



ELECTRICITY DISTRIBUTION SERVICES

Customised Price-Quality Path

# Annual Price-setting Compliance Statement

Assessment Period: 01 April 2020 – 31 March 2021

Published: 31 March 2020

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## Director's Certificate for the Customised Price-Quality Path Compliance Statement

For the period 1 April 2020 – 31 March 2021

I, John Loughlin, being a director of Powerco Limited certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached annual price-setting compliance statement of Powerco, and related information, prepared for the purposes of the *Powerco Limited Electricity Distribution Customised Price-Quality Path Determination 2018* has been prepared in accordance with all the relevant requirements, and all forecasts used in the calculations for forecast revenue from prices and forecast allowable revenue are reasonable.



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Director

25 March 2020

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Date

### **Powerco is required to report annually on compliance with its price path**

Powerco Limited's electricity distribution business (Powerco) is subject to regulation under the Commerce Act 1986. The Commerce Commission (Commission) has set a customised price-quality path (CPP) which applies to Powerco from 1 April 2018 to 31 March 2023. This 2021 assessment period is the third assessment period under the current customised price-quality path.

The CPP requirements are set in the Powerco Limited Electricity Distribution Customised Price-Quality Path Determination 2018 (the Determination), and any subsequent amendments. Each year Powerco must demonstrate that forecast revenue from prices is below forecast allowable revenue. Powerco must disclose an annual price-setting compliance statement (Statement) which includes information relevant to making this assessment.

### **Powerco is compliant with its price path for the period 1 April 2020 – 31 March 2021**

Appendix A provides the Determination's compliance requirements and references the relevant information included in this Statement.

Powerco published this Statement on 31 March 2020. A copy is available at Powerco's principal office (Powerco, Level 2, 84 Liardet Street New Plymouth). The Statement is published on Powerco's website ([www.Powerco.co.nz](http://www.Powerco.co.nz)) and additional copies can be provided on request.

This section demonstrates compliance with the price path requirements of Section 8 of the Determination.

For presentation purposes, the tables set out in this section are aggregates of the price and quantity information for each price group. While the dollar balances are rounded to the nearest thousand dollars, the underlying compliance calculations apply the whole number.

## 3.1 Price path compliance

Clause 8.4 of the Determination states that to demonstrate compliance with the price path,

*the forecast revenue from prices (FR<sub>t</sub>) for each assessment period must not exceed the forecast allowable revenue (FAR<sub>t</sub>) for the assessment period.*

Table 1: Price path results for this assessment period

CPP requirement	FR <sub>2021</sub>	≤	FAR <sub>2021</sub>
Powerco's result (\$000)	351,589	≤	351,590
<b>Compliance test</b>	<b>Complies</b>		

### 3.2 Forecast revenue from prices

Forecast revenue from prices is calculated in accordance with schedule 1.2 of the Determination as the sum of each **price** multiplied by each corresponding forecast **quantity**. The Determination requires that these forecasts are demonstrably reasonable.

Powerco's total forecast revenue from prices is provided in Table 2. Appendix B includes the full table of prices and forecast quantities for the 2021 pricing year.

**Table 2: Calculating Powerco's forecast revenue from prices (FR<sub>t</sub>)**

$$FR_{2021} = \sum(P_{2021} \times Q_{\text{forecast 2021}})$$

Region	Transmission <sup>1</sup> (\$000)	Distribution (\$000)	Total (\$000)
Western	44,785	132,294	177,079
Eastern	55,085	119,425	174,510
<b>FR<sub>2021</sub> is the total forecast revenue from prices for the 2021 assessment period</b>	<b>99,870</b>	<b>251,719</b>	<b>351,589</b>

The reasonableness of FR<sub>2021</sub> is demonstrated by Table 3 where bottom-up quantity forecasts are shown to align with historical growth data at a regional level. The methodology and outputs are provided in more detail at Appendix C.

**Table 3: Summary of 2021 regional forecasts**

Region	Forecast connections		Forecast volume (GWh)	
	2021 forecast (% change from 2020)	% growth range (2017- 2020)	2021 forecast (% change from 2020)	% growth range (2017-2020)
Western	0.80%	0.74% – 0.84%	-1.05%	-1.82% – 3.26%
Eastern	1.53%	1.53% – 1.93%	1.19%	-1.40% – 4.41%

<sup>1</sup> Powerco's forecast transmission revenue includes all pass-through and recoverable costs (refer Table 5) and the opening wash-up account balance (refer Table 7).

### 3.3 Forecast allowable revenue

Forecast allowable revenue is calculated in accordance with schedule 1.4 of the Determination as **forecast net allowable revenue + forecast pass-through and recoverable costs + opening wash-up account balance**.

The calculation of Powerco's forecast allowable revenue for this 2021 assessment period is provided in Table 4.

**Table 4: Calculating Powerco's notional revenue (NR)**

$FAR_{2021}$  = forecast net allowable revenue + forecast pass-through and recoverable costs + opening wash-up account balance

Calculation components	Total (\$000)
<b>Forecast net allowable revenue</b> <sub>2021</sub> is specified in schedule 1.3 of the Determination.	241,093 <sup>2</sup>
<b>Forecast pass-through and recoverable costs</b> <sub>2021</sub> includes, but is not limited to, rates and levies, IRIS or other incentive adjustment and Transpower charges (see Section 3.4 for more detail).	102,889
<b>Opening wash-up account balance</b> <sub>2021</sub> represents any under or over recoveries resulting from differences between actual and forecast values in the prior year, adjusted for the time value of money (see Section 3.5 for more detail).	7,608
<b><math>FAR_{2021}</math> is the total forecast allowable revenue for the 2021 assessment period</b>	<b>351,590</b>

<sup>2</sup> This value comes from the Amendments Determination made in March 2020.

### 3.4 Forecasts of pass-through and recoverable costs

The Determination allows for the inclusion of pass-through and recoverable costs in pricing if they are ascertainable at the time prices are set and have not been previously recovered or will not be able to be recovered other than through prices. Pass-through and recoverable costs are defined in clauses 3.1.2 and 3.1.3 of the Electricity Distribution Services Input Methodologies Determination 2012.

Pass-through costs include:

- Local government rates on system fixed assets;
- Electricity Industry Act levies; and
- Electricity and Gas Complaints Commissioner Scheme (EGCC) levies.

Recoverable costs include:

- IRIS incentive adjustments;
- Transpower charges;
- Distributed generation allowance;
- Claw back applied by the Commission;
- Costs relating to a CPP application;
- Auditor or verifier fees;
- Catastrophic event allowance;
- Extended reserves allowance; and
- Quality incentive adjustment.

**Table 5: Pass-through and recoverable costs included in the 2021 forecast**

Pass-through and recoverable costs incurred	Total (\$000)
Council rates	2,020
Commission levies	779
Electricity Authority levies	1,025
Utilities Disputes levies	195
IRIS incentive adjustment	(984)
Transpower connection charges	14,712
Transpower interconnection charges	73,374
Transpower new investment charges	7,294
Distributed generation allowance (Avoided Costs of Transmission))	4,682
Quality incentive adjustment	(786)
Capex wash-up adjustment	578
<b>Pass-through and recoverable costs included in 2021 pricing forecast</b>	<b>102,889</b>



## Demonstrating the forecasts are reasonable

Schedule 1.4(3) of the Determination requires all forecasts of pass-through and recoverable costs used to calculate forecast allowable revenue to be demonstrably reasonable. Table 6 summarises the methodology Powerco has applied to determine its forecasts of pass-through and recoverable costs. It is Powerco's opinion that all these methods deliver acceptable forecasts in the context they are used.

**Table 6: Methodology to forecast pass-through and recoverable costs**

<b>Cost component</b>	<b>Forecasting methodology</b>
<b>Rates</b>	Forecast is a combination of current and proposed levy rates
<b>Commission levies</b>	Forecast is a combination of current and projected levy amounts
<b>Electricity Authority levies</b>	Forecast is based on historical costs
<b>Utilities Dispute levies</b>	Forecast is based on historical costs
<b>IRIS incentive adjustment</b>	Forecast based on CPP BBM model
<b>Transpower connection charges</b>	As notified by Transpower
<b>Transpower interconnection charges</b>	As notified by Transpower
<b>Transpower new investment charges</b>	As notified by Transpower
<b>Distributed generation allowance (Avoided Costs of Transmission)</b>	Based on demand levels and Transpower's interconnection charge for 2020/21 pricing year
<b>Quality incentive adjustment</b>	Determined for 2018/19 regulatory year (adjusted for time value of money)
<b>Capex wash-up adjustment</b>	Forecast using the Input Methodologies formula

### 3.5 Opening wash-up account balance

Powerco moved to a revenue cap form of control under a CPP. This means variances between actual and forecast allowable revenue now also result in a wash-up balance in addition to variances between actual and forecast pass-through and recoverable costs. Powerco must calculate the wash-up amount for each assessment period using the methodology specified in schedule 1.6 of the Determination where:

- The 'opening wash-up account balance' for the third **assessment period** is the *closing wash-up account balance* of the second **assessment period**.
- The closing wash-up account balance for the second assessment period is the **wash-up amount** for the previous **assessment period** x **(1 + 67<sup>th</sup> percentile estimate of post-tax WACC)<sup>2</sup>**.

**Table 7: Calculating the closing wash-up account balance for the second assessment period**

Description	Total (\$000)
Wash-up amount for the second assessment period	6,622 <sup>3</sup>
+ adjustment for 67 <sup>th</sup> percentile estimate of post-tax WACC	986
<b>Closing wash-up balance <sub>2020</sub></b>	<b>7,608</b>

<sup>3</sup> Our 2019 annual compliance statement incorrectly disclosed the wash-up amount <sub>2019</sub> as \$7,179k. It should have been disclosed as \$6,622k. The \$557k difference follows the correct inclusion of \$520k actual pass-through balance <sub>2019</sub> (adjusted for the time-value-of-money) required to calculate actual allowable revenue <sub>2019</sub>.

## 4. Appendices

The following list of appendices provides further information supporting this Statement.

Appendix reference	Information provided
A – Compliance references	References the compliance requirements of the Determination and where they are evidenced in this Statement.
B – Prices and forecast quantities for pricing year 2021	Detailed schedules specifying prices and forecast quantities
C – Quantity forecasting	Calculating forecast revenue from prices requires a forecast of quantities

## Appendix A – Compliance statement references

Determination clause	Determination requirement	Compliance statement reference
<b>Price path</b>		
8.4	The forecast revenue from prices for each assessment period must not exceed the forecast allowable revenue for the assessment period	Section 3.1
<b>Annual price-setting compliance statement</b>		
11.2 (a)	State whether Powerco has complied with the price path in clause 8 for the assessment period	Section 2
11.2 (b)	State the date on which the Statement was prepared	Cover
11.2 (c)	Include a certificate in the form set out in Schedule 6, signed by at least one director of Powerco	Section 1
11.3 (a)	Include Powerco's calculation of its forecast revenue from prices together with supporting information for all components of the calculation	Section 3.2, Appendix B & C
11.3 (b)	Include Powerco's calculation of its forecast allowable revenue together with supporting information for all components of the calculation	Sections 3.3-3.5
11.3 (c)	Include any reasons for non-compliance with the price path	N/a
11.3 (d)	Include actions taken to mitigate any non-compliance and to prevent similar non-compliance in future assessment periods	N/a

## Appendix B – Prices and forecast quantities for pricing year 2021

The tables in this attachment contain our prices and forecast quantities.

### Western network - distribution prices

Western Network					Distribution Prices FY21 (Period 1 April 2020 to 31 March 2021)									
					Fixed				Variable					Individually Priced
					Network Asset Charge				Volume Charge		Demand Charge			
Lookup	Tariff Group	GXP Group	GXP	Short GXP code	ICP \$/Month	ICP cents/day	Installed Capacity \$/kVA/Month	CT/VT Charge (\$/day)	On Peak c/kWh	Off Peak c/kWh	Dist-\$/kW /Month	Trans-\$/kW /Month	\$/kVAr /Month	Indirect Fixed (\$/ICP)
<b>Residential+Small Commercial</b>														
E1A	E1	A	Brunswick	BRK	14		0.00		5.7100	6.1800				
E1 - UCA	E1 - UC	A	Brunswick	BRK	15		15.00		5.7100	6.1800				
E1A	E1	A	Bunnythorpe	BPE	16		0.00		5.7100	6.1800				
E1 - UCA	E1 - UC	A	Bunnythorpe	BPE	17		15.00		5.7100	6.1800				
E1A	E1	A	Carrington	CST	18		0.00		5.7100	6.1800				
E1 - UCA	E1 - UC	A	Carrington	CST	19		15.00		5.7100	6.1800				
E1A	E1	A	Huirangi	HUI	20		0.00		5.7100	6.1800				
E1 - UCA	E1 - UC	A	Huirangi	HUI	21		15.00		5.7100	6.1800				
E1A	E1	A	Linton	LTN	22		0.00		5.7100	6.1800				
E1 - UCA	E1 - UC	A	Linton	LTN	23		15.00		5.7100	6.1800				
E1A	E1	A	Moturoa / New Plymouth	NPL	24		0.00		5.7100	6.1800				
E1 - UCA	E1 - UC	A	Moturoa / New Plymouth	NPL	25		15.00		5.7100	6.1800				
E1A	E1	A	Stratford	SFD	26		0.00		5.7100	6.1800				
E1 - UCA	E1 - UC	A	Stratford	SFD	27		15.00		5.7100	6.1800				
E1A	E1	A	Wanganui	WGN	28		0.00		5.7100	6.1800				
E1 - UCA	E1 - UC	A	Wanganui	WGN	29		15.00		5.7100	6.1800				
E1B	E1	B	Greytown	GYT	31		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Greytown	GYT	32		15.00		7.5100	7.8600				
E1B	E1	B	Hawera	HWA	33		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Hawera	HWA	34		15.00		7.5100	7.8600				
E1B	E1	B	Mangamaire	MGM	35		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Mangamaire	MGM	36		15.00		7.5100	7.8600				
E1B	E1	B	Marion	MTN	37		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Marion	MTN	38		15.00		7.5100	7.8600				
E1B	E1	B	Masterton	MST	39		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Masterton	MST	40		15.00		7.5100	7.8600				
E1B	E1	B	Mataroa	MTR	41		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Mataroa	MTR	42		15.00		7.5100	7.8600				
E1B	E1	B	Ohakune	OKN	43		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Ohakune	OKN	44		15.00		7.5100	7.8600				
E1B	E1	B	Opunake	OPK	45		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Opunake	OPK	46		15.00		7.5100	7.8600				
E1B	E1	B	Waverley	WVY	47		0.00		7.5100	7.8600				
E1 - UCB	E1 - UC	B	Waverley	WVY	48		15.00		7.5100	7.8600				
<b>Medium/Large Commercial</b>														
E100A	E100	A	Carrington	CST	51	291.00		8.06			0.2875		7.00	
E100A	E100	A	Huirangi	HUI	52	291.00		8.06			0.2875		7.00	
E100A	E100	A	Moturoa / New Plymouth	NPL	53	291.00		8.06			0.2875		7.00	
E100A	E100	A	Stratford	SFD	54	291.00		8.06			0.2875		7.00	
E100B	E100	B	Hawera	HWA	55	291.00		8.06			0.5815		7.00	
E100C	E100	C	Waverley	WVY	56	291.00		8.06			0.5125		7.00	
E100D	E100	D	Opunake	OPK	57	291.00		8.06			0.5255		7.00	
E100E	E100	E	Brunswick	BRK	58	291.00		8.06			0.3375		7.00	
E100E	E100	E	Wanganui	WGN	59	291.00		8.06			0.3375		7.00	
E100F	E100	F	Marion	MTN	60	291.00		8.06			0.4055		7.00	
E100G	E100	G	Mataroa	MTR	61	291.00		8.06			0.5525		7.00	
E100G	E100	G	Ohakune	OKN	62	291.00		8.06			0.5525		7.00	
E100H	E100	H	Masterton	MST	63	291.00		8.06			0.4975		7.00	
E100H	E100	H	Greytown	GYT	64	291.00		8.06			0.4975		7.00	
E100I	E100	I	Bunnythorpe	BPE	65	291.00		8.06			0.3045		7.00	
E100I	E100	I	Linton	LTN	66	291.00		8.06			0.3045		7.00	
E100J	E100	J	Mangamaire	MGM	67	291.00		8.06			0.3635		7.00	
E300A	E300	A	Carrington	CST	69		1.85	8.06			0.1205		7.00	
E300A	E300	A	Huirangi	HUI	70		1.85	8.06			0.1205		7.00	
E300A	E300	A	Moturoa / New Plymouth	NPL	71		1.85	8.06			0.1205		7.00	
E300A	E300	A	Stratford	SFD	72		1.85	8.06			0.1205		7.00	
E300B	E300	B	Hawera	HWA	73		1.85	8.06			0.2265		7.00	
E300C	E300	C	Waverley	WVY	74		1.85	8.06			0.4515		7.00	
E300D	E300	D	Opunake	OPK	75		1.85	8.06			0.2545		7.00	
E300E	E300	E	Brunswick	BRK	76		1.85	8.06			0.1285		7.00	
E300E	E300	E	Wanganui	WGN	77		1.85	8.06			0.1285		7.00	
E300F	E300	F	Marion	MTN	78		1.85	8.06			0.2045		7.00	
E300G	E300	G	Mataroa	MTR	79		1.85	8.06			0.3445		7.00	
E300G	E300	G	Ohakune	OKN	80		1.85	8.06			0.3445		7.00	
E300H	E300	H	Masterton	MST	81		1.85	8.06			0.2945		7.00	
E300H	E300	H	Greytown	GYT	82		1.85	8.06			0.2945		7.00	
E300I	E300	I	Bunnythorpe	BPE	83		1.85	8.06			0.2025		7.00	
E300I	E300	I	Linton	LTN	84		1.85	8.06			0.2025		7.00	
E300J	E300	J	Mangamaire	MGM	85		1.85	8.06			0.2145		7.00	
SPECIAL	SPECIAL		Asset Based					8.06					7.00	136,321.27
SPECIAL	SPECIAL		Hau Nui Generation					8.06						116,195.82
SPECIAL	SPECIAL		Taranua Generation					8.06						249,115.02
SPECIAL	SPECIAL		Other Generation											

**Western network - transmission prices**

Western Network					Transmission Prices FY21 (Period 1 April 2020 to 31 March 2021)									
					Fixed				Variable				Individually Priced	
					Network Asset Charge				Volume Charge		Demand Charge			
Lookup	Tariff Group	GXP Group	GXP	Short GXP code	ICP \$/Month	ICP cents/day	Installed Capacity \$/kVA/Month	CT/VT Charge (\$/day)	On Peak c/kWh	Off Peak c/kWh	Dist-\$/kW /Month	Trans-\$/kW /Month	\$/kVAr /Month	Indirect Fixed (\$/ICP)
<b>Residential+Small Commercial</b>														
E1A	E1	A	Brunswick	BRK	105					6.7800				
E1 - UCA	E1 - UC	A	Brunswick	BRK	106					6.7800				
E1A	E1	A	Bunnythorpe	BPE	107					6.7800				
E1 - UCA	E1 - UC	A	Bunnythorpe	BPE	108					6.7800				
E1A	E1	A	Carrington	CST	109					6.7800				
E1 - UCA	E1 - UC	A	Carrington	CST	110					6.7800				
E1A	E1	A	Huirangi	HUI	111					6.7800				
E1 - UCA	E1 - UC	A	Huirangi	HUI	112					6.7800				
E1A	E1	A	Linton	LTN	113					6.7800				
E1 - UCA	E1 - UC	A	Linton	LTN	114					6.7800				
E1A	E1	A	Moturoa / New Plymouth	NPL	115					6.7800				
E1 - UCA	E1 - UC	A	Moturoa / New Plymouth	NPL	116					6.7800				
E1A	E1	A	Stratford	SFD	117					6.7800				
E1 - UCA	E1 - UC	A	Stratford	SFD	118					6.7800				
E1A	E1	A	Wanganui	WGN	119					6.7800				
E1 - UCA	E1 - UC	A	Wanganui	WGN	120					6.7800				
<b>Medium/Large Commercial</b>														
E1B	E1	B	Greytown	GYT	122					6.3700				
E1 - UCB	E1 - UC	B	Greytown	GYT	123					6.3700				
E1B	E1	B	Hawera	HWA	124					6.3700				
E1 - UCB	E1 - UC	B	Hawera	HWA	125					6.3700				
E1B	E1	B	Mangamaire	MGM	126					6.3700				
E1 - UCB	E1 - UC	B	Mangamaire	MGM	127					6.3700				
E1B	E1	B	Marton	MTN	128					6.3700				
E1 - UCB	E1 - UC	B	Marton	MTN	129					6.3700				
E1B	E1	B	Masterton	MST	130					6.3700				
E1 - UCB	E1 - UC	B	Masterton	MST	131					6.3700				
E1B	E1	B	Mataroa	MTR	132					6.3700				
E1 - UCB	E1 - UC	B	Mataroa	MTR	133					6.3700				
E1B	E1	B	Ohakune	OKN	134					6.3700				
E1 - UCB	E1 - UC	B	Ohakune	OKN	135					6.3700				
E1B	E1	B	Opunake	OPK	136					6.3700				
E1 - UCB	E1 - UC	B	Opunake	OPK	137					6.3700				
E1B	E1	B	Waverley	WVY	138					6.3700				
E1 - UCB	E1 - UC	B	Waverley	WVY	139					6.3700				
E100A	E100	A	Carrington	CST	142							0.3965	0.00	
E100A	E100	A	Huirangi	HUI	143							0.3965	0.00	
E100A	E100	A	Moturoa / New Plymouth	NPL	144							0.3965	0.00	
E100A	E100	A	Stratford	SFD	145							0.3965	0.00	
E100B	E100	B	Hawera	HWA	146							0.4095	0.00	
E100C	E100	C	Waverley	WVY	147							0.4095	0.00	
E100D	E100	D	Opunake	OPK	148							0.4095	0.00	
E100E	E100	E	Brunswick	BRK	149							0.3325	0.00	
E100E	E100	E	Wanganui	WGN	150							0.3325	0.00	
E100F	E100	F	Marton	MTN	151							0.3125	0.00	
E100G	E100	G	Mataroa	MTR	152							0.4095	0.00	
E100G	E100	G	Ohakune	OKN	153							0.4095	0.00	
E100H	E100	H	Masterton	MST	154							0.4415	0.00	
E100H	E100	H	Greytown	GYT	155							0.4415	0.00	
E100I	E100	I	Bunnythorpe	BPE	156							0.3295	0.00	
E100I	E100	I	Linton	LTN	157							0.3295	0.00	
E100J	E100	J	Mangamaire	MGM	158							0.4415	0.00	
E300A	E300	A	Carrington	CST	160							0.3965	0.00	0.0000
E300A	E300	A	Huirangi	HUI	161							0.3965	0.00	
E300A	E300	A	Moturoa / New Plymouth	NPL	162							0.3965	0.00	
E300A	E300	A	Stratford	SFD	163							0.3965	0.00	
E300B	E300	B	Hawera	HWA	164							0.4095	0.00	0.0000
E300C	E300	C	Waverley	WVY	165							0.4095	0.00	
E300D	E300	D	Opunake	OPK	166							0.4095	0.00	0.0000
E300E	E300	E	Brunswick	BRK	167							0.3325	0.00	
E300E	E300	E	Wanganui	WGN	168							0.3325	0.00	
E300F	E300	F	Marton	MTN	169							0.3125	0.00	
E300G	E300	G	Mataroa	MTR	170							0.4095	0.00	
E300G	E300	G	Ohakune	OKN	171							0.4095	0.00	
E300H	E300	H	Masterton	MST	172							0.4415	0.00	0.0000
E300H	E300	H	Greytown	GYT	173							0.4415	0.00	
E300I	E300	I	Bunnythorpe	BPE	174							0.3295	0.00	0.0000
E300I	E300	I	Linton	LTN	175							0.3295	0.00	
E300J	E300	J	Mangamaire	MGM	176							0.4415	0.00	
SPECIAL	SPECIAL		Asset Based											158,777.39
SPECIAL	SPECIAL		Hau Nui Generation											
SPECIAL	SPECIAL		Tararua Generation											
SPECIAL	SPECIAL		Other Generation											

## Western network - quantities

Western Network					Quantities FY21 (1 April 2020 to 31 March 2021)										
Lookup	Tariff Group	GXP Group	GXP	Short GXP code	ICP No.'s (Average)	ICP Days	ICP Months	kVA Installed	CT/VTs	kWh On peak	kWh Off Peak	kW Demand (AMD for E100/E300)	OPD (kW)	kVA Demand	
<b>Residential+Small Commercial</b>															
E1A	E1	A	Brunswick	BRK	14	6,044	2,206,076	-	-	13,691,266	31,571,971	118,152	-	-	
E1 - UCA	E1 - UC	A	Brunswick	BRK	15	6,373	2,326,207	-	-	14,436,818	33,291,211	124,586	-	-	
E1A	E1	A	Bunnythorpe	BPE	16	14,938	5,452,529	-	-	43,327,675	98,765,163	322,869	-	-	
E1 - UCA	E1 - UC	A	Bunnythorpe	BPE	17	20,012	7,304,463	-	-	58,043,781	132,310,436	432,531	-	-	
E1A	E1	A	Carrington	CST	18	10,968	4,003,150	-	-	27,337,344	61,526,282	209,543	-	-	
E1 - UCA	E1 - UC	A	Carrington	CST	19	17,438	6,364,754	-	-	43,464,646	97,822,890	333,160	-	-	
E1A	E1	A	Huirangi	HUI	20	4,203	1,534,007	-	-	8,856,436	21,912,164	81,476	-	-	
E1 - UCA	E1 - UC	A	Huirangi	HUI	21	5,808	2,119,826	-	-	12,238,601	30,280,153	112,590	-	-	
E1A	E1	A	Linton	LTN	22	6,922	2,526,638	-	-	18,661,979	43,966,355	166,584	-	-	
E1 - UCA	E1 - UC	A	Linton	LTN	23	9,907	3,615,890	-	-	26,707,292	62,920,568	238,399	-	-	
E1A	E1	A	Moturoa / New Plymouth	NPL	24	-	-	-	-	-	-	-	-	-	
E1 - UCA	E1 - UC	A	Moturoa / New Plymouth	NPL	25	-	-	-	-	-	-	-	-	-	
E1A	E1	A	Stratford	SFD	26	3,719	1,357,369	-	-	15,047,000	33,999,489	117,439	-	-	
E1 - UCA	E1 - UC	A	Stratford	SFD	27	4,626	1,688,533	-	-	18,718,094	42,294,517	146,092	-	-	
E1A	E1	A	Wanganui	WGN	28	4,711	1,719,351	-	-	11,555,213	26,470,336	103,198	-	-	
E1 - UCA	E1 - UC	A	Wanganui	WGN	29	5,222	1,906,181	-	-	12,810,838	29,346,685	114,412	-	-	
E1B	E1	B	Greytown	GYT	31	3,010	1,098,826	-	-	8,435,461	22,192,360	63,798	-	-	
E1 - UCB	E1 - UC	B	Greytown	GYT	32	4,172	1,522,922	-	-	11,691,155	30,757,572	88,421	-	-	
E1B	E1	B	Hawera	HWA	33	2,872	1,048,258	-	-	8,102,981	20,012,646	62,832	-	-	
E1 - UCB	E1 - UC	B	Hawera	HWA	34	6,429	2,346,451	-	-	18,137,949	44,796,890	140,645	-	-	
E1B	E1	B	Mangamaire	MGM	35	1,827	666,780	-	-	5,073,214	11,833,988	37,396	-	-	
E1 - UCB	E1 - UC	B	Mangamaire	MGM	36	2,492	909,650	-	-	6,921,093	16,144,425	51,018	-	-	
E1B	E1	B	Marton	MTN	37	3,825	1,395,962	-	-	10,911,969	26,724,307	80,746	-	-	
E1 - UCB	E1 - UC	B	Marton	MTN	38	2,384	869,995	-	-	6,800,588	16,655,196	50,323	-	-	
E1B	E1	B	Masterton	MST	39	9,492	3,464,718	-	-	24,885,486	59,995,058	180,886	-	-	
E1 - UCB	E1 - UC	B	Masterton	MST	40	8,848	3,229,505	-	-	23,196,056	55,922,104	168,606	-	-	
E1B	E1	B	Mataroa	MTR	41	1,665	607,563	-	-	4,191,494	10,174,667	32,702	-	-	
E1 - UCB	E1 - UC	B	Mataroa	MTR	42	1,111	405,410	-	-	2,796,865	6,789,266	21,821	-	-	
E1B	E1	B	Ohakune	OKN	43	602	219,796	-	-	1,438,936	3,531,554	11,210	-	-	
E1 - UCB	E1 - UC	B	Ohakune	OKN	44	602	219,796	-	-	1,438,936	3,531,554	11,210	-	-	
E1B	E1	B	Opunake	OPK	45	972	354,688	-	-	3,528,351	9,317,948	35,675	-	-	
E1 - UCB	E1 - UC	B	Opunake	OPK	46	2,082	760,097	-	-	7,561,274	19,968,412	76,451	-	-	
E1B	E1	B	Waverley	WVY	47	-	-	-	-	-	-	-	-	-	
E1 - UCB	E1 - UC	B	Waverley	WVY	48	1,348	492,152	-	-	4,301,727	11,265,125	38,407	-	-	
<b>Medium/Large Commercial</b>															
E100A	E100	A	Carrington	CST	51	-	-	-	-	-	-	-	-	-	
E100A	E100	A	Huirangi	HUI	52	38	-	458	-	-	-	1,827,395	856,889	4,104	
E100A	E100	A	Moturoa / New Plymouth	NPL	53	9	-	108	-	1	-	484,886	107,753	2,302	
E100A	E100	A	Stratford	SFD	54	8	-	96	-	-	-	-	-	-	
E100B	E100	B	Hawera	HWA	55	10	-	120	-	-	-	413,051	166,393	1,346	
E100C	E100	C	Waverley	WVY	56	-	-	-	-	-	-	486,352	207,808	1,867	
E100D	E100	D	Opunake	OPK	57	1	-	12	-	-	-	-	-	-	
E100E	E100	E	Brunswick	BRK	58	10	-	120	-	-	-	45,447	4,765	487	
E100E	E100	E	Wanganui	WGN	59	9	-	108	-	-	-	523,369	250,323	886	
E100F	E100	F	Marton	MTN	60	5	-	60	-	-	-	348,546	164,194	1,068	
E100G	E100	G	Mataroa	MTR	61	4	-	48	-	-	-	267,915	154,665	585	
E100G	E100	G	Ohakune	OKN	62	-	-	-	-	-	-	268,648	131,209	812	
E100H	E100	H	Masterton	MST	63	23	-	277	-	-	-	1,159,623	501,013	3,396	
E100H	E100	H	Greytown	GYT	64	5	-	60	-	-	-	249,224	131,209	469	
E100I	E100	I	Bunnythorpe	BPE	65	62	-	747	-	1	-	3,092,571	1,468,953	6,993	
E100I	E100	I	Linton	LTN	66	33	-	398	-	-	-	1,590,266	598,503	4,731	
E100J	E100	J	Mangamaire	MGM	67	2	-	24	-	-	-	106,653	37,750	871	
E300A	E300	A	Carrington	CST	69	-	-	428,267	12	-	-	6,922,841	2,501,660	10,279	
E300A	E300	A	Huirangi	HUI	70	-	-	157,878	3	-	-	3,062,853	1,561,195	3,801	
E300A	E300	A	Moturoa / New Plymouth	NPL	71	-	-	21,171	-	-	-	241,824	74,605	-	
E300A	E300	A	Stratford	SFD	72	-	-	85,895	-	-	-	1,775,822	492,835	6,494	
E300B	E300	B	Hawera	HWA	73	-	-	70,773	1	-	-	1,241,459	535,099	2,034	
E300C	E300	C	Waverley	WVY	74	-	-	18,147	-	-	-	438,810	314,224	-	
E300D	E300	D	Opunake	OPK	75	-	-	36,294	2	-	-	626,610	315,326	3,091	
E300E	E300	E	Brunswick	BRK	76	-	-	122,189	2	-	-	1,995,963	1,085,633	4,955	
E300E	E300	E	Wanganui	WGN	77	-	-	257,081	5	-	-	3,848,228	1,632,125	12,735	
E300F	E300	F	Marton	MTN	78	-	-	84,484	1	-	-	1,457,924	527,014	3,762	
E300G	E300	G	Mataroa	MTR	79	-	-	36,294	-	-	-	565,970	344,360	434	
E300G	E300	G	Ohakune	OKN	80	-	-	-	-	-	-	-	-	-	
E300H	E300	H	Masterton	MST	81	-	-	171,791	1	-	-	2,990,820	1,407,207	2,897	
E300H	E300	H	Greytown	GYT	82	-	-	13,913	-	-	-	226,020	27,196	706	
E300I	E300	I	Bunnythorpe	BPE	83	-	-	621,593	13	-	-	10,232,295	4,711,883	11,739	
E300I	E300	I	Linton	LTN	84	-	-	245,467	4	-	-	4,075,718	1,991,920	7,341	
E300J	E300	J	Mangamaire	MGM	85	-	-	9,073	1	-	-	110,254	15,436	562	
SPECIAL	SPECIAL		Asset Based		32	-	-	-	-	-	-	-	-	20,796	
SPECIAL	SPECIAL		Hau Nui Generation		1	-	-	-	-	-	-	-	-	-	
SPECIAL	SPECIAL		Taranua Generation		1	-	-	-	-	-	-	-	-	-	
SPECIAL	SPECIAL		Other Generation		-	-	-	-	-	-	-	-	-	-	
<b>Western Region Total</b>					<b>174,878</b>	<b>63,737,542</b>	<b>2,639</b>	<b>2,380,312</b>	<b>47</b>	<b>474,310,517</b>	<b>1,116,091,289</b>	<b>54,450,538</b>	<b>22,319,144</b>	<b>121,542</b>	

**Western network - distribution revenue**

Western Network					Distribution Revenue (FY21 Prices)						
Lookup	Tariff Group	GXP Group	GXP	Short GXP code	Fixed (Monthly)	Fixed (Daily)	Variable	Demand	Non-standard	Total	
<b>Residential+Small Commercial</b>											
E1A	E1	A	Brunswick	BRK	14	-	-	2,732,919	-	-	2,732,919
E1 - UCA	E1 - UC	A	Brunswick	BRK	15	-	348,931	2,881,739	-	-	3,230,670
E1A	E1	A	Bunnythorpe	BPE	16	-	-	8,577,697	-	-	8,577,697
E1 - UCA	E1 - UC	A	Bunnythorpe	BPE	17	-	1,095,669	11,491,085	-	-	12,586,754
E1A	E1	A	Carrington	CST	18	-	-	5,363,287	-	-	5,363,287
E1 - UCA	E1 - UC	A	Carrington	CST	19	-	954,713	8,527,286	-	-	9,481,999
E1A	E1	A	Huirangi	HUI	20	-	-	1,859,874	-	-	1,859,874
E1 - UCA	E1 - UC	A	Huirangi	HUI	21	-	317,974	2,570,138	-	-	2,888,111
E1A	E1	A	Linton	LTN	22	-	-	3,782,720	-	-	3,782,720
E1 - UCA	E1 - UC	A	Linton	LTN	23	-	542,383	5,413,478	-	-	5,955,861
E1A	E1	A	Moturoa / New Plymouth	NPL	24	-	-	-	-	-	-
E1 - UCA	E1 - UC	A	Moturoa / New Plymouth	NPL	25	-	-	-	-	-	-
E1A	E1	A	Stratford	SFD	26	-	-	2,960,352	-	-	2,960,352
E1 - UCA	E1 - UC	A	Stratford	SFD	27	-	253,280	3,682,604	-	-	3,935,884
E1A	E1	A	Wanganui	WGN	28	-	-	2,295,669	-	-	2,295,669
E1 - UCA	E1 - UC	A	Wanganui	WGN	29	-	285,927	2,545,124	-	-	2,831,051
<b>Medium/Large Commercial</b>											
E1B	E1	B	Greytown	GYT	31	-	-	2,377,823	-	-	2,377,823
E1 - UCB	E1 - UC	B	Greytown	GYT	32	-	228,438	3,295,551	-	-	3,523,989
E1B	E1	B	Hawera	HWA	33	-	-	2,181,528	-	-	2,181,528
E1 - UCB	E1 - UC	B	Hawera	HWA	34	-	351,968	4,883,196	-	-	5,235,163
E1B	E1	B	Mangamaire	MGM	35	-	-	1,311,150	-	-	1,311,150
E1 - UCB	E1 - UC	B	Mangamaire	MGM	36	-	136,447	1,788,726	-	-	1,925,173
E1B	E1	B	Marton	MTN	37	-	-	2,920,019	-	-	2,920,019
E1 - UCB	E1 - UC	B	Marton	MTN	38	-	130,499	1,819,823	-	-	1,950,322
E1B	E1	B	Masterton	MST	39	-	-	6,584,512	-	-	6,584,512
E1 - UCB	E1 - UC	B	Masterton	MST	40	-	484,426	6,137,501	-	-	6,621,927
E1B	E1	B	Mataroa	MTR	41	-	-	1,114,510	-	-	1,114,510
E1 - UCB	E1 - UC	B	Mataroa	MTR	42	-	60,811	743,681	-	-	804,492
E1B	E1	B	Ohakune	OKN	43	-	-	385,644	-	-	385,644
E1 - UCB	E1 - UC	B	Ohakune	OKN	44	-	32,969	385,644	-	-	418,614
E1B	E1	B	Opunake	OPK	45	-	-	997,370	-	-	997,370
E1 - UCB	E1 - UC	B	Opunake	OPK	46	-	114,015	2,137,369	-	-	2,251,383
E1B	E1	B	Waverley	WVY	47	-	-	-	-	-	-
E1 - UCB	E1 - UC	B	Waverley	WVY	48	-	73,823	1,208,498	-	-	1,282,321
E100A	E100	A	Carrington	CST	51	133,245	-	-	554,104	-	687,349
E100A	E100	A	Huirangi	HUI	52	31,558	2,942	-	155,518	-	190,018
E100A	E100	A	Moturoa / New Plymouth	NPL	53	-	-	-	-	-	-
E100A	E100	A	Stratford	SFD	54	28,052	-	-	128,174	-	156,226
E100B	E100	B	Hawera	HWA	55	35,064	-	-	295,881	-	330,945
E100C	E100	C	Waverley	WVY	56	-	-	-	-	-	-
E100D	E100	D	Opunake	OPK	57	3,506	-	-	27,291	-	30,798
E100E	E100	E	Brunswick	BRK	58	35,064	-	-	182,841	-	217,905
E100E	E100	E	Wanganui	WGN	59	31,558	-	-	125,109	-	156,667
E100F	E100	F	Marton	MTN	60	17,532	-	-	112,732	-	130,264
E100G	E100	G	Mataroa	MTR	61	14,026	-	-	154,109	-	168,135
E100G	E100	G	Ohakune	OKN	62	-	-	-	-	-	-
E100H	E100	H	Masterton	MST	63	80,648	-	-	600,682	-	681,330
E100H	E100	H	Greytown	GYT	64	17,532	-	-	127,269	-	144,801
E100I	E100	I	Bunnythorpe	BPE	65	217,399	2,942	-	990,640	-	1,210,981
E100I	E100	I	Linton	LTN	66	115,713	-	-	517,351	-	633,064
E100J	E100	J	Mangamaire	MGM	67	7,013	-	-	44,867	-	51,880
E300A	E300	A	Carrington	CST	69	792,295	35,303	-	906,157	-	1,733,754
E300A	E300	A	Huirangi	HUI	70	292,075	8,826	-	395,679	-	696,579
E300A	E300	A	Moturoa / New Plymouth	NPL	71	39,167	-	-	29,140	-	68,307
E300A	E300	A	Stratford	SFD	72	158,907	-	-	259,441	-	418,348
E300B	E300	B	Hawera	HWA	73	130,930	2,942	-	295,430	-	429,302
E300C	E300	C	Waverley	WVY	74	33,572	-	-	198,123	-	231,695
E300D	E300	D	Opunake	OPK	75	67,144	5,884	-	181,110	-	254,137
E300E	E300	E	Brunswick	BRK	76	226,050	5,884	-	291,167	-	523,100
E300E	E300	E	Wanganui	WGN	77	475,601	14,710	-	583,645	-	1,073,955
E300F	E300	F	Marton	MTN	78	156,296	2,942	-	324,480	-	483,718
E300G	E300	G	Mataroa	MTR	79	67,144	-	-	198,014	-	265,157
E300G	E300	G	Ohakune	OKN	80	-	-	-	-	-	-
E300H	E300	H	Masterton	MST	81	317,813	2,942	-	901,078	-	1,221,833
E300H	E300	H	Greytown	GYT	82	25,738	-	-	71,504	-	97,242
E300I	E300	I	Bunnythorpe	BPE	83	1,149,946	38,245	-	2,154,212	-	3,342,403
E300I	E300	I	Linton	LTN	84	454,115	11,768	-	876,723	-	1,342,605
E300J	E300	J	Mangamaire	MGM	85	16,786	2,942	-	27,585	-	47,313
SPECIAL	SPECIAL		Asset Based			-	-	-	145,572	4,392,314	4,537,886
SPECIAL	SPECIAL		Hau Nui Generation			-	-	-	-	116,996	116,996
SPECIAL	SPECIAL		Tararua Generation			-	-	-	-	250,830	250,830
SPECIAL	SPECIAL		Other Generation			-	-	-	-	-	-
<b>Western Region Total</b>						<b>5,171,487</b>	<b>5,550,544</b>	<b>104,956,515</b>	<b>11,855,627</b>	<b>4,760,140</b>	<b>132,294,313</b>



**Western network - transmission revenue**

Western Network						Transmission Revenue (FY21 Prices)					
Lookup	Tariff Group	GXP Group	GXP	Short GXP code		Fixed (Monthly)	Fixed (Daily)	Variable	Demand	Non-standard	Total
<b>Residential+Small Commercial</b>											
E1A	E1	A	Brunswick	BRK	105	-	-	928,268	-	-	928,268
E1 - UCA	E1 - UC	A	Brunswick	BRK	106	-	-	978,816	-	-	978,816
E1A	E1	A	Bunynthorpe	BPE	107	-	-	2,937,616	-	-	2,937,616
E1 - UCA	E1 - UC	A	Bunynthorpe	BPE	108	-	-	3,935,368	-	-	3,935,368
E1A	E1	A	Carrington	CST	109	-	-	1,853,472	-	-	1,853,472
E1 - UCA	E1 - UC	A	Carrington	CST	110	-	-	2,946,903	-	-	2,946,903
E1A	E1	A	Huirangi	HUI	111	-	-	600,466	-	-	600,466
E1 - UCA	E1 - UC	A	Huirangi	HUI	112	-	-	829,777	-	-	829,777
E1A	E1	A	Linton	LTN	113	-	-	1,265,282	-	-	1,265,282
E1 - UCA	E1 - UC	A	Linton	LTN	114	-	-	1,810,754	-	-	1,810,754
E1A	E1	A	Moturoa / New Plymouth	NPL	115	-	-	-	-	-	-
E1 - UCA	E1 - UC	A	Moturoa / New Plymouth	NPL	116	-	-	-	-	-	-
E1A	E1	A	Stratford	SFD	117	-	-	1,020,187	-	-	1,020,187
E1 - UCA	E1 - UC	A	Stratford	SFD	118	-	-	1,269,087	-	-	1,269,087
E1A	E1	A	Wanganui	WGN	119	-	-	783,443	-	-	783,443
E1 - UCA	E1 - UC	A	Wanganui	WGN	120	-	-	868,575	-	-	868,575
<b>Medium/Large Commercial</b>											
E1B	E1	B	Greytown	GYT	122	-	-	537,339	-	-	537,339
E1 - UCB	E1 - UC	B	Greytown	GYT	123	-	-	744,727	-	-	744,727
E1B	E1	B	Hawera	HWA	124	-	-	516,160	-	-	516,160
E1 - UCB	E1 - UC	B	Hawera	HWA	125	-	-	1,155,387	-	-	1,155,387
E1B	E1	B	Mangamaire	MGM	126	-	-	323,164	-	-	323,164
E1 - UCB	E1 - UC	B	Mangamaire	MGM	127	-	-	440,874	-	-	440,874
E1B	E1	B	Marton	MTN	128	-	-	695,092	-	-	695,092
E1 - UCB	E1 - UC	B	Marton	MTN	129	-	-	433,197	-	-	433,197
E1B	E1	B	Masterton	MST	130	-	-	1,585,205	-	-	1,585,205
E1 - UCB	E1 - UC	B	Masterton	MST	131	-	-	1,477,589	-	-	1,477,589
E1B	E1	B	Mataroa	MTR	132	-	-	266,998	-	-	266,998
E1 - UCB	E1 - UC	B	Mataroa	MTR	133	-	-	178,160	-	-	178,160
E1B	E1	B	Ohakune	OKN	134	-	-	91,660	-	-	91,660
E1 - UCB	E1 - UC	B	Ohakune	OKN	135	-	-	91,660	-	-	91,660
E1B	E1	B	Opunake	OPK	136	-	-	224,756	-	-	224,756
E1 - UCB	E1 - UC	B	Opunake	OPK	137	-	-	481,653	-	-	481,653
E1B	E1	B	Waverley	WVY	138	-	-	-	-	-	-
E1 - UCB	E1 - UC	B	Waverley	WVY	139	-	-	274,020	-	-	274,020
E100A	E100	A	Carrington	CST	142	-	-	-	339,757	-	339,757
E100A	E100	A	Huirangi	HUI	143	-	-	-	42,724	-	42,724
E100A	E100	A	Moturoa / New Plymouth	NPL	144	-	-	-	-	-	-
E100A	E100	A	Stratford	SFD	145	-	-	-	65,975	-	65,975
E100B	E100	B	Hawera	HWA	146	-	-	-	85,098	-	85,098
E100C	E100	C	Waverley	WVY	147	-	-	-	-	-	-
E100D	E100	D	Opunake	OPK	148	-	-	-	1,951	-	1,951
E100E	E100	E	Brunswick	BRK	149	-	-	-	83,232	-	83,232
E100E	E100	E	Wanganui	WGN	150	-	-	-	54,595	-	54,595
E100F	E100	F	Marton	MTN	151	-	-	-	48,333	-	48,333
E100G	E100	G	Mataroa	MTR	152	-	-	-	53,730	-	53,730
E100G	E100	G	Ohakune	OKN	153	-	-	-	-	-	-
E100H	E100	H	Masterton	MST	154	-	-	-	221,197	-	221,197
E100H	E100	H	Greytown	GYT	155	-	-	-	57,929	-	57,929
E100I	E100	I	Bunynthorpe	BPE	156	-	-	-	484,020	-	484,020
E100I	E100	I	Linton	LTN	157	-	-	-	197,207	-	197,207
E100J	E100	J	Mangamaire	MGM	158	-	-	-	16,667	-	16,667
E300A	E300	A	Carrington	CST	160	-	-	-	991,908	-	991,908
E300A	E300	A	Huirangi	HUI	161	-	-	-	619,014	-	619,014
E300A	E300	A	Moturoa / New Plymouth	NPL	162	-	-	-	29,581	-	29,581
E300A	E300	A	Stratford	SFD	163	-	-	-	195,409	-	195,409
E300B	E300	B	Hawera	HWA	164	-	-	-	219,123	-	219,123
E300C	E300	C	Waverley	WVY	165	-	-	-	128,675	-	128,675
E300D	E300	D	Opunake	OPK	166	-	-	-	129,126	-	129,126
E300E	E300	E	Brunswick	BRK	167	-	-	-	360,973	-	360,973
E300E	E300	E	Wanganui	WGN	168	-	-	-	542,682	-	542,682
E300F	E300	F	Marton	MTN	169	-	-	-	164,692	-	164,692
E300G	E300	G	Mataroa	MTR	170	-	-	-	141,015	-	141,015
E300G	E300	G	Ohakune	OKN	171	-	-	-	-	-	-
E300H	E300	H	Masterton	MST	172	-	-	-	621,282	-	621,282
E300H	E300	H	Greytown	GYT	173	-	-	-	12,007	-	12,007
E300I	E300	I	Bunynthorpe	BPE	174	-	-	-	1,552,566	-	1,552,566
E300I	E300	I	Linton	LTN	175	-	-	-	656,338	-	656,338
E300J	E300	J	Mangamaire	MGM	176	-	-	-	6,815	-	6,815
SPECIAL	SPECIAL		Asset Based			-	-	-	-	5,115,857	5,115,857
SPECIAL	SPECIAL		Hau Nui Generation			-	-	-	-	-	-
SPECIAL	SPECIAL		Tararua Generation			-	-	-	-	-	-
SPECIAL	SPECIAL		Other Generation			-	-	-	-	-	-
<b>Western Region Total</b>						-	-	31,545,658	8,123,617	5,115,857	44,785,132

## Eastern network - distribution prices

Eastern Network				Distribution Prices FY21 (Period 1 April 2020 to 31 March 2021)																				Individually Priced	
				Fixed		Variable														Demand Charge					
				Network Asset Charge		Volume Charge																			
				ICP \$/Month	ICP cents/day	Uncontrolled c/kWh	All Inclusive c/kWh	Controlled c/kWh	Night Only c/kWh	Night Rate c/kWh	On Peak Uncontrolled c/kWh	Off Peak Uncontrolled c/kWh	On Peak All Inclusive c/kWh	Off Peak All Inclusive c/kWh	Summer Day c/kWh	Summer Night c/kWh	Winter Day c/kWh	Winter Night c/kWh	Winter AM Peak c/kWh	Winter PM Peak c/kWh	\$/kW /Month	\$/kVAr /Month	ABP (\$/AMD, value)		
<b>Residential+Small Commercial</b>				24UC	AICO	CTRL	NITE	CTUN	PEAK	OFFPK	PKCN	OPCN	TS/1	TS/2	TW/1/3/5	TW/6	TW/2	TW/4							
V05	V05	Valley	Low Usage - Controlled	15.0000	7.4500	7.1800	5.7100	5.2000	6.9500																
V05U	V05U	Valley	Low Usage - Controlled																						
V05S	V05S	Valley	Low Usage - TOU	15.0000	7.4500	7.1800	5.7100	5.2000	6.9500	7.4500	7.4500	7.2800	7.1800												
V06	V06	Valley	Residential - Standard Controlled	85.0000	4.2600	3.9900	2.5200	2.0100	6.9500																
V06U	V06U	Valley	Low Usage - Controlled																						
V06S	V06S	Valley	Residential - Standard TOU	85.0000	4.2600	3.9900	2.5200	2.0100	6.9500	4.2600	4.2600	4.0900	3.9900												
<b>Unmetered Supply</b>																									
V01	V01	Valley	Unmetered/Streetlighting		6.9500																				
V02	V02	Valley	Unmetered/Streetlighting	9.7400																					
T01	T01	Tauranga	Unmetered/Streetlighting		6.6000																				
T02	T02	Tauranga	Unmetered/Streetlighting	9.8200																					
<b>Medium Commercial</b>																									
V24	V24	Valley	Commercial three phase 100A	991.0000	3.6000																7.0000				
V28	V28	Valley	> 200 Amp up to 299 kVA	2,600.0000	2.9500	2.2400															7.0000				
T22	T22	Tauranga	Capacity 100 – 199kVA	999.0000	4.2600	2.2400	2.3300														7.0000				
T24	T24	Tauranga	Capacity 200 -299kVA	2,500.0000	3.1300	2.0600															7.0000				
T41	T41	Tauranga	capacity 200 kVA utilised	2,500.0000	3.1300							3.1300	3.1300	3.1300	3.1300	3.1300	3.1300				7.0000				
<b>Large Commercial / Industrial</b>																									
V40	V40	Valley	Individual ICP prices																		7.0000	26,668.4342			
V60	V60	Valley	Individual ICP prices																		7.0000	125,831.2084			
V601	V601	Kinleith	Individual ICP prices																		7.0000	3,277,744.1694			
T50	T50	Tauranga	Individual ICP prices																		7.0000	25,705.2923			
T60	T60	Tauranga	Individual ICP prices																		7.0000	114,338.9893			

## Eastern network - transmission prices

Eastern Network				Transmission Prices FY21 (Period 1 April 2020 to 31 March 2021)																		Individually Priced		
				Fixed		Variable														Demand Charge				
				Network Asset Charge		Volume Charge																		
Tariff Group	Network Group	Tariff Description	ICP \$/Month	ICP cents/day	Uncontrolled c/kWh	All Inclusive c/kWh	Controlled c/kWh	Night Only c/kWh	Night Rate c/kWh	On Peak Uncontrolled c/kWh	Off Peak Uncontrolled c/kWh	On Peak All Inclusive c/kWh	Off Peak All Inclusive c/kWh	Summer Day c/kWh	Summer Night c/kWh	Winter Day c/kWh	Winter Night c/kWh	Winter AM Peak c/kWh	Winter PM Peak c/kWh	\$/kW /Month	\$/kVA /Month	ABP (\$/AMD, value)	Indirect Fixed (\$/ICP)	
<b>Residential+Small Commercial</b>						24UC	AICO	CTRL	NITE	CTUN	PEAK	OFFPK	PKCN	OPCN	TS/1	TS/2	TW/1/3/5	TW/6	TW/2	TW/4				
V05	V05	Valley	Low Usage - Controlled			2.9200	2.6400	1.8800		3.9800														
V05U	V05U	Valley	Low Usage - Uncontrolled																					
V05S	V05S	Valley	Low Usage - TOU			2.9200	2.6400	1.8800		3.9800	9.7300		9.0000											
V06	V06	Valley	Residential - Standard Controlled			2.9200	2.6400	1.8800		3.9800														
V06U	V06U	Valley	Residential - Standard Uncontrolled																					
V06S	V06S	Valley	Residential - Standard TOU			2.9200	2.6400	1.8800		3.9800	9.7300		9.0000											
<b>Tauranga</b>																								
T05	T05	Tauranga	Low Usage - Controlled			3.0700	2.6600	1.3300		3.6800														
T05U	T05U	Tauranga	Low Usage - Uncontrolled																					
T05S	T05S	Tauranga	Low Usage - TOU			3.0700	2.6600	1.3300		3.6800	9.9000		8.9700											
T06	T06	Tauranga	Standard Residential & Commercial - Controlled			3.0700	2.6600	1.3300		3.6800														
T06U	T06U	Tauranga	Standard Residential & Commercial - Uncontrolled																					
T06S	T06S	Tauranga	Standard Residential & Commercial - TOU			3.0700	2.6600	1.3300		3.6800	9.9000		8.9700											
<b>Unmetered Supply</b>																								
V01	V01	Valley	Unmetered/Streetlighting				3.9800																	
V02	V02	Valley	Unmetered/Streetlighting		5.5700																			
<b>Tauranga</b>																								
T01	T01	Tauranga	Unmetered/Streetlighting				3.6800																	
T02	T02	Tauranga	Unmetered/Streetlighting		5.4800																			
<b>Medium Commercial</b>																								
V24	V24	Valley	Commercial three phase 100A				2.3400																	
V28	V28	Valley	> 200 Amp up to 299 kVA				1.7100		1.5700															
<b>Tauranga</b>																								
T22	T22	Tauranga	Capacity 100 – 199kVA				2.0800		0.9600															
T24	T24	Tauranga	Capacity 200 -299kVA				1.5000		0.8800															
T41	T41	Tauranga	capacity 200 kVA utilised				1.5000							1.5000	1.5000	1.5000	1.5000	1.5000	1.5000					
<b>Large Commercial / Industrial</b>																								
V40	V40	Valley	Individual ICP prices																					14,608.8200
V60	V60	Valley	Individual ICP prices																					186,100.7540
V601	V601	Kinleith	Individual ICP prices																					4,248,042.1548
<b>Tauranga</b>																								
T50	T50	Tauranga	Individual ICP prices																					15,964.5544
T60	T601	Tauranga	Individual ICP prices																					117,592.8242

## Eastern network - quantities

Eastern Network				Quantities FY21 (1 April 2020 to 31 March 2021)																		Individually Priced		
				ICP No.'s (Average)	ICP Days	kWh Uncontrolled	kWh All Inclusive	kWh Controlled	kWh Nite Only	kWh Day	kWh Night	kWh Uncontrolled On peak	kWh Uncontrolled Off Peak	kWh All Inclusive On Peak	kWh All Inclusive Off Peak	Distributed Generation	kWh Summer Day	kWh Summer Night	kWh Winter Day	kWh Winter Night	kWh Winter AM Peak	kWh Winter PM Peak	kVA Demand pa	Asset Value / AMD
Tariff Group	Network Group	Tariff Description		24UC	AICO	CTRL	NITE	CTUD	CTUN	PEAK	OPFK	PCKN	OPCN	24DG	TS/1	TS/2	TW/1/3/5	TW/6	TW/2	TW/4				
<b>Residential-Small Commercial</b>																								
V05	V05	Valley	Low Usage - Controlled	3,593	1,311,502	12,408,644	1,279,315	3,115,848	118,600	-	8	-	-	-	-	-	-	-	-	-	-	-	-	
V05U	V05U	Valley	Low Usage - Controlled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
V05S	V05S	Valley	Low Usage - TOU	32,994	12,042,707	30,147,971	1,467,380	31,133,041	264,872	-	-	25,200,074	58,075,249	1,287,783	2,925,769	568,508	-	-	-	-	-	-	-	
V06	V06	Valley	Residential - Standard Controlled	6,360	2,321,255	57,523,992	8,751,493	5,172,448	487,955	-	268	-	-	-	-	-	-	-	-	-	-	-	-	
V06U	V06U	Valley	Low Usage - Controlled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
V06S	V06S	Valley	Residential - Standard TOU	29,141	10,636,632	113,132,147	5,864,882	34,958,894	2,640,640	-	502	49,599,397	116,233,922	2,519,529	5,751,067	511,167	-	-	-	-	-	-	-	
<b>Tauranga</b>																								
T05	T05	Tauranga	Low Usage - Controlled	15,593	5,691,621	42,639,470	15,474,936	13,431,464	2,783,437	-	138	-	-	-	-	-	-	-	-	-	-	-	-	
T05U	T05U	Valley	Low Usage - Controlled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T05S	T05S	Tauranga	Low Usage - TOU	13,915	5,079,054	20,513,180	5,381,602	16,076,035	1,118,706	-	-	8,471,454	18,752,726	1,739,306	3,671,302	550,607	-	-	-	-	-	-	-	
T06	T06	Tauranga	Standard Residential & Commercial - Controlled	39,135	14,284,283	244,424,226	41,207,210	47,119,421	4,542,903	-	51,117	-	-	-	-	-	-	-	-	-	-	-	-	
T06U	T06U	Tauranga	Standard Residential & Commercial - Uncontrolled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T06S	T06S	Tauranga	Standard Residential & Commercial - TOU	18,618	6,795,504	69,086,738	11,613,767	30,581,728	1,490,043	-	5,510	15,896,791	36,324,723	1,909,850	4,081,016	572,390	-	-	-	-	-	-	-	
<b>Unmetered Supply</b>																								
V01	V01	Valley	Unmetered/Streetlighting	-	-	331,097	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
V02	V02	Valley	Unmetered/Streetlighting	12,266	4,477,016	1,944,263	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T01	T01	Tauranga	Unmetered/Streetlighting	-	-	2,077,194	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T02	T02	Tauranga	Unmetered/Streetlighting	14,345	5,236,873	5,901,443	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Medium Commercial</b>																								
V24	V24	Valley	Commercial three phase 100A	507	185,049	66,343,367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
V28	V28	Valley	> 200 Amp up to 299 kVA	43	15,797	11,456,738	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,295	-	
T22	T22	Tauranga	Capacity 100 - 199kVA	634	231,400	60,270,608	-	330,213	365,451	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T24	T24	Tauranga	Capacity 200 -299kVA	59	21,552	8,747,901	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T41	T41	Tauranga	capacity 200 kVA unlimited	87	31,761	-	-	-	-	-	-	-	-	-	11,802,562	3,810,371	5,206,096	2,852,304	1,791,763	1,496,103	9,766	-	-	
<b>Large Commercial / Industrial</b>																								
V40	V40	Valley	Individual ICP prices	83	-	60,132,529	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,177	
V60	V60	Valley	Individual ICP prices	25	-	275,059,203	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35,142	
V601	V601	Kirieth	Individual ICP prices	1	-	328,913,510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T50	T50	Tauranga	Individual ICP prices	218	-	185,940,490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42,922	
T60	T601	Tauranga	Individual ICP prices	33	-	172,158,756	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34,755	
<b>Eastern Region Total</b>				<b>187,651</b>	<b>68,361,006</b>	<b>1,769,153,468</b>	<b>91,040,586</b>	<b>181,919,091</b>	<b>13,812,607</b>	<b>-</b>	<b>57,543</b>	<b>99,167,715</b>	<b>7,456,468</b>	<b>16,429,155</b>	<b>3,888,714</b>	<b>11,802,562</b>	<b>3,810,371</b>	<b>5,206,096</b>	<b>2,852,304</b>	<b>1,791,763</b>	<b>1,496,103</b>	<b>143,058</b>	<b>-</b>	<b>-</b>

## Eastern network - distribution revenue

Eastern Network				Distribution Revenue (FY21 Prices)					
				Fixed (Monthly)	Fixed (Daily)	Variable	Demand	Non-standard	Total
Tariff Group	Network Group		Tariff Description						
<b>Residential+Small Commercial</b>									
V05	V05	Valley	Low Usage - Controlled	-	196,725	1,200,381	-	-	1,397,107
V05U	V05U	Valley	Low Usage - Controlled	-	-	-	-	-	-
V05S	V05S	Valley	Low Usage - TOU	-	1,806,406	10,650,684	-	-	12,457,090
V06	V06	Valley	Residential - Standard Controlled	-	1,973,067	2,939,879	-	-	4,912,946
V06U	V06U	Valley	Low Usage - Controlled	-	-	-	-	-	-
V06S	V06S	Valley	Residential - Standard TOU	-	9,041,138	13,384,530	-	-	22,425,667
<b>Unmetered Supply</b>									
T05	T05	Tauranga	Low Usage - Controlled	-	853,743	4,740,743	-	-	5,594,486
T05U	T05U	Valley	Low Usage - Controlled	-	-	-	-	-	-
T05S	T05S	Tauranga	Low Usage - TOU	-	761,858	4,834,076	-	-	5,595,934
T06	T06	Tauranga	Standard Residential & Commercial - Controlled	-	12,141,640	11,082,023	-	-	23,223,663
T06U	T06U	Tauranga	Standard Residential & Commercial - Uncontrolled	-	-	-	-	-	-
T06S	T06S	Tauranga	Standard Residential & Commercial - TOU	-	5,776,178	5,552,811	-	-	11,328,990
V01	V01	Valley	Unmetered/Streetlighting	-	-	23,011	-	-	23,011
V02	V02	Valley	Unmetered/Streetlighting	-	436,061	-	-	-	436,061
T01	T01	Tauranga	Unmetered/Streetlighting	-	-	137,095	-	-	137,095
T02	T02	Tauranga	Unmetered/Streetlighting	-	514,163	-	-	-	514,163
<b>Medium Commercial</b>									
V24	V24	Valley	Commercial three phase 100A	-	1,833,832	2,388,361	-	-	4,222,194
V28	V28	Valley	> 200 Amp up to 299 kVA	-	410,718	337,974	9,068	-	757,760
T22	T22	Tauranga	Capacity 100 – 199kVA	-	2,311,691	2,583,440	-	-	4,895,130
T24	T24	Tauranga	Capacity 200 -299kVA	-	538,800	273,809	-	-	812,609
T41	T41	Tauranga	capacity 200 kVA unitised	-	794,021	843,823	68,364	-	1,706,208
<b>Large Commercial / Industrial</b>									
V40	V40	Valley	Individual ICP prices	-	-	-	134,241	2,213,480	2,347,721
V60	V60	Valley	Individual ICP prices	-	-	-	245,993	3,145,780	3,391,773
V601	V601	Kinleith		-	-	-	-	3,277,744	3,277,744
T50	T50	Tauranga	Individual ICP prices	-	-	-	300,454	5,600,486	5,900,940
T60	T601	Tauranga	Individual ICP prices	-	-	-	243,284	3,823,605	4,066,889
<b>Eastern Region Total</b>				-	39,390,042	60,972,640	1,001,404	18,061,096	119,425,181

## Eastern network - transmission revenue

Eastern Network				Transmission Revenue (FY21 Prices)					
				Fixed (Monthly)	Fixed (Daily)	Variable	Demand	Non-standard	Total
Tariff Group	Network Group	Tariff Description							
<b>Residential+Small Commercial</b>									
V05	V05	Valley	Low Usage - Controlled	-	-	454,685	-	-	454,685
V05U	V05U	Valley	Low Usage - Uncontrolled	-	-	-	-	-	-
V05S	V05S	Valley	Low Usage - TOU	-	-	4,072,228	-	-	4,072,228
V06	V06	Valley	Residential - Standard Controlled	-	-	2,007,993	-	-	2,007,993
V06U	V06U	Valley	Residential - Standard Uncontrolled	-	-	-	-	-	-
V06S	V06S	Valley	Residential - Standard TOU	-	-	9,168,318	-	-	9,168,318
<b>Tauranga Residential</b>									
T05	T05	Tauranga	Low Usage - Controlled	-	-	1,899,309	-	-	1,899,309
T05U	T05U	Tauranga	Low Usage - Uncontrolled	-	-	-	-	-	-
T05S	T05S	Tauranga	Low Usage - TOU	-	-	1,981,406	-	-	1,981,406
T06	T06	Tauranga	Standard Residential & Commercial - Controlled	-	-	9,228,505	-	-	9,228,505
T06U	T06U	Tauranga	Standard Residential & Commercial - Uncontrolled	-	-	-	-	-	-
T06S	T06S	Tauranga	Standard Residential & Commercial - TOU	-	-	4,581,925	-	-	4,581,925
<b>Unmetered Supply</b>									
V01	V01	Valley	Unmetered/Streetlighting	-	-	13,178	-	-	13,178
V02	V02	Valley	Unmetered/Streetlighting	-	249,370	-	-	-	249,370
				-	-	-	-	-	-
T01	T01	Tauranga	Unmetered/Streetlighting	-	-	76,441	-	-	76,441
T02	T02	Tauranga	Unmetered/Streetlighting	-	286,926	-	-	-	286,926
<b>Medium Commercial</b>									
V24	V24	Valley	Commercial three phase 100A	-	-	1,552,435	-	-	1,552,435
V28	V28	Valley	> 200 Amp up to 299 kVA	-	-	195,910	-	-	195,910
<b>Tauranga Commercial</b>									
T22	T22	Tauranga	Capacity 100 – 199kVA	-	-	1,256,799	-	-	1,256,799
T24	T24	Tauranga	Capacity 200 -299kVA	-	-	131,219	-	-	131,219
T41	T41	Tauranga	capacity 200 kVA unitised	-	-	404,388	-	-	404,388
<b>Large Commercial / Industrial</b>									
V40	V40	Valley	Individual ICP prices	-	-	-	-	1,212,532	1,212,532
V60	V60	Valley	Individual ICP prices	-	-	-	-	4,652,519	4,652,519
V601	V601	Kinleith	Individual ICP prices	-	-	-	-	4,248,042	4,248,042
T50	T50	Tauranga	Individual ICP prices	-	-	-	-	3,478,244	3,478,244
T60	T601	Tauranga	Individual ICP prices	-	-	-	-	3,932,416	3,932,416
<b>Eastern Region Total</b>				-	536,296	37,024,736	-	17,523,753	55,084,785

## Appendix C – Quantity forecasting

Calculating forecast revenue from prices requires Powerco to prepare a forecast of quantities for the year ahead that are used for pricing.

Prices have fixed and volume components, so revenue forecasts require forecasts of the number of connections as well as volumes (kW and kWh). Forecasts are required for the next pricing year only, and therefore largely rely on the levels and trends of recent actual data.

Forecasts of connections and quantities use a bottom up approach for each tariff group.

- Forecasts of regional connections are determined using current connections and applying an estimated growth rate for the region using the average growth rates over the previous three years as a guide.
- Volume and demand forecasts are calculated by determining the average volume (demand) per connection for each and every price category (and tariff code) over the previous five years and multiplying it by the relevant connection forecast.
- In situations where we determine that the average volume over the previous five years is not appropriate to use as a forecast (such as in the case of closed price categories or “one-off” events), Powerco uses the average volumes from the immediately preceding 12 months to generate the forecast.

Tables C.1 to C.8 below demonstrate that our connection and volume forecasts are consistent with actual historical growth rates.

Table C.9 outlines our forecasting methodology in instances where the average volume over the previous five years is not appropriate to use as a forecast.

**Table C.1: Connection growth – Western Region**

Customer group	Actual Growth			Projected Growth 2019-20	2020-21 Forecast		Comment
	2016-17	2017-18	2018-19		Growth	Total ICPs	
Small	0.7%	0.8%	0.8%	0.8%	0.8%	175,266	Forecast is consistent with historical growth
Medium	-1.3%	-0.9%	-0.9%	0.9%	1.3%	221	Forecast is consistent with recent historical growth
Large	0.0%	0.0%	3.6%	-2.1%	1.4%	273	Based on specific ICPs and assumed growth
<b>Total</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>175,760</b>	

**Table C.2: Connection Growth – Eastern Region**

Customer group	Actual Growth			Projected Growth 2019-20	2020-21 Forecast		Comment
	2016-17	2017-18	2018-19		Growth	Total ICPs	
Small	1.9%	1.8%	1.5%	1.5%	1.5%	160,906	Forecast is consistent with historical growth
Medium	3.8%	4.4%	5.0%	4.5%	4.1%	1,355	Forecast is consistent with historical growth
Large	0.3%	0.6%	3.5%	1.2%	1.9%	365	Based on specific ICPs and assumed growth
<b>Total</b>	<b>1.9%</b>	<b>1.8%</b>	<b>1.5%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>162,626</b>	

**Table C.3: Average volume (kWh) per connection – Western region**

Customer group	Actual Volume			Projected Volume 2019-20	2020-21 Forecast		Comment
	2016-17	2017-18	2018-19		Volume	Growth	
Small	9,032	9,070	9,111	9,105	9,074	-0.34%	Reflects a trend of declining average household usage
Medium	431,118	440,416	427,737	419,818	429,207	2.24%	No impact to revenue due to fixed charges
Large	2,365,042	2,333,865	2,455,966	2,487,648	2,403,131	-3.40%	No impact to revenue due to fixed charges
<b>Total</b>	<b>13,370</b>	<b>13,331</b>	<b>13,650</b>	<b>13,570</b>	<b>13,321</b>	<b>-1.84%</b>	

**Table C.4: Total volume (GWh) – Western region**

Customer group	Actual Volume			Projected Volume 2019-20	2020-21 Forecast		Comment
	2016-17	2017-18	2018-19		Volume	Growth	
Small	1,533	1,552	1,572	1,583	1,590	0.46%	Higher connection growth offsets declining average usage
Medium	95	96	92	92	95	3.56%	Reflects growth in connection numbers
Large	648	639	697	692	656	-5.13%	No impact to revenue due to fixed charges
<b>Total</b>	<b>2,276</b>	<b>2,287</b>	<b>2,362</b>	<b>2,366</b>	<b>2,341</b>	<b>-1.05%</b>	

**Table C.5: Average volume (kWh) per connection – Eastern region**

Customer group	Actual Volume			Projected Volume 2019-20	2020-21 Forecast		Comment
	2016-17	2017-18	2018-19		Volume	Growth	
Small	7,744	7,794	7,817	7,726	7,723	-0.04%	Reflects a trend of declining average household usage
Medium	135,081	131,837	130,675	127,481	128,775	1.01%	Reflects historical trends
Large	2,858,631	2,851,304	2,966,652	2,815,873	2,803,434	-0.44%	No impact to revenue due to fixed charges
<b>Total</b>	<b>15,122</b>	<b>15,076</b>	<b>15,504</b>	<b>15,051</b>	<b>15,001</b>	<b>-0.33%</b>	

**Table C.6: Total volume (GWh) – Eastern region**

Customer group	Actual Volume			Projected Volume 2019-20	2020-21 Forecast		Comment
	2016-17	2017-18	2018-19		Volume	Growth	
Small	1,170	1,199	1,220	1,225	1,243	1.47%	Higher connection growth offsets declining average usage
Medium	154	156	163	166	174	5.15%	Reflects growth in connection numbers
Large	983	987	1,062	1,020	1,022	0.22%	No impact to revenue due to fixed charges
<b>Total</b>	<b>2,307</b>	<b>2,342</b>	<b>2,445</b>	<b>2,411</b>	<b>2,440</b>	<b>1.19%</b>	

**Table C.7: Average chargeable demand\* (kW) per connection – Western region**

Customer group	Actual Volume			Projected Volume 2019-20	2020-21 Forecast		Comment
	2016-17	2017-18	2018-19		Volume	Growth	
Small	22	21	22	22	22	-0.23%	Consistent with historical data
Medium	75,750	74,858	73,946	73,348	70,853	-3.40%	Reflects a change in minimum chargeable demands
Large	268,990	260,228	231,644	221,387	210,062	-5.12%	Reflects a change in minimum chargeable demands
<b>Total</b>	<b>344,761</b>	<b>335,108</b>	<b>305,612</b>	<b>294,756</b>	<b>437</b>	<b>-99.85%</b>	

**Table C.8: Total chargeable demand\* (GW) – Western region**

Customer group	Actual Volume			Projected Volume 2019-20	2020-21 Forecast		Comment
	2016-17	2017-18	2018-19		Volume	Growth	
Small	3,668	3,658	3,788	3,773	3,795	0.57%	Reflects connection growth
Medium	16,665	16,319	15,972	15,990	15,645	-2.15%	Reflects a change in minimum chargeable demands
Large	73,703	71,303	65,787	61,546	57,351	-6.82%	Reflects a change in minimum chargeable demands
<b>Total</b>	<b>94,037</b>	<b>91,280</b>	<b>85,547</b>	<b>81,309</b>	<b>76,791</b>	<b>-5.56%</b>	

\* The figures in tables C.7 and C.8 are the sum of the relevant chargeable demands used for pricing – they are not peak demand values or forecasts. The tables have a step change in the kW/GW values for the medium and large customers. This is because the pricing methodology for those customers changed in 2016, moving from maximum monthly demands (12 values) to maximum daily demands (365 values). The values in the tables reflect the demand we use for revenue calculations and have a step change as a result for the medium and large customer groups.



**Table C.9: Forecast exceptions**

Region	Customer Group	Price Category	Charge Type	Forecast methodology / comment
Western	Small	E1	Variable Charges	Four years of historical data only used due to limited historical 'Peak' volume data
Western	Medium	E100	Variable Charge	Prior year data used, due to observed stability of volumes (note that this category is kWh volume, which is set at zero charge)
Western	Medium	E100	Power Factor Charge	Prior year data used due to the impact of a FY20 price increase
Western	Large	E300	Variable Charge	Prior year data used, due to observed stability of volumes (note that this category is kWh volume, which is set at zero charge)
Western	Large	E300	Power Factor Charge	Existing daily average used due to no change expected, or able to be forecast
Western	Large	SPECIAL	Variable Charge	Prior year data used, due to observed stability of volumes (note that this category is kWh volume, which is set at zero charge)
Western	Large	SPECIAL	Power Factor Charge	Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Small	T01	Variable Charge	Prior year data used to estimate FY21 quantities due to volatility
Eastern	Small	T02	Variable Charge	Prior year data used to estimate FY21 quantities due to volatility
Eastern	Small	T05S	Variable Charge	Prior year data used as this category was only widely used from FY20 onwards
Eastern	Small	T06S	Variable Charge	Prior year data used as this category was only widely used from FY20 onwards
Eastern	Medium	T22	Variable Charge	Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Medium	T41	Variable Charge	Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Medium	T41	Power Factor Charge	Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Large	T50	Variable Charge	Two years of historical data used, due to observed stability of volumes (note that this category is kWh volume, which is set at zero charge)
Eastern	Large	T50	Power Factor Charge	Prior year data used to estimate FY21 quantities due to volatility
Eastern	Large	T60	Variable Charge	Two years of historical data used, due to observed stability of volumes (note that this category is kWh volume, which is set at zero charge)
Eastern	Large	T60	Power Factor Charge	Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Small	V01	Variable Charge	Prior year data used to estimate FY21 quantities due to volatility
Eastern	Small	V02	Variable Charge	Prior year data used to estimate FY21 quantities due to volatility
Eastern	Small	V05S	Variable Charge	Prior year data used as this category was only widely used from FY20 onwards
Eastern	Small	V06S	Variable Charge	Prior year data used as this category was only widely used from FY20 onwards
Eastern	Medium	V24	Variable Charge	Prior year data Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Medium	V28	Variable Charge	Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Medium	V28	Power Factor Charge	Prior year data used to estimate FY21 quantities due to volatility
Eastern	Large	V40	Variable Charge	Two years of historical data used, due to observed stability of volumes (note that this category is kWh volume, which is set at zero charge)
Eastern	Large	V40	Power Factor Charge	Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Large	V60	Variable Charge	Two years of historical data used, due to observed stability of volumes (note that this category is kWh volume, which is set at zero charge)
Eastern	Large	V60	Power Factor Charge	Two years of historical data used for FY21 estimate, due to observed stability of volumes
Eastern	Large	V601	Variable Charge	Two years of historical data used due to inherent volatility of data.

## Approach to forecasting kWh quantities for small customers

Over recent years, the structure and level of distribution pricing has received attention from regulators, retailers, and other stakeholders. In the past, our prices for residential and small commercial customers had a time-of-use (TOU) component of their total distribution charge. A day/night structure applied, where prices were lower overnight than in the day. From 1 April 2019 we modified this structure to distinguish between peak and off-peak hours, requiring forecasts of volumes in those periods. The approach taken to forecasting volumes is summarised below:

Forecast	Comment
<b>Annual volumes</b>	Annual volumes are based on growth of ICPs and the historical trend of average kWh per annum - no adjustment has been made to reflect an impact of the pricing change.
<b>Within-year peak/off-peak volumes</b>	<b>Eastern region.</b> We have observed peak volumes of 29%-30% compared to off-peak volumes of 71% - 70%. <b>Western region:</b> Forecasts reflect a historical split between peak/off-peak of 30%/70% +/- 1%.

We update our forecasting models to reflect available data. This is because price structures and levels have the potential to affect consumption in aggregate, as well as at points in time when different prices might apply. Consumption is also affected by how retailers bundle distribution prices with other prices, as well as external factors such as temperature and a consumer's individual circumstances.

## Approach to forecasting revenues for large commercial/ industrial customers

Powerco has made changes to its approach to forecasting revenue in relation its large commercial and industrial customers on asset-based pricing categories of V40, V60, T50, T60 and SPECIAL.

Historically Powerco would simply forecast revenue from these price categories using the expected revenue from known customers prior to the start of the pricing year. We identified that this approach had the tendency to underestimate the actual revenue from these price categories as the forecasted revenue did not include subsequent revenue that resulted from new connections or demand growth from existing customers within the pricing year.

We have revised the forecasting approach to include an estimate for revenue growth from new connections and revenue growth from existing customers based on historical growth in order to improve the alignment between forecasted and actual revenue from these price categories (as per the Table below).

**Table C.10: Revenue forecast for large commercial / industrial customers**

Price category	2020-21 Growth		Baseline Assumptions		Adjustments for known changes		2020-21 forecast	
	ICPs	Revenue	ICPs	Revenue	ICPs	Revenue	ICPs	Revenue
SPECIAL	0	67,482	34	9,808,468			34	9,875,950
<b>Western</b>	<b>0</b>	<b>67,482</b>	<b>34</b>	<b>9,808,468</b>	-	-	<b>34</b>	<b>9,875,950</b>
T50	6	119,708	215	8,959,017			221	9,078,725
T60	1	102,172	33	7,653,750			34	7,755,922
	<b>7</b>	<b>221,880</b>	<b>248</b>	<b>16,612,767</b>	-	-	<b>255</b>	<b>16,834,647</b>
V40	-	-	83	3,426,012			83	3,426,012
V60	-	-	25	7,798,299			25	7,798,299
V601	-	-	2	7,525,786			2	7,525,786
	-	-	<b>110</b>	<b>18,750,097</b>	-	-	<b>110</b>	<b>18,750,097</b>
<b>Eastern</b>	<b>7</b>	<b>221,880</b>	<b>358</b>	<b>35,362,864</b>	-	-	<b>365</b>	<b>35,584,744</b>
<b>Total</b>	<b>7</b>	<b>289,362</b>	<b>392</b>	<b>45,171,332</b>	-	-	<b>399</b>	<b>45,460,694</b>