

Wellington Electricity

[Excel workbook](#)

Explanatory documentation: [Link](#)

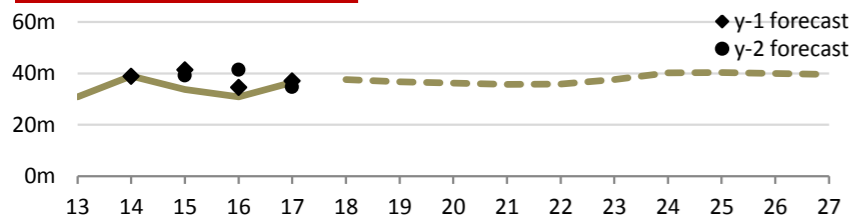
Summary database: [Link](#)

2017

Summary statistics

	2017 value	5 year trend	3 year CAGR	Rank
Regulatory asset base	\$603m		+1.1%	4
Regulatory profit	\$45.1m		+1.2%	5
Return on investment	8.03%			14
Line charge revenue	\$171.9m		+0.9%	4
Other income	\$0.9m		+16.3%	8
Customer connections	166,344		+0.3%	4
Energy delivered	2,325 GWh		-0.6%	4
Peak demand	576 MW		+1.0%	4
Network capacity	1,374 MVA		+0.9%	4
Capital expenditure	\$36.4m		-2.2%	5
Operating expenditure	\$30.1m		-0.2%	5
Capital contributions	\$7.3m		+14.1%	4
Related party transactions	\$13.5m		-1.6%	11
Line length	4,701km		+0.4%	10
Outages - SAIDI	131 minutes		-11.9%	9
Outages - SAIFI	0.92 faults		-5.6%	5

Capital expenditure



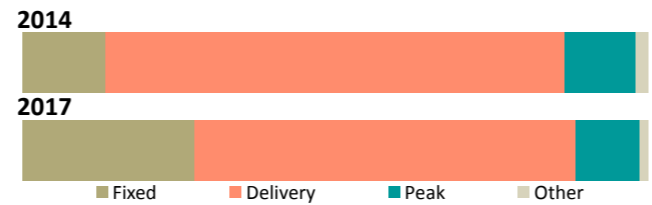
3 year ratios

Total capex / asset base	Total capex / connections	Total capex / depreciation
5.6% Rank: 6	\$203 Rank: 3	1.39 Rank: 7

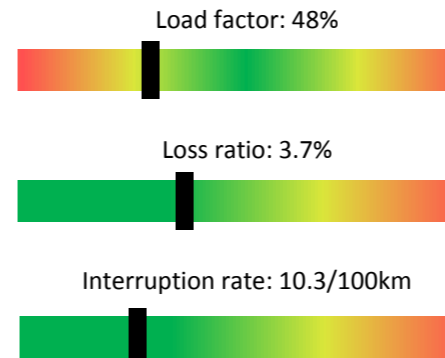
Capex by expenditure category	Average (2015-2017)	5 year trend	% of capex
Asset replacement & renewal	\$20.7m		61.5%
Consumer connection	\$6.6m		19.5%
System growth	\$2.2m		6.5%
Asset relocations	\$2.0m		5.8%
Non-network assets	\$1.2m		3.4%
Reliability, safety & environment	\$1.1m		3.2%
Total capital expenditure	\$33.7m		100.0%
Related party transactions	\$1.9m		5.8%

Line charge revenues

	Proportion of revenue	Charges per unit	Rank
Average daily charge	27.4%	77.7¢/ICP	18
Delivery (kWh)	61.0%	4.5¢/kWh	11
Peak based	10.1%	\$30/kW	10



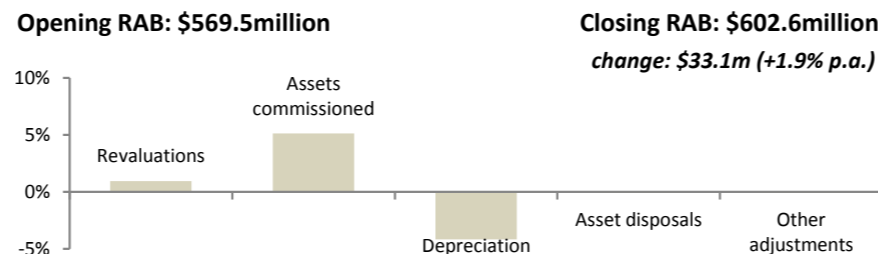
Network ratios



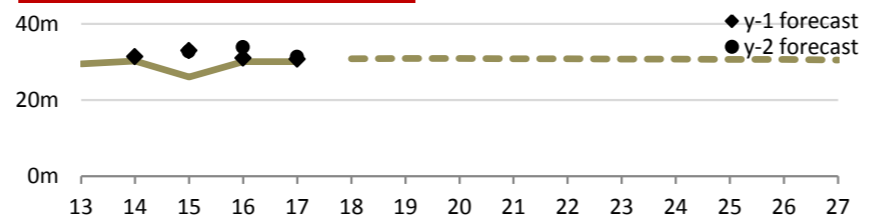
Company details

PQ Regulated?	Yes	Price breach: 2012
		Quality breach: 2013, 2014
CEO:	Greg Skelton	
Ownership:	Cheung Kong Infrastructure and Power Assets Holdings	
Head Office:	75 The Esplanade; Petone, Lower Hutt	
Phone number:	04 915 6100	
Website:	www.welectricity.co.nz	

Annualised RAB changes (2015-2017)



Operating expenditure



3 year ratios

Network opex / metre of line	Non-network opex / connections	Total opex / kW
\$2.77 Rank: 29	\$95 Rank: 1	\$51 Rank: 1

Opex by expenditure category	Average (2015-2017)	5 year trend	% of opex
Business support	\$11.5m		40.1%
Routine & corrective maintenance	\$7.3m		25.4%
System operations & network support	\$4.3m		14.8%
Service interruptions & emergencies	\$3.4m		11.8%
Vegetation management	\$1.3m		4.6%
Asset replacement & renewal	\$1.0m		3.4%
Total operating expenditure	\$28.8m		100.0%
Related party transactions	\$11.8m		41.0%

Lines and cables

Estimated state of the assets	Distribution & LV			
	O/H lines	U/G cables	Subtransmission lines and cables	Poles
Quantity	1,678km	2,829km	195km	37,801
RAB Value	\$138.3m	\$211.9m	\$56.9m	*
Average grade	2.93	3.20	3.06	3.48
Grade 1 / 2	0.1% / 15.0%	0.7% / 3.8%	0.6% / 9.6%	0.3% / 3.2%
Unknown grade	0.0%	0.0%	0.0%	2.9%
Average age	44 years	38 years	39 years	30 years
Over generic age	146km (8.7%)	107km (3.8%)	0km (0.2%)	5,442 (14.4%)
Unknown age	0.0%	0.0%	0.0%	0.0%
5yr replacement req (est)	7.7%	2.5%	5.3%	1.9%
5yr planned replacement	1.0%	1.2%	1.7%	5.6%
Forecast repex (ave)	\$6.6m -31%	\$1.2m +20%	\$0.3m +181%	*
Repex series				*

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

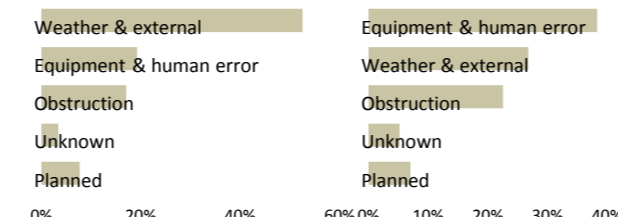
Switchgear and transformers

Estimated state of the assets	Distribution transformers			
	Distribution transformers	Distribution switchgear	Zone-substation transformers	Zone-substation switchgear
Quantity	4,307	5,856	52	358
RAB Value	\$91.5m	\$32.2m	<----- \$51.8m ----->	
Average grade	3.33	3.06	2.77	3.26
Grade 1 / 2	1.0% / 1.8%	2.7% / 16.4%	3.9% / 15.4%	0.0% / 3.8%
Unknown grade	0.0%	0.0%	0.0%	0.0%
Average age	30 years	30 years	48 years	37 years
Over generic age	1,402 (32.6%)	2,493 (42.6%)	43 (83.5%)	240 (67.2%)
Unknown age	0.0%	0.0%	0.0%	0.0%
5yr replacement req (est)	1.9%	11.0%	11.5%	1.9%
5yr planned replacement	3.0%	6.6%	3.9%	3.8%
Forecast repex (ave)	\$2.4m -32%	\$3.4m +24%	\$2.5m -25%	
Repex series				

Reliability

	Unplanned	Planned	Trend
Interruptions	305	177	↑
SAIDI	123.2	7.4	↑
SAIFI	0.84	0.08	↑
CAIDI	146.4	92.2	↑

SAIDI causes



SAIFI causes

