Default Price-Quality Path

Annual Price Setting Compliance Statement

1 April 2023 – 31 March 2024 Assessment Period

31 March 2023

Table of Contents

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 fourth assessment period, commencing 1 April 2023 and ending 31 March 2024.

2. Date prepared

This statement was prepared on 23 January 2023.

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 fourth assessment period.

Table 1

Compliance with price path RY24			
Forecast revenue from prices must not exceed the lesser of: *(a) the forecast allowable revenue for that assessment period; and* *(b) the amount determined in accordance with the following formula:* *the forecast revenue from prices for the previous assessment period x (1 + limit on annual percentage increase in forecast revenue from prices).*			**Relevant Clause**
Term	Description	Value ($000)	
Forecast revenue from prices ($000)	*Forecast prices between 1 April 2023 and 31 March 2024 multiplied by forecast quantities for the period ending 31 March 2024*	42,704	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*	47,784	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)*	46,366	Clause 4.2 & 8.4
Maximum allowable forecast revenue ($000)	*The lessor of the forecast allowable revenue and maximum allowable forecast revenue from prices*	46,366	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 2024
Revenue Path Inputs and Calculations
for the Assessment Period ending 31 March 2024

Table 2

Forecast allowable revenue RY24		
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 2024*	40,331
Forecast pass through costs	*Forecast pass-through costs*	393
Forecast recoverable costs	*Forecast recoverable costs.*	6,579
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)*	482
Pass-through balance allowance	*(ePTB - pass-through balance) x (67th percentile estimate of post-tax WACC)^2*	-
Total		47,784

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

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 RY24		
Term	Description	Value ($000)
$\Sigma P_{2022/23} * Q_{2022/23}$	*Forecast prices between 1 April 2023 and 31 March 2024 multiplied by forecast quantities for the period ending 31 March 2024*	42,704

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 allowable forecast revenue from prices RY24		
Term	Description	Value ($000)
Forecast revenue from prices from previous assessment period	*Forecast prices between 1 April 2022 and 31 March 2023 multiplied by forecast quantities for the period ending 31 March 2023*	42,151
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)*	46,366

Appendix A – Pass-through and recoverable costs

Forecast pass-through costs

Electricity Distribution Services Default Price-Quality Path Determination 2024
Forecast Pass-through Costs
for the Assessment Period ending 31 March 2024

Table 5

Forecast Pass-through Costs RY24					
Forecast pass-through costs	$000	Forecasting methodology	Previous year forecast	Variance	Comment
Rates on system fixed assets	61	Actual 2022 plus CPI estimate	58	3	CPI Increases only
Commerce Act levies	212	Actual June Quarter 2023, forecast plus CPI	170	43	Increase in Levy.
Electricity Authority levies	97	2022 Actuals plus 6 months 2023 forecast plus CPI	99	(2)	
Utilities Disputes levies	23	Last 2 years average	23	(0)	
Total forecast pass-through costs	**393**		**350**	**43**	

Forecast recoverable costs

Electricity Distribution Services Default Price-Quality Path Determination 2024
Forecast Recoverable Costs
for the Assessment Period ending 31 March 2024

Table 6

Forecast Recoverable Costs RY24					
Forecast recoverable costs	$000	Forecasting methodology	Previous year forecast	Variance	Comment
IRIS OPEX incentive adjustment	1,762	Calculations are consistent with clause 3.1.3 of the IMs	366	1,396	
IRIS CAPEX incentive adjustment	(498)	Calculations are consistent with clause 3.1.3 of the IMs	(484)	(14)	
Transpower transmission charges	6,006	As notified by Transpower	1,683	4,323	As notified by Transpower under new TPM
New investment contract charges	-		-	-	
System operator services charges	-		-	-	
Avoided transmission charges - purchased assets	-		-	-	
Avoided transmission charges	-		2,393	(2,393)	ACOT no longer payable from 1 April 2023.
Claw-back	-		-	-	
Catastrophic event allowance	-		-	-	
Extended reserves allowance	-		-	-	
Quality incentive adjustment	(121)	Determined for the 2021/2022 regulatory year (adjusted for time value of money)	54	(175)	
Capex wash-up adjustment	(570)	Calculations are consistent with clause 3.1.3 (1)(p) of the IMs	(553)	(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	**6,579**		**3,458**	**3,121**	

Appendix B – Forecast prices and quantities

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

$\Sigma P_{L2023} * Q_{Li}$		Prices at 31 March 2024 multiplied by QTY31 Ma	FY														
Tariff or Fee		Description	Distribution Average Number of ICPs 31/03/24	Distribution kWh or kw or kvarh for 31/03/24	Other Qty for 31/03/24	Line Tariff 1.4.2023 to 31.3.2024 year	Forecast Pass-through Revenue ($)	Forecast Pass-through Revenue ($)	Forecast Distribution Revenue ($)		Forecast Other Revenue ($)	Total Revenue ($)					Total Revenue ($) Forecast
						Fixed	Fixed	Variable	Fixed	Variable	Fixed		Forecast Distribution Discount ($)	Forecast Distribution Discount ($)	Total Discount ($)	Total Revenue ($) less Discount	
						Total						ΣTh, 2024 & 2024	Fixed	Variable		ΣTh, 2024 & 2024	
Low User Non-TOU (LR)																	
LRFP		LRFP Daily Passthrough Price				15.5600	429,628		-			429,628	-		-	429,628	
LRFD		LRFD Distribution Fixed Price	7,544			29.4400	-		812,869			812,869	(362,548)		(362,548)	450,321	
LUC	UN24	LRF Uncontrolled		6,338,733				77,966		1,000,886		1,078,852		(184,205)	(184,205)	894,647	
LA	IN18	LRF All inclusive		24,352,269				299,533		3,114,655		3,414,188		(707,683)	(707,683)	2,706,506	
LFC	CN20	LRF Controlled 20		134,502				1,654		7,196		8,850		-	-	8,850	
Low user TOU Uncontrolled																	
LUF		LUF Daily price on HHR				15.5600	110,596		-			110,596	-		-	110,596	
LUFD Distribution Daily Price		LUF Daily price on HHR	1,942			29.4400	-		209,251			209,251	(93,328)		(93,328)	115,923	
LU1	UN24	LUF Peak		1,685,905				20,737		357,580		378,317		(47,746)	(47,746)	330,571	
LU2	UN24	LUF Shoulder		4,767,999				58,646		671,334		729,981		(135,034)	(135,034)	594,947	
LU3	UN24	LUF Off peak		1,652,938				20,331		217,857		238,188		(46,813)	(46,813)	191,376	
Low user TOU controlled																	
LCFP		LCF Daily price on HHR				15.5600	433,045		-			433,045	-		-	433,045	
LCFD Distribution Daily Price			7,604			29.4400	-		819,334			819,334	(365,432)		(365,432)	453,902	
LC1	IN18	LCF Peak		7,475,986				91,955		1,265,684		1,357,639		(177,168)	(177,168)	1,180,471	
LC2	IN18	LCF Shoulder		20,500,386				252,155		2,353,444		2,605,599		(485,823)	(485,823)	2,119,776	
LC3	IN18	LCF Off peak		9,958,179				122,485		1,013,742		1,136,227		(235,991)	(235,991)	900,236	
Standard User Non-TOU (SR)																	
SRFP		SRFP Daily Passthrough Price				15.5600	290,956		-			290,956	-		-	290,956	
SRFD Distribution Fixed Price			5,109			134.4400	-		2,513,885			2,513,885	(608,365)		(608,365)	1,905,521	
SUC	UN24	SRF Uncontrolled		7,392,093				90,923		819,044		909,967		(51,836)	(51,836)	858,130	
SA	IN18	SRF All inclusive		27,914,516				332,279		2,182,773		2,515,051		(189,437)	(189,437)	2,325,615	
SFC	CN20	SRF Controlled 20		333,338				4,100		11,500		15,600		-	-	15,600	
Standard user TOU Uncontrolled																	
SUFP		SUF Daily price on HHR				15.5600	116,462		-			116,462	-		-	116,462	
SUFD Distribution Fixed Price			2,045			134.4400	-		1,006,243			1,006,243	(243,513)		(243,513)	762,731	
SU1	UN24	SUF Peak		2,783,501				34,237		453,154		487,391		(18,272)	(18,272)	469,119	
SU2	UN24	SUF Shoulder		7,887,662				97,018		786,400		883,418		(51,778)	(51,778)	831,640	
SU3	UN24	SUF Off peak		4,040,685				49,700		334,569		384,269		(26,525)	(26,525)	357,744	
Standard user TOU Uncontrolled																	
SCFP		SCF Daily price on HHR				15.5600	226,602		-			226,602	-		-	226,602	
SCFD Distribution Fixed Price			3,979			134.4400	-		1,957,869			1,957,869	(473,808)		(473,808)	1,484,061	
SC1	IN18	SCF Peak		5,999,959				73,799		796,795		870,594		(36,880)	(36,880)	833,714	
SC2	IN18	SCF Shoulder		16,300,024				200,490		1,136,112		1,336,602		(100,190)	(100,190)	1,236,412	
SC3	IN18	SCF Off peak		8,279,978				101,733		436,707		538,440		(50,839)	(50,839)	487,601	
BTS TOU Uncontrolled (BTSU)																	
BTSUFP		BTSUFP Passthrough Price				40.6700	-		-			-			-	-	
BTSUFD		BTSUFD Distribution Fixed Price	0			149.3300	-		-			-	-		-	-	
BTSU1		BTSU Peak		-				-		-		-		-	-	-	
BTSU2		BTSU Shoulder		-				-		-		-		-	-	-	
BTSU3		BTSU Off peak		-				-		-		-		-	-	-	
General User (GG)																	
GGFP		GGFP Daily Passthrough Price				40.6700	512,945		-			512,945	-		-	512,945	
GGFD		GGFD Distribution Fixed Price	3,446			149.3300	-		1,883,404			1,883,404	(410,340)		(410,340)	1,473,064	
GGUC	UN24	GGF Uncontrolled		39,370,349				484,255		4,814,994		5,299,249		(144,016)	(144,016)	5,155,233	
GGA	IN18	GGF All inclusive		5,117,926				62,959		472,385		535,335		(18,721)	(18,721)	516,614	
GGFC	CN20	GGF Controlled 20		2,358,692				29,012		99,773		128,785		-	-	128,785	
General TOU Uncontrolled																	
GUFP		GUFP Daily Passthrough Price				40.6700	256,026		-			256,026	-		-	256,026	
GUFD		GUFD Distribution Fixed Price	1,720			149.3300	-		940,862			940,862	(204,813)		(204,813)	735,250	
GU1	UN24	GUF Peak		4,749,318				58,306		829,082		887,387		(14,579)	(14,579)	872,809	
GU2	UN24	GUF Shoulder		14,645,941				180,145		1,653,527		1,833,672		(45,043)	(45,043)	1,788,629	
GU3	UN24	GUF Off peak		7,025,288				86,411		666,700		753,111		(21,606)	(21,606)	731,505	
General TOU controlled																	
GCFP		GCFPF Daily Passthrough Price				40.6700	60,732		-			60,732	-		-	60,732	
GCFD		GCFDF Distribution Fixed Price	408			149.3300	-		222,992			222,992	(48,583)		(48,583)	174,408	
GC1	IN18	GCF Peak		1,489,725				18,324		215,861		234,185		(3,405)	(3,405)	230,780	
GC2	IN18	GCF Shoulder		4,546,531				55,922		376,907		432,830		(10,392)	(10,392)	422,438	
GC3	IN18	GCF Off peak		2,393,680				29,442		155,359		184,792		(5,471)	(5,471)	179,321	
General Advanced User (GA)																	
GAFP		GAFPF Daily Passthrough Price				103.0000	16,964		-			16,964	-		-	16,964	
GAFD		GAFDF Distribution Fixed Price	45			896.6200	-		147,673			147,673	(8,663)		(8,663)	139,010	
G1		G1 Peak		1,621,423				19,944		202,029		221,973		(16,340)	(16,340)	205,633	
G2		G2 Shoulder		3,498,485				43,031		275,331		318,362				318,362	
G3		G3 Off peak		1,557,639				19,161		69,947		89,108				89,108	
LDGF		Distributor Generation only (< 1 MW or for Network Purposes)	4									-				-	
LDGD																	
LDGV1	LDG	LDG Peak		2,891		-		-		-		-	-		-	-	
LDGV2	LDG	LDG Shoulder		5,782		-		-		-		-				-	
LDGV3	LDG	LDG Off Peak		2,891		-		-		-		-				-	
DG		Distributed Generation		7,041,669						70,417		70,417				70,417	
Larger User (TOU)																	
TOUF		TOUF Daily Pass Through				2,578.2900	349,152		-			349,152			-	349,152	
TOUF		Daily Distribution Demand price	37			152.7100	-		29,680			29,680	(7,123)		7,123	13,557	
TOUDVD		Daily Distribution Demand Price				-			-			-	-		-	-	
TOULVFD		Daily Distribution LV Capacity price $/day/ kVA				-			167,632			167,632	-		-	167,632	
TOU1		Peak		3,591,624				11,135	-	260,407		271,542		(9,850)	9,850	261,692	
TOU2		Shoulder		6,459,059				20,823	-	274,510		294,533		(20,704)	20,704	273,829	
TOU3		Off peak		3,159,520				9,795	-	17,061		26,856		-	-	26,856	
TOUTX		TOU Off peak				2,578.2900	226,477		-			226,477			-	226,477	
TOUTX		Daily Distribution LV Capacity price $/day/ kVA	24			152.7100	-		13,414			13,414	(4,620)		4,620	8,794	
TOUTXD		Daily Distribution Demand Price		-		-			-	-		-	-		-	-	
TOUTXT		Daily Distribution LV Capacity price $/day/ kVA				-			386,888			386,888	-		-	386,888	
TOUTX1		Peak		6,127,030				18,994	-	444,210		463,203		(17,406)	17,406	445,798	
TOUTX2		Shoulder		12,525,588				38,829	-	532,337		571,167		(36,495)	36,495	534,672	
TOUTX3		Off peak		6,965,366				21,593	-	37,613		59,206		-	-	59,206	
TOUPFVD		Daily Distribution Power factor Price kVar				-			-	-		-	-		-	-	
								-	-	-		-			-	-	
Industrial																	
0000904310TEBBE			1			3,161.3100	618,741	-	538,298	-		1,157,039	13,913		13,913	1,143,126	
0000930130TE465			1									-			-	-	
0000904000TE210			1			1,299.5000	139,450	-	336,167	-		475,617	6,957		6,957	468,660	
LDGN		Ngawha Connection	1			2,123.1100	-	-	777,058	-		777,058	-		-	777,058	
LDGSO	LDGS1	Distribution System Operator															
Street Lights																	
UMDECL					3	-	-	-	-	-	-	-	-		-	-	
UMG					170	40.0000	1,307	-	-	-	23,581	24,888	-		-	24,888	
UMGL					70	15.0000	-	-	-	-	3,843	3,843	-		-	3,843	
UMNT					3	24.0000	-	-	-	-	264	264	-		-	264	
UML					2,258	40.0000	17,355	-	-	-	313,216	330,571	-		-	330,571	
NIL					-	-	-					-			-	-	
$\Sigma P_{L2023} Q_i$			33,911	291,137,452	2,504			3,806,436	3,137,015	12,753,719	28,427,872	340,904	48,465,947	- 2,852,005	- 2,910,244	- 5,762,249	42,703,698

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 2024) 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 2018 to 31 March 2022 and a forecast of the year ended March 2023. 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 2023 is based on actuals to October 2022 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 2023 and applying an estimated growth rate using the average growth rate over the previous four years.
- Volumes for Residential connections are calculated by determining the average volume (kWh) per connection over the previous four years then aggregating connections by their Price Code as of 30 September 2022. 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. Commercial connections 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 2023/2024. 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 connections				Forecast		
Customer Group	**2018/2019**	**2019/2020**	**2020/2021**	**2021/2022**	**2022/2023E**	**2023/2024F**	**Commentary**
Residential	1.3%	1.0%	0.8%	1.3%	1.5%	1.2%	Consistent with historical trends
Commercial	1.1%	2.0%	2.0%	1.8%	0.7%	1.2%	Consistent with trends over last 2 years
Industrial	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Based on known connections
Unmetered	-6.2%	1.0%	6.8%	0.0%	2.3%	0.0%	Based on known connections
Overall	1.2%	1.2%	1.0%	1.4%	1.4%	1.2%	

Table B: Total Annualised Usage by customer group

Customer Group	**Actual consumption(kWh)**				**Forecast (kWh)**		**Commentary**
	2018/2019	**2019/2020**	**2020/2021**	**2021/2022**	**2022/2023E**	**2023/2024F**	
Residential	152,527,236	149,475,744	154,810,578	158,070,335	157,446,021	156,889,635	Based on historical average
Commercial	124,764,398	125,819,695	118,827,749	124,752,401	127,622,313	127,206,148	Based on historical average
Industrial	51,851,723	48,412,301	42,993,253	46,345,753	45,764,219	46,054,986	Included for completeness as revenue is not based on consumption
Unmetered	948,167	926,012	908,465	921,256	887,896	988,576	
Overall	330,091,524	324,633,751	317,540,044	330,089,745	331,720,448	331,139,345	

Table C: Average usage by Customer Group

Customer Group	**Actual Consumption per connection(kWh)**				**Forecast (kWh)**	
	2018/2019	**2019/2020**	**2020/2021**	**2021/2022**	**2022/2023E**	**2023/2024F**
Residential	5,727	5,549	5,696	5,756	5,655	5,559
Commercial	23,679	23,505	21,763	22,425	22,662	22,382
Industrial	17,283,908	16,137,434	14,331,084	15,448,584	15,254,740	15,351,662
Unmetered	3,778	3,792	3,581	3,516	3,350	3,688
Overall	10,266	9,977	9,653	9,916	9,832	9,689

Table D: Exceptions to standard methodology for Commercial.

Price Code	Charge type	Forecast methodology
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

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:

Table E: Residential and General Commercial TOU methodology

Forecast	Commentary
Connections	As of 1 November 2022 17,144 customers (51%) had been migrated to TOU pricing. Top Energy will continue its process of all customers with communicating meters being transferred to TOU rates however retailers will still be able to have an exemption if they are unable to supply the 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: Weekday Peak 0700-0930, 01530-20 00; Shoulder 0930-1730, 2000-2200 and Off-peak 2200-0700 Weekend Shoulder 0700-2200 and Off-peak 2200-0700

	Peak	Shoulder	Off-peak
Residential – All Inclusive	20%	54%	27%
Residential – Uncontrolled	20%	55%	25%
Commercial	18%	55%	27%

Solar

Top Energy's network has the second highest uptake of solar in New Zealand. As at 30 November 2022, 4.7% of connections had an on grid solar connection with a total of 9.1MW installed.[1] Growth over the last year has been 32% in installed capacity. 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

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 November 2022 adjusted for an increase in uptake (Electricity Authority https://www.emi.ea.govt.nz/).
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.

[1] Electricity Authority https://www.emi.ea.govt.nz/ as at 30 November 2022

Appendix C – Director's certificate

I, David Alexander Sullivan, 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.

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Date: 23 January 2023