HORIZON ENERGY DISTRIBUTION LIMITED

Default Price-Quality Path

Annual Compliance Statement

1 April 2022 – 31 March 2023 Assessment Period

1 August 2023

Contents

1. Introduction

Horizon Energy Distribution Limited is subject to price-quality regulation under Part 4 of the Commerce Act 1986. The Commerce Commission has set a Default Price-Quality Path (DPP) which applies to Horizon Energy Distribution Limited from 1 April 2020.

This annual compliance statement is published in accordance with clause 11.4 of the 2020 DPP Determination, and applies to the third assessment period, commencing 1 April 2022 and ending 31 March 2023.

2. Date prepared

This statement was prepared on 1 August 2023.

3. Wash-up amount

3.1 Statement of compliance

As demonstrated in Table 1 in Section 3.2, and consistent with clause 8.6 of the 2020 DPP Determination, Horizon Energy Distribution Limited has complied with the wash-up amount calculation for the third assessment period.

3.2 Wash-up amount calculation

Table 1

Wash-up amount RY23		
Term	Description	Value ($000)
Actual allowable revenue (AAR)	*Sum of actual net allowable revenue, actual pass-through and recoverable costs, wash-up amount and revenue wash-up draw down amount*	34,956
Actual revenue (AR)	*Sum of actual revenue from prices plus other regulated income*	32,095
Revenue foregone (RV)	*Actual net allowable revenue x (revenue reduction percentage - 20%) when revenue reduction percentage is greater than 20%, otherwise nil*	-
Wash-up amount	*AAR - AR - RV*	**2,861**

Further information supporting actual allowable revenue is included in Section 3.2.1.

Further information supporting actual revenue is included in Section 3.2.2.

Further information supporting revenue foregone is included in Section 3.2.3.

3.2.1 Actual allowable revenue

Table 2 below shows the actual allowable revenue for the assessment period consistent with Schedule 1.6 of the 2020 DPP Determination.

Table 2

Actual allowable revenue RY23		
Term	Description	Value ($000)
Actual net allowable revenue (ANAR)	*Actual net allowable revenue previous x (1 + CPI calculated) for third assessment period*	26,966
Actual pass-through costs	*Sum of all pass-through costs that were incurred or approved by the Commission in the assessment period*	446
Actual recoverable costs	*Sum of all recoverable costs that were incurred or approved by the Commission in the assessment period*	8,265
Wash-up closing account balance	*The wash-up account balance for the third assessment period of the DPP regulatory period is per Schedule 1.7 (1)(b)*	(721)
Total actual allowable revenue (AAR)	*Actual net allowable revenue + actual pass-through costs and actual recoverable costs + closing wash up account balance*	**34,956**

Further information supporting actual pass-through costs, actual recoverable costs and the pass-through balance is included in Appendix A.

3.2.2 Actual revenue

Table 3 below shows actual revenue for the assessment period consistent with clause 4.2 of the 2020 DPP Determination.

Table 3

Actual revenue RY23		
Term	Description	Value ($000)
Actual revenue from prices	*Actual prices between 1 April 2022 and 31 March 2023 multiplied by actual quantities for the assessment period*	32,501
Other regulated income	*Other income associated with supply of electricity distribution services*	(406)
Total actual revenue (AR)	*Sum of actual revenue from prices plus other regulated income*	**32,095**

Further information supporting actual revenue from prices is included in Appendix B.

3.2.3 Revenue foregone

Table 4 below shows the revenue foregone consistent with clause 4.2 of the 2020 DPP Determination.

Table 4

Revenue foregone RY23		
Term	Description	Value ($000)
Actual net allowable revenue (ANAR)	*Actual net allowable revenue previous x (1 + CPI calculated)*	26,966
Revenue reduction percentage (RRP)	*1 - (actual revenue from prices / forecast revenue from prices)*	0.76%
Revenue foregone (RV)	*Actual net allowable revenue x (RRP- 20%) when RRP is greater than 20%, otherwise nil*	-

4. Quality standards

4.1 Statement of compliance with planned interruptions quality standards

Horizon Energy Distribution Limited is subject to a planned accumulated SAIDI limit and a planned accumulated SAIFI limit which are assessed for the DPP regulatory period as stated in clause 9.2 of the 2020 DPP Determination.

Table 5 and Table 6 below show the planned accumulated SAIDI and SAIFI limits for Horizon Energy Distribution Limited for the DPP regulatory period and the planned SAIDI and SAIFI assessed values up to the third assessment period.

Table 5

Planned interruptions quality standard - SAIDI	
Sum of planned SAIDI assessed values ≤ Planned accumulated SAIDI limit	
Planned accumulated SAIDI limit	858.6300
Planned SAIDI assessed value (to date) third assessment	169.5930
Compliance result	**Compliant**

Table 6

Planned interruptions quality standard - SAIFI	
Sum of planned SAIFI assessed values ≤ Planned accumulated SAIFI limit	
Planned accumulated SAIFI limit	5.4415
Planned SAIFI assessed value (to date) third assessment	1.0951
Compliance result	**Compliant**

4.2 Statement of compliance with unplanned interruptions quality standards

As demonstrated in Table 7 and Table 8 below, and consistent with clause 9.7 of the 2020 DPP Determination, Horizon Energy Distribution Limited has complied with the unplanned interruptions quality standard.

Table 7

Unplanned interruptions quality standard RY23 - SAIDI		
Unplanned SAIDI assessed value ≤ Unplanned SAIDI limit		
Unplanned SAIDI limit		194.5300
Unplanned SAIDI assessed value	*Sum of normalised SAIDI values for Class C interruptions commencing within the assessment period*	159.8374
Compliance result		**Compliant**

Table 8

Unplanned interruptions quality standard RY23 - SAIFI		
Unplanned SAIFI assessed value ≤ Unplanned SAIFI limit		
Unplanned SAIFI limit		2.3904
Unplanned SAIFI assessed value	*Sum of normalised SAIFI values for Class C interruptions commencing within the assessment period*	2.0065
Compliance result		**Compliant**

Information about policies, procedures and calculations for measuring planned and unplanned interruptions during the assessment period is in Appendix C.

4.2.1 Major events

Table 9 and Table 10 below show the SAIDI and SAIFI values attributed to major events which occurred during the assessment period.

Further information about major events is included in Appendix D.

Table 9

Unplanned SAIDI major events RY23			
Start	End	Pre-normalised unplanned SAIDI	Normalised unplanned SAIDI
12/04/2022 04:30 AM	14/04/2022 03:30 AM	36.1873	1.2106
30/09/2022 04:30 AM	1/10/2022 23:00:00 PM	15.5686	0.9181
12/02/2023 18:30:00 PM	14/02/2023 17:30:00 PM	27.5686	1.8354

Table 10

Unplanned SAIFI major events RY23			
Start	End	Pre-normalised unplanned SAIFI	Normalised unplanned SAIFI
22/11/2022 06:30 AM	23/11/2022 17:30:00 PM	0.1240	0.0073

4.3 Statement of compliance with extreme event standard

As demonstrated in Table 11 below, and consistent with clause 9.9 of the 2020 DPP Determination, Horizon Energy Distribution Limited has complied with the extreme event standard.

Table 11

Extreme event standard RY23	
Unplanned SAIDI value ≤ 120 minutes, and customer interruption minutes ≤ six million during any 24-hour period, excluding unplanned interruptions from major external factors	
Number of extreme events	Compliance result
-	Compliant

4.4 Quality Incentive Adjustment

Table 12 below shows Horizon Energy Distribution Limited's quality incentive adjustment for the assessment period.

Table 12

Quality Incentive Adjustment RY23		
Term	Description	Value ($000)
SAIDI planned adjustment	$(SAIDI_{planned, target} - SAIDI_{planned, assessed}) \times 0.5 \times IR$	9
SAIDI unplanned adjustment	$(SAIDI_{unplanned, target} - SAIDI_{unplanned, assessed}) \times IR$	(84)
Total adjustment	*SAIDI planned adjustment + SAIDI unplanned adjustment*	(74)
Revenue at risk	*0.02 * ANAR*	539
Total penalty/reward		(74)
67th percentile estimate of post-tax WACC		4.23%
Quality incentive adjustment		**(81)**

Table 13 below shows Horizon Energy Distribution Limited's quality incentive adjustment inputs consistent with Schedule 4 of the 2020 DPP Determination.

Table 13

Quality Incentive Adjustment Inputs RY23					
Term	Units	Value	Term	Units	Value
SAIDI planned interruption cap	minutes	171.73	SAIDI unplanned interruption cap	minutes	194.53
SAIDI planned interruption collar	minutes	0.00	SAIDI unplanned interruption collar	minutes	0.00
SAIDI planned interruption target	minutes	57.24	SAIDI unplanned interruption target	minutes	144.35
Planned SAIDI assessed value	minutes	53.83	Unplanned SAIDI assessed value	minutes	159.84
Incentive rate		5,397			
Actual net allowable revenue (ANAR)	$000	26,966			
SAIDI planned interruption target	minutes	57.24	SAIDI unplanned interruption target	minutes	144.35
Minimum of the planned SAIDI cap and assessed value	minutes	53.83	Minimum of the unplanned SAIDI cap and assessed value	minutes	159.84
Planned SAIDI subject to incentive	minutes	3.41	Unplanned SAIDI subject to incentive	minutes	(15.49)
Adjustment (IR x 0.5)	$	2,699	Adjustment (IR)	$	5,397
SAIDI planned adjustment	$000	9.21	SAIDI unplanned adjustment	$000	(83.59)

5. Transactions

Horizon Energy Distribution Limited has not entered into any agreements with another EDB or Transpower for an amalgamation, merger, major transaction, or transfer in the assessment period.

6. Director's certification

A Director's certificate in the form set out in Schedule 7 of the 2020 DPP Determination is included as Appendix E.

7. Assurance report

An assurance report meeting the requirements of Schedule 8 of the 2020 DPP Determination is included in Appendix F.

Appendix A – Pass-through and recoverable costs

Pass-through costs

Table 14

Actual and forecast pass-through costs RY23				
Actual pass-through costs	Actual ($000)	Forecast ($000)	Forecast variance ($000)	Explanation for variances
Rates on system fixed assets	269	236	33	Increased Kawerau District Council rates charged
Commerce Act levies	75	41	34	Increased charges with greater Commission activity
Electricity Authority levies	87	112	(25)	Lower charges this year
Utilities Disputes levies	15	17	(2)	Minor variance
Total actual pass-through costs	**446**	**406**	**40**	

Recoverable costs

Table 15

Actual and forecast recoverable costs RY23				
Actual recoverable costs	Actual ($000)	Forecast ($000)	Forecast variance ($000)	Explanation for variances
IRIS incentive adjustment	249	249	(0)	
Transmission charges	3,640	3,656	(16)	New ICCP charge lower from Dec'21.
New investment contract charges	-	-	-	
System operator services charges	-	-	-	
Avoided transmission charges	738	738	0	
Distributed generation allowance	3,449	3,449	0	
Claw-back	-	-	-	
Catastrophic event allowance	-	-	-	
Extended reserves allowance	-	-	-	
Quality incentive adjustment	48	48	(0)	From RY21 results.
Capex wash-up adjustment	94	94	0	
Reconsideration event allowance	-	-	-	
Quality standard variation engineers fee	-	-	-	
Urgent project allowance	-	-	-	
Revenue wash-up draw down amount	-	-		
Fire and Emergency NZ levies	47	28	19	Allocation for RY23 costs.
Innovation project allowance	-	-	-	
Total actual recoverable costs	**8,265**	**8,263**	**3**	

Wash Up Inputs

Table 16

Actual net allowable revenue RY23		
Term	Description	Value ($000)
Actual net allowable revenue (ANAR*previous*)	*Amount specified as forecast net allowable revenue from the second assessment period*	25,179
CPI Calculated	*As per Schedule 1.6 Clause 8.6 (3)*	7.10%
Actual net allowable revenue (ANAR *new*)	*Actual net allowable revenue previous x (1 + CPI calculated)*	**26,966**

Table 17

DCPI2022/23			
Denominator		Numerator	
CPIJun2021	1082	CPIJun2022	1161
CPISep2021	1106	CPISep2022	1186
CPIDec2021	1122	CPIDec2022	1203
CPIMar2022	1142	CPIMar2023	1218
Total	4452	Total	4768
DCPI2021/22	7.098%		

Source: Statistics NZ, SE9A Series

Appendix B – Prices and quantities

Table 18 shows the actual prices and quantities for actual revenue from prices for the third assessment period.

Table 18

Actual revenue from prices RY23				
Price Category	Unit	Unit price	Actual quantity	Actual revenue ($000)
Low User Domestic - Urban	$/kWh	0.08963	41,685,929	3,736
Low User Domestic - Urban	$/ICP/day	0.30000	8,141	891
Low User Domestic - Urban - TOU	$/ICP/day	0.30000	21	2
LUDU - TOU - Off-Peak	$/kWh	0.07617	43,981	3
LUDU - TOU - Shoulder	$/kWh	0.07617	33,783	3
LUDU - TOU - Peak	$/kWh	0.10702	45,326	5
Low User Domestic - Rural	$/kWh	0.08963	21,927,284	1,965
Low User Domestic - Rural	$/ICP/day	0.30000	3,896	427
Low User Domestic - Rural - TOU	$/ICP/day	0.30000	6	1
LUDR - TOU - Off-Peak	$/kWh	0.07617	9,988	1
LUDR - TOU - Shoulder	$/kWh	0.07617	9,575	1
LUDR - TOU - Peak	$/kWh	0.10702	12,758	1
Standard User Domestic - Urban	$/kWh	0.01638	40,464,575	663
Standard User Domestic - Urban	$/ICP/day	1.90584	5,152	3,584
Std User Domestic User - Urban -TOU	$/ICP/day	1.43927	28	15
NDU - TOU - Off-Peak	$/kWh	0.02523	49,072	1
NDU - TOU - Shoulder	$/kWh	0.02523	52,079	1
NDU - TOU - Peak	$/kWh	0.05373	72,313	4
Standard User Domestic - Rural	$/kWh	0.01638	37,256,206	610
Standard User Domestic - Rural	$/ICP/day	1.90584	4,586	3,190
Std User Domestic User - Rural -TOU	$/ICP/day	1.43927	19	10
NDR - TOU - Off-Peak	$/kWh	0.02523	33,515	1
NDR - TOU - Shoulder	$/kWh	0.02523	50,217	1
NDR - TOU - Peak	$/kWh	0.05373	34,327	2
Under Verandah Lights	$/day	0.86506	15	5
Electric Fences	$/day	0.82458	5	2
Lanark	$/month	-8.64	1	(0)
Street Lights	$/light/month	5.61187	5,120	345
Telecom - PCM 24 Hour	$/PCM/day	2.08954	56	43
Telecom - PCM Night	$/PCM/month	27.31570	3	1
Capacity Group 2 - Urban	$/kWh	0.03711	13,050,713	484
Capacity Group 2 - Urban	$/ICP/day	2.11862	797	616
Capacity Group 2 - Rural	$/kWh	0.06295	22,888,280	1,441
Capacity Group 2 - Rural	$/ICP/day	3.30909	1,538	1,858
Capacity Group 3 - Urban	$/kWh	0.04318	10,266,568	443
Capacity Group 3 - Urban	$/ICP/day	5.56686	267	542
Capacity Group 3 - Rural	$/kWh	0.04854	16,261,034	789
Capacity Group 3 - Rural	$/ICP/day	8.92905	320	1,042
Capacity Group 4 - Urban	$/kWh	0.05254	2,026,266	106
Capacity Group 4 - Urban	$/ICP/day	12.10526	34	150
Capacity Group 4 - Rural	$/kWh	0.05966	1,230,481	73
Capacity Group 4 - Rural	$/ICP/day	13.82522	31	156
Capacity Group 5 - Urban	$/kWh	0.04514	2,266,991	102
Capacity Group 5 - Urban	$/kVA/day	0.09741	3,857	137
Capacity Group 5 - Rural	$/kWh	0.08856	971,180	86
Capacity Group 5 - Rural	$/kVA/day	0.10904	3,788	151
Network Maximum Demand - Urban - Variable	$/kWh	0.02487	26,682,663	664
Network Maximum Demand - Urban - Capacity	$/kVA/day	0.06449	18,955	446
Network Maximum Demand - Urban - Demand	$/kW/day	0.17641	12,357	796
Network Maximum Demand - Rural - Variable	$/kWh	0.02487	25,381,410	631
Network Maximum Demand - Rural - Capacity	$/kVA/day	0.06449	32,630	768
Network Maximum Demand - Rural - Demand	$/kW/day	0.17641	21,122	1,360
Standard Customers sub-total				**28,356**

Major Industrial Non-Standard Customers				
Price Category	Unit	Unit price	Actual quantity	Actual revenue ($000)
Fonterra (BOPE)	$/month	38,234	1	459
Fonterra Lipid & Distillery	$/month	9,782	1	117
Asaleo Care (TP)	$/month	75,916	1	911
Whakatane Mill (TP)	$/month	125,029	1	1,500
Kaingaroa Timberlands (TP)	$/month	22,103	1	265
CHH - Kawerau (TP)	$/month	37,649	1	452
Norske Skog Oxidation Ponds (TP)	$/month	13,648	1	164
Sequal Investments	$/month	16,557	1	199
Kawerau Dairy Ltd	$/month	4,684	1	56
Fonterra Assets	$/month	1,250	1	15
GDL Breaker Contract	$/month	585	1	7
BOPE TG1 & TG2	$/month	-	1	-
Total actual revenue from prices				**32,501**

Table 19 shows the forecast revenue from prices for the third assessment period from the price setting compliance statement.

Table 19

Forecast revenue from prices RY23	
Total forecast revenue from prices	**32,750**

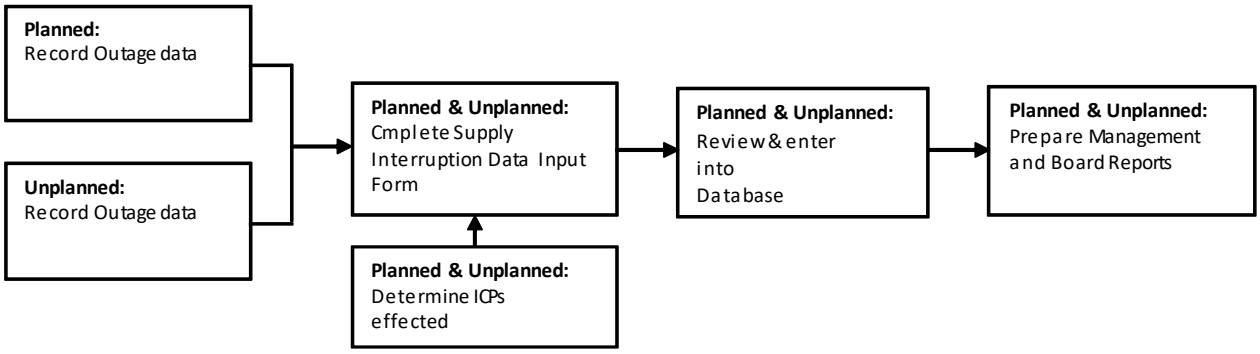
Appendix C – Policies and procedures for measuring planned and unplanned interruptions

The intention was for the manual recording of switching operations for interruptions to disappear, however we have continued with the existing method of manually recording operations for FY22. Work is underway to complete all interruption management within the SCADA system.

Current Process

Capture of Statistical Information

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



Planned Outages – Initial Recording of Outage Data

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

This schedule records:

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

Unplanned Outages – Initial Recording of Outage Data

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

Planned and Unplanned Outages – Supply Interruption Data Input Form

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

Planned and Unplanned Outages – Customer Numbers

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

Planned and Unplanned Outages – Collation of Data

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

Planned and Unplanned Outages – Management and Board Reports

From the database reports are generated containing statistics on SAIDI and SAIFI. SAIDI and SAIFI calculations are performed based on Schedule 4 of the Electricity Distribution Services Default Price-Quality Path Determination 2020. Reporting based on these calculations is provided to Management and the Board of Directors to drive performance and network improvements.

Disclaimer

The information presented in this Default Price-Quality Path Compliance Statement has been prepared solely for the purpose of complying with the requirements of the Electricity Distribution Services Default Price-Quality Path Determination 2020. This statement has not been prepared for any other purpose and Horizon Energy Distribution Limited expressly disclaims any liability to any other party who may rely on this statement for any other purpose.

Appendix D – SAIDI and SAIFI major events

Tables 20,21 and 22 below show the normalisation of the SAIDI and SAIFI major events that took place during the assessment period, consistent with Schedule 3.2 of the 2020 DPP Determination.

Table 20 part 1

Normalisation of unplanned SAIDI major events RY23						
SAIDI unplanned boundary value						**14.6900**
1/48th of the SAIDI unplanned boundary value	12/04/2022 to 14/04/2022			30/09/2022 to 01/10/2022		
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.3060	04:30 AM	0.0000	0.0000	04:30 AM	0.0000	0.0000
0.3060	05:00 AM	0.0000	0.0000	05:00 AM	0.0000	0.0000
0.3060	05:30 AM	0.0000	0.0000	05:30 AM	0.0000	0.0000
0.3060	06:00 AM	0.0000	0.0000	06:00 AM	0.0000	0.0000
0.3060	06:30 AM	0.0000	0.0000	06:30 AM	0.0000	0.0000
0.3060	07:00 AM	0.0000	0.0000	07:00 AM	0.0000	0.0000
0.3060	07:30 AM	0.0000	0.0000	07:30 AM	0.0000	0.0000
0.3060	08:00 AM	0.0000	0.0000	08:00 AM	0.0000	0.0000
0.3060	08:30 AM	0.0000	0.0000	08:30 AM	0.0000	0.0000
0.3060	09:00 AM	0.0000	0.0000	09:00 AM	0.0000	0.0000
0.3060	09:30 AM	0.0000	0.0000	09:30 AM	0.0000	0.0000
0.3060	10:00 AM	0.0000	0.0000	10:00 AM	0.0000	0.0000
0.3060	10:30 AM	0.0000	0.0000	10:30 AM	0.0000	0.0000
0.3060	11:00 AM	0.0000	0.0000	11:00 AM	0.0000	0.0000
0.3060	11:30 AM	0.0000	0.0000	11:30 AM	0.0000	0.0000
0.3060	12:00 PM	0.0000	0.0000	12:00 PM	0.0000	0.0000
0.3060	12:30 PM	0.0000	0.0000	12:30 PM	0.0000	0.0000
0.3060	01:00 PM	0.0000	0.0000	01:00 PM	0.0000	0.0000
0.3060	01:30 PM	0.0000	0.0000	01:30 PM	0.0000	0.0000
0.3060	02:00 PM	0.0000	0.0000	02:00 PM	0.0000	0.0000
0.3060	02:30 PM	0.0000	0.0000	02:30 PM	0.0000	0.0000
0.3060	03:00 PM	0.0000	0.0000	03:00 PM	0.0000	0.0000
0.3060	03:30 PM	0.0000	0.0000	03:30 PM	0.0000	0.0000
0.3060	04:00 PM	0.0000	0.0000	04:00 PM	0.0000	0.0000
0.3060	04:30 PM	0.0000	0.0000	04:30 PM	0.0000	0.0000
0.3060	05:00 PM	0.0000	0.0000	05:00 PM	0.0000	0.0000
0.3060	05:30 PM	0.0000	0.0000	05:30 PM	0.0000	0.0000
0.3060	06:00 PM	0.0000	0.0000	06:00 PM	0.0000	0.0000
0.3060	06:30 PM	0.0000	0.0000	06:30 PM	0.0000	0.0000
0.3060	07:00 PM	0.0000	0.0000	07:00 PM	0.0000	0.0000
0.3060	07:30 PM	0.0000	0.0000	07:30 PM	0.0000	0.0000
0.3060	08:00 PM	0.0000	0.0000	08:00 PM	0.0000	0.0000
0.3060	08:30 PM	0.0000	0.0000	08:30 PM	0.0000	0.0000
0.3060	09:00 PM	0.0000	0.0000	09:00 PM	0.0000	0.0000
0.3060	09:30 PM	0.0000	0.0000	09:30 PM	0.0000	0.0000
0.3060	10:00 PM	0.0000	0.0000	10:00 PM	0.0000	0.0000
0.3060	10:30 PM	0.0000	0.0000	10:30 PM	0.0000	0.0000
0.3060	11:00 PM	0.0000	0.0000	11:00 PM	0.0000	0.0000
0.3060	11:30 PM	0.0000	0.0000	11:30 PM	6.3537	0.3060
0.3060	12:00 AM	0.0000	0.0000	12:00 AM	0.0000	0.0000
0.3060	12:30 AM	0.0000	0.0000	12:30 AM	0.0000	0.0000
0.3060	01:00 AM	0.0000	0.0000	01:00 AM	0.0000	0.0000
0.3060	01:30 AM	0.0000	0.0000	01:30 AM	0.0000	0.0000
0.3060	02:00 AM	0.0000	0.0000	02:00 AM	0.0000	0.0000
0.3060	02:30 AM	0.0000	0.0000	02:30 AM	0.0000	0.0000
0.3060	03:00 AM	0.0000	0.0000	03:00 AM	0.0000	0.0000
0.3060	03:30 AM	0.0000	0.0000	03:30 AM	0.0000	0.0000
0.3060	04:00 AM	27.1589	0.3060	04:00 AM	8.7870	0.3060

Table 20 part 2

Normalisation of unplanned SAIDI major events RY23						
SAIDI unplanned boundary value						**14.6900**
1/48th of the SAIDI unplanned boundary value	12/04/2022 to 14/04/2022			30/09/2022 to 01/10/2022		
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.3060	04:30 AM	0.0000	0.0000	04:30 AM	0.0000	0.0000
0.3060	05:00 AM	0.0000	0.0000	05:00 AM	0.0000	0.0000
0.3060	05:30 AM	0.0000	0.0000	05:30 AM	0.0000	0.0000
0.3060	06:00 AM	0.0000	0.0000	06:00 AM	0.0000	0.0000
0.3060	06:30 AM	0.0000	0.0000	06:30 AM	0.0000	0.0000
0.3060	07:00 AM	0.0000	0.0000	07:00 AM	0.0000	0.0000
0.3060	07:30 AM	0.0000	0.0000	07:30 AM	0.0000	0.0000
0.3060	08:00 AM	0.0000	0.0000	08:00 AM	0.0000	0.0000
0.3060	08:30 AM	0.0000	0.0000	08:30 AM	0.0000	0.0000
0.3060	09:00 AM	0.0000	0.0000	09:00 AM	0.0000	0.0000
0.3060	09:30 AM	0.0000	0.0000	09:30 AM	0.0000	0.0000
0.3060	10:00 AM	0.0000	0.0000	10:00 AM	0.0000	0.0000
0.3060	10:30 AM	0.0150	0.0150	10:30 AM	0.0000	0.0000
0.3060	11:00 AM	0.0000	0.0000	11:00 AM	0.0000	0.0000
0.3060	11:30 AM	0.0000	0.0000	11:30 AM	0.0000	0.0000
0.3060	12:00 PM	0.0720	0.0720	12:00 PM	0.4280	0.3060
0.3060	12:30 PM	0.1408	0.1408	12:30 PM	0.0000	0.0000
0.3060	01:00 PM	8.4299	0.3060	01:00 PM	0.0000	0.0000
0.3060	01:30 PM	0.0000	0.0000	01:30 PM	0.0000	0.0000
0.3060	02:00 PM	0.0000	0.0000	02:00 PM	0.0000	0.0000
0.3060	02:30 PM	0.0000	0.0000	02:30 PM	0.0000	0.0000
0.3060	03:00 PM	0.0000	0.0000	03:00 PM	0.0000	0.0000
0.3060	03:30 PM	0.2821	0.2821	03:30 PM	0.0000	0.0000
0.3060	04:00 PM	0.0582	0.0582	04:00 PM	0.0000	0.0000
0.3060	04:30 PM	0.0304	0.0304	04:30 PM	0.0000	0.0000
0.3060	05:00 PM	0.0000	0.0000	05:00 PM	0.0000	0.0000
0.3060	05:30 PM	0.0000	0.0000	05:30 PM	0.0000	0.0000
0.3060	06:00 PM	0.0000	0.0000	06:00 PM	0.0000	0.0000
0.3060	06:30 PM	0.0000	0.0000	06:30 PM	0.0000	0.0000
0.3060	07:00 PM	0.0000	0.0000	07:00 PM	0.0000	0.0000
0.3060	07:30 PM	0.0000	0.0000	07:30 PM	0.0000	0.0000
0.3060	08:00 PM	0.0000	0.0000	08:00 PM	0.0000	0.0000
0.3060	08:30 PM	0.0000	0.0000	08:30 PM	0.0000	0.0000
0.3060	09:00 PM	0.0000	0.0000	09:00 PM	0.0000	0.0000
0.3060	09:30 PM	0.0000	0.0000	09:30 PM	0.0000	0.0000
0.3060	10:00 PM	0.0000	0.0000	10:00 PM	0.0000	0.0000
0.3060	10:30 PM	0.0000	0.0000	10:30 PM	0.0000	0.0000
0.3060	11:00 PM	0.0000	0.0000	11:00 PM	0.0000	0.0000
0.3060	11:30 PM	0.0000	0.0000			
0.3060	12:00 AM	0.0000	0.0000			
0.3060	12:30 AM	0.0000	0.0000			
0.3060	01:00 AM	0.0000	0.0000			
0.3060	01:30 AM	0.0000	0.0000			
0.3060	02:00 AM	0.0000	0.0000			
0.3060	02:30 AM	0.0000	0.0000			
0.3060	03:00 AM	0.0000	0.0000			
0.3060	03:30 AM	0.0000	0.0000			
Total		**36.1873**	**1.2106**	**Total**	**15.5686**	**0.9181**

Table 21 column 1 and column 2

Normalisation of unplanned SAIDI major events RY23						
SAIFI unplanned boundary value						**14.6900**
1/48th of the SAIFI unplanned boundary value	12/02/2023 to 14/02/2023 Part 1			12/02/2023 to 14/02/2023 Part 2		
	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption
0.3060	06:30 PM	0.0000	0.0000	06:30 PM	0.0000	0.0000
0.3060	07:00 PM	0.0000	0.0000	07:00 PM	0.0000	0.0000
0.3060	07:30 PM	0.0000	0.0000	07:30 PM	0.0000	0.0000
0.3060	08:00 PM	0.0000	0.0000	08:00 PM	0.2930	0.2930
0.3060	08:30 PM	0.0000	0.0000	08:30 PM	0.0000	0.0000
0.3060	09:00 PM	0.0000	0.0000	09:00 PM	0.0000	0.0000
0.3060	09:30 PM	0.0000	0.0000	09:30 PM	0.0000	0.0000
0.3060	10:00 PM	0.0000	0.0000	10:00 PM	0.0000	0.0000
0.3060	10:30 PM	0.0000	0.0000	10:30 PM	0.0000	0.0000
0.3060	11:00 PM	0.0000	0.0000	11:00 PM	0.0000	0.0000
0.3060	11:30 PM	0.0000	0.0000	11:30 PM	0.0000	0.0000
0.3060	12:00 AM	12.0328	0.3060	12:00 AM	0.0000	0.0000
0.3060	12:30 AM	0.0000	0.0000	12:30 AM	0.0000	0.0000
0.3060	01:00 AM	0.0000	0.0000	01:00 AM	0.0000	0.0000
0.3060	01:30 AM	0.0000	0.0000	01:30 AM	0.0000	0.0000
0.3060	02:00 AM	0.0000	0.0000	02:00 AM	0.0000	0.0000
0.3060	02:30 AM	0.0000	0.0000	02:30 AM	0.0000	0.0000
0.3060	03:00 AM	0.0000	0.0000	03:00 AM	1.0889	0.3060
0.3060	03:30 AM	0.0000	0.0000	03:30 AM	0.7397	0.3060
0.3060	04:00 AM	0.0000	0.0000	04:00 AM	0.0000	0.0000
0.3060	04:30 AM	0.0000	0.0000	04:30 AM	0.0000	0.0000
0.3060	05:00 AM	0.0000	0.0000	05:00 AM	0.0000	0.0000
0.3060	05:30 AM	0.0000	0.0000	05:30 AM	0.0000	0.0000
0.3060	06:00 AM	0.0000	0.0000	06:00 AM	0.0000	0.0000
0.3060	06:30 AM	0.0000	0.0000	06:30 AM	0.0000	0.0000
0.3060	07:00 AM	0.0000	0.0000	07:00 AM	0.0000	0.0000
0.3060	07:30 AM	0.0000	0.0000	07:30 AM	0.0000	0.0000
0.3060	08:00 AM	0.0000	0.0000	08:00 AM	0.0000	0.0000
0.3060	08:30 AM	0.0000	0.0000	08:30 AM	0.0000	0.0000
0.3060	09:00 AM	0.0000	0.0000	09:00 AM	0.0000	0.0000
0.3060	09:30 AM	0.0000	0.0000	09:30 AM	0.0713	0.0713
0.3060	10:00 AM	0.0000	0.0000	10:00 AM	0.0000	0.0000
0.3060	10:30 AM	0.0000	0.0000	10:30 AM	0.0000	0.0000
0.3060	11:00 AM	0.0000	0.0000	11:00 AM	0.0000	0.0000
0.3060	11:30 AM	0.0000	0.0000	11:30 AM	0.0000	0.0000
0.3060	12:00 PM	0.0000	0.0000	12:00 PM	0.0000	0.0000
0.3060	12:30 PM	0.0000	0.0000	12:30 PM	0.2333	0.2333
0.3060	01:00 PM	0.0000	0.0000	01:00 PM	0.0000	0.0000
0.3060	01:30 PM	0.0000	0.0000	01:30 PM	0.0000	0.0000
0.3060	02:00 PM	0.0000	0.0000	02:00 PM	0.0135	0.0135
0.3060	02:30 PM	0.0000	0.0000	02:30 PM	0.0000	0.0000
0.3060	03:00 PM	0.0000	0.0000	03:00 PM	0.0000	0.0000
0.3060	03:30 PM	0.0000	0.0000	03:30 PM	0.0000	0.0000
0.3060	04:00 PM	0.0000	0.0000	04:00 PM	0.0000	0.0000
0.3060	04:30 PM	0.0000	0.0000	04:30 PM	0.0000	0.0000
0.3060	05:00 PM	0.0000	0.0000	05:00 PM	0.0000	0.0000
0.3060	05:30 PM	0.0000	0.0000	05:30 PM	0.0000	0.0000
0.3060	06:00 PM	13.0960	0.3060			
				Total	**27.5686**	**1.8354**

SAIDI Major Events

Date range – 12/04/2022 to 14/04/2022

Cause – A severe weather event started on 12/04/22 affecting a total of 1779 ICP's across the network.

Location – Multiple Interruptions across Network

Response - The faults occurred from around 04:18 am on 13/04/22 to 22:22 pm on 14/04/22, there were several field operators and network controllers available to deal with the interruptions and assist with restoration efforts.

Mitigating Factors – Once the risk to worker safety due to the high winds had reduced, field workers assessed the locations and the extent of the damage. Faults were then systematically repaired and restored.

Future Improvements – There were no realistic network improvements identified that could minimise the effects of a similar event happening in the future. Horizon Energy Distribution Limited supports changes to the Tree Regulations to enable trees that are within fall distance of powerlines to be actively managed by the tree owners, as the current regulations only allow EDBs to deal with trees that are in the growth limit and notice zones. This change will start to reduce the incidents of damage caused by vegetation outside of our control.

Date range – 30/09/2022 to 01/10/2022

Cause – A severe weather event started affecting the network from around midday on the 30th of September at and continued through to approximately 22:00 when most of the interruptions were resolved.

Location – Multiple Interruptions across Network

Response - The faults occurred from around 4:10 am on 01/10/22 to 20:39 pm on 01/10/22, there were several field operators and network controllers available to deal with the interruptions and assist with restoration efforts.

- During the event we had all available field workers including asset inspectors, supervisors, designers working long hours to assess the extent of the damages and restore the network.

- The Field Teams and the Network Controllers fatigue levels were monitored, with the teams working rotational shifts to allow sufficient rest breaks for teams to recover from the extended hours worked.

Mitigating Factors – Once the risk to worker safety due to the high winds had reduced, field workers assessed the locations and the extent of the damage. Faults were then systematically repaired and restored.

Future Improvements – There were no realistic network improvements identified that could minimise the effects of a similar event happening in the future. Horizon Energy Distribution Limited supports changes to the Tree Regulations to enable trees that are within fall distance of powerlines to be actively managed by the tree owners, as the current regulations only allow EDBs to deal with trees that are in the growth limit and notice zones. This change will start to reduce the incidents of damage caused by vegetation outside of our control.

Date range – 12/02/2023 to 14/02/2023

Cause – A severe weather event started affecting the network from 13/02/23 affecting a total of 2019 ICP's across the network.

Location – Multiple Interruptions across the Network.

Response - Several faults occurred from around 00:00 am on 13/02/2023 to 14:00 pm on 14/02/2023, there were several field operators and network controllers available to deal with the interruptions and assist with restoration efforts.

Mitigating Factors – Once the risk to worker safety due to the high winds had reduced, field workers assessed the locations and the extent of the damage. Faults were then systematically repaired and restored.

Future Improvements – There were no realistic network improvements identified that could minimise the effects of a similar event happening in the future. Horizon Energy Distribution Limited supports changes to the Tree Regulations to enable trees that are within fall distance of powerlines to be actively managed by the tree owners, as the current regulations only allow EDBs to deal with trees that are in the growth limit and notice zones. This change will start to reduce the incidents of damage caused by vegetation outside of our control.

Table 21 column 1 and column 2

Normalisation of unplanned SAIFI major events RY23						
SAIFI unplanned boundary value						0.1170
1/48th of the SAIFI unplanned boundary value	22/11/2022 to 23/11/2022			Event reference		
	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption	Half hour commencing	Raw SAIFI value for Class C interruption	Normalised SAIFI value for Class C interruption
0.0024	06:30 AM	0.0000	0.0000	12:30 AM	0.0000	0.0000
0.0024	07:00 AM	0.0000	0.0000	01:00 AM	0.0000	0.0000
0.0024	07:30 AM	0.0000	0.0000	01:30 AM	0.0000	0.0000
0.0024	08:00 AM	0.0000	0.0000	02:00 AM	0.0000	0.0000
0.0024	08:30 AM	0.0000	0.0000	02:30 AM	0.0000	0.0000
0.0024	09:00 AM	0.0000	0.0000	03:00 AM	0.0000	0.0000
0.0024	09:30 AM	0.0000	0.0000	03:30 AM	0.0000	0.0000
0.0024	10:00 AM	0.0000	0.0000	04:00 AM	0.0000	0.0000
0.0024	10:30 AM	0.0000	0.0000	04:30 AM	0.0000	0.0000
0.0024	11:00 AM	0.0000	0.0000	05:00 AM	0.0000	0.0000
0.0024	11:30 AM	0.0000	0.0000	05:30 AM	0.0000	0.0000
0.0024	12:00 PM	0.0000	0.0000	06:00 AM	0.0440	0.0024
0.0024	12:30 PM	0.0000	0.0000	06:30 AM	0.0000	0.0000
0.0024	01:00 PM	0.0000	0.0000	07:00 AM	0.0000	0.0000
0.0024	01:30 PM	0.0000	0.0000	07:30 AM	0.0000	0.0000
0.0024	02:00 PM	0.0000	0.0000	08:00 AM	0.0000	0.0000
0.0024	02:30 PM	0.0000	0.0000	08:30 AM	0.0000	0.0000
0.0024	03:00 PM	0.0000	0.0000	09:00 AM	0.0000	0.0000
0.0024	03:30 PM	0.0000	0.0000	09:30 AM	0.0000	0.0000
0.0024	04:00 PM	0.0000	0.0000	10:00 AM	0.0000	0.0000
0.0024	04:30 PM	0.0000	0.0000	10:30 AM	0.0000	0.0000
0.0024	05:00 PM	0.0000	0.0000	11:00 AM	0.0000	0.0000
0.0024	05:30 PM	0.0000	0.0000	11:30 AM	0.0000	0.0000
0.0024	06:00 PM	0.0440	0.0024	12:00 PM	0.0000	0.0000
0.0024	06:30 PM	0.0000	0.0000	12:30 PM	0.0000	0.0000
0.0024	07:00 PM	0.0000	0.0000	01:00 PM	0.0000	0.0000
0.0024	07:30 PM	0.0000	0.0000	01:30 PM	0.0000	0.0000
0.0024	08:00 PM	0.0000	0.0000	02:00 PM	0.0000	0.0000
0.0024	08:30 PM	0.0000	0.0000	02:30 PM	0.0000	0.0000
0.0024	09:00 PM	0.0000	0.0000	03:00 PM	0.0000	0.0000
0.0024	09:30 PM	0.0000	0.0000	03:30 PM	0.0000	0.0000
0.0024	10:00 PM	0.0000	0.0000	04:00 PM	0.0000	0.0000
0.0024	10:30 PM	0.0000	0.0000	04:30 PM	0.0000	0.0000
0.0024	11:00 PM	0.0000	0.0000	05:00 PM	0.0000	0.0000
0.0024	11:30 PM	0.0000	0.0000	05:30 PM	0.0000	0.0000
0.0024	12:00 AM	0.0360	0.0024			
				Total	0.1240	0.0073

SAIFI Major Events

Date range – 22/11/2022 to 23/11/2022

Cause – This SAIFI Major event is attributable to 3 separate interruptions.

- The first interruption 221122B occurred at 18:24 pm on 22/11/2022 on the 50kV Waiotahi/Te Kaha Feeder affecting 1,133 ICP's, the cause was due to a lightning strike.
- The second interruption 221123A occurred at 00:10 am on 23/11/2022 on the 11kV Te Teko Feeder affecting 926 ICP's, the cause was due to a lightning strike.
- The third interruption 221123B occurred at 06:26 am on 23/11/2022 on the 50kV Waiotahi/Te Kaha Feeder affecting 1,133 ICP's, the cause was due to a lightning strike.

Location – 3 Separate Locations

- 50kV Waiotahi/Te Kaha Feeder unknown location
- 11kV Te Teko Feeder unknown location
- 50kV Waiotahi/Te Kaha Feeder unknown location

Response – Fault 221122B

- The initial tripping of Transpower Waiotahi/Te Kaha CB 92 occurred at 18:24 pm
- The duty network controller attempted a close of CB 92 after 25 minutes and the feeder remained energised.

Response – Fault 221123A

- The initial tripping of Plains Te Teko CB PT 22 occurred at 00:10 am
- The duty network controller attempted a close of CB 22 after 24 minutes and the feeder remained energised.

Response – Fault 221123B

- The initial tripping of Transpower Waiotahi/Te Kaha CB 92 occurred at 06:26 am
- Due to this being the second interruption in a short time the duty network controller decided to start and run the standby generator.
- Once the 50kV line from Waiotahi to Te Kaha was patrolled with no cause found the 50kV line was re-energised.

Mitigating Factors – The overall response to these interruptions was good with the duty network controllers acting swiftly to restore customers. The patrol of the 50kV line was done for safety with no cause found.

Future Improvements – There were no realistic network improvements identified that could minimise the effects of a similar event happening in the future.

Appendix E – Director's certificate

We, Anthony de Farias and Linda Robertson being directors of Horizon Energy Distribution Limited certify that, having made all reasonable enquiry, to the best of my/our knowledge and belief, the attached annual compliance statement of Horizon Energy Distribution Limited, and related information, prepared for the purposes of the *Electricity Distribution Services Default Price-Quality Path Determination 2020* has been prepared in accordance with all the relevant requirements.

Dated 1 day of August 2023

.....

Anthony de Farias

.....

Linda Robertson

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

Opinion

Our reasonable assurance opinion has been formed on the basis of the matters outlined in this report.

In our opinion, Horizon Energy Distribution Limited has complied in all material respects, with the Electricity Distribution Services Default Price-Quality Path Determination 2020 (consolidating all amendments as of 20 May 2020 including decision numbers NZCC 21 and NZCC 3) (the "Determination") in preparing the Annual Compliance Statement for the regulatory period ended 31 March 2023 (the 'Annual Compliance Statement').

As far as appears from an examination, in all material respects, the information used in preparation of the Annual Compliance Statement of Horizon Energy Distribution Limited has been properly extracted from Horizon Energy Distribution Limited's accounting and other records, sourced from its financial and non-financial systems.

Information subject to assurance

We have performed an engagement to provide reasonable assurance in relation to Horizon Energy Distribution Limited's (the "company") Annual Compliance Statement for the regulatory period ended 31 March 2023.

Criteria

The criteria we have assessed the Annual Compliance Statement against is the Determination. As a result, this report may not be suitable for another purpose.

Standards we followed

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

- used our professional judgement to assess the risk of material misstatement and non-compliance and plan and perform the engagement to obtain reasonable assurance that the Annual Compliance Statement is free from material misstatement or non-compliance, whether due to fraud or error;
- considered relevant internal controls when designing our assurance procedures, however we do not express an opinion on the effectiveness of these controls; and
- ensured that the engagement team possesses the appropriate knowledge, skills and professional competencies.

How to interpret reasonable assurance and material misstatement and non-compliance

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

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

Use of this assurance Report

Our report is made solely for Horizon Energy Distribution Limited. Our assurance work has been undertaken so that we might state to Horizon Energy Distribution Limited those matters we are required to state to them in the assurance report and for no other purpose. We have also consented to the Commerce Commission receiving a copy of our report on a reliance basis for the purpose noted above. No other third party is intended to receive our report.

Our report should not be regarded as suitable to be used or relied on by any third parties other than Horizon Energy Distribution Limited and the New Zealand Commerce Commission ("Recipients") for any purpose or in any context. Any other party who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

Our report is released the Recipients on the basis that it shall not be copied, referred to or disclosed, in whole or in part, without our prior written consent.

To the fullest extent permitted by law, none of KPMG, any entities directly or indirectly controlled by KPMG, or any of their respective members or employees accept or assume any responsibility and deny all liability to any party other than Horizon Energy Distribution Limited for our work, for this independent reasonable assurance report, and/or for the opinions we have reached.

Directors' responsibility for Annual Compliance Statement

The Directors of the company are responsible for the preparation and presentation of the Annual Compliance Statement in accordance with the Determination. This responsibility includes such internal control as the Directors determine is necessary to enable the preparation of the Annual Compliance Statement that is free from material misstatement and non-compliance whether due to fraud or error.

Our responsibility

Our responsibility is to express an opinion to the directors on whether, in all material respects, the Company has complied with the Determination in the preparation of the Annual Compliance Statement.

Our independence and quality control

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

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

Our firm has also provided other services to the company including the annual audit of the financial statements, regulatory assurance services, agreed upon procedures in relation to Interim Financial Statements, taxation compliance and advisory services. Subject to certain restrictions, partners and employees of our firm may also deal with the company on normal terms within the ordinary course of trading activities of the business of the company. These matters have not impaired our independence as assurance providers of the company for this engagement. The firm has no other relationship with, or interest in, the company.

KPMG

KPMG
Auckland

01 August 2023