24      | 8    |
| RY20 readiness expenditure - Other network assets                      | -              | 604     | -       | -              | -       | 25      | 8    |
| RY21 readiness expenditure - Other network assets                      | -              | -       | -       | -              | -       | -       | 8    |
| RY19 readiness expenditure - Non-network asset                         | 1,390          | -       | -       | -              | 15      | 14      | 9    |
| RY20 readiness expenditure - Non-network asset                         | -              | 3,145   | -       | -              | -       | 15      | 9    |
| RY21 readiness expenditure - Non-network asset                         | -              | -       | 926     | -              | -       | -       | 9    |
| Total  | 8,319          | 11,146  | 11,882  |                |         |         |      |
|  |                |         |         |                |         |         |      |

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