

# Unison Networks

[Excel workbook](#)

Explanatory documentation: [Link](#)

Summary database: [Link](#)

2017

## Summary statistics

	2017 value	5 year trend	3 year CAGR	Rank
Regulatory asset base	\$581m		+2.9%	5
Regulatory profit	\$45.9m		+12.7%	4
Return on investment	8.66%			9
Line charge revenue	\$148.4m		+4.5%	5
Other income	\$1.4m		+25.1%	5
Customer connections	111,842		+0.5%	5
Energy delivered	1,583 GWh		+0.7%	5
Peak demand	323 MW		-0.9%	5
Network capacity	1,119 MVA		+0.8%	5
Capital expenditure	\$46.2m		-1.0%	4
Operating expenditure	\$35.4m		-0.3%	4
Capital contributions	\$6.4m		+8.4%	6
Related party transactions	\$37.2m		+112.9%	2
Line length	9,182km		+1.1%	4
Outages - SAIDI	216 minutes		+24.2%	18
Outages - SAIFI	2.22 faults		+8.0%	19

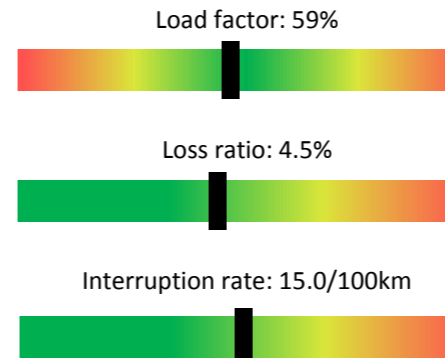
## Line charge revenues

	Proportion of revenue	Charges per unit	Rank
Average daily charge	35.9%	130.6¢/ICP	26
Delivery (kWh)	57.0%	5.3¢/kWh	17
Peak based	7.1%	\$32/kW	12

**2014**

**2017**

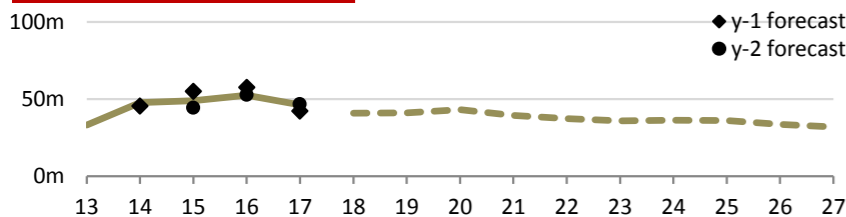
## Network ratios



## Company details

PQ Regulated?	Yes	Price breach: No
		Quality breach: No
CEO:	Ken Sutherland	
Ownership:	Hawke's Bay Power Consumers' Trust	
Head Office:	1101 Omaha Road, Hastings	
Phone number:	06 873 9300	
Website:	<a href="http://www.unison.co.nz">www.unison.co.nz</a>	

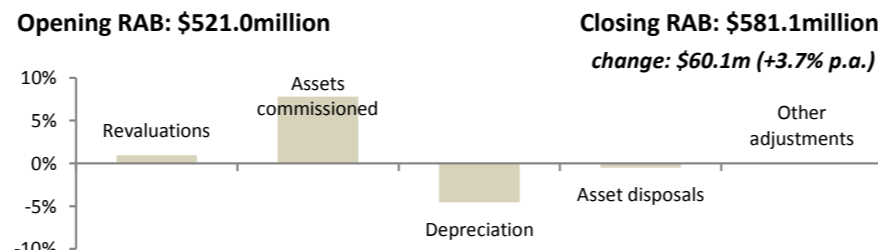
## Capital expenditure



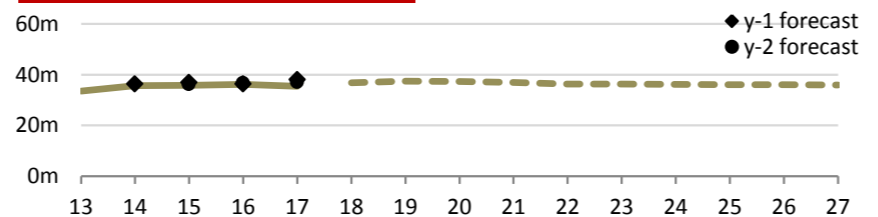
3 year ratios		
Total capex / asset base	Total capex / connections	Total capex / depreciation
8.8% Rank: 22	\$443 Rank: 18	2.03 Rank: 15

Capex by expenditure category	Average (2015-2017)	5 year trend	% of capex
Asset replacement & renewal	\$16.7m		33.8%
Consumer connection	\$12.2m		24.8%
System growth	\$8.5m		17.3%
Non-network assets	\$6.8m		13.9%
Reliability, safety & environment	\$3.6m		7.4%
Asset relocations	\$1.4m		2.8%
Total capital expenditure	\$49.3m		100.0%
Related party transactions	\$26.1m		53.1%

## Annualised RAB changes (2015-2017)



## Operating expenditure



3 year ratios		
Network opex / metre of line	Non-network opex / connections	Total opex / kW
\$0.92 Rank: 6	\$247 Rank: 21	\$109 Rank: 16

Opex by expenditure category	Average (2015-2017)	5 year trend	% of opex
Business support	\$19.9m		55.6%
System operations & network support	\$7.5m		21.0%
Service interruptions & emergencies	\$3.0m		8.3%
Routine & corrective maintenance	\$2.6m		7.4%
Asset replacement & renewal	\$1.6m		4.4%
Vegetation management	\$1.2m		3.3%
Total operating expenditure	\$35.8m		100.0%
Related party transactions	\$13.1m		36.6%

## Lines and cables

Estimated state of the assets	Distribution & LV O/H lines	Distribution & LV U/G cables	Subtransmission lines and cables	Poles
Quantity	5,143km	3,540km	498km	64,991
RAB Value	\$115.4m	\$138.4m	\$44.7m	*
Average grade	3.74	3.85	3.15	3.34
Grade 1 / 2	0.0% / 0.3%	0.4% / 0.4%	0.0% / 0.0%	0.9% / 8.8%
Unknown grade	0.0%	0.0%	0.0%	0.0%
Average age	36 years	28 years	36 years	29 years
Over generic age	312km (6.1%)	23km (0.6%)	21km (4.2%)	9,536 (14.7%)
Unknown age	0.1%	0.1%	0.9%	0.0%
5yr replacement req (est)	0.2%	0.7%	0.0%	5.3%
5yr planned replacement	1.1%	1.2%	0.0%	2.6%
Forecast repex (ave)	\$7.0m +23%	\$4.7m +25%	\$0.3m -85%	*
Repex series				*

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

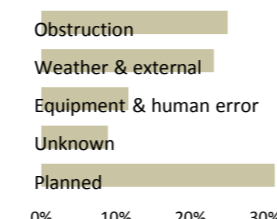
## Switchgear and transformers

Estimated state of the assets	Distribution transformers	Distribution switchgear	Zone-substation transformers	Zone-substation switchgear
Quantity	9,737	12,327	62	662
RAB Value	\$90.5m	\$50.2m	<----- \$78.6m ----->	
Average grade	3.56	3.47	3.22	3.32
Grade 1 / 2	1.0% / 2.7%	1.0% / 3.1%	0.0% / 8.5%	0.0% / 3.9%
Unknown grade	0.0%	0.0%	0.0%	0.0%
Average age	22 years	27 years	28 years	21 years
Over generic age	860 (8.8%)	4,165 (33.8%)	24 (39.0%)	180 (27.2%)
Unknown age	0.0%	1.7%	0.0%	0.0%
5yr replacement req (est)	2.3%	2.5%	4.3%	1.9%
5yr planned replacement	1.0%	4.7%	0.0%	1.7%
Forecast repex (ave)	\$1.0m -3%	\$1.6m +23%	\$2.6m +6%	
Repex series				

## Reliability

	Unplanned	Planned	Trend
Interruptions	651	728	↑
SAIDI	155.8	60.7	↑
SAIFI	1.90	0.32	↑
CAIDI	81.8	190.1	↑

## SAIDI causes



## SAIFI causes

