



Default Price-Quality Path

Annual Price Setting Compliance Statement

1 April 2021 – 31 March 2022 Assessment Period

31 March 2021

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

2. Date prepared

This statement was prepared on 21 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

Compliance with price path RY22			Relevant Clause
Term	Description	Value (\$000)	
<i>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).</i>			
Forecast revenue from prices (\$000)	<i>Forecast prices between 1 April 2021 and 31 March 2022 multiplied by forecast quantities for the period ending 31 March 2022</i>	46,352	Schedule 1.3
Forecast allowable revenue (\$000)	<i>The sum of forecast net allowable revenue, forecast pass-through and recoverable costs, opening wash-up account balance and the pass-through balance allowance</i>	46,439	Schedule 1.5 & Clause 8.4
Maximum allowable forecast revenue from prices (\$000)	<i>Forecast revenue from prices for the previous assessment period x (1 + limit on annual percentage increase in forecast revenue from prices)</i>	49,611	Clause 4.2 & 8.4
Maximum allowable forecast revenue (\$000)	<i>The lesser of the forecast allowable revenue and maximum allowable forecast revenue from prices</i>	46,439	DPP Clause 8.4
Compliance result	<i>Forecast revenue from prices ≤ forecast allowable revenue and maximum allowable forecast revenue from prices</i>	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 2022**

Table 2

Forecast allowable revenue RY22		
Term	Description	Value (\$'000)
Forecast net allowable revenue	<i>Forecast net allowable revenue as set out in Table 1.4.1 in Schedule 1.4 for the period ending 31 March 2022</i>	38,756
Forecast pass through costs	<i>Forecast pass-through costs</i>	269
Forecast recoverable costs	<i>Forecast recoverable costs.</i>	7,605
Opening wash-up account balance	<i>The opening wash-up account balance for the second assessment period of the DPP regulatory period is nil as set out in Schedule 1.7 (1)(a)</i>	-
Pass-through balance allowance	<i>(ePTB - pass-through balance) x (67th percentile estimate of post-tax WACC)²</i>	(191)
Total		46,439

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 RY22		
Term	Description	Value (\$000)
$\Sigma P_{2021/22} * Q_{2021/22}$	<i>Forecast prices between 1 April 2021 and 31 March 2022 multiplied by forecast quantities for the period ending 31 March 2022</i>	46,352

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 has been changed to be 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 RY22		
Term	Description	Value (\$000)
Forecast revenue from prices from previous assessment period	<i>Forecast prices between 1 April 2020 and 31 March 2021 multiplied by forecast quantities for the period ending 31 March 2021</i>	45,101
Limit on annual percentage increase in forecast revenue from prices		10%
Maximum allowable forecast revenue from prices	<i>Forecast revenue from prices for the previous assessment period x (1 + limit on annual percentage increase in forecast revenue from prices)</i>	49,611

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 2022**

Table 5

Forecast Pass-through Costs RY22		
Forecast pass-through costs	\$000	Forecasting methodology
Rates on system fixed assets	53	Actual 2021 plus CPI estimate
Commerce Act levies	115	2021 Actuals plus 6 months 2021 forecast plus CPI
Electricity Authority levies	78	2022 Actuals plus 6 months 2021 forecast plus CPI
Utilities Disputes levies	23	Last 2 years average
Total forecast pass-through costs	269	

Forecast recoverable costs

Table 6

Forecast Recoverable Costs RY22		
Forecast recoverable costs	\$000	Forecasting methodology
IRIS OPEX incentive adjustment	1,017	Calculations are consistent with clause 3.1.3 of the IMs
IRIS CAPEX incentive adjustment	(471)	Calculations are consistent with clause 3.1.3 of the IMs
Transpower transmission charges	4,829	As notified by Transpower
New investment contract charges	-	
System operator services charges	-	
Avoided transmission charges - purchased assets	-	
Avoided transmission charges	2,410	Based on Demand levels and Transpower's price for interconnection for 2021/2022 year
Distributed generation allowance	-	
Claw-back	-	
Catastrophic event allowance	-	
Extended reserves allowance	-	
Quality incentive adjustment	358	Determined for the 2019/2020 regulatory year (adjusted for time value of money)
Capex wash-up adjustment	(538)	Calculations are consistent with clause
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	7,605	

Pass-through balance allowance

**Electricity Distribution Services Default Price-Quality Path Determination 2022
Pass-through Balance Allowance
for the Assessment Period ending 31 March 2022**

Schedule 1.5

Table 7

Pass-through balance allowance RY22		
Term	Description	Value (\$000)
Pass-through balance	<i>Pass-through balance for the assessment period ending 31 March 2021</i>	(62)
ePTB	<i>An estimate of the pass-through balance as at 31 March 2020</i>	(238)
67th percentile estimate of post-tax WACC		4.23%
Pass-through balance allowance	<i>$(ePTB - \text{pass-through balance}) \times (67\text{th percentile estimate of post-tax WACC})^2$</i>	(191)

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 2022) and therefore have been based on the level and trends of recent actual data. The total forecast quantities (kWh) by Price Code has 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 2016 to 31 March 2020 and a forecast of the year ended March 2021. 1 April 2016 has been selected as the starting point for the detailed quantities calculation as this is when Residential and General Commercial were separated into different Price Codes. The forecast for the year ended 31 March 2021 is based on actuals to September 2020 and the remainder forecast based on growth over the last 12 months.

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 at 31 March 2021 and applying an estimated growth rate using the average growth rate over the previous four years (from 31 March 2017 to 31 March 2021). 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 2020. 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. 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 2021/2022. 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

Customer Group	Actual Growth ICP connections			Forecast		Commentary
	2017/18	2018/2019	2019/2020	2020/2021	2021/2022	
Residential	0.90%	1.3%	1.0%	0.8%	1.0%	Consistent with historical trends
Commercial	4.20%	1.1%	2.0%	1.7%	0.8%	Reduced due to impact of Covid-19
Industrial	0.0%	0.0%	0.0%	0.0%	0.0%	Based on known connections
Unmetered	0.0%	-6.2%	1.0%	3.9%	0.0%	Based on known connections
Overall	1.4%	1.2%	1.2%	1.0%	1.0%	

Table B: Total Annualised Usage by customer group

Customer Group	Actual Growth (kWh)				Forecast (kWh)		Commentary
	2016/2017	2017/18	2018/2019	2019/2020	2020/2021	2021/2022	
Residential	145,527,388	148,552,975	152,527,236	149,475,744	155,076,256	153,171,871	Based on historical average
Commercial	117,005,263	120,464,061	124,764,398	125,819,695	118,622,203	124,155,569	Based on historical average
Industrial	57,378,176	55,248,315	51,851,723	48,412,301	44,443,258	47,658,852	Included for completeness as revenue is not based on consumption
Unmetered	1,596,978	1,077,863	948,167	926,012	926,055	926,034	Based on last twelve months
Overall	321,507,805	325,343,214	330,091,524	324,633,751	319,067,773	325,912,326	

Table C: Average usage by Customer Group

Customer Group	Actual Growth (kWh)				Forecast (kWh)	
	2016/2017	2017/18	2018/2019	2019/2020	2020/2021	2021/2022
Residential	5,573	5,639	5,727	5,549	5,705	5,584
Commercial	23,453	23,471	23,679	23,505	21,756	22,495
Industrial	19,126,059	18,416,105	17,283,908	16,137,434	14,814,419	15,886,284
Unmetered	6,312	4,162	3,778	3,792	3,701	3,632
Overall	10,253	10,250	10,266	9,977	9,701	9,814

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:

Table E: Residential and General Commercial TOU methodology

Forecast	Commentary																
Connections	<p>Currently 14,500 customers (44%) have 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 apply for an exemption if they are unable to supply the TOU metering or TOU data.</p> <p>The split does not impact revenue as the daily charges for TOU and non-TOU are the same.</p>																
Average Quantities	<p>Quantities kWh for customers on TOU price codes or single rate price codes are based on the same methodology as outlined above.</p> <p>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.</p>																
Allocation between time periods	<p>The allocation of usage between Peak, Shoulder and Off-peak has been calculated based on a sample of annual consumption data purchased from a retailer (over 25% of customers). As above no adjustment has been made due to behaviour changes. This will be reassessed for the forecast next year when a complete 12 months actual usage by peak, shoulder and off-peak is available. An initial analysis suggests that splits from the sample are representative of the actuals.</p> <p>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.</p> <p>The aggregate TOU splits by timebound are below:</p> <table border="1" data-bbox="533 1473 1441 1693"> <thead> <tr> <th></th> <th>Peak</th> <th>Shoulder</th> <th>Off-peak</th> </tr> </thead> <tbody> <tr> <td>Residential – All Inclusive</td> <td>20%</td> <td>54%</td> <td>26%</td> </tr> <tr> <td>Residential – Uncontrolled</td> <td>19%</td> <td>54%</td> <td>27%</td> </tr> <tr> <td>Commercial</td> <td>17%</td> <td>60%</td> <td>23%</td> </tr> </tbody> </table> <p><u>Weekday</u> Peak 0700-0930, 01530-20 00; Shoulder 0930-1730, 2000-2200 and Off-peak 2200-0700</p> <p><u>Weekend</u> Shoulder 0700-2200 and Off-peak 2200-0700</p>		Peak	Shoulder	Off-peak	Residential – All Inclusive	20%	54%	26%	Residential – Uncontrolled	19%	54%	27%	Commercial	17%	60%	23%
	Peak	Shoulder	Off-peak														
Residential – All Inclusive	20%	54%	26%														
Residential – Uncontrolled	19%	54%	27%														
Commercial	17%	60%	23%														

Solar

Top Energy's network has the second highest uptake of solar in New Zealand. As at 31 October 2020 3.2% of connections had an on grid solar connection with a total of 5.3MW installed.¹ Growth over the last year has been 32%. 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	<p>The forecast for solar is based kW install rather than connections with solar.</p> <p>Residential growth is based on the growth rate for the year ended October 2020 (Electricity Authority https://www.emi.ea.govt.nz/). This is 20% and equates to 720kW for the assessment period.</p> <p>General Commercial is based on connection growth of >10kW for the year ended October 2020. This is 660kW for the assessment period compared to 600kW in the year ended 31 October 2020.</p>
Generation from kW installed	<p>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.</p>
Reduction in on grid consumption	<p>Assumed Residential 45% consumed within the premise and 55% exported to grid². Commercial is 55% consumed and 45% exported.</p>

¹ Electricity Authority <https://www.emi.ea.govt.nz/> as at 31 October 2020

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: 21.12.2020