# Northpower

Summary statistics	2017 value	5 year trend	3 year CAGR	Rank
Regulatory asset base	\$258m		+1.5%	9
Regulatory profit	\$20.0m		+12.3%	9
Return on investment	8.13%			13
Line charge revenue	\$67.0m		+3.0%	8
Other income	\$0.4m	$\sim$	-10.9%	17
Customer connections	57,952		+2.0%	8
Energy delivered	1,056 GWh		+3.1%	8
Peak demand	170 MW		+0.4%	8
Network capacity	548 MVA		+1.5%	10
Capital expenditure	\$12.6m	$\sim$	-12.7%	15
Operating expenditure	\$16.6m		+0.2%	8
Capital contributions	\$2.6m	$\sim$	+6.2%	12
Related party transactions	\$18.9m		+0.9%	7
Line length	5,981km		+0.6%	7
Outages - SAIDI	154 minutes	<u> </u>	-0.3%	11
Outages - SAIFI	2.97 faults	$\sim$	+8.4%	24

## **Capital expenditure**



3 year ratio	DS				
	capex / et base		al capex / nnections		capex / eciation
5.9%	Rank: 7	\$262	Rank: 5	1.55	Rank: 10
Capex by e category	xpenditure		Average (2015–2017)	5 year trend	% of capex
Asset repla	cement & rene	wal	\$9.5m		63.3%
Consumer	connection		\$2.8m	~	18.8%
System gro	wth		\$1.5m	$\sim$	10.0%
Reliability,	safety & enviro	nment	\$0.8m		5.4%
Non-netwo	rk assets		\$0.3m	$\sim$	- 1.7%
Asset reloc	ations		\$0.1m	$\sim$	0.8%
Total capita	al expenditure		\$15.0m		100.0%
Relate	ed party transa	ctions	\$11.1m		73.7%

COMMERCE

**NEW ZEALAND** 

Te Komihana Tauhokohoko

COMMISSION

#### Excel workbook

Explanatory documentation: Link

Summary database: Link

### Line charge revenues

Opening RAB: \$241.2million

Revaluations

**Operating expenditure** 

10%

5%

0%

-5%

20m

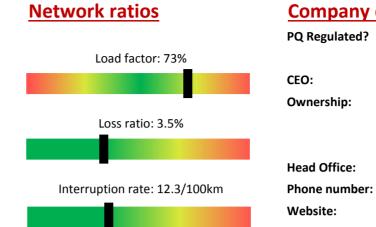
10m

0m

Ргор	oortion of revenue	Charges per unit	Rdlik
Average daily charge	11.5%	36.3¢/ICP	10
Delivery (kWh)	69.1%	4.4¢/kWh	10
Peak based	16.7%	\$66/kW	17
2014			
2017			
Fixed D	elivery	Peak	Other

Annualised RAB changes (2015–2017)

Assets commissioned



#### Lines and cables

Estimated state of the assets	Distribution & LV O/H lines	Distribution & LV U/G cables	Subtransmission lines and cables	Poles
Quantity	4,691km	947km	344km	54,352
RAB Value	\$106.8m	\$49.2m	\$17.5m	*
Average grade	3.18	3.63	2.83	3.26
Grade 1 / 2	1.7% / 1.0%	0.2% / 0.0%	0.0% / 20.5%	1.2% / 1.2%
Unknown grade	6.3%	3.2%	0.0%	4.7%
Average age	33 years	18 years	44 years	30 years
Over generic age	153km (3.3%)	3km (0.3%)	58km (16.8%)	1,768 (3.3%)
Unknown age	0.0%	0.0%	0.0%	0.0%
5yr replacement req (e	est) 2.2%	0.2%	10.2%	1.8%
5yr planned replaceme	ent 8.7%	0.2%	0.0%	5.1%
Forecast repex (ave)	\$5.8m -12%	\$0.2m -18%	\$0.1m -94%	*
Repex series				*

#### Switchgear and transformers

Estimated state of the assets	Distribution	Distribution	Zone-substation	Zone-substation
	transformers	switchgear	transformers	switchgear
Quantity	7,219	8,534	40	444
RAB Value	\$29.1m	\$7.4m	< \$	32.8m>
Average grade	3.25	3.21	3.17	3.32
Grade 1 / 2	5.9% / 1.2%	11.7% / 2.0%	0.0% / 7.0%	4.6% / 3.19
Unknown grade	0.8%	4.9%	0.0%	19.1%
Average age	26 years	18 years	37 years	26 years
Over generic age	1,500 (20.8%)	1,668 (19.5%)	22 (56.0%)	138 (31.1%
Unknown age	0.0%	0.0%	0.0%	0.0%
5yr replacement req (est	) 6.4%	12.7%	3.5%	6.2%
5yr planned replacemen	t 23.1%	14.7%	7.0%	9.9%
Forecast repex (ave)	\$0.4m +17%	\$0.3m +49%	\$2.1	m +221%
Repex series		\		· · · · · · · · · · · · · · · · · · ·

#### Reliability

	Unplanned	Planned	Trend
Interruptions	345	390	
SAIDI	94.4	60.0	
SAIFI	2.73	0.24	
CAIDI	34.6	251.1	

AIDI o	causes	;	
Weath	ner & ex	ternal	
Obstru	uction		
Equipr	ment &	human e	rror
Unkno	wn		
Planne	ed		
0%	10%	20%	30%

	SAIDI causes
nd	Weather & externa
2	Obstruction
-	Equipment & hum
	Unknown

0

Weather & external
Obstruction
Equipment & human error
Unknown
Planned

uipment &	human ei	rror
known		
nned		
10%	20%	30%

own		
ed		
10%	20%	30%

Closing RAB: \$258.4million change: \$17.2m (+2.3% p.a.)

Other Asset disposals adjustments

Depreciation	
<u>.</u>	◆ y-1 forecast
	• y-2 forecast

SAIFI causes Inknown

Obstruction

40%0%

Weather & external

10%

Equipment & human error

20%

30%

II F	1		1	1	1	1	1	1	1	1	1	1	1	1	
13	3 14	4 1	5	16	17	18	19	20	21	22	23	24	25	26	27

3 year ratios									
Network opex / metre of line		vork opex / ections	Total opex / kW						
\$1.55 Rank: 19	\$123	Rank: 5	\$98	Rank: 13					
Opex by expenditure category		Average (2015–2017)	5 year trend	% of opex					
Business support		\$4.5m		28.0%					
System operations & netwo	ork support	\$2.5m		15.3%					
Service interruptions & em	ergencies	\$2.4m		- 15.0%					
Asset replacement & renew	wal	\$2.4m		15.0%					
Routine & corrective maint	tenance	\$2.3m		14.2%					
Vegetation management		\$2.0m		- 12.4%					
Total operating expenditur	e	\$16.2m		100.0%					
Related party transa	ctions	\$9.6m		59.5%					

# 2017

## **Company details**

No

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