



**DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT  
FOR THE ASSESSMENT DATE 31 MARCH 2017**

*Pursuant to the Electricity Distribution Services Default Price-Quality Path  
Determination 2015*

30 May 2017

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**1) Compliance with the Price Path (Clause 11.2(a))**

Top Energy Limited does comply with the price path in clause 8 at the assessment date 31 March 2017, as specified in the Electricity Distribution Default Price-Quality Path Determination 2015.

**Clause 8.3** - The notional revenue (NR) of a Non-exempt EDB at any time during the Assessment Period must not exceed the allowable notional revenue (ANR) for the Assessment Period.

Compliance is demonstrated in the following tables. The first table demonstrates that notional revenue derived using posted prices at the end of the Assessment Period is less than allowable notional revenue. The maximum notional revenue during the Assessment Period does not exceed allowable notional revenue as there was no price change, illustrating that at no time during the Assessment Period is the price path breached.

**Commerce Act (Electricity Distribution Default Price-Quality Path)  
Determination 2015  
Commerce Act (Electricity Distribution Default Price-Quality  
for the Assessment Date 31 March 2017**

Clause 8.3

Test:	<u>NR2017</u>	$\leq$	<u>ANR2017</u>
NR2017:	\$ 36,512,252		
ANR2017:	\$ 36,780,225		
Result:	0.9927 $\leq$ 1		
Result:	Price Path has not been breached		

Supporting evidence is presented in Appendices A, B and C.

## 2) Compliance with the Quality Standards (Clause 11.2(a))

Top Energy Ltd complied with the requirements of the quality standards in clause 9 at the assessment date, 31 March 2017, as specified in the Electricity Distribution Default Price-Quality Path Determination 2015.

**Clause 9.1:** A Non-exempt EDB must, in respect of each Assessment Period, either:

- (a) Comply with the annual reliability assessment specified in clause 9.2 for that Assessment Period; or
- (b) Have complied with the annual reliability assessment in each of the two preceding Assessment Periods.

**Clause 9.2:** For the purpose of sub-clause 9.1(a), to comply with the annual reliability assessment:

- (a) a Non-exempt EDB's SAIDI Assessed Value for the Assessment Period must not exceed the SAIDI Limit specified in Schedule 4A; and
- (b) a Non-exempt EDB's SAIFI Assessed Value for the Assessment Period must not exceed the SAIFI Limit specified in Schedule 4A.

Test:	$\frac{SAIDI_{Assess\ 2017}}{SAIDI_{Limit}} \leq 1$
SAIDI <sub>Assess 2017</sub>	400.912
SAIDI <sub>Limit</sub>	516.675
Test:	0.7759 < 1
Result:	SAIDI Limit has not been breached

Test:	$\frac{SAIFI_{Assess\ 2017}}{SAIFI_{Limit}} \leq 1$
SAIFI <sub>Assess 2017</sub>	4.823
SAIFI <sub>Limit</sub>	6.248
Test:	0.7720 < 1
Result:	SAIFI Limit has not been breached

Compliance is demonstrated in the following tables: Supporting evidence is presented in Appendices E and F.

**3) Compliance with the Price and Quality Path (Clause 11.2(d))**

- (i) Top Energy have undertaken a restructure of prices during the assessment period. The 2015 NTOU consumption has had percentages for 2017 applied to allocate in 2015 actual quantities. The TOU consumption has had 1.4.2016 to 31.10.2016 percentages applied to the actual quantities for 2015.
- (ii) Top Energy have not received a transfer of Transmission Assets from Transpower that become System Fixed Assets or transferred system fixed assets to Transpower in the current or preceding assessment period.
- (iii) Top Energy have not engaged in any Amalgamations or Mergers in the assessment period.
- (iv) Top Energy have not conducted any major transactions in the assessment period.

**4) Director Certification (Clause 11.3)**

We, Murray Ian Bain and Gregory Mark Steed, being directors of Top Energy Limited certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached Annual Compliance Statement of Top Energy Limited, and related information, prepared for the purposes of the Electricity Distribution Default Price-Quality Path Determination 2015 are true and accurate.



**Murray Ian Bain**



**Gregory Mark Steed**

Date: 30 May 2017



## **INDEPENDENT ASSURANCE REPORT TO THE DIRECTORS OF TOP ENERGY AND TO THE COMMERCE COMMISSION**

The Auditor-General is the auditor of Top Energy Limited (the company). The Auditor-General has appointed me, Andrew Burgess, using the staff and resources of Deloitte Limited, to provide an opinion, on his behalf, on whether the Annual Compliance Statement for the year ended on 31 March 2017 on pages 2 to 4 and 7 to 18 has been prepared, in all material respects, with the Electricity Distribution Services Default Price-Quality Path Determination 2015 (the Determination).

### **Directors' responsibilities for the Annual Compliance Statement**

The directors of the company are responsible for the preparation of the Annual Compliance Statement in accordance with the Determination, and for such internal control as the directors determine is necessary to enable the preparation of an Annual Compliance Statement that is free from material misstatement.

### **Our responsibility for the Annual Compliance Statement**

Our responsibility is to express an opinion on whether the Annual Compliance Statement has been prepared, in all material respects, in accordance with the Determination.

### **Basis of opinion**

We conducted our engagement in accordance with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised): *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* and the Standard on Assurance Engagements 3100: *Compliance Engagements* issued by the External Reporting Board. Copies of these standards are available on the External Reporting Board's website.

These standards require that we comply with ethical requirements and plan and perform our assurance engagement to provide reasonable assurance about whether the Annual Compliance Statement has been prepared in all material respects in accordance with the Determination.

We have performed procedures to obtain evidence about the amounts and disclosures in the Annual Compliance Statement. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the Annual Compliance Statement, whether due to fraud or error or non-compliance with the Determination. In making those risk assessments, we considered internal control relevant to the company's preparation of the Annual Compliance Statement in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.

In assessing the disclosures about compliance with the price path in clause 8 of the Determination for the assessment period ended on 31 March 2017, our assurance engagement included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 2, 4 and 7 to 11 of the Annual Compliance Statement.

In assessing the disclosures about compliance with the quality standards in clause 9 of the Determination for the assessment period ended on 31 March 2017, our assurance engagement included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 3, 4 and 12 to 18 of the Annual Compliance Statement.

Our assurance engagement also included assessment of the significant estimates and judgements, if any, made by the company in the preparation of the Annual Compliance Statement.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Use of this report**

This independent assurance report solely for the directors of the company and for the Commerce Commission for the purpose of providing those parties with reasonable assurance about whether the Annual Compliance Statement has been prepared, in all material respects, in accordance with the Determination. We disclaim any assumption of responsibility for any reliance on this report to any

person other than the directors of the company or the Commerce Commission, or for any other purpose than that for which it was prepared.

### **Scope and inherent limitations**

Because of the inherent limitations of a reasonable assurance engagement, and the test basis of the procedures performed, it is possible that fraud, error or non-compliance may occur and not be detected.

We did not examine every transaction, adjustment or event underlying the Annual Compliance Statement nor do we guarantee complete accuracy of the Annual Compliance Statement. Also we did not evaluate the security and controls over the electronic publication of the Annual Compliance Statement.

The opinion expressed in this independent assurance report has been formed on the above basis.

### **Independence and quality control**

When carrying out the engagement, 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 (Revised) 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.

We also complied with the independent auditor requirements specified in the Determination.

The Auditor-General, and his employees, and Deloitte Limited and its partners and employees may deal with the company and its subsidiaries 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 business, this engagement, the regulatory assurance engagement performed under the electricity distribution information disclosure determination 2012, verification of unique emissions factor application engagement and the annual audit of the company's financial statements, we have no relationship with or interests in the company and its subsidiaries.

### **Opinion**

In our opinion:

- As far as appears from an examination, the information used in the preparation of the Annual Compliance statement has been properly extracted from the company's accounting and other records, and has been sourced, where appropriate, from its financial and non-financial systems; and
- The Annual Compliance Statement of company for the year ended on 31 March 2017, has been prepared, in all material respects, in accordance with the Determination.

In forming our opinion, we have obtained sufficient recorded evidence and all the information and explanations we have required.



Andrew Burgess  
**for Deloitte Limited**  
**On behalf of the Auditor-General**  
Auckland, New Zealand  
30 May 2017

## Appendix A – Price Path Compliance Calculations (Clause 11.4)

### Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2015 Price Path Inputs and Calculations for the Assessment Date 31 March 2017

#### Clause 8.5

Notional Revenue for the year ending March 2017		
Term	Description	Value \$
$DP_{2017} * Q_{2015}$	Prices at 31 March 2017 multiplied by 31 March 2015 Base Quantities	36,512,252
$NR_{2017}$	Notional Revenue for the year ending 31 March 2017	36,512,252

Supported by P\*Q schedules presented in Appendix B

#### Clause 8.4

Allowable Notional Revenue 2017		
Term	Description	Value \$
$DP_{t-1} Q_{t-2}$	2016 Price* 2015 Qty	34,210,978
$(ANR_t - I - NR_{t-1})$	Difference in Notional revenue	5,385.00
$(1 + CPI_{2017})$	Average change in Consumer Price Index	1.00461
$1-X$	Annual rate of Change	1.07
$ANR_{2017}$	Allowable Notional Revenue under for the year ending 31 March 2017	36,780,225



## Appendix B – Price and Quantity Schedules (Clause 11.3(a))

Prices at 31 March 2017 multiplied by 31 March 2015												
$\Sigma P_{2017} \times U_{2015}$	Tariff or Fee	Description	Distribution kWh at 31/3/2015	Distribution kWh at 31/3/2017	Chief City for 31/3/15	Low Tariff 1-4,2016 to 31/3,2017,year			National Distribution Revenue (\$)		National Other Revenue (\$)	Total Revenue (\$)
						Cost/Day Distribution	Total	Variable (kwh) Distribution	Fixed	Variable	Fixed	
Low User (LR)	LR	0 LRF Only Price	12 022			13 700	15 000		634 643			634 643
	LR	LRFA Uncontrolled		8 195 960				18 642		1 527 872	-	1 527 872
	LR	LRFA Machine		50 656 895				12 814		6 517 930	-	6 517 930
	LR	LRFA Controlled 20		255 239				6 926		13 003	-	13 003
	LR	LRFA Day		751 781				14 321		107 665	-	107 665
	LR	LRFA Night		186 038				2 110		3 927	-	3 927
Standard User (SR)	SR	0 SRF Only Price	13 010			35 533	40 000		1 734 832			1 734 832
	SR	SRFA Uncontrolled		13 757 873				17 791		2 446 320	-	2 446 320
	SR	SRFA Machine		70 340 035				11 950		8 484 211	-	8 484 211
	SR	SRFA Controlled 20		757 154				9 125		39 601	-	39 601
	SR	SRFA Day		2 067 910				13 388		297 335	-	297 335
	SR	SRFA Night		1 295 029				2 110		37 118	-	37 118
General User (G)	G	0 GRF Only Price	4 773			35 533	40 000		635 489			635 489
	G	GRFA Uncontrolled		49 526 102				17 791		7 168 287	-	7 168 287
	G	GRFA Machine		4 230 807				11 900		505 587	-	505 587
	G	GRFA Controlled 20		4 510 733				5 125		234 233	-	234 233
	G	GRFA Day		7 688 658				13 388		979 881	-	979 881
	G	GRFA Night		3 519 802				2 110		74 279	-	74 279
General Advanced User (GA)	GA	0 GA Only Price	2			671 600	832 600		4 903			4 903
	GA	GAFA Uncontrolled		71 235				14 340		10 216	-	10 216
	GA	GAFA Machine		137 841				9 752		13 452	-	13 452
	GA	GAFA Controlled 20		91 075				2 110		1 922	-	1 922
	GA											
	GA											
Larger User (L)	L	0 LRF Only Price	120			671 600	832 600		318 674			318 674
	L	LRFFA Uncontrolled		13 554 351				8 657		1 235 860	-	1 235 860
	L	LRFFA Machine										
	L	LRFFA Controlled 20										
	L	LRFFA Day										
	L	LRFFA Night										
Industrial	IND	0 IND Only Price	60			1 912 700	2 400 320		418 881			418 881
	IND	INDFA Uncontrolled		8 504 705				8 881		755 265	-	755 265
	IND	INDFA Machine		17 706 932				6 038		1 069 147	-	1 069 147
	IND	INDFA Controlled 20		8 646 174				0 538		45 616	-	45 616
	IND											
	IND											
Non standard	NS	0 NS Only Price	1			695 700	1 161 8316		221 178			221 178
	NS	NSFA Uncontrolled										
	NS	NSFA Machine										
	NS	NSFA Controlled 20										
	NS	NSFA Day										
	NS	NSFA Night										
Street Lights	SL	0 SL Only Price	1			175 6164	175 6164		64 100			64 100
	SL	SLFA Uncontrolled										
	SL	SLFA Machine										
	SL	SLFA Controlled 20										
	SL	SLFA Day										
	SL	SLFA Night										
UNCONTROLLED	UN	0 UN Only Price	19			39 4692	39 4692					2 737
	UN	UNFA Uncontrolled				40 8485	40 8485					5 517
	UN	UNFA Machine				13 6669	13 6669					3 747
	UN	UNFA Controlled 20				21 8566	21 8566					399
	UN	UNFA Day				81 8031	81 8031					17 616
	UN	UNFA Night				40 8485	40 8485					300 560
WASHLINE	WL	0 WL Only Price	551			50 3975	50 3975					101 357
	WL	WLFA Uncontrolled				122 5455	122 5455					1 789
	WL	WLFA Machine										
	WL	WLFA Controlled 20										
	WL	WLFA Day										
	WL	WLFA Night										
P.P.O.	PP	0 PP Only Price	57									
	PP	PPFA Uncontrolled										
	PP	PPFA Machine										
	PP	PPFA Controlled 20										
	PP	PPFA Day										
	PP	PPFA Night										

NB: The maximum NR (2017) prices and quantities are the same as NR (2017)

Prices at 31 March 2016 multiplied by 31 March 2015 Base Quantities														
Σ P <sub>2016</sub> × Q <sub>2015</sub>	Tariff or Fee	Description	Number of ICPS at 31/03/15	Wholesale or Retail for 31/03/15	Over-Qty for 31/03/15	Line 7a(1) 1.4.2015 to 31.3.2015 year				National Distribution Revenue (5)		National Other Revenue (5)	National Other Revenue (5)	Total Revenue (4)
						Fixed		Variable (cents/kWh)		Fixed	Variable			
						31/Day Distribution	Total	Variable (cents/kWh)	Total					
Low User (LR)	LR													
	LR24		12,691.71			0.137	0.150			634,649.109				634,649
	LR18			8,195,900.48					17,570		1,440,000.257			1,440,000
	LR12			50,866,895.83					12,077		6,143,195.909			6,143,195
	LR6			255,297.66					4,630		12,330.877			12,331
	LR3			251,781.05					11,698		101,475.405			101,475
Standard User (SR)	SR													
	SR24		13,010.06			0.137	0.150			650,567.991				650,568
	SR18			13,757,872.94					12,077		2,417,259.275			2,417,259
	SR12			70,940,035.49					15,699		8,667,500.548			8,667,501
	SR6			257,153.94					4,630		35,570.535			35,571
	SR3			252,910.47					13,498		400,600.555			400,600
General User (G)	GF													
	GF24		4,773.23			0.137	0.150			238,685.275				238,685
	GF18			40,426,106.30					17,570		7,102,656.877			7,102,657
	GF12			4,220,805.73					12,077		510,854.528			510,855
	GF6			4,570,326.65					4,630		220,266.387			220,266
	GF3			7,468,657.80					13,498		1,008,119.429			1,008,119
General Advanced User (GA)	GAF													
	GAF24		200			6.716	8.326			4,502,680				4,503
	GAF18			71,235.22					8,348		5,940,759			5,941
	GAF12			137,941.22					8,348		11,515,353			11,515
	GAF6			91,075.49							7,602,392			7,603
	GAF3													
Industrial	CAP150F		130.00			6.716	8.326			318,674.200				318,674
	CAP150V			13,554,253.05					8,348		1,164,901.045			1,164,901
	DG													
	TOU1		60			19.127	24.003			418,881.300				418,881
	TOU2		0	8,504,704.94					8,370		711,843.604			711,844
	TOU3		0	17,705,531.58					5,691		1,007,678.712			1,007,679
Non Standard	LDG		1						0.167		14,439.110			14,439
	Street Lights													
	UPEX500		19			0.372	0.372							
	UATECL		37			0.365	0.365							
	UATEL		75			0.129	0.129							
	UAEUT		5			0.206	0.206							
Other	UAEH		60			0.771	0.771							
	UAEH		2,024			0.365	0.365							
	UAEH500		552			0.475	0.475							
	UAEH500		4			1.155	1.155							
	UAEH													
	UAEH													
Σ P <sub>2016</sub> × Q <sub>2015</sub>					30,671	259,229,847.00	2.776		2,915,721	30,684,674	10,353		34,210,978	

Clause 11.4(e): The pricing methodology used to calculate distribution prices and pass-through prices is in accordance with the Pricing Methodology Disclosure 2016-2017 which is publicly available on the Top Energy Website; Network/Disclosures

**Appendix C – Pass Through and Recoverable Costs (Clause 11.3(b) (c))**

**Commerce Act (Electricity Distribution Default Price-Quality Path)**

**Determination 2015**

**Pass Through and Recoverable Costs  
for the Assessment Date 31 March 2017**

Pass Through and Recoverable Costs for year ending March 2017				
V 2017	Actual (\$)	Forecast(\$)	Variance (\$)	Variance (%)
Transpower	5,472,321	5,472,321	-	-
Avoided Transmission Ngawha	2,748,037	2,748,037	-	-
Avoided Transmission Transpower	1,803,583	1,803,583	-	-
Energy Efficiency Incentive	-	-	-	-
Quality Incentive Adjustment	-	-	-	-
Clawback	1,649,000	1,649,000	-	-
NPV Washup Allowance	614,000	614,000	-	-
Opex Incentive	-	-	-	-
Capex Incentive	21,523	22	21,501	99.9%
IRIS (Balance from previous years difference)			-	-
Total V	12,308,463	12,286,962	21,501	.17%
K 2017	Actual (\$)	Forecast(\$)	Variance (\$)	Variance (%)
Rates	33,211	32,113	1,098	3.31%
Electricity Authority Levies	78,611	81,548	(2,936)	(3.73)%
Complaints Levy	16,289	-	16,289	100.%
Commerce Act Levies	93,640	81,029	12,611	13.47%
Total K	221,752	194,689	27,062	12.2%
<b>Total Pass Through and Recoverable Costs</b>	<b>12,530,215</b>	<b>12,481,651</b>	<b>48,564</b>	<b>.39%</b>

Note: Top Energy Limited had system fixed assets transferred from Transpower on 1 April 2012. The Avoided Transmission Transpower charge in the above table is consistent with clause 3.3.3(1)(b) of the IM Determination as required by clause 11.3(d).

## Appendix D –PTB 2017 Compliance Calculations

Pass Through and Recoverable Costs for year ending March 2017	
V 2017	2017
PTBi2017 Qi2017	12,587,555
Actual K 2017	221,752
Actual V 2017	12,308,463
PTBt2016	(136,975)
Interest 2016 PBT	(8,342)
Total K+V (passthrough)	12,384,898
PTB 2017	(202,657)

Variance comments	Description
PTBt Balance Transmission from Previous year Difference Interest	Negative as Over recovered in 2016
Interest saved (1*r)	Cost of Debt is 6.09% as detailed in 2014 NZCC-28-COC 31 Oct 2014

## Appendix E – Quality Standard Compliance Calculations

### Event Days exceeding Boundary Values

#### Quality Standards for Top Energy Limited Regulatory Period 1 April 2015 – 31 March 2020 Schedule 4A

##### Assessment Period Limits

SAIDI	SAIFI
516.675	6.248

##### Class C Unplanned Outage Boundary Values

SAIDI	SAIFI
29.364	0.347

Any Daily Value for Class C Interruptions greater than the Unplanned Boundary Value equals the Unplanned Boundary Value:

#### Event Days exceeding SAIDI and SAIFI Boundary Values

Date	SAIDI_C	SAIFI_C	SAIDI_C_NOF	SAIFI_C_NOF	CAUSE
21/05/2016	127.771	0.300	29.364	0.300	Storm - Gales, KOE-OMA 33kV tripped NFF INC172543 KOE 33kV bus trip - possum contacted sub-transmission lines Kaikohe INC173101, protection failure
21/09/2016	129.976	1.032	29.364	0.347	- tripped Southern 110kV breakers

#### Assessed SAIDI Value

SAIDI <sub>2017</sub>	400.912
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The sum of daily SAIDI Values in the Normalised Assessment Dataset

$$SAIDI_{\text{assess}} = (0.5 \times SAIDI_B) + SAIDI_C$$

SAIDI<sub>B</sub> is the sum of the daily SAIDI Values for Class B Interruptions  
SAIDI<sub>C</sub> is the sum of the daily SAIDI Values for Class C Interruptions

#### Assessed SAIFI Value

SAIFI <sub>2017</sub>	4.823
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The sum of daily SAIFI Values in the Normalised Assessment Dataset

$$SAIFI_{\text{assess}} = (0.5 \times SAIFI_B) + SAIFI_C$$

SAIFI<sub>B</sub> is the sum of the daily SAIFI Values for Class B Interruptions  
SAIFI<sub>C</sub> is the sum of the daily SAIFI Values for Class C Interruptions

### ***Annual Reliability Assessments***

FYE	SAIDI	SAIFI
2014	464.909	5.486
2015	599.923	6.349
2016	461.799	5.639
2017	400.912	4.823

## Appendix F –Quality Incentive Calculations

Quality Incentive Adjustment		2016	2017
Term	Description	Value \$000	Value \$000
<i>S<sub>SAIDI</sub></i>	SAIDI incentive	-55.506	72.809
<i>S<sub>SAIFI</sub></i>	SAIFI incentive	-42.815	129.120
<i>S<sub>TOTAL</sub></i>	SAIDI incentive plus SAIFI incentive	-98.322	201.929

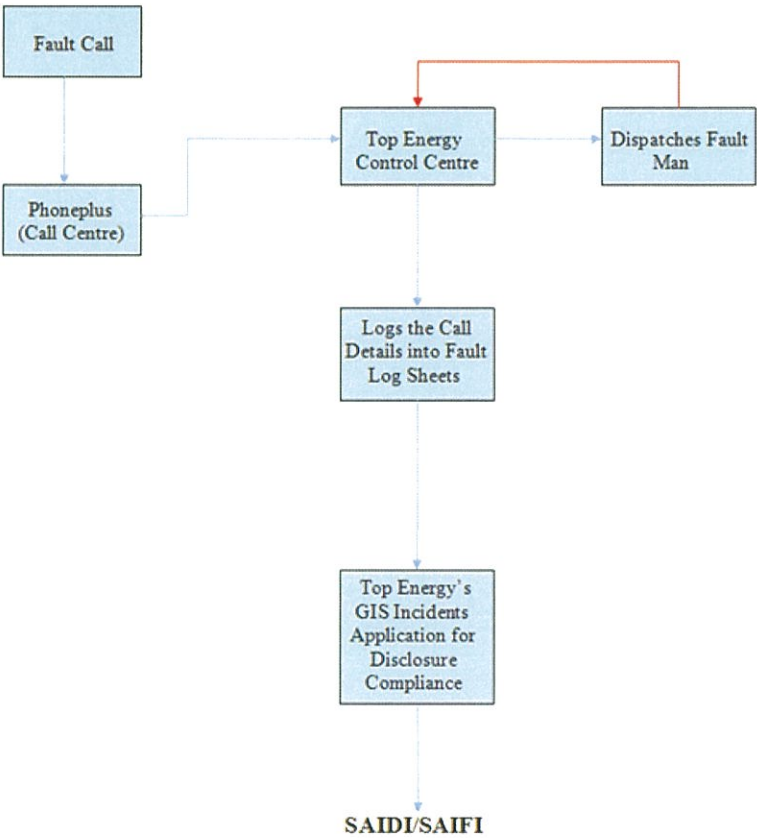
SAIDI Incentive		2016	2017
Term	Description	Value	Value
<i>SAIDI Target</i>	SAIDI target specified in DPP Determination	435.4607	435.4607
<i>SAIDI Collar</i>	SAIDI incentive range collar specified in DPP Determination	354.2460	354.2460
<i>SAIDI Cap</i>	SAIDI incentive range cap specified in DPP Determination	516.6753	516.6753
<i>MAR</i>	Maximum allowable revenue for the 2015/16 year (in \$000)	34,231	34,231
<i>REV<sub>RISK</sub></i>	Revenue at risk; 1% of MAR (\$000)	342.310	342.310
<i>SAIDI<sub>IR</sub></i>	SAIDI incentive rate per unit; equal to 50% of revenue at risk divided by Cap minus Target (\$000)	2.107	2.107
<i>SAIDI<sub>ASSESS</sub></i>	Assessed SAIDI value for the Assessment Period	461.799	400.9123
<i>SAIDI<sub>ASSESS - FOR INCENTIVE</sub></i>	Assessed SAIDI value for purpose of incentive	461.799	400.9123
<i>S<sub>SAIDI</sub></i>	SAIDI incentive adjustment; equal to incentive rate multiplied by SAIDI target minus Assessed SAIDI value (\$000)	-55.506	72.809

SAIFI Incentive			
SAIFI Incentive		2016	2017
Term	Description	Value	Value
<i>SAIFI Target</i>	SAIFI target specified in DPP Determination	5.4359	5.4359
<i>SAIFI Collar</i>	SAIFI incentive range collar specified in DPP Determination	4.6240	4.6240
<i>SAIFI Cap</i>	SAIFI incentive range cap specified in DPP Determination	6.2478	6.2478
<i>MAR</i>	Maximum allowable revenue for the 2015/16 year (in \$000)	34,231.000	34,231.000
<i>REV<sub>RISK</sub></i>	Revenue at risk; 1% of MAR (\$000)	342.310	342.310
<i>SAIFI<sub>IR</sub></i>	SAIFI incentive rate per unit; equal to 50% of revenue at risk divided by Cap minus Target (\$000)	210.808	210.808
<i>SAIFI<sub>ASSESS</sub></i>	Assessed SAIFI value for the Assessment Period	5.6390	4.8234
<i>SAIFI<sub>ASSESS - FOR INCENTIVE</sub></i>	Assessed SAIFI value for purpose of incentive	5.6390	4.8234
<i>S<sub>SAIFI</sub></i>	SAIFI incentive adjustment; equal to incentive rate multiplied by SAIFI target minus Assessed SAIFI value (\$000)	-42.815	129.120



**Appendix G – Policies and Procedures for Recording SAIDI and SAIFI**

Top Energy Limited records data for network performance from its network Control Centre. The following flow diagram outlines the process that manages the recording and production of quality performance statistics.



**Top Energy Faults Management Process**



## 1. PLANNED OUTAGES

Planned outages are maintained by the Control Centre. They;

1. schedule the work with the Field Staff,
2. conduct and coordinate the switching on the network. These details are recorded by action, date and time on 'Switching Procedure Sheet' following a predetermined switching plan.

## 2. UNPLANNED OUTAGES

Unplanned outages are initiated either by a fault call received by our contracted Call Centre (PHONEplus) or by receiving a direct protection equipment alarm generated directly out of the SCADA system. A call detail record is entered into the Call Centre's call management system (CMS), this is completed by the Call Centre operators who identify key information about the interruption, such as: time, fault description, name and contact details of the caller.

Subsequently the control Centre Operator will dispatch a Fault Man directly or via the contractor's Faults Supervisor, log the fault, and enter the relevant details in the log. As part of managing the restoration of supply, the Control Centre Operator records the devices that are operated and the times they are operated on the 'Switching Procedure Sheet'. All HV and EHV faults are additionally recorded electronically via the SCADA system which provides an accurate record of the operation, time and date factors of the outage.

The data generated by the SCADA alarm only records faults on a feeder and the time that the circuit tripped. The event logs are not a complete switching record, as they do not provide evidence of the time that consumers down the feeder were restored.

The reason that no automatic record is created in SCADA for minor faults is that the alarms are placed on the first circuit breaker or reclosers on the feeder. The circuit breakers are designed so they do not trip needlessly with every small fault further down the feeder, meaning that there will only be alarms created for events exceeding momentary supply interruptions.

Therefore, the sources of recorded information from individual events are from three sources;

- (a) Call detail sheet from the call management system (CMS) which is logged by the Call Centre
- (b) Switching procedure sheets
- (c) Computer generated records from the SCADA System.

Once the outage is completed and all power is restored, the information gathered from the call detail sheet, switching procedure sheet, SCADA records and any other relevant information to form a network performance pack.

### 3. NETWORK PERFORMANCE PACK

The network performance pack is assembled to provide verified event data, to ensure accurate data entry into the GIS Incident Application. The time the customers are without power, number of customers affected is calculated by the GIS Incidents application. The control centre operators also allocate each fault a cause code so that they can be categorised for disclosure purposes.

### 4. GIS INCIDENT APPLICATION

Top Energy Limited has been using its fully upgraded GIS Incident Application since 1 April 2009. Top Energy Limited is recording network interruptions and generating the Network Performance Indexes, such as SAIDI and SAIFI, using this GIS Incident program. On a monthly basis, the database is reviewed for reasonableness by the Control Centre Manager. After the data is reviewed, network quality graphs and a summary monthly report of reliability statistics form part of the General Manager Network's report to the Board of Directors. On a six monthly basis, the statistics are summarised and reported as part of the Company's Financial Report, with comparison against targets set out in the Company's Statement of Corporate Intent.

The GIS incidents system calculates customer outage minutes from the network outage data entered into the system.

The system calculates the customer outage minutes for each individual operation, by recording the time stamped operation of each switchable device, and counting the number of ICP's connected beyond the device. A report is then generated from the data where the SAIDI and SAIFI are stated. For disclosure the averaged ICP count is used.

The equation used by GIS Incidents to calculate customer minutes

$$\Sigma (\text{Outage Duration}_1 \times \text{ICP Count}_1) + (\text{Outage Duration}_2 \times \text{ICP Count}_2) + \dots \text{ (and so on for each outage duration)}$$

Each GIS Incident that is inputted is reviewed and checked by the Control Centre Manager. Each month's results are checked for reasonableness, thus equates to 12 checks each year end.

A report is generated from the Report Manager, which shows the SAIDI and SAIFI calculations for the period.

For all outages the GIS Incident Application calculates the number of affected customers. The ICPs affected are automatically populated from the GIS system. With a fully integrated GIS & ICP database of our network, Top Energy uses its GIS system to report the number of customers beyond every isolation device on the network. The customer count is extracted from the GIS system, which is linked to the ICP database.

For the assessment period ending 31 March 2017, Top Energy had been using the accurate customer count as at 31 March 2016. To determine the total number of consumers on our network, Top Energy maintains an ICP database (Club ICP) which is based on the industry maintained Registry equivalent. The ICP database has been maintained consistently in compliance with relevant Rules and Regulations. The result is used for internal reporting and performance management throughout the year. For disclosure purposes the average of the Total ICP counts at 31 March year start and 31 March year end.

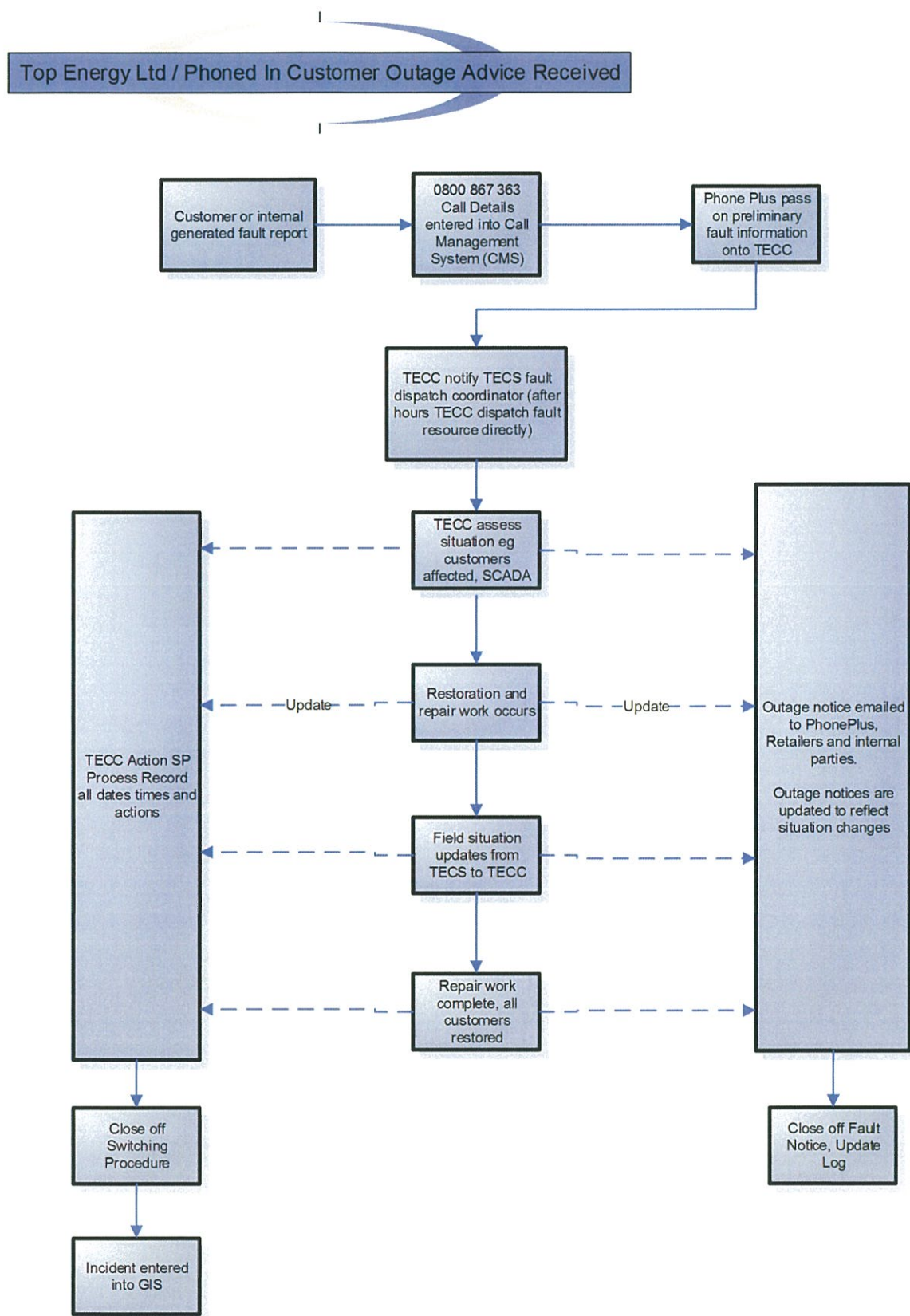
The Customer count data is taken from the Electricity Registry.

The average ICP count for 2017 was calculated as the sum of the 31 March 2016 + 31 March 2017 ICP counts divided by 2.

To ensure the accuracy of ICPs in Geographical Information System (GIS) an automatic trace is set to run on a daily basis. The trace runs through the connected model and gathers total ICPs per feeder. The trace results are compared against the previous days trace and outputted into a report showing the difference between the two traces, categorized by feeder. The report is e-mailed to the GIS Manager each morning and reviewed. If there is a significant ICP difference the connectivity of the feeder is further investigated in GIS, and when remedied the trace is rerun manually.

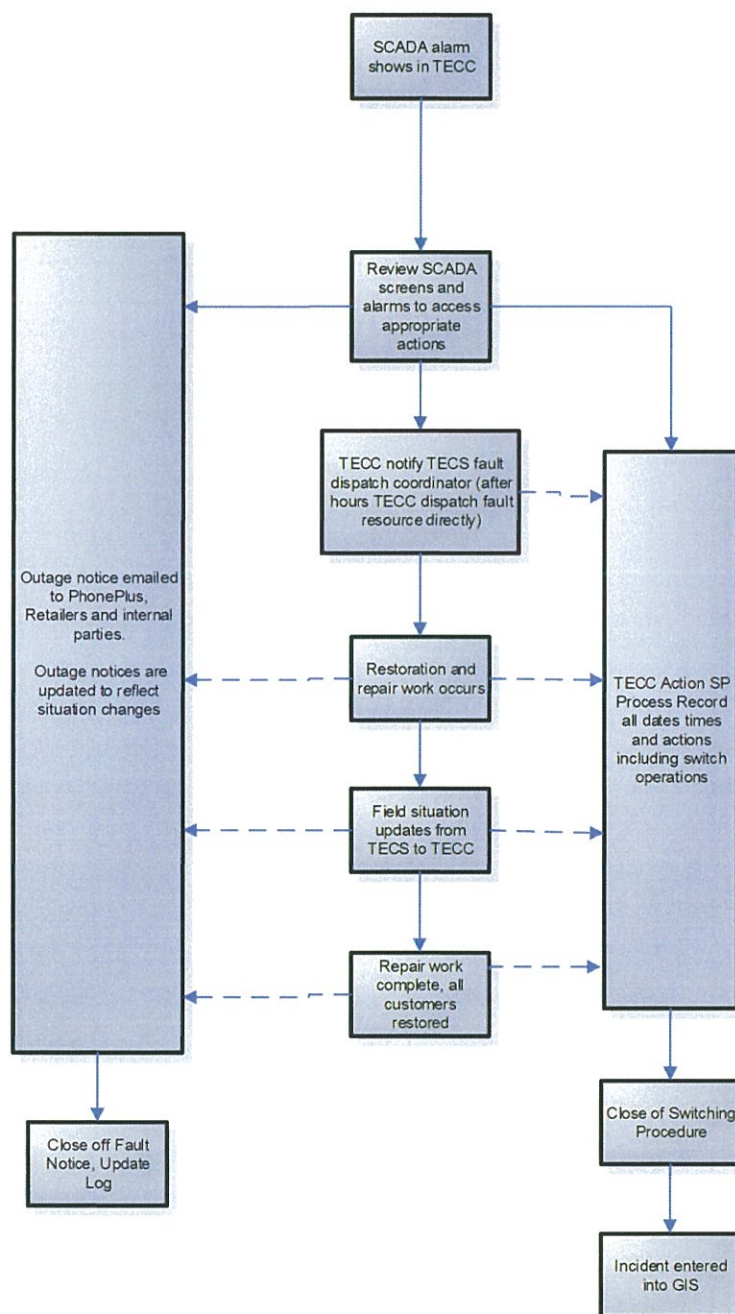
In addition, a weekly trace is run to ensure number of ICP's in Club ICP database matches number of ICPs connected in GIS by the GIS Administrator. The report outputs total number of ICPs in Club ICP application and the total number of ICPs in GIS, the difference between the two databases categorised by feeders. The report also lists ICP numbers which are not placed in GIS. This report is reviewed and rectified by GIS Technician as appropriate.

## 5. PHONED IN CUSTOMER OUTAGE ADVICE

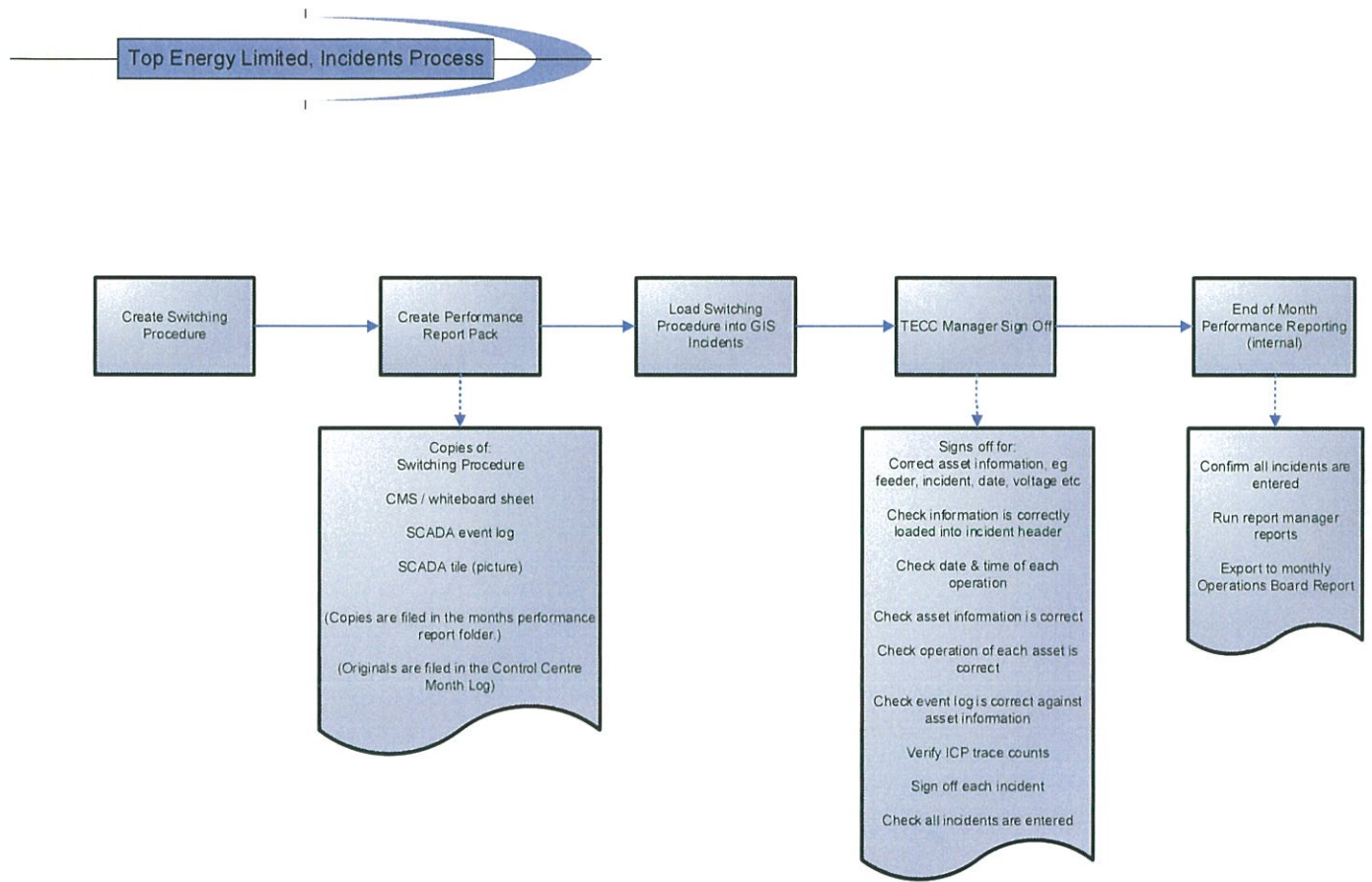


## 6. SCADA GENERATED OUTAGE ADVICE

### Top Energy Ltd / SCADA Generated Fault Outage Advice



## 7. INCIDENTS PROCESS





## 8. PROCESS FOR SUPPLYING OUTAGE DATA FOR AUDITOR

Top Energy Network Operations will receive a request in the following March of each year to provide a spreadsheet of Top Energy outage events. The Auditor will specify a selection of outage events for compliance audit. Once the audit selection process has been confirmed, Top Energy will package the relevant outage information and hold on site ready for the audit.

