

Default Price-Quality Path

Annual Price Setting Compliance Statement

1 April 2022 – 31 March 2023 Assessment Period

31 March 2022

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# 1. Introduction

Top Energy Limited (Top Energy) 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 Top Energy from 1 April 2020.

This price-setting compliance statement is published in accordance with clause 11.1 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 14 December 2021.

### 3. Statement of compliance

As demonstrated in Table 1 below, and consistent with clause 8.3 of the 2020 DPP Determination Top Energy has complied with the price path for the second assessment period.

Table 1

Forecast revenue from prices must not exe (a) the forecast allowable revenue for t (b) the amount determined in accordan the forecast revenue from prices for the increase in forecast revenue from prices	Relevant Clause		
Term	Description	Value (\$000)	
Forecast revenue from prices (\$000)	Forecast prices between 1 April 2022 and 31 March 2023 multiplied by forecast quantities for the period ending 31 March 2023	42,151	Schedule 1.3
Forecast allowable revenue (\$000)	The sum of forecast net allowable revenue, forecast pass-through and recoverable costs, opening wash-up account balance and the pass- through balance allowance	42,165	Schedule 1.5 & Clause 8.4
Maximum allowable forecast revenue from prices (\$000)	Forecast revenue from prices for the previous assessment period x (1 + limit on annual percentage increase in forecast revenue from prices)		Clause 4.2 & 8.4
Maximum allowable forecast revenue (\$000)	The lessor of the forecast allowable revenue and maximum allowable forecast revenue from prices	42,165	DPP Clause 8.4
Compliance result	Forecast revenue from prices ≤ forecast allowable revenue and maximum allowable forecast revenue from prices	Compliant	DPP Clause 8.4

Further information supporting forecast allowable revenue is included in Section 5 and Appendix A.

Further information supporting forecast revenue from prices is included in Section 6 and Appendix B.

Further information supporting maximum allowable forecast revenue is included in Section 7.

# 4. Director's certification

A Director's certificate in the form set out in Schedule 6 of the 2020 DPP Determination is included as Appendix C.

## 5. Forecast allowable revenue

Table 2 shows the derivation of forecast allowable revenue, consistent with the requirements of Schedule 1.5 of the 2020 DPP Determination.

# Electricity Distribution Services Default Price-Quality Path Determination 2022 Revenue Path Inputs and Calculations for the Assessment Period ending 31 March 2023

For	Forecast allowable revenue RY23								
Term	Description	Value (\$000)							
Forecast net allowable revenue	Forecast net allowable revenue as set out in Table 1.4.1 in Schedule 1.4 for the period ending 31 March 2023	39,541							
Forecast pass through costs	Forecast pass-through costs	350							
Forecast recoverable costs	Forecast recoverable costs.	3,458							
Opening wash-up account balance	The opening wash-up account balance for the third assessment period of the DPP regulatory period is the closing wash-up account balance for the previous assessment period as set out in Schedule 1.7(1)(b)	(1,183)							
Pass-through balance allowance	(ePTB - pass-through balance) x (67th percentile estimate of post-tax WACC)^2	-							
Total		42,165							

Table 2

Appendix A shows the components of the forecast pass-through and recoverable costs.

The methodology to derive the forecasts of the pass-through and recoverable costs is documented in Appendix A.

# 6. Forecast revenue from prices

Table 3 shows forecast revenue from prices.

Table 3								
Forecast revenue from prices RY23								
Term	Description	Value (\$000)						
ΣΡ <sub>2022/23</sub> *Q <sub>2022/23</sub>	Forecast prices between 1 April 2022 and 31 March 2023 multiplied by forecast quantities for the period ending 31 March 2023	42,151						

More information about forecast prices and quantities is included in Appendix B.

Top Energy's Forecast revenue from prices is equal to the total of each price multiplied by the forecast quantities for that price. Given prices have a fixed and variable component the revenue forecasts require forecasts of the number of connections and quantities (kWh). The Determination requires that these forecasts are demonstrably reasonable.

Top Energy has a posted discount which is specified on its pricing schedule. All prices used in the calculation of revenue from prices are net of the discount. This includes the fixed and variable (kWh) components of the Price Codes. The criteria and methodology of the discount is compliant with the Electricity Distribution Default Price-Quality (Definition of discount) Amendments Determination 2020 published on 30 March 2020.

# 7. Maximum allowable forecast revenue from prices

Table 4 shows the maximum allowable forecast revenue from prices, consistent with the requirements of clause 8.4 of the 2020 DPP Determination.

Table 4		
Maximum allo	wable forecast revenue from prices R	Y23
Term	Description	Value (\$000)
Forecast revenue from prices from previous assessment period	Forecast prices between 1 April 2021 and 31 March 2022 multiplied by forecast quantities for the period ending 31 March 2022	46,352
Limit on annual percentage increase in forecast revenue from prices		10%
Maximum allowable forecast revenue from prices	Forecast revenue from prices for the previous assessment period x (1 + limit on annual percentage increase in forecast revenue from prices)	50,987

Table 4

## Appendix A – Pass-through and recoverable costs

### Forecast pass-through costs

#### Electricity Distribution Services Default Price-Quality Path Determination 2022 Forecast Pass-through Costs

#### for the Assessment Period ending 31 March 2023

Table 5					
Forecast Pass-through Costs RY23					
Forecast pass-through costs	- \$000	Forecasting methodology	Previous year forecast	Variance	Comment
Rates on system fixed assets	58	Actual 2022 plus CPI estimate	53	5	CPI Increases only
Commerce Act levies	170	First seven months 2021 actuals plus 5 months estimate to 31 March	115	55	Estimates different to 2022 prices
Electricity Authority levies	99	Actuals fourth quarter YE 2021 and forecast estimates for previous year plus	78	21	Estimates different to 2022 prices
Utilities Disputes levies	23	Last 2 years average	23	(0)	
Total forecast pass-through costs	350		269	80	

### Forecast recoverable costs

#### Electricity Distribution Services Default Price-Quality Path Determination 2022 Forecast Recoverable Costs for the Assessment Period ending 31 March 2023

Table 6

Forecast Recoverable Costs RY23					
Forecast recoverable costs	\$000	Forecasting methodology	Previous year forecast	Variance	Comment
IRIS OPEX incentive adjustment	366	Calculations are consistent with clause 3.1.3 of the IMs	1,017	(651)	
IRIS CAPEX incentive adjustment	(484)	Calculations are consistent with clause 3.1.3 of the IMs	(471)	(14)	
Transpower transmission charges	1,683	As notified by Transpower	4,829	(3,146)	Reduction in RCPD and connection charge
New investment contract charges	-			-	
System operator services charges	-			-	
Avoided transmission charges - purchased assets	-			-	
Avoided transmission charges	2,393	Based on Demand levels 2020/2021, and Transpower's price for interconnection for 2022/2023 year	2,410	(17)	
Claw-back	-			-	
Catastrophic event allowance	-			-	
Extended reserves allowance	-			-	
Quality incentive adjustment	54	Determined for the 2020/2021 regulatory year (adjusted for time value of money)	358	(304)	
Capex wash-up adjustment	(553)	Calculations are consistent with clause 3.1.3 (1)(p) of the IMs	(538)	(16)	
Transmission asset wash-up adjustment	-			-	
Reconsideration event allowance	-			-	
Quality standard variation engineers fee	-			-	
Urgent project allowance	-			-	
Revenue wash-up draw down amount	-			-	
Fire and emergency NZ levies	-			-	
Innovation project allowance	-			-	
Total forecast recoverable costs	3,458		7,605	(4,147)	

# Appendix B – Forecast prices and quantities

Norm         Norm <th< th=""><th><math>\Sigma P_{i,2023} \cdot Q_{i,s}</math></th><th></th><th>Prices at 31 March 2023</th><th>i multiplied by QTY3</th><th>1 March 2023 Fo</th><th>precast</th><th>Line Tariff 1.4.2122 to 31.3.2123 year</th><th>Forecast Pass- through Revenue (\$)</th><th>Forecast Pass- through Revenue (\$)</th><th></th><th>ibution Revenue</th><th>Forecast Other Revenue (\$)</th><th>Total Revenue (\$)</th><th></th><th></th><th></th><th>Total Revenue (\$) Forecast</th></th<>	$\Sigma P_{i,2023} \cdot Q_{i,s}$		Prices at 31 March 2023	i multiplied by QTY3	1 March 2023 Fo	precast	Line Tariff 1.4.2122 to 31.3.2123 year	Forecast Pass- through Revenue (\$)	Forecast Pass- through Revenue (\$)		ibution Revenue	Forecast Other Revenue (\$)	Total Revenue (\$)				Total Revenue (\$) Forecast
Norm         Norm <t< th=""><th>Tariff or Fee</th><th></th><th>Description</th><th>Number of ICPs</th><th>or kw or kvarh for</th><th>Other Qty for 31/03/23</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>Discount</th><th></th><th>Total Revenue (\$)</th></t<>	Tariff or Fee		Description	Number of ICPs	or kw or kvarh for	Other Qty for 31/03/23									Discount		Total Revenue (\$)
M         M							Total						ΣΠ1,2123 <b>0</b> 1 2123			(*)	less Discount
M         M																·	
N         N				8,427				15,379		- 907,386				- (403,881)	)	(403,881)	503,50
N         N																	
D         D	LFC	CN20	LRF Controlled 20		102,707				544		7,097		7,641		·	·	7,64
matrix	LN	D16 N8													(27,806)	(27,806)	25,23
m         m	Low user TOU Uncontrolled LUF						0.5000	3.173					3,173				3.17
Sector     Sector </td <td></td> <td>11N24</td> <td>LUF Daily price on HHR</td> <td>1,738</td> <td>1 347 904</td> <td></td> <td>29.5000</td> <td>· · ·</td> <td>22 240</td> <td>187,189</td> <td>316.083</td> <td></td> <td></td> <td>(83,319)</td> <td></td> <td></td> <td></td>		11N24	LUF Daily price on HHR	1,738	1 347 904		29.5000	· · ·	22 240	187,189	316.083			(83,319)			
max         max <td>LU2</td> <td>UN24</td> <td>LUF Shoulder</td> <td></td> <td>3,771,658</td> <td></td> <td></td> <td></td> <td>62,232</td> <td></td> <td>615,535</td> <td></td> <td>677,767</td> <td></td> <td>(150,965)</td> <td>(150,965)</td> <td>526,80</td>	LU2	UN24	LUF Shoulder		3,771,658				62,232		615,535		677,767		(150,965)	(150,965)	526,80
Image: Section of the section of		UN24	LUP Off peak		1,831,757				4,163		307,918		312,001		(/3,316)	(73,318)	239,30
Check         Check         Control         Control <thcontrol< th=""> <thcontrol< th=""> <thcont< td=""><td></td><td></td><td>LCF Daily price on HHR</td><td></td><td></td><td></td><td>0.5000</td><td>13,101</td><td></td><td>-</td><td></td><td></td><td>- 13,101</td><td></td><td></td><td></td><td>13,10</td></thcont<></thcontrol<></thcontrol<>			LCF Daily price on HHR				0.5000	13,101		-			- 13,101				13,10
Control         <	LCF LC1	IN18	LCF Peak	7,179	6.949.627		29.5000		75.056	772,970	1,226,609		772,970	(344,052)	(228.375)	(344,052) (228,375)	428,91
math math math math math math math math	LC2	IN18	LCF Shoulder		19,131,413				221,924		2,749,184		2,971,108		(628,687)	(628,687)	2,342,42
m     m </td <td>Standard User Non-TOU (SR)</td> <td>IN10</td> <td>LCF Off peak</td> <td></td> <td>8,881,794</td> <td></td> <td></td> <td></td> <td>23,093</td> <td></td> <td>1,294,072</td> <td></td> <td>1,317,164</td> <td></td> <td>(291,866)</td> <td>(231,000)</td> <td>-</td>	Standard User Non-TOU (SR)	IN10	LCF Off peak		8,881,794				23,093		1,294,072		1,317,164		(291,866)	(231,000)	-
Simple     Simple    Simple <td>SRF</td> <td></td> <td>SRFP Daily Passthrough Price</td> <td>5.543</td> <td></td> <td></td> <td></td> <td>13,480</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>13,48</td>	SRF		SRFP Daily Passthrough Price	5.543				13,480		-				-			13,48
Matrix     Matrix    Matrix <td>SUC</td> <td>UN24</td> <td>SRF Uncontrolled</td> <td>0,012</td> <td>7,150,204</td> <td></td> <td>134.2000</td> <td></td> <td>111,543</td> <td>2,102,033</td> <td>903,071</td> <td></td> <td></td> <td>(094,977)</td> <td></td> <td></td> <td>924,99</td>	SUC	UN24	SRF Uncontrolled	0,012	7,150,204		134.2000		111,543	2,102,033	903,071			(094,977)			924,99
m         m	SA	IN18			30,516,224						2,761,718		3,091,294		(382,486)	(382,486)	2,708,80
matrix			SRF Day		1,542,166				17,581		192,154		209,735		(19,329)	(19,329	190,40
mm	SN Standard user TOU Uncontrolled	NO			639,567				1,663		49,311						50,97
MA	SUF SUF			1.656	-			4,051		812,149			812,149	(195,702)			4,05
Simple	SU1	UN24	SUF Peak SUE Shoulder		2,101,396				32,782		388,968		421,750		(26,592)	(26,592)	395,15
Solution     Solu	502 503	UN24	SUF Off peak		3,220,877				8,374		383,606		391,981		(40,758)	(40,758)	2 791,00 2 351,22
Norm         Norm </td <td>Standard user TOU Uncontrolled</td> <td></td> <td>: :</td>	Standard user TOU Uncontrolled																: :
No.     No. </td <td>SCF SCF</td> <td></td> <td>SCF Daily price on HHR</td> <td>3.500</td> <td></td> <td></td> <td></td> <td>8,559</td> <td></td> <td>1.715.991</td> <td></td> <td></td> <td>8,559</td> <td>(415,613)</td> <td></td> <td>. (415.613)</td> <td>8,55</td>	SCF SCF		SCF Daily price on HHR	3.500				8,559		1.715.991			8,559	(415,613)		. (415.613)	8,55
Sheep         Sheep <t< td=""><td>SC1</td><td></td><td></td><td>-,000</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>860,065</td><td>,,013)</td><td>(61,865)</td><td>(61,865)</td><td>798,20</td></t<>	SC1			-,000									860,065	,,013)	(61,865)	(61,865)	798,20
Sector																	
Sector	General User (GG)												-				
Sect         Sect <t< td=""><td>GGF</td><td></td><td></td><td></td><td></td><td></td><td></td><td>9,331</td><td></td><td>·</td><td></td><td></td><td></td><td>-</td><td></td><td>·</td><td>9,33</td></t<>	GGF							9,331		·				-		·	9,33
MA     MA     MAAAAA     MAAAAA     MAAAAA     MAAAAAA     MAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA		UN24		3,816	44,842,231		149.3300		699,539	2,079,680	5.825.006			(453,103)			
Simple	GGA	IN18	GGF All inclusive		4,323,170				46,690		414,160		460,850				434,94
m         m	GGD	CN20 D16	GGF Day		7,614,792				86,809		919,105		1,005,914		(45,621)	(45,621)	165,56
char         char <t< td=""><td>GGN</td><td>N8</td><td>GGF Night</td><td></td><td>3,627,200</td><td></td><td></td><td></td><td>9,431</td><td></td><td>258,982</td><td></td><td>268,413</td><td></td><td>· · ·</td><td>· · ·</td><td>268,41</td></t<>	GGN	N8	GGF Night		3,627,200				9,431		258,982		268,413		· · ·	· · ·	268,41
Bit         Bit <td>GUFD</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3,213</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3,21</td>	GUFD							3,213									3,21
OM	GU1		GUF Peak	1,314			149.3300	-		/16,102			522,662	(156,018)	(19,756)	(19,756)	502,90
off         off <td>GU2 GU3</td> <td></td> <td>1,224,71 404,52</td>	GU2 GU3																1,224,71 404,52
C         C	General TOU controlled		GCFPF Daily Passthrough Price	,			0.6700	857					- 857				85
SC         Normal         Normal <td>GCF</td> <td></td> <td>GCFDF Distribution Fixed Price</td> <td>350</td> <td>000 540</td> <td></td> <td>149.3300</td> <td></td> <td>40.020</td> <td>190,961</td> <td>477.044</td> <td></td> <td>190,961</td> <td>(41,605)</td> <td>(6.309)</td> <td></td> <td>149,35</td>	GCF		GCFDF Distribution Fixed Price	350	000 540		149.3300		40.020	190,961	477.044		190,961	(41,605)	(6.309)		149,35
bar         bar <td>GC1 GC2</td> <td>IN18</td> <td>GCF Shoulder</td> <td></td> <td>3,324,486</td> <td></td> <td></td> <td></td> <td>37,899</td> <td></td> <td>294,549</td> <td></td> <td>332,449</td> <td></td> <td>(18,843)</td> <td>(18,843)</td> <td>313,60</td>	GC1 GC2	IN18	GCF Shoulder		3,324,486				37,899		294,549		332,449		(18,843)	(18,843)	313,60
odd     Outpendingenet     Image     Image </td <td>GC3</td> <td>IN18</td> <td>GCF Off peak</td> <td></td> <td>1,257,020</td> <td></td> <td></td> <td></td> <td>3,268</td> <td></td> <td>100,562</td> <td></td> <td>103,830</td> <td></td> <td>(7,125)</td> <td>(7,125)</td> <td>96,70</td>	GC3	IN18	GCF Off peak		1,257,020				3,268		100,562		103,830		(7,125)	(7,125)	96,70
<table-container>      Sector     Sector&lt;</table-container>			CAEDE Daily Desethrough Bries				10 0774	3 376					-			· · · ·	3,27
<table-container>Since<td>GAF</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td>146,952</td><td></td><td></td><td></td><td>(8,639)</td><td></td><td>(8,639)</td><td></td></table-container>	GAF							-		146,952				(8,639)		(8,639)	
Series Se	G1														(19,404)	(19,404)	155,98
cond         image         image <th< td=""><td>G2 G1</td><td>See Note 1.7</td><td>G2 Shoulder G3 Off peak</td><td></td><td>4,041,198</td><td></td><td></td><td></td><td>45,666</td><td></td><td>351,584</td><td></td><td>397,250</td><td></td><td></td><td></td><td>397,25 106,76</td></th<>	G2 G1	See Note 1.7	G2 Shoulder G3 Off peak		4,041,198				45,666		351,584		397,250				397,25 106,76
image         image <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>·</td><td></td><td></td><td></td><td>-</td></t<>													·				-
bit       bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit       bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit       bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit       bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit       bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit     bit       bit				4			0.0000										
Deck		LDG		1	740				12		138		149	-			14
<table-container>          bit         bit&lt;         bit&lt;         bit         bit&lt;</table-container>				1													20
OB     Image of the second seco				1					2								9
Import	DG																18,91
bit         bit<         bit<         bit<         bit	Larger User (TOU) TOUF		TOUF Daily Pass Through				\$7,3320	7,743					7,741			·	7,74
Image         Image <t< td=""><td></td><td></td><td>Daily Distribution Demand</td><td>17</td><td></td><td></td><td></td><td></td><td></td><td>347.736</td><td></td><td></td><td></td><td>(7,403)</td><td></td><td>. 7,403</td><td></td></t<>			Daily Distribution Demand	17						347.736				(7,403)		. 7,403	
Day Montoni Vigand         Dep Mo			Daily Distribution Demand Price											-			-
Image: book of the section of the sectin of the section of the section of the	TOULVED		Daily Distribution LV Capacity price Siday/ kVA							119,410			119,440				119,41
ODM         OPPA	TOU1		Peak				0.0000						322,252				312,05
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$								-		:					(22,041)	- 22,041	275,88
bit         bit<         bit<         bit<         bit					ayar 49.80				-,-02								
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	TOUTXF		TOU Off peak Daily Distribution LV Capacity							· · ·							5,02
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	TOUTXF		Daily Distribution Demand	24						225,559			225,559	(4,608)		- 4,608	220,95
CODIX         Pack         C         CODIX         C         245,73         C         245,73         C         C         C         245,73         C         C         245,73         C         C         C         245,73         C<	TOUTXD		Price Daily Distribution LV Capacity		·					·····	·			·		·	· ·
Image: constraint of the second of the se	TOUTXT		price \$/day/ kVA		5,928,790		0.0000		110 710	265,373	326 234		265,373	· · ·	(19,55%)	10,553	265,37 417,40
$ \begin{array}{                                    $	TOUTX2		Shoulder		11,427,774				145,133		428,542		573,674				532,92
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	TOUTX3		Daily Distribution Power		8,408,188				5,886		71,470		77,355				77,35
Image: Note of the second se	TOUPFVD		factor Price kVar				0.000						· · · ·				
Non-statistic         Normal Network         Normal N	Industrial				·			200 0 2 2		610 AT							
Source         Source<	0000984310TE88E 0000930130TE465			1													921,39
L050         L050         L050         L0         L0 <thl0< th="">         L0         <thl0< th=""> <th< td=""><td></td><td></td><td></td><td>1</td><td></td><td></td><td>1102.2540</td><td>90,252</td><td></td><td>312,071</td><td></td><td></td><td>402,323</td><td>- 8,694</td><td></td><td>- 8,694</td><td>393,62</td></th<></thl0<></thl0<>				1			1102.2540	90,252		312,071			402,323	- 8,694		- 8,694	393,62
L050         L050         L050         L0         L0 <thl0< th="">         L0         <thl0< th=""> <th< td=""><td></td><td></td><td></td><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>·</td><td></td></th<></thl0<></thl0<>					•											·	
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5P 1,0022 Q / 33,609 291,959,356 2,564 574,049 3.225,448 12,821,397 33,229,335 993,872 49,274,099 - 2,795,306 - 4,327,516 7,122,822 42,151				33,609	291,959,396												

Table 7 shows the forecast prices and quantities for the forecast revenue from prices for the third assessment period.

To calculate forecast revenue from prices requires a forecast of quantities for the assessment year. Given prices have a fixed and variable component the revenue forecasts require forecasts of the number of connections and quantities (kWh).

Forecasts are required for the next pricing year only (year ended March 2023) and therefore have been based on the level and trends of recent actual data. The total forecast quantities (kWh) by Price Code have then been adjusted to be in line with the longer-term trend for the network and for one-off events where appropriate e.g. Covid-19.

Actual data is based on the audited Information Disclosures for 1 April 2017 to 31 March 2021 and a forecast of the year ended March 2022. This timeframe has been chosen as it provides a representative view of consumption e.g. weather conditions. The forecast for the year ended 31 March 2022 is based on actuals to September 2021 and the reminder forecast.

The forecast of connections and quantities have been developed using a bottom up approach by Price Code. The general methodology is below (unless stated in the exceptions):

- Connections are calculated by using the forecasted connections as of 31 March 2022 and applying an estimated growth rate using the average growth rate over the previous four years. The one exception is Commercial where growth has been lowered relative to the historical average due to the impact of Covid-19.
- Volumes are calculated by determining the average volume (kWh) per connection over the previous four years then aggregating connections by their Price Code as at 30 September 2021. An average by Price Code by month is then calculated and then multiplying it by the relevant connection forecast by month and then aggregating it by Price Code. The exceptions are TOU and GA which are based on the last two years which is more reflective of their current consumption. Residential and General Commercial volumes are then adjusted to reflect increases in distributed generation. An adjustment has also been made to allow for correct price category allocation.
- Each Price Code average usage (except Industrial and unmetered) is then adjusted to align the aggregate forecast with the longer-term trend for the network (last decade) if appropriate. This year no change was made.

Tables A-D show the data used in the calculation and the forecast for 2022/2023. This demonstrates that the connections and volume forecasts are consistent with actual historical growth rates and distribution generation unless stated.

There are examples where the above methodology is not appropriate to use as a forecast. The exceptions are in Table E with an explanation of the methodology used and why.

# Table A: Connection Growth by customer group

	Actual	Growth ICP cor	ecast			
Customer Group	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	Commentary
Residential	1.3%	1.0%	0.8%	1.4%	1.2%	Consistent with historical trends
Commercial	1.1%	2.0%	1.9%	0.3%	1.2%	Reduced due to impact of Covid-19
Industrial	0.0%	0.0%	0.0%	0.0%	0.0%	Based on known connections
Unmetered	-6.2%	1.0%	6.8%	-0.5%	2.4%	Based on expected connections
Overall	1.4%	1.2%	1.2%	1.0%	1.0%	

# Table B: Total Annualised Usage by customer group

Customer		Actual consu	mption(kWh)		Forecas	t (kWh)	Commentary
Group	2017/18	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	
Residential	148,552,975	152,527,236	149,475,744	154,810,578	159,196,471	157,646,039	Based on historical average
Commercial	120,464,061	124,764,398	125,819,695	118,827,749	129,622,776	130,531,220	Based on historical average
Industrial	55,248,315	51,851,723	48,412,301	42,993,253	47,927,660	45,460,456	Included for completeness as revenue is not based on consumption
Unmetered	1,077,863	948,167	926,012	908,465	924,361	1,000,413	
Overall	325,343,214	330,091,524	324,633,751	317,540,044	337,671,267	334,638,128	

## Table C: Average usage by Customer Group

Customer	Actual	Consumption pe	Forecast (kWh)			
Group	2017/18	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Residential	5,639	5,727	5,549	5,696	5,793	5,661
Commercial	23,471	23,679	23,505	21,771	23,496	23,489
Industrial	18,416,105	17,283,908	16,137,434	14,331,084	15,975,887	15,153,485
Unmetered	4,162	3,778	3,792	3,581	3,536	3,791
Overall	10,250	10,266	9,977	9,654	10,152	9,939

## Table D: Exceptions to standard methodology for Commercial averages.

Price Code	Charge type	Forecast methodology
GG, G	Connections	GG and GA Connections have been reduced from historical growth due to the impact of Covid-19.
TOU	Connections	No growth in TOU connections is assumed. Increase in numbers is due to correct price allocation of some customers
IND	Fixed	Based on last 12 months consumption based on conversations with customers and known changes to production. No impact on revenue or prices
TOU	Variable	Based on last 24 months given type of customer and drivers for change unknown.
GA	Variable	Based on last 24 months given type of customer and drivers for change unknown.

### Other notes on forecasting kWh quantities

# **TOU pricing for Residential and General Commercial customers**

On 1 April 2020 Top Energy modified the structure of prices for Residential and General Commercial customers with the introduction of TOU pricing. These changes and the underlying drivers have been outlined in our pricing methodology and published price schedules.

The forecasting approach is outlined table below:

Forecast	Commentary				
Connections	As at 1 October 2021 15,600 customers (47%) have been migrated to pricing. Top Energy will continue its process of all customers with communicating meters being transferred to TOU rates however reta will still be able to apply for an exemption if they are unable to suppl TOU metering or TOU data.				
	The split does not impact revenue as the daily charges for TOU and non- TOU are the same.				
Average Quantities	Quantities kWh for customers on TOU price codes or single rate price codes are based on the same methodology as outlined above.				
	No adjustment has been made to average kWh quantities to reflect behavioural change due to the new price structure. TOU trial results were inconclusive due to low uptake and retailers are not required to pass through to customers the TOU prices we publish. This will be reassessed for the forecast next year.				
Allocation between time periods	The allocation of usage between Peak, Shoulder and Off-peak is based on actual data. As above no adjustment has been made due to behaviour changes which is consistent with what has been experienced over the last year.				
	The pricing has been set so single rate is approximately the same as an average customer on TOU rates, within constraints (e.g. Low Fixed Charge tariff regulation), based on the consumption by time period below. The aggregate TOU splits by timebound are below:				
		Peak	Shoulder	Off-peak	
	Residential – All Inclusive	19%	54%	27%	
	Residential – Uncontrolled	20%	55%	26%	
	Commercial	17%	60%	23%	
	<u>Weekday</u> Peak 0700-0930, 01530-20 00; Shoulder 0930-1730, 2000-2200 and Off- peak 2200-0700 <u>Weekend</u> Shoulder 0700-2200 and Off-peak 2200-0700				

# Solar

Top Energy's network has the second highest uptake of solar in New Zealand. As at 31 October 2021 3.9% of connections had an on grid solar connection with a total of 6.8MW installed.<sup>1</sup> Growth over the last year has been 27%. Given solar has a material impact on consumption an estimate has been included in the forecast for Residential and General Commercial. Larger scale installations will only be included once connections are known.

The methodology for forecasting solar is shown in Table F below.

Table F:	Solar	forecast	methodology
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Forecast	Commentary
KW installed	The forecast for solar is based kW install rather than connections with solar.
	Residential and Commercial growth is based on the growth rate for the year ended October 2021 (Electricity Authority https://www.emi.ea.govt.nz/). This is 18.40% and equates to 600 kW for the assessment period.
Generation from kW installed	Generation (kW) is forecasted to be appropriately 1,315KWh per annum per KW installed for the Far North. This is consistent with the EECA website solar tool.
Reduction in on grid consumption	Assumed Residential 45% consumed within the premise and 55% exported to grid. Commercial is 55% consumed and 45% exported.

<sup>&</sup>lt;sup>1</sup> Electricity Authority <u>https://www.emi.ea.govt.nz/</u> as at 31 October 2021

## Appendix C – Director's certificate

I, Euan Richard Krogh, being director of Top Energy certify that, having made all reasonable enquiry, to the best of my/our knowledge and belief, the attached annual price-setting compliance statement of Top Energy, 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 relevant requirements, and all forecasts used in the calculations for forecast revenue from prices and forecast allowable revenue are reasonable.

Date: 14.12.2021