

2024 Annual Price-Setting Compliance Statement

For the assessment period 1 April 2023 - 31 March 2024

2 March 2023

Pursuant to:

Electricity Distribution Services Default Price-Quality Path Determination 2020 (20 May 2020)



Table of contents

1.	INTRODUCTION			
	1.1	Background	. 3	
	1.2	Statement of compliance	. 3	
	1.3	Disclaimer	. 3	
2.	PRICE	РАТН	. 4	
	2.1	Price path compliance	. 4	
	2.2	Forecast pass-through costs and recoverable costs	. 5	
	2.3	Opening wash-up account balance	. 7	
	2.4	Voluntary undercharging	. 7	
Арре	endix 1:	Forecast quantities	. 9	
	Consu	mer group quantity forecasts	. 9	
	ategory quantity forecasts	12		
Арре	Appendix 2: 2024 Line charges and forecast quantities14			
Арре	Appendix 3: Directors' certification			



1. INTRODUCTION

1.1 Background

The 2024 assessment period is the fourth assessment period of the Electricity Distribution Services Default Price-Quality Path Determination 2020 ("the Determination")¹ and covers the 12 months to 31 March 2024.

This annual price-setting compliance statement ("the Statement") is submitted to the Commerce Commission (the Commission) by Vector Limited ("Vector") before the start of the 2024 assessment period pursuant to clauses 11.1 to 11.3 of the Determination.

Under clause 8.4 of the Determination, Vector's forecast revenue from prices must not exceed the lesser of:

- the forecast allowable revenue for the 2024 assessment period; and
- the forecast revenue from prices for the 2023 assessment period multiplied by (1+ limit on annual percentage increase in forecast revenue from prices).

The Statement includes the calculations of Vector's forecast revenue from prices, forecast allowable revenue and supporting information for all components of their calculations.

The Statement was approved for issue on 20 February 2023 and published on 2 March 2023. In the Statement, references to Vector relate only to Vector's electricity distribution business.

1.2 Statement of compliance

As required by clause 11.2(a) of the Determination, the Statement confirms Vector's compliance with the price path in clause 8.4 set for Vector in respect of the 2024 assessment period.

1.3 Disclaimer

The information contained in the Statement has been prepared for the express purpose of complying with the requirements of clauses 11.1 to 11.3 of the Determination. The Statement has not been prepared for any other purpose. Vector expressly disclaims any liability to any other party who may rely on the Statement for any other purpose.

For presentation purposes, some numbers in the Statement have been rounded. In most cases calculations are based on more detailed numbers. This may cause small discrepancies or rounding inconsistencies when aggregating some of the information presented in the Statement. These discrepancies do not affect the overall compliance calculations which are based on the more detailed information.

¹ Available at <u>https://comcom.govt.nz/ data/assets/pdf file/0025/216862/Electricity-distribution-services-default-price-quality-path-determination-2020-consolidated-20-May-2020-20-May-2020.pdf.</u>



2. PRICE PATH

2.1 Price path compliance

As required by clause 8.4 of the Determination, in order to demonstrate compliance with the price path, Vector must demonstrate that its forecast revenue from prices does not exceed the lesser of:

- the forecast allowable revenue for the 2024 assessment period; and
- the forecast revenue from prices for the 2023 assessment period multiplied by (1+ limit on annual percentage increase in forecast revenue from prices).

Vector has defined that latter term as allowable forecast revenue from prices and the lesser of these two terms as the maximum forecast allowable revenue, therefore Vector's forecast revenue from prices must not exceed the maximum forecast allowable revenue for the 2024 assessment period.

As outlined in Table 1 below, Vector complies with the price path, in accordance with clause 8.4 of the Determination.

Table 1: Vector price path compliance 2024				
Formula: FRFP ₂₀₂₄ ≤ MFAR ₂₀₂₄				
Component	Component Description Value (\$000)			
FRFP ₂₀₂₄	Forecast revenue from prices 2024	649,807		
MFAR ₂₀₂₄	FAR2024Maximum forecast allowable revenue 2024655,226			
Result: \$649,807 ≤ 655,226				

The method of calculation of forecast revenue from prices for the 2024 assessment period is set out in schedule 1.3 of the Determination and presented with Vector values in Table 2 below.

Table 2: Forecast revenue from prices 2024				
Formula: FRFP ₂₀₂₄ = ∑P _{i,2024} Q _{i,2024}				
Component Description Value (\$000)				
$\sum P_{i,2024} Q_{i,2024}$	Prices 2024 x forecast quantities 2024 ²	649,807		
FRFP2024:Forecast revenue from prices 2024649,807				

The method of calculation of maximum allowable revenue for the 2024 assessment period is set out under clause 8.4 of the Determination and presented with Vector values in Table 3 below.

Table 3: Maximum forecast allowable revenue 2024				
Formula: MFAR ₂₀₂₄ = min(FAR ₂₀₂₄ , AFRFP ₂₀₂₄)				
Component Description Value (\$000)				
FAR ₂₀₂₄	Forecast allowable revenue 2024	655,226		
AFRFP ₂₀₂₄ Allowable forecast revenue from prices 2024 687,834				
MFAR ₂₀₂₄ Maximum forecast allowable revenue 2024 655,226				

² An outline of how quantities are forecast is included in Appendix 1. Details of ∑P_{i,2024} Q_{i,2024} are included in Appendix 2.



The method of calculation of forecast allowable revenue for the 2024 assessment period is set out in Schedule 1.5 of the Determination and presented with Vector values in Table 4 below.

Table 4: Forecast allowable revenue 2024				
Formula: FAR ₂₀₂₄ = FNAR ₂₀₂₄ + FPRC ₂₀₂₄ + OWAB ₂₀₂₄ + PTBA ₂₀₂₄				
Component Description Value (\$000)				
FNAR2024	Forecast net allowable revenue 2024 ³	412,398		
FPRC ₂₀₂₄	Forecast pass-through and recoverable costs 2024 ⁴	214,045		
OWAB ₂₀₂₄	Opening wash-up account balance 2024 ⁵	28,783		
PTBA ₂₀₂₄	Pass-through balance allowance 2024 ⁶	-		
FAR _{2024:}	Forecast allowable revenue 2024 ⁷	655,226		

The method of calculation of allowable forecast revenue from prices for the 2024 assessment period is set out under clause 8.4 of the Determination and presented with Vector values in Table 5 below.

Table 5: Allowable forecast revenue from prices 2024				
Formula: AFRFP ₂₀₂₄ = FRFP ₂₀₂₃ × (1+ limit)				
Component Description Value (\$000)				
FRFP ₂₀₂₃	Forecast revenue from prices 2023 ⁸	625,305		
FRFP2023 × limitLimit on annual percentage change (10%)62,531				
AFRFP ₂₀₂₄ Allowable forecast revenue from prices 2024 687,836				

2.2 Forecast pass-through costs and recoverable costs

Forecast allowable revenue includes a forecast of pass-through and recoverable costs excluding any recoverable cost that is a revenue wash-up draw down amount.⁹ These costs have been determined in accordance with Part 3.1.2-3 of the Electricity Distribution Services Input Methodologies Determination 2012 (consolidated 20 May 2020) ("Input Methodologies") which defines pass-through costs and recoverable costs.¹⁰ Schedule 1.5 (3) of the Determination requires that all forecasts of pass-through costs and recoverable costs used to calculate 'forecast allowable revenue' must be demonstrably reasonable.

³ Forecast net allowable revenue is set out in schedule 1.4 of the Determination.

⁴ Details of forecast pass-through and recoverable costs are included in section 2.2.

⁵ Details of the opening wash-up account balance are included in section 2.3.

⁶ The pass-through balance allowance is nil for the third to fifth assessment periods, as set out in clause 4.2 of the Determination.

⁷ As part of forecast pass-through and recoverable costs detailed in section 2.2, the incremental rolling incentive (IRIS) adjustment is specified in Schedule 2.2 of the Determination and the capex wash-up adjustment is specified in clause 3.1.3 of the Input Methodologies.

⁸ Forecast revenue from prices for 31 March 2023 is from the 2023 Annual Price-Setting Compliance Statement (available at <u>https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path</u>).

⁹ The revenue wash-up drawn down amount is the opening wash-up account balance as included in section 2.3.

¹⁰ Available at <u>https://comcom.govt.nz/ data/assets/pdf file/0017/60542/Electricity-distribution-services-input-methodologies-determination-2012-consolidated-20-May-2020-20-May-2020.pdf</u>



Table 6 summarises the forecast methods and the pass-through and recoverable costs used to set prices for the 2024 assessment period. All other pass-through and recoverable costs not included Table 6 are not applicable to Vector for the 2024 assessment period.

Table 6: Forecast pass-through and recoverable costs 2024					
Cost type	Description Forecast method		Value (\$000)		
rrough costs	Local Authority rates	Historic base plus 3.5% (long term plan) plus \$10.5m targeted rate ¹¹	17,912		
	Commerce Act levy	Based on letter provided to Vector on the final review of Commission's Part 4 energy funding consultation paper ¹² and historic trend of total industry levy with an increased portion attributable to Vector due to growth in Vector's Regulatory Asset Base	2,481		
ass-t	Electricity Authority levy	From current trend and proposed EA appropriation	1,601		
å	Utility Disputes levy	Historic trend	398		
	Total pass-through cost	S	22,392		
	Incremental rolling incentive scheme ("IRIS") incentive adjustment	As per the Commission's financial model, with updated OPEX, commissioned asset value and weighted average asset life	2,924		
	Transpower electricity lines service charges	As notified by Transpower	180,206		
costs	Transpower new investment charges	As notified by Transpower	7,923		
rerable	Distributed generation allowance	Based on demand and Transpower's 2024 interconnection rates	-		
Recov	Quality incentive allowance	Determined from the 2022 assessment period and adjusted for the time value of money	(355)		
	Fire and Emergency New Zealand levy	Historic plus 12% (CPI change over last two years)	588		
	CAPEX wash-up	As per the Commission's financial model, updated commissioned asset value	367		
	Total recoverable costs				
Total forecast pass-through and recoverable costs excluding revenue wash-up drawn down amount					

¹¹ Auckland Council has included a targeted vegetation management rate on Vector from 1 July 2021 of \$10.5m per year to fund enhanced maintenance of the Council's trees that present a risk to the electricity lines network.

¹² Consultation paper available at <u>https://comcom.govt.nz/ data/assets/pdf_file/0024/229830/Part-4-energy-levy-funding-consult_ation-paper-10-Dec-2020.pdf</u>.



2.3 Opening wash-up account balance

Forecast allowable revenue includes the recovery of the opening wash-up account balance which is defined in schedule 1.7 of the Determination. The opening wash-up account balance (which was nil for the first and second assessments periods) used to set prices for the 2024 assessment period is presented in Table 7 below.

Table 7: Opening wash-up account balance 2024				
Formula: OWAB ₂₀₂₄ = ((WUA ₂₀₂₂ - VUAF ₂₀₂₂) × (1+ WACC) ²			
Component Description Value (\$000)				
WUA ₂₀₂₂	Wash-up amount 2022 ¹³	26,494		
- VUAF2022	Voluntary undercharging amount foregone 2022 ¹⁴	-		
(WUA ₂₀₂₂ - VUAF ₂₀₂₂) × WACC ²	67th percentile estimate of post-tax WACC (4.23%) 15	2,289		
OWAB2024:Opening wash-up account balance 202428,783				

2.4 Voluntary undercharging

As specified in clause 4.2 of the Determination, the voluntary undercharging amount foregone is the voluntary undercharging floor less the forecast revenue in prices however if the forecast revenue from prices is greater voluntary undercharging revenue floor, then the amount foregone is nil. Tables 8 and 9 below detail the voluntary undercharging calculations for the 2022 and 2024 assessment periods respectively.

Table 8: Voluntary undercharging revenue floor and amount foregone 2022				
Formula: VURF ₂₀₂₂ = F	AR2022 x VUT			
VUAF ₂₀₂₂ = m	nax{VURF ₂₀₂₂ - FRFP ₂₀₂₂ , 0)			
Component Description Value (\$000)				
FAR2022 x VUT	Forecast allowable revenue 2022 times the voluntary undercharging threshold (90%) $^{\rm 16}$	542,857		
AFRFP ₂₀₂₂	Allowable forecast revenue from prices 2022 ¹⁷	622,107		
VURF2022:	Voluntary undercharging revenue floor 2022	542,857		
- FRFP2022	Forecast revenue from prices 2022 ¹⁶	(602,980)		
VUAF 2022:	-			

¹³ Wash-up account 2022 is from the 2022 Annual Compliance Statement (available at <u>https://www.vector.co.nz/</u><u>about-us/regulatory/disclosures-electricity/price-quality-path</u>).

¹⁴ Details of the voluntary undercharging amount forgone are included in section 2.4.

¹⁵ 67th percentile estimate of post-tax WACC as defined in clause 4.2 of the Determination.

¹⁶ Forecast allowable revenue 2022 and forecast revenue from prices 2022 are from the 2022 Annual Price Setting Compliance Statement (available at <u>https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-guality-path</u>).

¹⁷ Allowable forecast revenue from prices 2024 is from Table 5.



Table 9: Voluntary undercharging revenue floor and amount foregone 2024					
Formula: VURF ₂₀₂₄ = n	nin{FAR ₂₀₂₄ x VUT , AFRFP ₂₀₂₄ }				
VUAF ₂₀₂₄ = n	nax{VURF ₂₀₂₄ - FRFP ₂₀₂₄ , 0)				
Component Description Value (\$000)					
FAR2024 x VUT	Forecast allowable revenue 2024 times the voluntary undercharging threshold (90%) ¹⁸	589,703			
AFRFP2024	687,836				
VURF2024:Voluntary undercharging revenue floor 2024589,70					
- FRFP ₂₀₂₄	(649,807)				
VUAF _{2024:}	VUAF _{2024:} Voluntary undercharging amount foregone 2024				

¹⁸ Forecast allowable revenue 2024 is from Table 4.
¹⁹ Allowable forecast revenue from prices 2024 is from Table 5.
²⁰ Forecast revenue from prices 2024 is from Table 2.



Appendix 1: Forecast quantities

Schedule 1.3 of the Determination requires all forecast quantities used to calculate the forecast revenue from prices to be demonstrably reasonable.

Consumer group quantity forecasts

Vector produces network load forecasts as part of its Asset Management Plan (AMP). The same bottomup approach is used for price setting to forecast monthly connections (ICPs), energy volumes, capacity, demand, and power factor by consumer groups (residential, general and commercial)²¹ and by network (Auckland and Northern). The latest forecast was prepared in August 2022 and is based on actual billed data to June 2022.

ICP forecasts

The forecast monthly total connections are driven by three areas: namely prior months total connections, gross connections and movements

- Gross connections are based on the Auckland Forecasting Centre's household and employment forecasts²² which are converted into ICPs (by using the historic ratios of ICPs to household numbers (for residential) or to employment numbers (for general and commercial)).
- Movements are the historic monthly average from July 2020 to June 2022 of disconnections, reconnections, decommissioned and transfers to embedded networks.

Figures 1-3 show ICP growth for the consumer groups which illustrate that the growth in the forecast ICPs are reasonable when compared with the historic trends and fluctuations.²³



²¹ For further information on how consumer groups (and price categories) are defined, see our pricing methodology, available at www.vector.co.nz/about-us/regulatory/disclosures-electricity/pricing-methodology.

²² The Auckland Forecasting Centre's household/employment forecasts consider Statistics NZ forecasts and local knowledge of building developments, council plans and strategy.

²³ PY is pricing year



Volume forecasts

Volume forecasts by consumer group are determined by multiplying the forecasted monthly volume per ICP by the forecast number of ICPs. Forecasted volumes per ICP are calculated using historic annual trend lines and the annual amounts are allocated to each month based on their historic contributions.

- Residential and general volume data are available and used from July 2006 to June 2022, whereas commercial volume data are available and used from July 2011 to June 2022 (as volumes cannot be split between standard and non-standard ICPs prior to July 2011).
- In the previous year, the volume forecasts for PY23 were determined by a machine learning forecasting model as there was deemed to provide a higher degree of confidence in its ability to see known and unknown trends and allows for a more scientific modelling of weather and Covid-19 implications.
- Forecasts for PY23 and PY24 have been estimated using the machine learning forecasting model and various trends (short term, long term, including Covid-19 years, excluding Covid-19 years). The long-term trend is deemed to be the most appropriate for the PY24 forecast volumes, as it demonstrated to be the most reliable forecast compared to actual volumes for year to date PY23.

Figures 4-6 show volumes per ICP for the consumer groups. This illustrates that the use of long-term trends are reasonable for the volume forecasts with Covid-19's impact in PY21 and PY22.





Capacity, demand and power factor forecasts

Commercial capacity, demand and power factor forecasts are determined by forecasted monthly quantity per ICP times the forecast number of ICPs. Annual values are the summation of monthly values.

Forecasted capacities per ICP are calculated using historic monthly trend lines. Forecasted demand (or power factor) per ICP are calculated using historic annual trend lines and the annual amounts are allocated to each month based on their historic contributions.

- Capacity, demand and power factor data are reliably available and used from July 2014 to June 2022.
- In previous years, short term trends were used for these forecasts as it was believed more recent history would be a more likely to give a better indication of where these quantities per ICP are likely to be as Auckland recovers post Covid-19.
- The long-term trend is deemed to be the most appropriate for the PY24 forecast quantities, as it demonstrated to be the most reliable forecast compared to actual quantities for year to date PY23.
- The allocation of annual demand (or power factor) per ICP into monthly values is based on the average contribution to annual demand (or power factor) per ICP for that month using historic data (from PY2015 to PY2020).

Figures 7-9 show capacity, demand and power factor per ICP for the commercial consumer group which illustrate that the use of the historic trends is reasonable for these forecasts with Covid-19's impact shown on demand in PY21 and PY22.





Price category quantity forecasts

Consumer group to price category forecasts

For the 2024 assessment period, price category level quantities are required for all pricing components except injection volumes as these have a zero price so are not forecast.

The annual forecasts of connections, energy volumes, capacity, demand and power factor by consumer group are converted into the relevant billed quantities and apportioned into price category level quantities using the actual historic splits within the consumer groups.

- Fixed quantities (number of days) is estimated using the average of year beginning and year end forecast ICPs for the 2024 assessment period multiplied by number of days in the year.
- Annual volumetric quantities (kWh) is same as the annual energy volume forecast.
- Annual capacity (kVA.days), demand (kVA.days) and power factor (kVAr.days) quantities are estimated by using their annual forecasts (sum of monthly quantities) multiplied the average days per month (365/12). This is because it is required to add the number of days in (multiple by 365) and remove the month summation (divide by 12).

Actual price category level quantities for the 2022 assessment period²⁴ were used as the basis to apportion the relevant 2024 assessment period consumer group forecast quantities into price categories.

Price category quantity modifications

For residential and general ICPs, modifications to ICP and volumes quantities were required to shift quantities between price categories, however there is no overall change in quantities. The modifications are required as there are changes to the eligibility criteria for price categories (controlled), new price categories (distributed energy resources) and changes to price components (time of use).

For commercial ICPs, additional quantities were added to the zone substation price category as three ICPs currently on non-standard prices are expected to move to this price category and new price categories (sub-transmission)

Table 9: Price category changes requiring quantity adjustments				
Consumer group	Price categories	Change	Assumption	
Residential	Controlled	Customers with an active gas ICP connection to Vector's gas distribution network no longer eligible for controlled tariff, to be moved on uncontrolled	Estimated 20% of controlled ICPs will move to uncontrolled	
	Distributed energy resources (DER)	New price categories for TOU ICPs with controllable load	Estimated 1% of residential ICPs will move to DER	
Residential /	Time of use (TOU)	Continued transition to the mandatory TOU price categories	Estimated 10% of exemption ICPs move to TOU	
general		Differing peak rate depending on time of year.	Estimated 60% of residential peak volume in winter period	

These changes are shown in Table 9 below.

²⁴ Billed quantities for the 2022 assessment period are from the 2022 Annual Compliance Statement available at <u>https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path</u>).



		Summer (Oct - Mar) peak rate equals the off-peak rate	Estimated 52% of general peak volume in winter period
		Winter (Apr - Sep) peak rate greater than off-peak rate	
Zone substation	Time of use (TOU)	Three ICPs currently on non- standard prices expected to move to the Auckland zone substation price category	Estimated quantities based in the ICPs historic consumption data
Sub- transmission	Time of use (TOU)	New price categories for high voltage ICPs	No quantities forecast, not anticipated to have any ICPs.

The 2024 forecast price categories level quantities can be found in Appendix 2.



Appendix 2: 2024 Line charges and forecast quantities

	Pi,2024 Qi,2024
Northern charges between 1 April 2023 to 31 March 2024	\$164,976,234
Auckland charges between 1 April 2023 to 31 March 2024	\$287,911,907
Non-standard charges between 1 April 2023 to 31 March 2024	\$8,789,558
GXP transmission charges between 1 April 2023 to 31 March 2024	\$188,129,042
Total charges between 1 April 2023 to 31 March 2024	\$649,806,740

Northern line charges between 1 April 2023 to 31 March 2024

Residential - time of use

Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,2	2024 Qi,2024
WRHLC	WRHLC-FIXD	Fixed, low user	\$/day	0.4500	22,527,683	\$	10,137,457
WRHLC	WRHLC-OFPK	Volumetric, controlled, off peak	\$/kWh	0.0387	219,214,218	\$	8,483,590
WRHLC	WRHLC-PEAK	Volumetric, controlled, peak (summer)	\$/kWh	0.0387	38,857,743	\$	1,503,795
WRHLC	WRHLC-PEAK	Volumetric, controlled, peak (winter)	\$/kWh	0.1322	57,572,877	\$	7,611,134
WRHLD	WRHLD-FIXD	Fixed, low user	\$/day	0.4500	481,819	\$	216,819
WRHLD	WRHLD-OFPK	Volumetric, DER, off peak	\$/kWh	0.0328	4,688,528	\$	153,784
WRHLD	WRHLD-PEAK	Volumetric, DER, peak (summer)	\$/kWh	0.0328	831,085	\$	27,260
WRHLD	WRHLD-PEAK	Volumetric, DER, peak (winter)	\$/kWh	0.1263	1,231,362	\$	155,521
WRHLU	WRHLU-FIXD	Fixed, low user	\$/day	0.4500	11,635,917	\$	5,236,163
WRHLU	WRHLU-OFPK	Volumetric, uncontrolled, off peak	\$/kWh	0.0387	110,264,437	\$	4,267,234
WRHLU	WRHLU-PEAK	Volumetric, uncontrolled, peak (summer)	\$/kWh	0.0387	19,490,663	\$	754,289
WRHLU	WRHLU-PEAK	Volumetric, uncontrolled, peak (winter)	\$/kWh	0.1322	28,877,992	\$	3,817,671
WRHSC	WRHSC-FIXD	Fixed, standard user	\$/day	1.3000	13,710,558	\$	17,823,726
WRHSC	WRHSC-OFPK	Volumetric, controlled, off peak	\$/kWh	-	272,586,480	\$	-
WRHSC	WRHSC-OFPK	Volumetric, controlled, peak (summer)	\$/kWh	-	47,124,828	\$	-
WRHSC	WRHSC-PEAK	Volumetric, controlled, peak (winter)	\$/kWh	0.0935	69,821,656	\$	6,528,325
WRHSD	WRHSD-FIXD	Fixed, standard user	\$/day	1.1700	338,578	\$	396,137
WRHSD	WRHSD-OFPK	Volumetric, DER, off peak	\$/kWh	-	6,731,445	\$	-
WRHSD	WRHSD-PEAK	Volumetric, DER, peak (summer)	\$/kWh	-	1,163,734	\$	-
WRHSD	WRHSD-PEAK	Volumetric, DER, peak (winter)	\$/kWh	0.0935	1,724,226	\$	161,215
WRHSU	WRHSU-FIXD	Fixed, standard user	\$/day	1.3000	7,179,203	\$	9,332,964
WRHSU	WRHSU-OFPK	Volumetric, uncontrolled, off peak	\$/kWh	-	140,736,559	\$	-
WRHSU	WRHSU-PEAK	Volumetric, uncontrolled, peak (summer)	\$/kWh	-	24,344,762	\$	-
WRHSU	WRHSU-PEAK	Volumetric, uncontrolled, peak (winter)	\$/kWh	0.0935	36,069,980	\$	3,372,543

Residential - exemption

Price category and code		Description	Units	Pi,2024	Qi,2024	Pi,2024 Qi,2024	
WRNLC	WRNLC-FIXD	Fixed, low user	\$/day	0.4500	10,981,532	\$	4,941,689
WRNLC	WRNLC-AICO	Volumetric, controlled, anytime	\$/kWh	0.0551	162,411,642	\$	8,948,881
WRNLU	WRNLU-FIXD	Fixed, low user	\$/day	0.4500	2,554,993	\$	1,149,747
WRNLU	WRNLU-24UC	Volumetric, uncontrolled, anytime	\$/kWh	0.0551	34,660,306	\$	1,909,783
WRNSC	WRNSC-FIXD	Fixed, standard user	\$/day	1.3000	9,068,670	\$	11,789,271
WRNSC	WRNSC-AICO	Volumetric, controlled, anytime	\$/kWh	0.0164	232,298,633	\$	3,809,698
WRNSU	WRNSU-FIXD	Fixed, standard user	\$/day	1.3000	3,560,819	\$	4,629,065
WRNSU	WRNSU-24UC	Volumetric, uncontrolled, anytime	\$/kWh	0.0164	66,704,063	\$	1,093,947

General	General											
Price category and code		Description	Units	Pi,2024	Qi,2024	Pi,2	024 Qi,2024					
WBSU	WBSU-FIXD	Fixed	\$/day/fitting	0.0550	17,475,097	\$	961,130					
WBSU	WBSU-24UC	Volumetric, unmetered	\$/kWh	0.0226	11,140,973	\$	251,786					
WBSH	WBSH-FIXD	Fixed	\$/day	1.5200	3,590,945	\$	5,458,236					
WBSH	WBSH-OFPK	Volumetric, off peak	\$/kWh	-	114,332,707	\$	-					
WBSH	WBSH-SPEK	Volumetric, peak (summer)	\$/kWh	-	22,196,015	\$	-					
WBSH	WBSH-PEAK	Volumetric, peak (winter)	\$/kWh	0.0935	23,838,888	\$	2,228,936					
WBSN	WBSN-FIXD	Fixed	\$/day	1.5200	5,124,263	\$	7,788,879					
WBSN	WBSN-24UC	Volumetric, anytime	\$/kWh	0.0164	228,843,884	\$	3,753,040					

Low volta	Low voltage										
Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,2	2024 Qi,2024				
WLVN	WLVN-FIXD	Fixed	\$/day	5.9200	359,453	\$	2,127,962				
WLVN	WLVN-24UC	Volumetric	\$/kWh	0.0202	125,375,045	\$	2,532,576				
WLVN	WLVN-CAPY	Capacity	\$/kVA/day	0.0436	53,208,848	\$	2,319,906				
WLVN	WLVN-PWRF	Power Factor	\$/kVAr/day	0.2917	238,105	\$	69,455				
WLVH	WLVH-FIXD	Fixed	\$/day	11.1500	97,129	\$	1,082,986				
WLVH	WLVH-24UC	Volumetric	\$/kWh	0.0059	130,019,542	\$	767,115				
WLVH	WLVH-CAPY	Capacity	\$/kVA/day	0.0436	26,206,882	\$	1,142,620				
WLVH	WLVH-DAMD	Demand	\$/kVA/day	0.1249	10,120,707	\$	1,264,076				
WLVH	WLVH-PWRF	Power Factor	\$/kVAr/day	0.2917	590,179	\$	172,155				



Transformer

Price category and code		Description	Units	Pi,2024	Qi,2024	Pi,2	2024 Qi,2024
WTXN	WTXN-FIXD	Fixed	\$/day	5.9200	52,006	\$	307,875
WTXN	WTXN-24UC	Volumetric	\$/kWh	0.0202	35,600,777	\$	719,136
WTXN	WTXN-CAPY	Capacity	\$/kVA/day	0.0419	12,763,599	\$	534,795
WTXN	WTXN-PWRF	Power Factor	\$/kVAr/day	0.2917	151,157	\$	44,093
WTXH	WTXH-FIXD	Fixed	\$/day	11.1500	111,660	\$	1,245,007
WTXH	WTXH-24UC	Volumetric	\$/kWh	0.0059	369,065,542	\$	2,177,487
WTXH	WTXH-CAPY	Capacity	\$/kVA/day	0.0419	83,981,161	\$	3,518,811
WTXH	WTXH-DAMD	Demand	\$/kVA/day	0.1199	29,152,896	\$	3,495,432
WTXH	WTXH-PWRF	Power Factor	\$/kVAr/day	0.2917	1,067,594	\$	311,417

High voltage

Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,2	024 Qi,2024		
WHVN	WHVN-FIXD	Fixed	\$/day	5.9200	-	\$	-		
WHVN	WHVN-24UC	Volumetric	\$/kWh	0.0202	-	\$	-		
WHVN	WHVN-CAPY	Capacity	\$/kVA/day	0.0402	-	\$	-		
WHVN	WHVN-PWRF	Power Factor	\$/kVAr/day	0.2917	-	\$	-		
WHVH	WHVH-FIXD	Fixed	\$/day	11.1500	9,560	\$	106,593		
WHVH	WHVH-24UC	Volumetric	\$/kWh	0.0059	118,588,720	\$	699,673		
WHVH	WHVH-CAPY	Capacity	\$/kVA/day	0.0402	16,381,007	\$	658,516		
WHVH	WHVH-DAMD	Demand	\$/kVA/day	0.1151	8,164,847	\$	939,774		
WHVH	WHVH-DEXA	Excess demand	\$/kVA/day	0.8000	4,851	\$	3,880		
WHVH	WHVH-PWRF	Power Factor	\$/kVAr/day	0.2917	141,172	\$	41,180		

Zone substation

Price category and code		Description	Units	Pi,2024	Qi,2024	Pi,2024 Qi,2024	
WZSH	WZSH-FIXD	Fixed	\$/day	2.1000	-	\$	-
WZSH	WZSH-24UC	Volumetric	\$/kWh	0.0059	-	\$	-
WZSH	WZSH-CAPY	Capacity	\$/kVA/day	0.1050	-	\$	-
WZSH	WZSH-DAMD	Demand	\$/kVA/day	0.0261	-	\$	-
WZSH	WZSH-DEXA	Excess demand	\$/kVA/day	0.8000	-	\$	-
WZSH	WZSH-PWRF	Power Factor	\$/kVAr/day	0.2917	-	\$	-

Subtransmission

Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,202	24 Qi,2024			
WSTH	WSTH-FIXD	Fixed	\$/day	2.1000	-	\$	-			
WSTH	WSTH-24UC	Volumetric	\$/kWh	0.0059	-	\$	-			
WSTH	WSTH-CAPY	Capacity	\$/kVA/day	0.0840	-	\$	-			
WSTH	WSTH-DAMD	Demand	\$/kVA/day	0.0209	-	\$	-			
WSTH	WSTH-DEXA	Excess demand	\$/kVA/day	0.8000	-	\$	-			
WSTH	WSTH-PWRF	Power Factor	\$/kVAr/day	0.2917	-	\$	-			

Auckland line charges between 1 April 2023 to 31 March 2024

Residential - time of use

Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,2	2024 Qi,2024
ARHLC	ARHLC-FIXD	Fixed, low user	\$/day	0.4500	36,181,924	\$	16,281,866
ARHLC	ARHLC-OFPK	Volumetric, controlled, off peak	\$/kWh	0.0378	340,716,425	\$	12,879,081
ARHLC	ARHLC-PEAK	Volumetric, controlled, peak (summer)	\$/kWh	0.0378	59,579,582	\$	2,252,108
ARHLC	ARHLC-PEAK	Volumetric, controlled, peak (winter)	\$/kWh	0.1313	88,275,018	\$	11,590,510
ARHLD	ARHLD-FIXD	Fixed, low user	\$/day	0.4500	735,142	\$	330,814
ARHLD	ARHLD-OFPK	Volumetric, DER, off peak	\$/kWh	0.0328	6,922,652	\$	227,063
ARHLD	ARHLD-PEAK	Volumetric, DER, peak (summer)	\$/kWh	0.0328	1,210,534	\$	39,706
ARHLD	ARHLD-PEAK	Volumetric, DER, peak (winter)	\$/kWh	0.1263	1,793,566	\$	226,527
ARHLU	ARHLU-FIXD	Fixed, low user	\$/day	0.4500	17,471,625	\$	7,862,231
ARHLU	ARHLU-OFPK	Volumetric, uncontrolled, off peak	\$/kWh	0.0387	147,979,756	\$	5,726,817
ARHLU	ARHLU-PEAK	Volumetric, uncontrolled, peak (summer)	\$/kWh	0.0387	25,716,473	\$	995,228
ARHLU	ARHLU-PEAK	Volumetric, uncontrolled, peak (winter)	\$/kWh	0.1322	38,102,351	\$	5,037,131
ARHSC	ARHSC-FIXD	Fixed, standard user	\$/day	1.2800	18,617,883	\$	23,830,890
ARHSC	ARHSC-OFPK	Volumetric, controlled, off peak	\$/kWh	-	373,582,154	\$	-
ARHSC	ARHSC-PEAK	Volumetric, controlled, peak (summer)	\$/kWh	-	63,721,728	\$	-
ARHSC	ARHSC-PEAK	Volumetric, controlled, peak (winter)	\$/kWh	0.0935	94,412,154	\$	8,827,536
ARHSD	ARHSD-FIXD	Fixed, standard user	\$/day	1.1700	422,240	\$	494,021
ARHSD	ARHSD-OFPK	Volumetric, DER, off peak	\$/kWh	-	8,472,578	\$	-
ARHSD	ARHSD-PEAK	Volumetric, DER, peak (summer)	\$/kWh	-	1,445,164	\$	-
ARHSD	ARHSD-PEAK	Volumetric, DER, peak (winter)	\$/kWh	0.0935	2,141,201	\$	200,202
ARHSU	ARHSU-FIXD	Fixed, standard user	\$/day	1.3000	8,108,205	\$	10,540,666
ARHSU	ARHSU-OFPK	Volumetric, uncontrolled, off peak	\$/kWh	-	152,549,043	\$	-
ARHSU	ARHSU-PEAK	Volumetric, uncontrolled, peak (summer)	\$/kWh	-	25,892,774	\$	-
ARHSU	ARHSU-PEAK	Volumetric, uncontrolled, peak (winter)	\$/kWh	0.0935	38,363,564	\$	3,586,993



Residential - exemption

Price category and code		Description	Units	Pi,2024	Qi,2024	Pi,2024 Qi,2024	
ARNLC	ARNLC-FIXD	Fixed, low user	\$/day	0.4500	14,852,639	\$	6,683,688
ARNLC	ARNLC-AICO	Volumetric, controlled, anytime	\$/kWh	0.0542	215,230,680	\$	11,665,503
ARNLU	ARNLU-FIXD	Fixed, low user	\$/day	0.4500	4,272,847	\$	1,922,781
ARNLU	ARNLU-24UC	Volumetric, uncontrolled, anytime	\$/kWh	0.0551	42,064,588	\$	2,317,759
ARNSC	ARNSC-FIXD	Fixed, standard user	\$/day	1.2800	10,852,100	\$	13,890,688
ARNSC	ARNSC-AICO	Volumetric, controlled, anytime	\$/kWh	0.0164	262,919,790	\$	4,311,885
ARNSU	ARNSU-FIXD	Fixed, standard user	\$/day	1.3000	4,223,611	\$	5,490,694
ARNSU	ARNSU-24UC	Volumetric, uncontrolled, anytime	\$/kWh	0.0164	58,433,007	\$	958,301

General

Price category and code		Description	Units	Pi,2024	Qi,2024		2024 Qi,2024
ABSU	ABSU-FIXD	Fixed	\$/day/fitting	0.0550	26,948,083	\$	1,482,145
ABSU	ABSU-24UC	Volumetric, unmetered	\$/kWh	0.0226	17,609,243	\$	397,969
ABSH	ABSH-FIXD	Fixed	\$/day	1.5200	4,184,641	\$	6,360,654
ABSH	ABSH-OFPK	Volumetric, off peak	\$/kWh	-	147,270,833	\$	-
ABSH	ABSH-PEAK	Volumetric, peak (summer)	\$/kWh	-	28,211,286	\$	-
ABSH	ABSH-PEAK	Volumetric, peak (winter)	\$/kWh	0.0935	30,299,389	\$	2,832,993
ABSN	ABSN-FIXD	Fixed	\$/day	1.5200	9,644,223	\$	14,659,219
ABSN	ABSN-24UC	Volumetric, anytime	\$/kWh	0.0164	474,258,819	\$	7,777,845

Low voltage									
Price category and code		Description	u Units		Qi,2024	Pi,	Pi,2024 Qi,2024		
ALVN	ALVN-FIXD	Fixed	\$/day	2.1000	894,289	\$	1,878,006		
ALVN	ALVN-24UC	Volumetric	\$/kWh	0.0424	244,824,938	\$	10,380,577		
ALVN	ALVN-CAPY	Capacity	\$/kVA/day	0.0469	135,934,172	\$	6,375,313		
ALVN	ALVN-PWRF	Power Factor	\$/kVAr/day	0.2917	201,509	\$	58,780		
ALVT	ALVT-FIXD	Fixed	\$/day	2.1000	517,139	\$	1,085,991		
ALVT	ALVT-24UC	Volumetric	\$/kWh	0.0129	519,650,512	\$	6,703,492		
ALVT	ALVT-CAPY	Capacity	\$/kVA/day	0.0469	140,904,519	\$	6,608,422		
ALVT	ALVT-DAMD	Demand	\$/kVA/day	0.1364	41,706,261	\$	5,688,734		
ALVT	ALVT-PWRF	Power Factor	\$/kVAr/day	0.2917	2,229,404	\$	650,317		

Iransformer										
Price category and code		Description Units		Pi,2024	Qi,2024	Pi, 2	2024 Qi,2024			
ATXN	ATXN-FIXD	Fixed	\$/day	2.1000	63,293	\$	132,915			
ATXN	ATXN-24UC	Volumetric	\$/kWh	0.0424	22,559,767	\$	956,534			
ATXN	ATXN-CAPY	Capacity	\$/kVA/day	0.0450	14,690,198	\$	661,059			
ATXN	ATXN-PWRF	Power Factor	\$/kVAr/day	0.2917	8,898	\$	2,596			
ATXT	ATXT-FIXD	Fixed	\$/day	2.1000	363,747	\$	763,868			
ATXT	ATXT-24UC	Volumetric	\$/kWh	0.0129	1,134,276,118	\$	14,632,162			
ATXT	ATXT-CAPY	Capacity	\$/kVA/day	0.0450	270,558,087	\$	12,175,114			
ATXT	ATXT-DAMD	Demand	\$/kVA/day	0.1309	85,915,407	\$	11,246,327			
ATXT	ATXT-PWRF	Power Factor	\$/kVAr/day	0.2917	2,303,892	\$	672,045			

High voltage

Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,	2024 Qi,2024
AHVN	AHVN-FIXD	Fixed	\$/day	2.1000	2,606	\$	5,473
AHVN	AHVN-24UC	Volumetric	\$/kWh	0.0424	573,475	\$	24,315
AHVN	AHVN-CAPY	Capacity	\$/kVA/day	0.0432	534,906	\$	23,108
AHVN	AHVN-PWRF	Power Factor	\$/kVAr/day	0.2917	2,378	\$	694
AHVT	AHVT-FIXD	Fixed	\$/day	2.1000	55,102	\$	115,714
AHVT	AHVT-24UC	Volumetric	\$/kWh	0.0129	429,523,891	\$	5,540,858
AHVT	AHVT-CAPY	Capacity	\$/kVA/day	0.0432	71,022,947	\$	3,068,191
AHVT	AHVT-DAMD	Demand	\$/kVA/day	0.1257	30,852,759	\$	3,878,192
AHVT	AHVT-DEXA	Excess demand	\$/kVA/day	0.8000	46,798	\$	37,438
AHVT	AHVT-PWRF	Power Factor	\$/kVAr/day	0.2917	876,404	\$	255,647

Zone substation

Price category and code		Description	Units	Pi,2024	Qi,2024	Pi,2	2024 Qi,2024
AZST	AZST-FIXD	Fixed	\$/day	2.1000	1,095	\$	2,300
AZST	AZST-24UC	Volumetric	\$/kWh	0.0059	146,211,233	\$	862,646
AZST	AZST-CAPY	Capacity	\$/kVA/day	0.1050	14,494,150	\$	1,521,886
AZST	AZST-DAMD	Demand	\$/kVA/day	0.0261	8,493,550	\$	221,682
AZST	AZST-DEXA	Excess demand	\$/kVA/day	0.8000	-	\$	-
AZST	AZST-PWRF	Power Factor	\$/kVAr/day	0.2917	-	\$	-



Subtransmission									
Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,20	24 Qi,2024		
ASTT	ASTT-FIXD	Fixed	\$/day	2.1000	-	\$	-		
ASTT	ASTT-24UC	Volumetric	\$/kWh	0.0059	-	\$	-		
ASTT	ASTT-CAPY	Capacity	\$/kVA/day	0.0840	-	\$	-		
ASTT	ASTT-DAMD	Demand	\$/kVA/day	0.0209	-	\$	-		
ASTT	ASTT-DEXA	Excess demand	\$/kVA/day	0.8000	-	\$	-		
ASTT	ASTT-PWRF	Power Factor	\$/kVAr/day	0.2917	-	\$	-		

Non-standard line charges between 1 April 2023 to 31 March 2024

Non-standard ICPs have a quantity of one for price compliance. This is because they are charged an annual line charge, billed monthly, that covers their capital contribution and upstream distribution costs.

Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,2	2024 Qi,2024
NS	WN24-1	Fixed	\$/year	\$ 261,432	1	\$	261,432
NS	WN24-2	Fixed	\$/year	\$ 518,597	1	\$	518,597
NS	WN24-3	Fixed	\$/year	\$ -	1	\$	-
NS	AN24-1	Fixed	\$/year	\$ -	1	\$	-
NS	AN24-2	Fixed	\$/year	\$ 996,888	1	\$	996,888
NS	AN24-3	Fixed	\$/year	\$ 1,049,414	1	\$	1,049,414
NS	AN24-4	Fixed	\$/year	\$ -	1	\$	-
NS	AN24-5	Fixed	\$/year	\$ 676,174	1	\$	676,174
NS	AN24-6	Fixed	\$/year	\$ 566,748	1	\$	566,748
NS	AN24-7	Fixed	\$/year	\$ 794,112	1	\$	794,112
NS	AN24-8	Fixed	\$/year	\$ -	1	\$	-
NS	AN24-9	Fixed	\$/year	\$ 807,884	1	\$	807,884
NS	AN24-10	Fixed	\$/year	\$ -	1	\$	-
NS	AN24-11	Fixed	\$/year	\$ 547,478	1	\$	547,478
NS	AN24-12	Fixed	\$/year	\$ 746,850	1	\$	746,850
NS	AN24-13	Fixed	\$/year	\$ 333,732	1	\$	333,732
NS	AN24-14	Fixed	\$/year	\$ 68,869	1	\$	68,869
NS	AN24-15	Fixed	\$/year	\$ 282,876	1	\$	282,876
NS	AN24-16	Fixed	\$/year	\$ 57,534	1	\$	57,534
NS	AN24-17	Fixed	\$/year	\$ -	1	\$	-
NS	AN24-18	Fixed	\$/year	\$ -	1	\$	-
NS	AN24-19	Fixed	\$/year	\$ -	1	\$	-
NS	AN24-20	Fixed	\$/year	\$ 499,668	1	\$	499,668
NS	AN24-21	Fixed	\$/year	\$ 290,129	1	\$	290,129
NS	AN24-22	Fixed	\$/year	\$ 123,748	1	\$	123,748
NS	AN24-23	Fixed	\$/year	\$ 167,425	1	\$	167,425

Grid Exit Point (GXP) transmission charges between 1 April 2023 and 31 March 2024

Transmission charges are priced at the GXP with percentage share as the unit, rather than priced at the ICP with a nominal unit. The quantities are 1,200,000 representing 12 months times 100,000.

Price categ	ory and code	Description	Units	Pi,2024	Qi,2024	Pi,	2024 Qi,2024
GXP	ALB	Fixed	\$/month per 1/1000%	\$ 16.6024	1,200,000	\$	19,922,889
GXP	HEN	Fixed	\$/month per 1/1000%	\$ 8.1971	1,200,000	\$	9,836,569
GXP	HEP	Fixed	\$/month per 1/1000%	\$ 11.2512	1,200,000	\$	13,501,473
GXP	LFD	Fixed	\$/month per 1/1000%	\$ 0.7453	1,200,000	\$	894,333
GXP	SVL	Fixed	\$/month per 1/1000%	\$ 7.8875	1,200,000	\$	9,464,958
GXP	WEL	Fixed	\$/month per 1/1000%	\$ 2.9292	1,200,000	\$	3,515,048
GXP	WRD	Fixed	\$/month per 1/1000%	\$ 6.6977	1,200,000	\$	8,037,230
GXP	НОВ	Fixed	\$/month per 1/1000%	\$ 6.3706	1,200,000	\$	7,644,668
GXP	MNG	Fixed	\$/month per 1/1000%	\$ 10.7517	1,200,000	\$	12,902,028
GXP	OTA	Fixed	\$/month per 1/1000%	\$ 5.2323	1,200,000	\$	6,278,799
GXP	PAK	Fixed	\$/month per 1/1000%	\$ 11.5513	1,200,000	\$	13,861,508
GXP	PEN	Fixed	\$/month per 1/1000%	\$ 38.0383	1,200,000	\$	45,645,977
GXP	ROS	Fixed	\$/month per 1/1000%	\$ 12.1752	1,200,000	\$	14,610,189
GXP	ТАК	Fixed	\$/month per 1/1000%	\$ 8.8356	1,200,000	\$	10,602,759
GXP	WIR	Fixed	\$/month per 1/1000%	\$ 9.5088	1,200,000	\$	11,410,614

Schedule 6: Form of Director's Certificate for Annual Price-Setting Compliance Statement

Clause 11.2(c)

I, Jonathan Mason, being director of Vector Limited certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached annual price-setting compliance statement of Vector Limited, and related information, prepared for the purposes of the Electricity Distribution Services Default Price-Quality Path Determination 2020 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.

Jonath P. Mar

Director

20 February 2023

Date

Note: Section 103(2) of the Commerce Act 1986 provides that no person shall attempt to deceive or knowingly mislead the Commission in relation to any matter before it. It is an offence to contravene section 103(2) and any person who does so is liable on summary conviction to a fine not exceeding \$100,000 in the case of an individual or \$300,000 in the case of a body corporate.