

# Nelson Electricity

[Excel workbook](#)

Explanatory documentation: [Link](#)

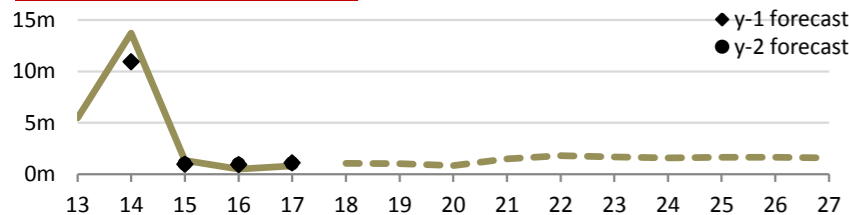
Summary database: [Link](#)

2017

## Summary statistics

	2017 value	5 year trend	3 year CAGR	Rank
Regulatory asset base	\$41m		-1.5%	27
Regulatory profit	\$3.4m		+6.1%	28
Return on investment	8.67%			8
Line charge revenue	\$10.4m		+1.3%	27
Other income	\$0.0m		-42.4%	26
Customer connections	9,203		+0.1%	26
Energy delivered	140 GWh		-0.6%	26
Peak demand	33 MW		-0.4%	26
Network capacity	97 MVA		+0.6%	26
Capital expenditure	\$0.8m		-61.1%	29
Operating expenditure	\$2.0m		-4.1%	29
Capital contributions	\$0.1m		-18.9%	22
Related party transactions	\$0.2m		-10.6%	24
Line length	295km		+3.4%	29
Outages - SAIDI	36 minutes		+17.5%	2
Outages - SAIFI	0.23 faults		-22.4%	1

## Capital expenditure



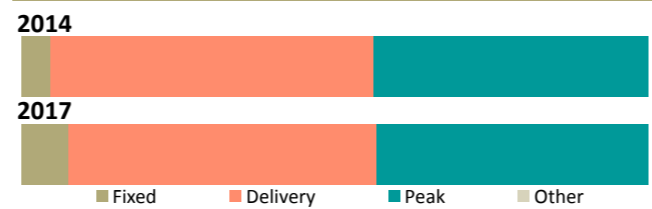
### 3 year ratios

Total capex / asset base	Total capex / connections	Total capex / depreciation
2.1% Rank: 2	\$96 Rank: 1	0.63 Rank: 2

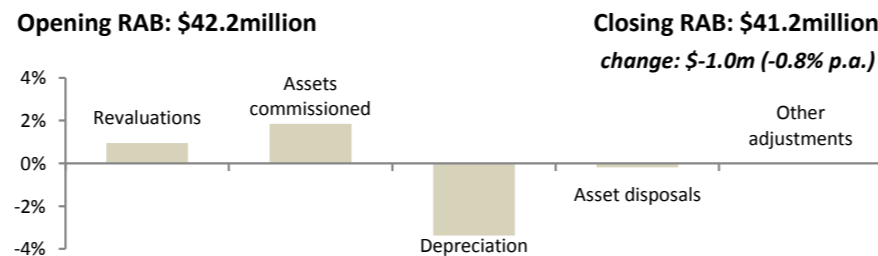
Capex by expenditure category	Average (2015-2017)	5 year trend	% of capex
Asset replacement & renewal	\$0.5m		55.7%
System growth	\$0.3m		38.3%
Asset relocations	\$0.0m		2.1%
Non-network assets	\$0.0m		2.1%
Reliability, safety & environment	\$0.0m		1.7%
Consumer connection	\$0.0m		0.0%
Total capital expenditure	\$0.9m		100.0%
Related party transactions	\$0.0m		0.0%

## Line charge revenues

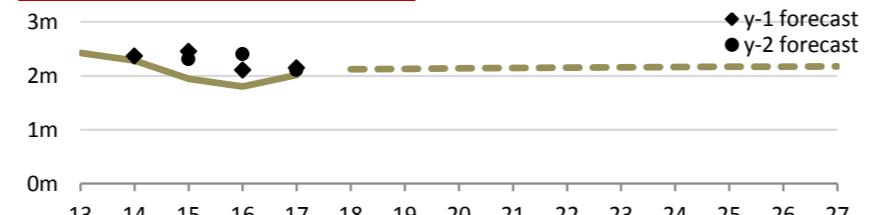
	Proportion of revenue	Charges per unit	Rank
Average daily charge	7.4%	22.8¢/ICP	6
Delivery (kWh)	49.2%	3.7¢/kWh	6
Peak based	43.4%	\$136/kW	25



## Annualised RAB changes (2015-2017)



## Operating expenditure

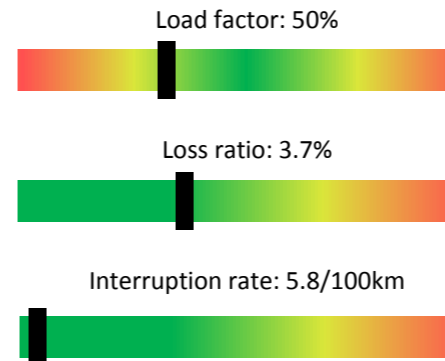


### 3 year ratios

Network opex / metre of line	Non-network opex / connections	Total opex / kW
\$1.82 Rank: 20	\$151 Rank: 11	\$57 Rank: 2

Opex by expenditure category	Average (2015-2017)	5 year trend	% of opex
Business support	\$1.0m		51.4%
System operations & network support	\$0.4m		20.8%
Routine & corrective maintenance	\$0.3m		14.9%
Service interruptions & emergencies	\$0.1m		6.7%
Asset replacement & renewal	\$0.1m		4.0%
Vegetation management	\$0.0m		2.3%
Total operating expenditure	\$1.9m		100.0%
Related party transactions	\$0.2m		10.5%

## Network ratios



## Company details

PQ Regulated?	Yes	Price breach:	No
		Quality breach:	No
General Manager:	Phil Goodall		
Ownership:	Network Tasman (50%) Marlborough Lines (50%)		
Head Office:	63 Haven Road; Nelson		
Phone number:	03 546 9256		
Website:	<a href="http://www.nel.co.nz">www.nel.co.nz</a>		

## Lines and cables

Estimated state of the assets	Distribution & LV O/H lines	Distribution & LV U/G cables	Subtransmission lines and cables	Poles
Quantity	30km	247km	17km	894
RAB Value	\$0.5m	\$15.3m	\$5.6m	*
Average grade	3.02	3.09	3.00	3.08
Grade 1 / 2	0.0% / 0.0%	0.0% / 14.0%	0.0% / 0.0%	0.0% / 12.3%
Unknown grade	0.0%	0.0%	0.0%	0.0%
Average age	45 years	31 years	20 years	37 years
Over generic age	1km (4.2%)	2km (0.8%)	0km (0.0%)	99 (11.1%)
Unknown age	1.1%	8.7%	0.0%	6.7%
5yr replacement req (est)	0.0%	7.0%	0.0%	6.1%
5yr planned replacement	2.4%	1.8%	0.0%	1.0%
Forecast repex (ave)	\$0.0m -100%	\$0.6m +361%	\$0.0m -100%	*
Repex series				*

\* RAB and expenditure on poles is included within Distribution and LV lines

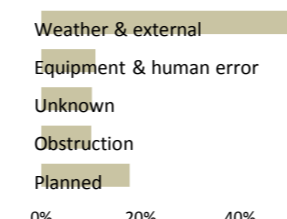
## Switchgear and transformers

Estimated state of the assets	Distribution transformers	Distribution switchgear	Zone-substation transformers	Zone-substation switchgear
Quantity	199	363	3	36
RAB Value	\$3.9m	\$2.1m	<----- \$10.0m ----->	
Average grade	3.09	3.52	4.00	2.89
Grade 1 / 2	0.0% / 9.2%	0.0% / 3.2%	0.0% / 0.0%	0.0% / 0.0%
Unknown grade	0.0%	0.0%	0.0%	0.0%
Average age	17 years	22 years	3 years	3 years
Over generic age	8 (3.9%)	55 (15.3%)	0 (0.0%)	0 (0.0%)
Unknown age	0.5%	0.0%	0.0%	0.0%
5yr replacement req (est)	4.6%	1.6%	0.0%	0.0%
5yr planned replacement	5.2%	2.8%	0.0%	0.0%
Forecast repex (ave)	\$0.0m -100%	\$0.1m +1327%	\$0.0m -100%	
Repex series				

## Reliability

	Unplanned	Planned	Trend
Interruptions	5	12	↓
SAIDI	27.4	8.8	↓
SAIFI	0.17	0.07	↓
CAIDI	164.2	134.1	↑

### SAIDI causes



### SAIFI causes

