Network Tasman Limited

Default Price-Quality Path

Annual Compliance Statement

1 April 2021 – 31 March 2022 Assessment Period

26 August 2022

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1. Introduction

Network Tasman 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 Network Tasman 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 second assessment period, commencing 1 April 2021 and ending 31 March 2022.

2. Date prepared

This statement was prepared on 26 August 2022

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 Network Tasman Limited has complied with the wash-up amount calculation for the second assessment period.

3.2 Wash-up amount calculation

Table 1

Wash-up amount RY22		
Term	Description	Value ($000)
Actual allowable revenue (AAR)	*Sum of actual net allowable revenue, actual pass-through and recoverable costs*	43,737
Actual revenue (AR)	*Sum of actual revenue from prices plus other regulated income*	39,972
Revenue foregone (RV)	*Actual net allowable revenue x (revenue reduction percentage - 20%) when revenue reduction percentage is greater than 20%, otherwise nil*	0
Wash-up amount	*AAR - AR - RV*	**3,765**

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 3.3.3.

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 RY22		
Term	Description	Value ($000)
Actual net allowable revenue (ANAR)	*Amount specified as forecast net allowable revenue for the second assessment period*	27,853
Actual pass-through costs	*Sum of all pass-through costs that were incurred or approved by the Commission in the assessment period*	437
Actual recoverable costs	*Sum of all recoverable costs that were incurred or approved by the Commission in the assessment period*	15,446
Total actual allowable revenue (AAR)	*Actual net allowable revenue + actual pass-through costs and actual recoverable costs*	**43,737**

Further information supporting actual pass-through costs and actual recoverable costs 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 RY22		
Term	Description	Value ($000)
Actual revenue from prices	*Actual prices between 1 April 2021 and 31 March 2022 multiplied by actual quantities for the assessment period*	39,972
Other regulated income	*Other income associated with supply of electricity distribution services*	-
Total actual revenue (AR)	*Sum of actual revenue from prices plus other regulated income*	**39,972**

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 RY22		
Term	Description	Value ($000)
Forecast revenue from prices	*Forecast revenue from prices for the second assessment period*	39,246
Revenue reduction percentage (RRP)	*1 - (actual revenue from prices / forecast revenue from prices)*	-1.85%
Actual net allowable revenue (ANAR)	*Amount specified as forecast net allowable revenue for the second assessment period*	27,853
Revenue foregone (RV)	*Actual net allowable revenue x (RRP- 20%) when RRP is greater than 20%, otherwise nil*	**0**

Table 4b

Calculation of ANR

Year	Month	cpi Index
2020	Mar	1052
	Jun	1047
	Sep	1054
	Dec	1059
2021	Mar	1068
	Jun	1082
	Sep	1106
	Dec	1122
2022	Mar	1142

Term	Description	Value ($000)
ANARprevious		26,452
1+CPIt		1.05298
X		0
Actual net allowable revenue (ANAR)	$ANARprevious*(1+\Delta CPIt)*(1-X)$	**27,853**

4. Quality standards

4.1 Statement of compliance with planned interruptions quality standards

Network Tasman 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 Network Tasman Limited for the DPP regulatory period and the planned SAIDI and SAIFI assessed values for both the first and the second assessment period.

Table 5

Planned interruptions quality standard - SAIDI	
Sum of planned SAIDI assessed values ≤ Planned accumulated SAIDI limit	
Planned accumulated SAIDI limit	1,129.14
Planned SAIDI assessed value for the first assessment period	116.01
Planned SAIDI assessed value for the second assessment period	66.13
Sum of planned SAIDI assessed values	182.14
Compliance result	**Compliant**

Table 6

Planned interruptions quality standard - SAIFI	
Sum of planned SAIFI assessed values ≤ Planned accumulated SAIFI limit	
Planned accumulated SAIFI limit	4.9021
Planned SAIFI assessed value for the first assessment period	0.3317
Planned SAIFI assessed value for the second assessment period	0.2054
Sum of planned SAIFI assessed values	0.5371
Compliance result	**Compliant**

Further information supporting planned SAIDI and SAIFI assessed values is included in Section 4.1.1.

4.1.1 Planned SAIDI and SAIFI assessed values

Table 7 and Table 8 below show Network Tasman Limited's planned SAIDI and SAIFI assessed values for the assessment period.

Table 7

Planned SAIDI assessed value RY22		
Term	Description	Value
Class B non-notified interruptions		66.13
Class B notified interruptions falling outside window		-
$SAIDI_B$	*Sum of Class B non-notified interruptions*	66.13
Class B notified interruptions falling inside window		-
Class B intended interruptions cancelled without notice		-
Class B intended interruptions cancelled with notice		-
$SAIDI_N$	*Sum of Class B notified interruptions*	-
Planned SAIDI assessed value	$SAIDI_B + (SAIDI_N/2)$	66.13

Table 8

Planned SAIFI assessed value RY22		
Term	Description	Value
Planned SAIFI assessed value	*Sum of Class B interruptions commencing within the assessment period*	0.2054

4.2 Statement of compliance with unplanned interruptions quality standards

As demonstrated in Table 9 and Table 10 below, and consistent with clause 9.7 of the 2020 DPP Determination, Network Tasman Limited has complied with the unplanned interruptions quality standard.

Table 9

Unplanned interruptions quality standard RY22 - SAIDI		
Unplanned SAIDI assessed value ≤ Unplanned SAIDI limit		
Unplanned SAIDI limit		101.03
Unplanned SAIDI assessed value	*Sum of normalised SAIDI values for Class C interruptions commencing within the assessment period*	79.53
Compliance result		**Compliant**

Table 10

Unplanned interruptions quality standard RY22 - SAIFI		
Unplanned SAIFI assessed value ≤ Unplanned SAIFI limit		
Unplanned SAIFI limit		1.1956
Unplanned SAIFI assessed value	*Sum of normalised SAIFI values for Class C interruptions commencing within the assessment period*	0.7391
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

Network Tasman Limited had three major events during the assessment period.

SAIDI major events. The applicable SAIDI unplanned boundary value of 7.22 is used in the normalisation calculation.

Table 11

Unplanned SAIDI major events RY22			
Start	End	Pre-normalised unplanned SAIDI	Normalised unplanned SAIDI
16-Jul-2021 11:00 AM	18-Jul-2021 01:30 AM	9.9395	1.5378
05-Aug-2021 12:00 AM	06-Aug-2021 11:00 PM	12.8660	0.1863
19-Feb-2022 06:30 AM	21-Feb-2022 05:30 AM	9.6011	0.1504

SAIFI major events. The applicable SAIFI unplanned boundary value of 0. 0688 is used in the normalisation calculation.

Table 12

Unplanned SAIFI major events RY22			
Start	End	Pre-normalised unplanned SAIFI	Normalised unplanned SAIFI
16-Jul-2021 03:30 PM	17-Jul-2021 08:00 PM	0.0704	0.0126
05-Aug-2021 12:00 AM	06-Aug-2021 11:00 PM	0.1546	0.0025
19-Feb-2022 06:30 AM	21-Feb-2022 05:30 AM	0.1574	0.0014

Further information of each major event is in Appendix D

4.3 Statement of compliance with extreme event standard

As demonstrated in Table 13 below, and consistent with clause 9.9 of the 2020 DPP Determination Network Tasman Limited has complied with the extreme event standard.

Table 11

Extreme event standard RY22	
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
Nil	Compliant

4.4 Quality Incentive Adjustment

Table 14 below shows Network Tasman Limited's quality incentive adjustment for the assessment period.

Table 12

Quality Incentive Adjustment RY22		
Term	Description	Value ($000)
SAIDI planned adjustment	*(SAIDI$_{planned, target}$ - SAIDI$_{planned, assessed}$) x 0.5 x IR*	29
SAIDI unplanned adjustment	*(SAIDI$_{unplanned, target}$ - SAIDI$_{unplanned, assessed}$) x IR*	(32)
Total adjustment	*SAIDI planned adjustment + SAIDI unplanned adjustment*	(3)
Revenue at risk	*0.02 * ANAR*	557.069
Total penalty/reward		(3)
67th percentile estimate of post-tax WACC		4.23%
Quality incentive adjustment		**(3)**

Table 15 below shows Network Tasman Limited's quality incentive adjustment inputs consistent with Schedule 4 of the 2020 DPP Determination.

Table 13

Quality Incentive Adjustment Inputs RY22					
Term	Units	Value	Term	Units	Value
SAIDI planned interruption cap	minutes	225.83	SAIDI unplanned interruption cap	minutes	101.03
SAIDI planned interruption collar	minutes	0	SAIDI unplanned interruption collar	minutes	0
SAIDI planned interruption target	minutes	75.28	SAIDI unplanned interruption target	minutes	74.49
Planned SAIDI assessed value	minutes	66.12	Unplanned SAIDI assessed value	minutes	79.53
Incentive rate	$	6,260			
Actual net allowable revenue (ANAR)	$000	27,853			
SAIDI planned interruption target	minutes	75	SAIDI unplanned interruption target	minutes	74
Minimum of the planned SAIDI cap and assessed value	minutes	66	Minimum of the unplanned SAIDI cap and assessed value	minutes	80
Planned SAIDI subject to incentive	minutes	9	Unplanned SAIDI subject to incentive	minutes	(5)
Adjustment (IR x 0.5)	$	3,130	Adjustment (IR)	$	6,260
SAIDI planned adjustment	$000	29	SAIDI unplanned adjustment	$000	(32)

5. Transactions

Network Tasman 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 pass-through costs RY22	
Actual pass-through costs	Actual ($000)
Rates on system fixed assets	167
Commerce Act levies	89
Electricity Authority levies	157
Utilities Disputes levies	24
Total actual pass-through costs	**437**

Recoverable costs

Table 15

Actual recoverable costs RY22	
Actual recoverable costs	Actual ($000)
IRIS incentive adjustment	782
Transmission charges	11,809
New investment contract charges	1,244
System operator services charges	
Avoided transmission charges	1,790
Distributed generation allowance	
Claw-back	
Catastrophic event allowance	
Extended reserves allowance	
Quality incentive adjustment	(3)
Capex wash-up adjustment	(212)
Reconsideration event allowance	
Quality standard variation engineers fee	
Urgent project allowance	
Fire and Emergency NZ levies	37
Innovation project allowance	
Total actual recoverable costs	**15,446**

Appendix B – Prices and quantities

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

Table 16

Actual revenue from prices RY22				
Price Code	Unit	Unit price	Actual quantity	Actual revenue ($000)
0S	$/day	0	-	0
0STL	$/W/day	0.00119	431,480	187
0UNM	$/day	0.533	70	14
1GL	$/day	0.85	2	1
1GL	$/day	1.00	3,681	1,344
1GLANY	$/kWh	0.0245	18,371,414	450
1GLANY	$/kWh	0.0288	12,422	0
1GLDAY	$/kWh	0.0301	818,970	25
1GLGEN	$/kWh	0.0000	108,154	0
1GLNIT	$/kWh	0.0053	454,713	2
1GLWSR	$/kWh	0.0075	1,609,086	12
1GLWSR	$/kWh	0.0087	3,083	0
1RL	$/day	0.1500	18,798	1,029
1RLANY	$/kWh	0.0691	351,152	24
1RLANY	$/kWh	0.0734	74,437,869	5,464
1RLDAY	$/kWh	0.0761	2,698	0
1RLDAY	$/kWh	0.0804	2,143,403	172
1RLGEN	$/kWh	0.0000	2,077,523	0
1RLNIT	$/kWh	0.0121	7,517	0
1RLNIT	$/kWh	0.0129	2,064,714	27
1RLWSR	$/kWh	0.0186	152,647	3
1RLWSR	$/kWh	0.0196	27,800,522	545
1RS	$/day	1.0000	16,124	5,885
1RS	$/day	0.8500	63	19
1RSANY	$/kWh	0.0288	361,631	10
1RSANY	$/kWh	0.0245	105,909,287	2,595
1RSDAY	$/kWh	0.0301	2,603,141	78
1RSDAY	$/kWh	0.0348	2,397	0
1RSGEN	$/kWh	0.0000	1,426,702	0
1RSNIT	$/kWh	0.0053	3,058,457	16
1RSNIT	$/kWh	0.0062	6,283	0
1RSWSR	$/kWh	0.0075	34,074,264	256
1RSWSR	$/kWh	0.0087	124,613	1
2	$/kVA/day	0.0800	0	0
2	$/kVA/day	0.0940	123,361	4,233
2	$/kVA/day	0.0800	216	6
2	$/kVA/day	0.0940	4,251	146
2ANY	$/kWh	0.0341	67,847,008	2,314
2ANY	$/kWh	0.0415	131,940	5
2DAY	$/kWh	0.0474	15,600	1
2DAY	$/kWh	0.0391	18,551,824	725
2GEN	$/kWh	0.0000	801,727	0
2HANY	$/kWh	0.2620	10,109	3
2HLFC	$/day	0.1500	5	0
2HWSR	$/kWh	0.1701	4,921	1
2LANY	$/kWh	0.1316	343,841	45
2LDAY	$/kWh	0.1498	31,740	5
2LGEN	$/kWh	0.0000	4,199	0

Actual revenue from prices RY22				
Price Code	Unit	Unit price	Actual quantity	Actual revenue ($000)
2LLFC	$/day	0.1500	166	9
2LNIT	$/kWh	0.0507	16,747	1
2LWSR	$/kWh	0.0572	45,542	3
2NIT	$/kWh	0.0115	7,821,228	90
2NIT	$/kWh	0.0136	6,182	0
2WSR	$/kWh	0.0184	8,969	0
2WSR	$/kWh	0.0155	3,233,652	50
3.3GEN	$/kWh	0.0000	2,349,449	0
3.4GEN	$/kWh	0.0000	16,278	0
6.1	$/ICP	0.0000	1	1,610
6.2	$/ICP	0.0000	1	493
AnyDem31	$/kVA/day	0.1276	2,197	102
AnyDem33	$/kVA/day	0.1462	2,349	125
AnyDem34	$/kVA/day	0.1540	47,885	2,692
AnyDem34	$/kVA/day	0.1537	-	0
AnyDem35	$/kVA/day	0.1460	216	11
AnyDem35	$/kVA/day	0.1460	3,962	211
CB	$/ICP	0	1	1,620
HLF	$/kVA/day	0.5	2,508	458
HLFANY	$/kWh	0.00790	4,493,935	36
HLFDAY	$/kWh	0.00900	1,960,712	18
HLFDAY	$/kWh	0.00900	1,456,727	13
HLFGEN	$/kWh	0	19,211	0
HLFNIT	$/kWh	0.00190	1,361,929	3
HLFWSR	$/kWh	0.00170	57,414	0
kVAr	$/kVAr/day	0.2899	131	14
MAT	$/ICP	6164.010	1	6
MATANY	$/kWh	0	7,499	0
MATANY	$/kWh	0	23,030	0
MATGEN	$/kWh	0	5,210,537	0
MATGEN	$/kWh	0	13,203,106	0
NEL	$/Connection	0	1	1,874
SD31	$/kWh	0.0031	3,955,504	12
SD33	$/kWh	0.0094	3,905,210	37
SD34	$/kWh	0.0095	1,761	0
SD34	$/kWh	0.0094	52,409,588	493
SD35	$/kWh	0.0064	4,272,271	27
SN31	$/kWh	0.0015	1,633,583	2
SN33	$/kWh	0.0051	1,746,949	9
SN34	$/kWh	0.0051	1,353	0
SN34	$/kWh	0.0051	18,937,646	97
SN35	$/kWh	0.0039	1,901,103	7
WD31	$/kWh	0.0056	2,864,842	16
WD33	$/kWh	0.0242	2,250,480	54
WD34	$/kWh	0.0242	40,472,851	979
WD35	$/kWh	0.0208	499,462	10
WD35	$/kWh	0.0206	2,826,454	58
WinDem	$/kW/day	0.2899	-	0
WinDem	$/kW/day	0.2926	125	13
WinDem	$/kW/day	0.2810	24,296	2,492
WN31	$/kWh	0.0015	1,174,039	2
WN33	$/kWh	0.0051	938,087	5
WN34	$/kWh	0.0051	15,102,098	77
WN35	$/kWh	0.0039	212,151	1
WN35	$/kWh	0.0039	1,282,813	5

Actual revenue from prices RY22				
Price Code	Unit	Unit price	Actual quantity	Actual revenue ($000)
Connection Fee				
0	Connection	125	0	0.0000
1	Connection	250	723	180.6500
2	Connection	325	48	15.5500
3	Connection	400	13	5.2000
Solar Connections				
Solar Pt 1A	<10kW	100	391	39.100
Solar Pt 2		500	27	13.500
Solar Pt 1	<10 kW	200	3	0.600
Network Development				
1c	per ICP	3250		0.0000
1	$/kVA-km	104.6991327	1153	120.7181
2	$/kVA-km	470.1544105	229	107.6654
3.4	$/kVA-km		0	0.0000
SubDivision	$/kVA-km		0	0.0000
Generator Fees				
Network Fee 1	Network Fee	684	1	1
Network Fee 2	Network Fee	600	1	1
Network Fee 3	Network Fee	360	1	0
Onekaka 33 Trnfr	Transformer	5148	1	5
Total actual revenue from prices				**39,972**

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

For the purposes of compiling annual SAIDI and SAIFI data:

1) A high voltage outage on the distribution network is defined as an event resulting in loss of supply to any number of consumers for a duration of more than one minute
2) Only those outages resulting in de-energisation of a high voltage feeder or conductor (6.6kV and above on NTL's network) are included in SAIDI & SAIFI statistics. Outages stemming from low voltage (400V) equipment are excluded.
3) Both planned (Class B) and unplanned (Class C) events are included within high voltage outage statistics
4) All high voltage outages are managed through Network Tasman's control room by a qualified NTL System Operator
5) The Faults and Maintenance Contract between NTL and its faults contractor, Delta, obligates both parties to manage all outage events centrally through the System Operator located in NTL's control room.
6) All HV fault switching operations are recorded by the System Operator in the Control Room Log at the time the activity takes place. This provides a detailed record of the switching events for future reference and record keeping.

Under fault conditions, customers affected by operation of a distribution system high voltage protection device can be divided into:

(a) Those within the core fault area (i.e. who won't have supply restored until the necessary line repairs are completed)
(b) Those outside the immediate fault area (i.e. who can have power restored through co-ordinated switching activity)

To calculate the customer minutes lost under each fault event, each event is approximated as a maximum two step restoration process. This is in keeping with the philosophy of fault restoration that relies on the following sequential process for supply restoration:

(a) Identification, isolation and minimisation of the core fault area.
(b) Restoration, through switching, of supply to areas not immediately within the core fault area
(c) Making repairs and restoration of the core fault area.

The switching and recording process is managed by a NTL System Operator using NTL's Geographical Information System (GIS). To record outage data the operator draws geographical selection polygons around all sections of the high voltage line affected by the fault event. The software is then used to select and identify all the distribution transformers within the fault area. A query is then made into NTL's customer connection database to find and list all customers (ICPs) connected to those transformers affected by the fault event.

This data is then used in the following formula to calculate the total customer minutes for a fault event:

Total No. of customers initially affected **x** (Time Unfaulted Area restored – Time of Initial Interruption)

+

No. of Fault area customers **x** (Time Fault Area restored – Time Unfaulted Area restored)

Planned and unplanned events rely on essentially the same recording process however by nature, planned interruptions can be identified down to a predetermined set of consumers within a known area in advance.

The total customer minutes for a planned interruption are thus calculated using the following formula:

Total No. of customers interrupted **x** (Time Interrupted Area restored – Time of Initial Interruption)

The system operator records details of all outage events in the NTL Outage Database. This is an access database that remains on line in the control room. Each planned or unplanned event forms one record entry into the database. For the avoidance of doubt, an unplanned loss of supply event can, in some circumstances, be followed by restoration of supply and then by a successive interruption as a result of isolating the initial cause or making repairs and completing the permanent restoration of supply to all consumers. Where this occurs, NTL's reported SAIFI records the initial outage and not any subsequent short duration outages required to effect the restoration of supply. NTL's reported SAIDI includes the customer minutes from subsequent short duration outages required to effect the restoration of supply. The Outages Database is subject to NTL's normal electronic file backup and security protocols.

The Outage Database records the following data fields for each event:

- Date
- ID number of the protective device that has operated (allows identification of the HV feeder and area affected)
- Area: (Text description of area affected)
- Description; (Text description of fault cause and type – recorded once known)
- Outage type (Planned Shutdown or Fault)
- Area Class (Urban or Rural)
- Fault Class (Overhead or Underground)
- Fault Voltage (6.6kV, 11kV, 33kV, 66kV)
- Outage Region (Stoke, Motueka, Golden Bay, Kikiwa, Murchison)
- Time of Initial Interruption
- Time Unfaulted Area Restored
- Time Fault area restored
- Customers (ICPs) in Total Area (recorded post event)
- Customers (ICPs) in Fault area (recorded post event)

Unless otherwise stated all data is recorded on line by the NTL System Operator at the time of the event.

The outage database supports the following NTL activities:

1) Queries on an as needed basis by NTL's Network and Operations Managers
2) Summary outage statistics are prepared and provided to NTL's CEO and Board of Directors on a monthly basis and are compared against expected values.
3) Annual outage statistics are prepared and independently audited for regulatory and financial reporting purposes.
4) Summary statistics are recorded on a cumulative basis and are used for comparative analysis and form a key input into NTL's annual Asset Management Planning process.
5) Annual data is also reported against reliability targets in NTL's SCI, Information Disclosure Statements and Annual Financial Statements.
6) The SCI targets are negotiated and agreed annually with the Network Tasman Trust.

Appendix D – SAIDI and SAIFI major events

Three Major events occurred during Assessment Period 2.

1 Storm event 16-18 July 2021

(i) Cause of event: Adverse weather

(ii) & (iii) Event start time and date:
SAIDI: 16-Jul-2021 11:00
SAIFI: 16-Jul-2021 15:30

(iv) & (v) Event end date and time:
SAIDI: 18-Jul-2021 01:30
SAIFI: 17-Jul-2021 20:00

(vi) SAIDI/SAIFI value before replacements:

This event consists of 12/11 individual outages that occurred during this extended major event. The respective SAIDI/SAIFI for these outages are as follows:

1. 0.736738236 (SAIDI). 0.016287419 (SAIFI)
2. 0.029911786 (SAIDI). 0.000808427 (SAIFI)
3. 1.788857978 (SAIDI). 0.020828875 (SAIFI)
4. 0.539220582 (SAIDI). 0.001117531 (SAIFI)
5. 1.422450484 (SAIDI). 0.014099912 (SAIFI)
6. 0.802577454 (SAIDI). 0.005135887 (SAIFI)
7. 0.330313622 (SAIDI). 0.004541456 (SAIFI)
8. 1.935088095 (SAIDI). 0.002615498 (SAIFI)
9. 1.674204056 (SAIDI). 0.004398792 (SAIFI)
10. 0.488384811 (SAIDI). 0.000475545 (SAIFI)
11. 0.003685474 (SAIDI). 0.000118886 (SAIFI)
12. 0.188101862 (SAIDI).

(vii) SAIDI/SAIFI replaced value:

This event consists of 12/11 individual outages that occurred during this extended major event. The respective replacement SAIDI/SAIFI for these outages are as follows:

1. 0.150416667 (SAIDI). 0.001433333 (SAIFI)
2. 0.029911786 (SAIDI). 0.000808427 (SAIFI)
3. 0.150416667 (SAIDI). 0.001433333 (SAIFI)
4. 0.150416667 (SAIDI). 0.001117531 (SAIFI)
5. 0.150416667 (SAIDI). 0.001433333 (SAIFI)
6. 0.150416667 (SAIDI). 0.001433333 (SAIFI)
7. 0.150416667 (SAIDI). 0.001433333 (SAIFI)
8. 0.150416667 (SAIDI). 0.001433333 (SAIFI)
9. 0.150416667 (SAIDI). 0.001433333 (SAIFI)
10. 0.150416667 (SAIDI). 0.000475545 (SAIFI)
11. 0.003685474 (SAIDI). 0.000118886 (SAIFI)
12. 0.150416667 (SAIDI).

Description of event:

A storm event that affected the top of the South Island caused damage to our network over the weekend of Sat 17 and Sun 18 July. The event bought heavy rain and high winds to the entire NTL network area. The rain caused rivers to flood and claim some poles. In combination with high winds, trees were uprooted which caused some damage to our network. Access was impeded due to flooding and road closures and the duration of the event meant that field crews were stood down for a period which extended the restoration times for some customers (mostly LV).

This was a big storm that made national headlines and CDEM emergencies were declared in neighbouring regions due to the flooding of Westport township and parts of Marlborough.

(viii) Location of the major event:

The event was caused by a storm that affected the entire region. HV faults occurred in:

- Owen River (Coal Creek) – two HV poles claimed by the Owen River. A 500kVA diesel generator was deployed to restore supply to about 110 affected customers for about 3 days while new poles and wires were installed.
- Moutere (Wilson Road) - tree fell onto lines breaking multiple poles
- Motueka (College St) – two separate faults caused by trees falling over the lines
- Totaranui (Golden Bay) – Blown jumper that was inaccessible due to effects of severe weather
- Buller River (Cole Road) – pole pushed over by high river level
- Waihero Road (Ngatimoti) – Broken transformer pole due to tree falling on it
- River Tce Rd (Brightwater) – Conductor downed by tree
- Springs junction (Rappahannock) - Conductor downed by tree
- Multiple 11kV links blown and replaced (no fault found) – Mt Burnett, Chings Rd, Motueka Vly

On top of this, field service crew responded to many LV faults over the weekend.

(ix) Main equipment involved:

11kV lines, poles, substations (i.e. pole mounted), 11kV fuse links

(x) How we responded to the major event:

All contactable field crew were in the field at the height of the storm. The same applies to the days following the storm as (safe) network access improved, subject to field crew managing fatigue levels according to the applicable fatigue policy. The NTL control room was manned continuously during the event and for the necessary time afterwards to ensure field crews were able to carry out their work. Specialist teams were set-up by NTL to manage repairs for the more challenging faults sites at Coal Creek and Cole Road.

(xi) Mitigating factors that may have prevented or minimised the major event:

Having a resilient and well maintained network. Having a well resourced and capable faults response capability. NTL has both.

This was a major storm event beyond the control of any party. The location and specific impacts of such events are unpredictable. As a result without expending billions of dollars across the entire network, there are no further mitigation strategies available.

(xii) A description of any steps we propose to take to mitigate the risk of future similar major events:

This was a storm event that caused widespread damage to infrastructure. The damage resulted from environmental conditions such as erosion from flooded rivers and trees falling on to the lines. We already have programmes in place to mitigate these sort of effects including:

- Regular patrols of the network to assess the condition of the assets and to check for any external factors that may impact on their integrity, such as land subsidence, nearby construction activities etc., Potential issues are referred to management for consideration and possible remedial action.
- Regular inspections of known erosion 'hot spots' where waterways are changing course. This often results in either moving assets out of the path of the waterway, reinforcement of riverbanks with rock works or a combination of both,
- Routine vegetation patrols that include the identification of high risk trees that are considered to be at an elevated risk of falling onto the lines. We have a limited ability to influence the owners of high risk fall distance trees and our preferred option in this area is to encourage them to allow us to fell these trees.

An area that went especially well was the response of field service crews. They were able to rapidly dispatch nearly all of their staff, most of whom were not officially on-call, to attend to faults as they occurred.

2 Major Event 05 - 06 August 2021.

(i) Cause of event: Lightning

(ii) & (iii) Event start time and date:
SAIDI: 05-Aug-2021 00:00
SAIFI: 05-Aug-2021 00:00

(iv) & (v) Event end date and time:
SAIDI: 06-Aug-2021 23:00
SAIFI: 06-Aug-2021 23:00

(vi) SAIDI/SAIFI value before replacements:

12.866 (SAIDI) 0.1535 (SAIFI)

(vii) SAIDI/SAIFI replaced value:

0.1504(SAIDI) 0.00143 (SAIFI)

Description of event:

A lightning storm in the Stoke hills caused a circuit breaker at Stoke 33kV GXP to reclose once and then lockout. The feeder involved supplies two zone substations (Hope and Brightwater) under the normal network configuration.

(viii) Location of the major event:

Marsden Valley and the hill country in the locality of Transpower's Stoke GXP substation. Consumers impacted were in south Richmond, Brightwater, Waimea Plains and Wakefield.

(ix) Main equipment involved:

Hope 33kV feeder overhead lines in Marsden Valley and Stoke hills. Transpower circuit breaker at Stoke GXP.

(x) How we responded to the major event:

Two zone substations at Hope and Brightwater are supplied from the affected 33kV circuit. These substations each supply approx 3,300 consumers. Supply restoration took place using the normal procedures for circuit breaker lock outs on this circuit which is to sectionalise the line and restore 33kV supply to the Hope substation and then the Brightwater substation. In the event of damage to the feeder circuit requiring repairs, the two substations can be switched over to a back-up 33kV feeder. A field staff response is required in any event.

The supply restoration work was slightly delayed for safety reasons until the lightning storm abated, but as so many consumers were affected, the restoration process time caused the SAIDI threshold to be exceeded.

(xi) Mitigating factors that may have prevented or minimised the major event:

Lightning protection on the lines. This is already in place. Extraordinary lightning events such as this cannot be further mitigated without huge expenditure into undergrounding the overhead lines. Such expenditure is not warranted.

(xii) A description of any steps we propose to take to mitigate the risk of future similar major events:

This lightning storm was unusually violent and despite lightning arrestors being in place on the lines, the line insulation flashed over as a result of two lightning strokes within approx 20s in the area where the lines traverse. The reclose relays are set to provide one reclose but will not reclose again if a second event occurs within 30s of the first event. Had the second lightning stroke occurred after this 30s reclosing reset period then it is likely that this SAIDI event would not have eventuated.

Given that lightning protection and circuit reclosing is already in place on the lines there is little more that can be done to mitigate a repeat of this event, without requiring very high capital expenditure. Line worker safety during lightning storms also cannot be compromised.

3 Major Event 19-20 February 2022

(i) Cause of event: Defective equipment

(ii) & (iii) Event start time and date:
SAIDI: 19-Feb-2022 06:30
SAIFI: 19-Feb-2022 06:30

(iv) & (v) Event end date and time:
SAIDI: 21-Feb-2022 05:30
SAIFI: 21-Feb-2022 05:30

(vi) SAIDI/SAIFI value before replacements:

9.601065221 (SAIDI). 0.157405426 (SAIFI)

(vii) SAIDI/SAIFI replaced value:

0.150416667 (SAIDI). 0.001433333 (SAIFI)

Description of event:

33kV Feeder outage due to failure of lightning arrestor at pole 5260.

The Hope 33kV feeder was locked out which affected supply to Hope and Brightwater substations.

(viii) Location of the major event: Marsden Valley Stoke.

Consumers impacted were in south Richmond, Brightwater, the Waimea Plains and Wakefield.

(ix) Main equipment involved: Lightning arrestor at Pole 5260.

(x) How we responded to the major event:

The normal response to a Hope 33kV feeder outage took place which was to sectionalise the circuit and restore to the Hope substation and then the Brightwater substation. When it was found that there was a permanent fault in the first line section, the 33kV supply for both substations was transferred to the back-up Railway Reserve feeder.

(xi) Mitigating factors that may have prevented or minimised the major event:

Lightning protection on the lines. This was already in place, but it was likely to have been damaged by the lightning event of 5 August resulting in this outage. Extraordinary lightning events and lightning arrestor damage such as this cannot be further mitigated without huge expenditure into undergrounding the overhead lines. Such expenditure is not warranted.

(xii) A description of any steps we propose to take to mitigate the risk of future similar major events:

This lightning arrestor failure is likely to be related to a severe lightning storm in Marsden Valley/Stoke hills on 5 August 2021. Lightning caused the insulation of the Hope 33kV feeder to flashover twice in quick succession, causing a circuit breaker lock-out. This outage was also a major loss of supply event.

Given that subsequent to this lightning storm, one lightning arrestor in the area has failed, we propose to replace all other lightning arrestors in the proximity of this failed unit.

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Appendix E – Director's Certificate

Schedule 7: Form of director's certificate for annual compliance statement

Clause 11.5(d)

We, Michael John McCliskie and Anthony Page Reilly, being directors of Network Tasman Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached annual compliance statement of Network Tasman 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.

Michael John MCCLISKIE
Director

Anthony Page REILLY
Director

26 August 2022

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

Independent Assurance Report

To the directors of Network Tasman Limited on the Annual Compliance Statement for the assessment period ended 31 March 2022 as required by the Electricity Distribution Services Default Price-Quality Path Determination 2020 (consolidated 20 May 2020)

The Auditor-General is the auditor of Network Tasman Limited (the Company). The Auditor-General has appointed me, John Mackey, using the staff and resources of Audit New Zealand, to undertake a reasonable assurance engagement, on his behalf, on whether the Annual Compliance Statement on pages 4 to 15 for the assessment period ended on 31 March 2022 has been prepared, in all material respects, in compliance with the Electricity Distribution Services Default Price-Quality Path Determination 2020 (consolidated 20 May 2020) (the Determination).

Opinion

In our opinion, in all material respects:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems; and
- the Company has complied with clauses 11.5 and 11.6 of the Determination in preparing the Annual Compliance Statement for the assessment period ended 31 March 2022.

Basis for opinion

We conducted our engagement in accordance with the Standard on Assurance Engagements (SAE) 3100 (Revised) Assurance Engagements on Compliance, issued by the New Zealand Auditing and Assurance Standards Board. An engagement conducted in accordance with SAE (NZ) 3100 (Revised) requires that we also comply with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised) Assurance Engagements Other Than Audits or Reviews of Historical Financial Information.

We have obtained sufficient recorded evidence and explanations that we required to provide a basis for our opinion.

Directors' responsibilities

The directors of the Company are responsible:

- For the preparation of the Annual Compliance Statement under clause 11.4 and in accordance with the requirements in clauses 11.5 and 11.6 of the Determination.
- For the identification of risks that may threaten compliance with the clauses identified above and controls which will mitigate those risks and monitor ongoing compliance.

Auditor's responsibilities

Our responsibilities in terms of clause 11.5(e) and schedule 8(1)(b)(vi) and 8(1)(c) of the Determination, are to express an opinion on whether:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems; and
- the Annual Compliance Statement, for the assessment period ended 31 March 2022, has been prepared, in all material respects, in accordance with the requirements in clauses 11.5 and 11.6 of the Determination.

To meet these responsibilities, we planned and performed procedures in accordance with SAE 3100 (Revised), to obtain reasonable assurance about whether the Company has complied, in all material respects, with clauses 11.5 and 11.6 of the Determination.

In relation to the wash-up amount set out in clause 8.6 of the Determination, our procedures included recalculation of the wash-up amount in accordance with schedule 1.6 of the Determination and assessing it against the amounts and disclosures contained on pages 4 to 7 of the Annual Compliance Statement.

In relation to the quality standards in clause 9 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the values and disclosures contained on pages 8 to 12 of the Annual Compliance Statement.

In relation to the quality incentive adjustment set out in schedule 4 of the Determination, our procedures included recalculation of the quality incentive adjustment in accordance with schedule 4 of the Determination and assessing it against the amounts and disclosures contained on pages 13 and 14 of the Annual Compliance Statement.

An assurance engagement to report on the Company's compliance with the Determination involves performing procedures to obtain evidence about the compliance activity and controls implemented to meet the requirements. The procedures selected depend on our judgement, including the identification and assessment of the risks of material non-compliance with the requirements.

Inherent limitations

Because of the inherent limitations of an assurance engagement, together with the internal control structure, it is possible that fraud, error, or non-compliance with clauses 11.5 and 11.6 of the Determination may occur and not be detected. A reasonable assurance engagement throughout the assessment period does not provide assurance on whether compliance with clauses 11.5 and 11.6 of the Determination will continue in the future.

Restricted use

This report has been prepared for use by the directors of the Company and the Commerce Commission in accordance with clause 11.5 (e) of the Determination and is provided solely for the purpose of establishing whether the compliance requirements have been met. We disclaim any assumption of responsibility for any reliance on this report to any person other than the directors of the Company and the Commerce Commission, or for any other purpose than that for which it was prepared.

Independence and quality control

We complied with the Auditor-General's:

- independence and other ethical requirements, which incorporate the independence and ethical requirements of Professional and Ethical Standard 1 issued by the New Zealand Auditing and Assurance Standards Board; and
- quality control requirements, which incorporate the quality control requirements of Professional and Ethical Standard 3 (Amended) issued by the New Zealand Auditing and Assurance Standards Board.

The Auditor-General, and his employees, and Audit New Zealand and its employees may deal with the Company on normal terms within the ordinary course of trading activities of the Company. Other than any dealings on normal terms within the ordinary course of trading activities of the Company, this engagement, the assurance engagement on the Information Disclosures and the annual audit of the Company's financial statements and performance information, we have no relationship with or interests in the Company.

John Mackey
Audit New Zealand
On behalf of the Auditor-General
Christchurch, New Zealand
26 August 2022