FIRST NZ CAPITAL

Meridian Energy Limited Cash Flow Powerhouse



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Meridian Energy Limited (Meridian) is New Zealand's largest electricity generator, generating around 13,000 GWh annually from low cost hydro and wind sources. It supplies 272,000 customers and 5,000 GWh p.a. to the Tiwai Point aluminium smelter. Reliance on hydro generation and its influence on electricity prices can result in significant earnings volatility from year to year.

Our risk weighted DCF valuation of \$2.00 per share assumes Tiwai smelter remains operating at a 1,500GWh reduced load after 2015 and that real electricity prices increase from circa \$70/MWh to \$80/MWh by 2025. It also incorporates a modest chance of the Labour/Greens policy being implemented and a chance that Tiwai smelter may close. In contrast, using comparable valuation multiples for Contact Energy (CEN) and Mighty River Power (MRP) imply Meridian shares may trade around \$1.50.

We estimate the Labour/Green proposal to reform the NZ electricity market would reduce our base case valuation by \$0.69 to \$1.39. However, the estimated impact of Tiwai smelter closing is only \$0.02 per share.

Factors which could result in an increase in Meridian's share price include:

- Potential revision of transmission pricing \$0.25 per share.
- Cost reductions \$0.10 per share.
- Retail electricity margin improvement \$0.05 per share.

Analyst

Nevill Gluyas, CFA +64 4 496 5338 nevill.gluyas@fnzc.co.nz

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Executive Summary

Introduction

Meridian Energy is New Zealand's largest electricity company. It generates around 13,000GWh p.a. from 100% renewable hydro (90%) and wind (10%) sources.

Meridian has vertically integrated into retail and contract markets, selling to 221,000 customers under its self-titled retail brand, and to 51,000 customers through the unique "Powershop" online prepayment model.

Wholesale activities include a 5,000GWh long term contract with NZ Aluminum Smelters in respect of the Tiwai Point Smelter ("Tiwai smelter"), the nation's largest electricity consumer.

The company also owns a 70MW windfarm in South Australia, and is building a 131MW windfarm in Victoria. The Powershop brand was recently introduced to retail customers in Victoria, with the hope of building a presence in the Australian retail electricity market. Meridian operates small solar facilities in USA and Tonga, but intends to divest these assets.

We assess a \$2.00 per share value for Meridian based on a DCF model, with assumed Tiwai reduction to 400MW in 2015 and forecast real prices of \$80/MWh in 2025. This estimate includes probability weighted discounts for Labour/Greens proposed electricity market reform and Tiwai smelter shutdown risks, which have been assumed to have low likelihood of occurring. Some potential valuation upsides are excluded from our fair value assessment, particularly the chance of a Transmission Pricing Methodology (TPM) change (\$0.25) or higher medium term wholesale electricity prices (\$0.23 per \$5/MWh).

Contact Energy (CEN) and Mighty River Power (MRP) multiples appear to be weighed down by the perceived risk of Labour/Greens and Tiwai smelter exit. We judge both companies as close comparables to Meridian. Applying CEN and MRP multiples would indicate a fully-paid trading range for Meridian shares of between \$1.43 and \$1.60, with a \$1.51 midpoint. NZ's largest electricity company and 100% renewable.

We assess a \$2.00 DCF valuation, discounted for low risk of Labour/Greens and Tiwai smelter closure.

But expect trading range between \$1.40 and \$1.60 if Meridian trades on similar multiples to CEN and MRP.

Price (NZ\$) EV / EBITDA Price / FCF Net Dividend Yield **Gross Dividend Yield** FY14 FY15 FY14 FY15 FY14 FY15 FY14 FY15 CEN 5.32 8.9x 8.1x 11.3x 11.5x 4.8% 4.8% 6.7% 6.7% MRP 2.23 8.3x 8.1x 11.7x 11.0x 5.8% 5.8% 8.1% 8.1% Meridian 1.50 8.6x 8.2x 13.3x 11.5x 7.0% 7.7% 8.9% 9.8% Meridian 14.2x 1.60 9.1x 8.6x 12.2x 6.6% 7.2% 8.3% 9.1% Meridian 1.80 10.0x 9.5x 15.9x 13.7x 5.8% 6.4% 7.4% 8.1%

Figure 1: Valuation matrix

Key Issues & Risks

Key issues facing the company include;

- Labour/Green proposal to reform electricity market: Meridian generates 45% to 50% of national hydro output and we expect it would take the brunt of this change. Our base case DCF falls by \$0.69 (33%) per share under this proposal. In percentage terms this is similar to our estimate of the policy impact on MRP.
- **Tiwai Point aluminium smelter:** In a Tiwai smelter shutdown scenario, our DCF valuation falls from base case by just \$0.02 (1%) per share. This concurs with management statements that the new contract was signed at a price where Meridian is economically indifferent to shutdown.
- **Hydrology driven volatility:** Investors should expect earnings forecasts to vary with hydrology (up or down by circa \$70m NPAT in some unusual inflow extremes). The level of debt Meridian can support is constrained by the variation of interest coverage ratios that this volatility causes.
- **Transmission pricing:** Charges for the High Voltage Direct Current ("HVDC") interconnector between the North and South Islands are currently allocated to South Island generators under the standing Transmission Pricing Methodology ("TPM"). We estimate Meridian's share of cost to exceed \$110m in FY2014. This can't be passed on to the wholesale market. A proposal by the regulator that might have changed HVDC charging in the TPM proved contentious and isn't likely to proceed as proposed. However a change in methodology is still being considered. This presents a possible \$65m pa upside for Meridian if implemented. We don't expect any major change could take effect until FY18 at the earliest, and exclude this \$0.25 (12%) per share upside from our DCF fair value.
- Low demand growth: NZ electricity growth has slowed or stalled from the 700GWh pa trend observed prior to 2008. Our base case DCF assumes flat demand until 2020, then resuming 500GWh p.a. growth indefinitely.
- Electricity prices and the long run cost of new generation: Meridian's value should be sensitive to estimates of longer run electricity prices, because its plant has near-zero marginal cost of generating, a very long life and large sunk capital. We have run a sensitivity of demand growth returning in 2016 and a \$5/MWh lift in long run prices, which lifts our DCF by \$0.23 (11%). This sensitivity isn't included in our valuation.
- Water Rights Reform: With fresh water policy likely to remain in political focus for some time, there is a risk of material change to Meridian's water access in coming decades. Our valuation estimate assumes no change to current rights or the current regime over the foreseeable future.
- Australian renewables growth: Australia's renewables scheme mandates 41,000GWh of renewable generation should be operating in Australia by 2020. Meridian hasn't yet signalled any ambition to invest in Australian wind beyond

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its two current windfarms. We ascribe no value to the prospect of further growth.

- Australian retail entry: Meridian's Powershop brand and unique customer engagement model proved extremely effective at securing customers in New Zealand. Meridian recently launched the brand in Victoria. We don't yet attribute value to this venture.
- Efficiency prospects: Management's attention has been focused on many significant issues over the last 2 years. Once Meridian is listed, management focus on the business can return and further gains might be found. In the June 2006 annual report there were 365 full time staff. This is in stark contrast to the prospectus figure of 827 as at 30 June 2013. Over this time Meridian's total generation and sales volumes have remained roughly constant. Employee costs were reported at \$79.6m for FY13. A sustained \$20m overhead cost reduction would lift our DCF valuation by \$0.05. Our DCF valuation currently excludes any such efficiency gains.
- Retail margin improvement: Historically, Meridian appears to have earned an average electricity price (net of network and transmission) of about \$5-\$10/MWh less across its retail portfolio than Contact Energy, after adjusting for differences in customer electricity purchase costs. Bridging that gap would equate to \$28m \$56m additional EBITDAF. Improving margins to the low end of that range would lift our DCF values by \$0.05. We have not assumed any margin uplift for our DCF valuation.

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Labour/Greens Risk

Labour/Greens Proposal to Reform Electricity Market

The Labour and Green parties announced a reform proposal in April 2013, raising the risk of a redesign of the electricity market should they win the next election in the second half of 2014. Very little detail was provided in the announcement

We estimate the policy has a 10% chance of appearing. The new Opposition leadership seems set to retain the policy, and so the risk relates to the likelihood of the Opposition winning the next election and managing to implement the proposal.

While some in the industry think it would be very difficult to implement, we think the essential pieces of the proposal might be implemented very quickly. We believe implementation of the NZPower concept (the entity to be created in the Labour/Green proposal) could retain current market processes as follows:

- Step 1: Hydro generators are compelled by legislation to sign fixed sum annual contracts, in return for all their future hydro revenue. Control of water release is passed to the electricity System Operator (currently part of Transpower)
- Step 2: NZPower extracts swaption agreements from all the major thermal plant, to limit its exposure to spot purchase cost
- Step 3: NZPower interposes itself into the current settlement process, receiving purchasers spot market invoices, payments for hydro generators spot revenue and settlements on thermal swaptions. It effectively rewrites the wholesale electricity cost charged to retailers, to meet some desired average charge target (partly offset by the hydro revenue) before forwarding the revised invoice on to purchasers. We think these steps could be completed within one or two years.
- Step 4: Financial impacts on gentailers would now be largely in place. Now politicians, officials and NZPower build all the other processes and structures necessary to operate the model over the remaining political term. This later work would take several more years.

We model the objective of NZPower as reducing hydro earnings - taking the midpoint of the stated \$500m-\$700m annual electricity cost reduction, and applying over 23,500GWh national hydro output, we estimate a \$25/MWh reduction to revenue for every hydro station.

Meridian is slightly unusual because of the Tiwai smelter contract. Even though NZPower may want to reduce Manapouri's revenue, the Tiwai contract would seem to have already achieved that end. Our main sensitivity case assumes that the smelter contract effectively shelters Manapouri, reducing the apparent impact. We further assume the change in regime would allow Meridian to shed \$40m of cost across its staff and other operating costs.

Incorporating those assumptions, our base case DCF valuation for Meridian falls by 0.69 (33%) to 1.39.

Meridian the main target of Labour/Greens NZPower proposal.

We think the pointy end of the proposal could be implemented quickly.

Tiwai Point

Tiwai Point Aluminium Smelter

The global downturn in aluminum prices and appreciation of the NZ dollar has placed financial pressure on the Tiwai Point smelter. Pacific Aluminum (a Rio Tinto subsidiary which owns 79% of the smelter) recently renegotiated its supply contract with Meridian, after indicating it was likely to close the smelter unless a cheaper price could be agreed.

With continued weakness of aluminium prices and strong NZ dollar, we estimate the smelter is still losing cash, even after renegotiation led to a discounted electricity price. We estimate the new electricity contract is priced at \$47.50/MWh, based on prospectus data and media comments after the Tiwai deal announcement. The chart below shows our estimate of the smelter's profitability thresholds for NZD/USD and aluminium price, based on the following assumptions:

- Smelter production of 330kt p.a., mix similar to 2012 (8% premium)
- Electricity contract price of \$47.5/MWh, plus \$45m transmission, for a total electricity cost of NZ\$858 per tonne of aluminum
- Smelter uses a proportion of premium alumina, which results in the smelter purchase cost being a 5% premium over alumina spot prices
- Other smelter cash costs and stay-in-business capex assumed to total NZD1,100 per tonne of aluminium
- Alumina USD spot price of 16% of aluminium USD spot price

Figure 2: Estimated breakeven NZD and aluminium prices for Tiwai Point



Source: Company Data, FNZC estimates

The renegotiated electricity contract with Meridian allows for Tiwai to reduce contract quantity from 2015, or even shut the smelter after 2017. Our base case DCF assumes

We think Tiwai smelter is still losing cash, still faces risk of closure in 2017.

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the smelter reduces load to 400MW (1,500GWh reduction) in January 2015, but remains open thereafter. Smelter shutdown in 2017 is treated as a potential risk sensitivity in our DCF valuation.

Our preliminary view is that by October 2015, aluminium prices need to be at least USD2,000/t and the NZD/USD depreciated to a value below 0.70 for the smelter to look like a going concern. Current aluminium prices are around USD1,780/t and NZD around 0.83 against USD. Our forecasts currently pick aluminium to remain below USD2,000/t and NZ dollar to depreciate no further than USD0.75 in the next 2 years.

If the smelter closes, we believe it is likely to have a large impact on electricity prices. Our DCF sensitivity analysis on a smelter closure from January 2017, tests the impact on Meridian if prices fell by \$30/MWh in the South Island and \$20/MWh in the North from 2017, recovering over ten years to an \$80/MWh real price in FY2027. Retail electricity prices were modelled to fall by 50% of the change in price, while commercial and industrial electricity prices matched spots when they are renewed.

\$90/MWh Semi-annual average price (real 2013) \$80/MWh \$70/MWh \$60/MWh \$50/MWh \$40/MWh \$30/MWh **1H15F 1H17F** 1H18F 1H14F 1H16F 1H20F 1H21F 1H22F 1H23F 1H24F 1H25F 1H26F 1H19F Otahuhu Node Haywards node

Figure 3: Price path used for Tiwai Shutdown scenario in DCF

Source: ASX, FNZC estimates

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Under this smelter shutdown scenario, our DCF valuation falls from our base case by just \$0.02(1%) per share. While this may at first seem a surprisingly small impact given the large spot electricity price movements, this concurs with Meridian management statements that the new contract has been signed at a price where it is economically indifferent to smelter closure.

If the smelter threatens to leave in 2017, we would not expect Meridian to offer further discounts to keep the smelter open.

But Meridian is indifferent to Tiwai smelter closure, based on our DCF estimate.



Earnings Volatility

Hydrology driven earnings volatility

Meridian's generation is dependent upon variable water inflows, which not only change production, but also significantly alter electricity spot market prices. The interaction is complex, but is generally an inverse relationship where low inflows and hydro storage correspond with high electricity prices.

Managing contract exposure and managing storage at its hydro lakes are both key to managing Meridian's earnings variation. We understand that EBITDAF variations around \$100m may arise, but are thought to have lower likelihood after completion of the HVDC upgrade this year.

Prior to HVDC upgrade, larger earnings volatility was possible. "Energy margin" is essentially the difference between generation revenue, contract revenue and purchase cost. The chart below shows historical variations of energy margin since 2009, in relation to the current prospectus forecasts. FY09 and FY12 low hydro inflow years caused a fall of circa \$150m. That fall carried through to EBITDAF and also impacted operating cashflow and NPAT.

Volatile earnings constrain company debt level.





Figure 5: Meridian Operating Cashflow



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We therefore don't expect the company to attempt gearing much beyond current levels, and therefore it should maintain lower gearing ratios than its peers. Earnings volatility implies that to maintain investment grade interest coverage ratios during low inflow events is likely to be a constraint on debt.

We note that our cost of capital calculation uses the same asset beta we employ for MRP, containing no extra premium for volatility. Our reasoning is that the hydro volatility is a largely unsystematic risk, which can be diversified by holdings in other power companies and across a wider range of sectors and assets.

Source: Meridian Prospectus

Source: Meridian Prospectus

HVDC Charges

Transmission Pricing Methodology could change

The HVDC interconnector between the North and South Islands is the largest single element of the national grid, and critical to operating the national market. Charges for the HVDC are significant and currently allocated to South Island generators under the standing Transmission Pricing Methodology ("TPM").

We estimate Meridian's share of this charge to exceed \$110m in FY2014.

This charge allocation has been disputed by Southern generators for more than a decade. A new TPM proposal by the Electricity Authority ("EA") in late 2012 would have changed HVDC charging, but proved contentious.

This proposal would have spread the annual \$875m transmission cost for the main grid assets (the "AC" assets) and HVDC across generators, retailers and line companies. For Meridian, its HVDC charge would fall, but its AC grid charges would increase. However the method of charge was based on a marginal use, and therefore could be included in generation offers, unlike the current HVDC charge.

To estimate the TPM benefit we assumed approximately half Transpower's \$875m HVDC + AC revenue is recovered from generators, with an average charge of \$11/MWh. Generators are assumed to add their transmission charge to their offer prices. We assume this charge varies between generators over time and that \$7/MWh is incorporated into cleared prices while the \$4/MWh is unable to be recovered. Meridian would be unable to recover \$52m of charges across its 13,000GWh portfolio. However, that unrecoverable amount is still \$60m to \$65m less than it currently pays for the HVDC.

Therefore we estimate Meridian might save \$65m in transmission charges under a new methodology. That gain from FY18 onwards is estimated to be worth \$0.25 (12%) per share.

The EA has said it will continue to develop the concept for further consultation in 2013/2014. Given its unpopularity, we don't expect any major change would take effect until FY18 at the earliest.

Transmission pricing review would be positive for Meridian.

We don't expect any benefit would arise before FY18, and haven't included this in our base case DCF.

Soft Electricity Market Conditions

Low Demand Growth

NZ electricity growth has slowed or stalled over the last five years, and it is unclear when it may resume. All of NZ's generators have installed new generation capacity over the last ten years, anticipating demand growth around 1.8%p.a. would continue.

Prior to 2008/2009 the growth trend was fairly clear: from a complex variety of sources demand combined to grow at a roughly consistent 700GWh p.a. The end of this pattern around 2009 seems to have caught the industry by surprise, and we haven't yet seen a definitive account of why the growth rate slowed.

It's possible the complex mix of underlying drivers will never be completely understood. For now the electricity industry has assumed that demand will remain flat for some time, and is battening down the hatches (and costs) while it waits to see when growth returns. Slow demand growth assumed for the next 5 years.



Figure 6: Breakdown of NZ Electricity Demand 1990 to 2012

Source: MBIE Energy Data File 2013

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There is now an excess of electricity supply. Consequently, soft prices are likely until demand growth resumes. However our view is that it's more likely a question of when, not if, electricity demand growth returns.

Electricity Prices and the Long Run Cost of New Generation

An essential feature of the current market is that new power station decisions are made by private investors based on their estimate of future market revenues arising over a new investments lifetime and the opportunity cost of capital.

There is no regulatory guarantee or rate of return recovery for bad investment decisions.

Consequently, over the medium to long term electricity prices should be determined by the so-called "Long Run Marginal Cost" ("LRMC"). LRMC measures the average lifetime revenue required to make the next cheapest new station economic. Although the estimate changes over time, and varies with exchange rates and technology, most LRMC consensus estimate at \$85/MWh.

Our base case DCF valuation assumes an \$80/MWh real price.

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seem to agree that CEN's Tauhara II geothermal plant is probably the next cheapest increment of supply, with estimated LRMC around \$85/MWh (in real terms).

Low demand growth and excess of generation mean that this plant is not yet required. Spot prices are not expected to reach \$85/MWh (on average) until demand growth returns. If this LRMC view is correct, Meridian should realise higher average wholesale electricity prices and generation revenue beyond the prospectus forecast horizon.

Meridian's value is sensitive to estimates of long run electricity prices, because its generation plant has near-zero marginal cost, a long life and large sunk capital. A \$5/MWh lift in long run electricity prices would lift our DCF valuation for Meridian by \$0.23 (11%).

Water Rights Reform

Meridian operates its hydro plant under consents that continue for at least another decade. Like all hydro generators in NZ, Meridian does not pay for access to water. Hence Meridian's value would be affected by changes in water access rules or introduction of water charging. In recent years, increasing irrigation demand for dairy farming and wider interest in fresh water policy has led to formation of special interest groups and policy groups within government. With fresh water policy likely to remain in political focus for some time, there is a risk of material change to Meridian's water access in coming decades. Our valuation estimate assumes no change to the current rights or regime over the foreseeable future.

Australian Renewables Growth

We think Australia's electricity markets offer two aspects of potential growth for Meridian. The first is the Large-scale Renewable Energy Target ("LRET") scheme, which mandates that 41,000GWh of renewable generation should be operating in Australia by 2020. Legislation commercially incentivises electricity retailers to secure that target, which may require the construction of up to 30,000GWh of new wind farms before the target date. Meridian has a great deal of experience securing, designing and building windfarms in NZ and Australia. However at this time the company hasn't signalled any ambition in this respect, other than continuing to own the 70MW Mt Millar windfarm in South Australia and completing construction of the 131MW Mt Mercer windfarm in Victoria.

Australian Retail Market Entry

For several years the eastern Australian states have appeared in international leaderboards for customer churn rates. This may be the second avenue of Australian growth available to Meridian. Most eastern states should have full retail competition by 2014. Meridian's Powershop brand and unique customer engagement model have proved extremely effective at securing customers in New Zealand and the company recently launched the brand in Victoria.

Water reform possible in coming decades. Not included in our valuation.

Meridian has arguable competitive advantage, but no sign of haste.

Meridian introducing Powershop model to Australia. No plans for traditional retail entry.

Potential cost savings and retail margin improvement

The first years of Mark Binn's tenure as CEO has been focused on some major commercial issues – one of the driest inflow sequences on record, Tiwai smelter contract renegotiation, managing the internal focus of its listing process and cutting spending on its growth and renewable development pipeline. While Meridian hasn't signaled any specific intentions, we think the company may focus on finding further cost reductions in the next few years.

In this regard we note that the June 2006 annual report indicated 365 full time staff, in contrast to the 827 staff reported in the prospectus as at 30 June 2013. Employee costs were reported at \$79.6m for FY13.

Over that period the size of Meridians generation and retail sales portfolios has remained roughly constant, because the addition of wind farms has offset the divestment of \sim 1,000GWh Tekapo A and B stations to Genesis.

Our DCF valuation does not incorporate any cost reductions.

Staff number in FY06: 365

Staff number in FY13: 827

Once listing complete, company might seek further efficiencies.

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Valuation

DCF Valuation

To value Meridian we have adopted a discounted cash flow (DCF) approach and assessed how this valuation changes for the key risks and opportunities facing the company. On an un-risked basis, our base case DCF valuation for Meridian is \$2.08 per share. After applying discounts for a low probability of Labour/Greens policy change and a slightly higher chance of Tiwai smelter closure, we derive an estimated fair value of \$2.00 per share.

We assess DCF value of Meridian at \$2.00 per share on a risked basis, assuming low probability of Labour/Greens proceeding or Tiwai smelter closure.

Figure 7: DCF Valuation Sensitivities (based on both instalments fully paid)

		DCF (NZS	\$ps)	
Scenario	Key Assumptions	low	mid	high
Base Case	Tiwai at 400MW Jan'15, \$80/MWh real prices by 2025	\$1.88	\$2.08	\$2.32
Tiwai Full Exit	Tiwai exits Jan'17, \$80/MWh real prices by 2026	\$1.84	\$2.06	\$2.33
Labour/Greens	\$25/MWh hydro fall from FY16, excludes Tiwai load, \$40m savings	\$1.25	\$1.39	\$1.57
Upside Growth	Tiwai at 400MW Jan'15, \$85/MWh real prices by 2021	\$2.09	\$2.31	\$2.57
HVDC	Base case, less \$65m transmission from FY18	\$2.10	\$2.33	\$2.59
Margin Gain	Base case, plus \$5/MWh retail margin improvement	\$1.93	\$2.13	\$2.37
Cost out	Base case, plus \$20m cost reduction	\$1.97	\$2.18	\$2.42

Source: FNZC estimates

Our base DCF valuation estimate relies on an expectation of real wholesale electricity prices rising to \$80/MWh from current levels near \$70/MWh over a ten year period. The long life of electricity assets mean that most of the DCF value comes from years after 2017.

Figure 8: Electricity Price Path assumed for Base Case DCF Valuation



Source: ASX, FNZC estimates

More detail on the DCF assumptions and output can be found in the appendix.

Estimated Trading Range Based on Comparable Company Multiples

In addition to a DCF valuation, we have attempted to estimate where Meridian shares may trade if it tracked the traded multiples of domestic comparable companies.

In contrast to DCF valuation, comparable trading multiples place greater emphasis on earnings measures over the next two years. We have looked to EV/EBITDAF and P/FCF as appropriate multiple measures. EBITDAF is an often used and approximates the pre-tax earnings available to debt and equity holders. Free Cash Flow ("FCF") provides a measure of cash available for shareholders, although it is a less conventional 'earnings' multiple measure. We have not placed any weight on P/E multiples, due to differences in accounting depreciation, cash tax and earnings normalisation between stocks in the sector.

Normally we would employ multiples from comparable firms in other markets to assess a multiple trading range. However the current risk of large value movements related to Tiwai smelter closure or Labour/Green policy suggest that CEN and MRP multiples may already capture the market's discounts for these risks, and serve as better guides.

We assess CEN and MRP are trading at FY14 EV/EBITDAF multiples of 8.3x and 9.1x respectively. Applying these to our FY14 EBITDAF of \$556m indicates a trading range between \$1.43 and \$1.60, with a midpoint of \$1.51.

P/FCF is a less conventional measure, but appropriate in this case given the impact of revaluations on depreciation charges, and on tax expense mismatches with cash tax payments, and because maintenance capex sits well below depreciation. However, CEN and MRP are currently trading at relatively close FY15 P/FCF multiples of 11.5x and 11.0x. Taking our FY15 forecast of \$396m operating cashflow, and deducting an assumed \$60m stay-in-business capex, gives estimated FCF of \$336m. Applying CEN and MRP P/FCF multiples indicate a Meridian trading range of between \$1.44 to \$1.51, with a midpoint of \$1.47.

We conclude a likely trading range for Meridian would lie between \$1.43 and \$1.60 (fully paid) based on comparable trading multiples for MRP and CEN, with a \$1.51 midpoint.

This range is 20% to 30% below our risked fair value assessment of \$2.00. We attribute that gap to several factors, including a combination of:

- The equity market placing a higher probability on Labour/Greens proceeding (to reach a \$1.60 DCF our fair value would require a 70% chance of Labour/Greens in our model)
- The equity market discounting the potential for current or future spot or retail prices to rise in a manner similar to our forecast (to reach a \$1.60 DCF fair value would require our forecast to predict falling prices to \$65/MWh in real terms)

Figure 9: Comparable Company Multiples

Ticker	Name	МСар	EV	/ EBITDA	L .		P/FCF		NIBE) / EBITI	DA	EV / EBIT	P/E	Div Yield	CAGR FY12	– FY15
		(\$mn)	FY13	FY14	FY15	FY13	FY14	FY15	FY13	FY14	FY15	FY14	FY14	FY14	EBITDA	EPS
New Z	ealand															-
CEN	Contact Energy	3,930	9.9	9.1	8.2	10.7	11.4	11.5	2.6	2.3	1.9	14.7	18.9	6.6%	6.9%	7.7%
TPW	TrustPower	2,200	10.6	11.7	10.0	13.4	12.7	11.5	3.1	4.0	3.1	15.3	18.3	7.0%	2.0%	-0.5%
VCT	Vector	2,659	8.3	9.5	9.6	8.9	16.6	13.2	4.1	4.9	5.0	14.0	17.1	7.8%	-2.7%	-9.8%
MRP	MRP	3,108	10.6	8.3	8.0	11.2	11.6	11.0	2.7	2.1	1.9	12.5	18.5	8.1%	3.3%	-0.2%
New Z	ealand Average		9.8	9.6	9.0	11.0	13.1	11.8	3.1	3.3	3.0	14.1	18.2	7.4%	2.4%	-0.7%
New Z	ealand Median		10.2	9.3	8.9	10.9	12.2	11.5	2.9	3.2	2.5	14.3	18.4	7.4%	2.7%	-0.4%
Austra	llia															
ORG	Origin Energy	5,637	8.5	7.4	6.9	20.4	10.8	8.9	2.1	1.7	1.4	10.8	14.2	6.0%	19.8%	7.6%
APA	APA Group	4,910	10.3	10.6	9.5	16.6	13.6	12.8	3.1	3.9	3.7	15.6	20.5	4.3%	6.0%	3.9%
AGK	AGL Energy	8,549	13.9	13.4	12.1	12.1	14.6	11.2	6.5	6.5	5.9	17.3	25.5	6.1%	14.1%	6.8%
ENV	Envestra	3,917	11.1	10.1	9.9	9.3	8.1	7.6	5.6	5.2	5.2	13.3	16.7	5.8%	8.2%	18.6%
SPN	SP AusNet	1,985	8.9	9.1	9.2	21.3	16.3	14.1	4.9	5.2	5.4	13.3	13.6	8.2%	4.5%	2.7%
SKI	Spark	2,143	6.6	5.7	5.5	11.3	10.0	9.5	-0.1	-0.3	-0.4	6.6	12.0	7.1%	7.8%	7.4%
Austra	alia Average		9.9	9.4	8.9	15.2	12.2	10.7	3.7	3.7	3.5	12.8	17.1	6.3%	10.0%	7.8%
Austra	alia Median		9.6	9.6	9.4	14.4	12.2	10.4	4.0	4.5	4.5	13.3	15.4	6.1%	8.0%	7.1%

Source: IRESS, Credit Suisse, FNZC estimates

Appendices

Our DCF model uses a 15 year forecast horizon, followed by a terminal value estimate. Our discount rate assumptions were based on a simplified Brennan Lally CAPM model. Terminal growth rate assumed zero real growth. Terminal maintainable capex was set to \$150m in real terms. The latter is difficult to estimate, because the expected life and long term cost of maintaining large hydro civil structures isn't clear. Our assumption represents a value that is 2.5 times the stay-in-business capex used over the forecast horizon.

Figure 10: Discount rate for valuation

Cost of Debt		Cost of Equity	
Corporate Tax Rate	28.0%	Asset Beta	0.63
Risk Free Rate	5.00%	Equity Beta	0.78
Target Gearing D/(D+E)	18.8%	Tax Adjusted Market Risk Premium	7.00%
Target Gearing D/E	23.2%	Investor Tax Rate	28.0%
Corporate Debt Premium	2.75%		
Pre-tax Cost of Debt	7.75%		
Post-tax Cost of Debt	5.58%	Cost of Equity	9.03%
WACC	8.38%		

Source: FNZC estimates

Figure 11: Discounted Cash Flow

		FY14F	FY15F	FY16F	FY17F	FY18F	FY19F	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
CF from operations (nom'l, post-tax)	\$m	349.5	395.5	374.1	381.5	389.6	406.5	425.3	445.8	467.9	491.3	515.6	617.3	652.4	670.6	\$688.6
add back interest	\$m	79.7	79.7	79.9	79.7	91.5	91.5	91.7	91.5	91.5	91.5	91.7	91.5	91.5	91.5	\$91.7
deduct interest tax shield	\$m	-22.3	-22.3	-22.4	-22.3	-25.6	-25.6	-25.7	-25.6	-25.6	-25.6	-25.7	-25.6	-25.6	-25.6	-\$25.7
add back supplementary dividends	\$m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$0.0
less net capex	\$m	-403.1	-142.4	-63.4	-65.0	-66.6	-68.3	-70.0	-71.8	-73.6	-75.4	-77.3	-79.2	-81.2	-83.2	-\$85.3
Free Cash Flows (nominal, post-tax)	\$m	3.7	310.5	368.1	373.8	388.8	404.1	421.3	439.9	460.2	481.7	504.4	603.9	637.0	653.2	\$669.4
Weighted Average Cost of Capital	%	8.4%														
Disc. factors @ WACC (nominal, post-tax)	%	0.9606	0.8863	0.8177	0.7545	0.6961	0.6423	0.5926	0.5468	0.5045	0.4655	0.4295	0.3963	0.3656	0.3373	0.3112
Valuation Forecast Horizon	years	15	L	ast Free Ca	sh Flow in	Horizon (n	ominal)	\$m	669.4							
DCF enterprise value to horizon	\$m	3,456	a	dd back La	st Horizon	Capex		\$m	85.3							
Terminal value disc'd to valuation date	\$m	2,827	Т	erminal m	aintainable	e capex (rea	al)	\$m	150.0							
Enterprise Value at valuation Date	\$m	6,283	Т	erminal m	aintainable	e capex (no	minal)	\$m	211.9							
Net Debt at Valuation Date	\$m	950	Т	erminal gr	owth rate (nom'l)		%	2.5%							
Implied Equity Valuation	\$m	5,333	Т	erminal va	lue at hori	zon (nom'l))	\$m	9,456.7							
Shares on issue	m	2,563	Т	erminal va	lue disc'd t	o valuation	n date	\$m	2,827.2							
Indicated DCF value per share	\$	2.08														
adjustment for ex-dividend date	cps	0.00														
DCF value per share	\$	2.08														

Figure 12: Profit & Loss forecasts

-		FY14F	FY15F	FY16F	FY17F	FY18F	FY19F	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
Summary Profit and loss																
Operating Revenue	\$m	2,244.2	2,440.3	2,310.5	2,307.8	2,390.8	2,478.7	2,571.8	2,668.2	2,769.4	2,874.8	2,984.6	3,221.7	3,313.6	3,396.6	3,482.3
Operating Costs	\$m	-1,688.5	-1,856.0	-1,755.4	-1,739.8	-1,802.4	-1,867.0	-1,934.6	-2,002.7	-2,073.8	-2,147.3	-2,224.1	-2,301.4	-2,364.7	-2,423.8	-2,485.5
Electricity Margin	\$m	855.4	894.4	873.0	893.8	922.3	954.0	988.1	1,025.1	1,064.2	1,105.3	1,147.8	1,317.2	1,355.7	1,389.8	1,424.2
EBITDAF, Generation, Retail, Swaption, CFD, NZAS	\$m	496.6	523.8	493.1	504.4	523.2	544.9	568.7	595.3	623.6	653.7	684.9	842.8	869.4	891.3	913.3
EBITDAF, All Other NZ Activities	\$m	-2.3	-2.4	-2.4	-2.5	-2.5	-2.6	-2.7	-2.7	-2.8	-2.9	-2.9	-3.0	-3.1	-3.2	-3.3
EBITDAF, All Overseas Activities	\$m	61.4	62.9	64.5	66.1	67.8	69.4	71.2	73.0	74.8	76.7	78.6	80.5	82.5	84.6	86.7
Total EBITDAF	\$m	555.7	584.4	555.1	568.0	588.4	611.7	637.2	665.5	695.6	727.5	760.5	920.3	948.9	972.7	996.8
All Other Depn. & Amortisation	\$m	-223.5	-231.2	-234.4	-235.4	-237.1	-238.8	-241.2	-242.3	-244.2	-246.1	-248.7	-250.0	-252.0	-254.1	-256.9
Change in Fair Value of Financial Instruments	\$m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All Other Significant Items	\$m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	\$m	332.3	353.2	320.7	332.6	351.3	372.9	396.0	423.2	451.4	481.4	511.9	670.3	696.9	718.6	739.8
Net Interest Expense	\$m	-79.7	-79.7	-79.9	-79.7	-91.5	-91.5	-91.7	-91.5	-91.5	-91.5	-91.7	-91.5	-91.5	-91.5	-91.7
Profit Before Income Tax	\$m	252.6	273.5	240.8	252.9	259.9	281.4	304.3	331.7	359.9	390.0	420.1	578.9	605.4	627.2	648.1
Income Tax Expense	\$m	-70.7	-76.6	-67.4	-70.8	-72.8	-78.8	-85.2	-92.9	-100.8	-109.2	-117.7	-162.1	-169.6	-175.7	-181.5
Reported Profit for the Period	\$m	181.8	196.9	173.4	182.1	187.1	202.6	219.1	238.8	259.1	280.7	302.5	416.7	435.8	451.5	466.6

Figure 13: Summary metrics

		FY14F	FY15F	FY16F	FY17F	FY18F	FY19F	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
TWAP	\$/MWh	70.6	74.7	73.5	77.0	80.1	83.4	86.7	90.2	93.8	97.5	101.3	105.3	108.3	111.0	113.7
GWAP	\$/MWh	61.9	72.6	65.6	66.3	69.8	73.5	77.2	81.2	85.2	89.5	93.8	98.4	101.4	103.9	106.5
Own generation	GWh	13,136	13,148	13,148	13,148	13,148	13,148	13,148	13,148	13,148	13,148	13,148	13,148	13,148	13,148	13,148
Average retail energy sales price	\$/MWh	175.2	176.4	176.9	180.0	184.1	188.6	193.6	199.0	204.7	210.7	216.9	245.5	252.1	258.4	264.9
LWAP_sales	\$/MWh	77.7	87.6	83.4	85.5	89.3	93.2	97.2	101.3	105.6	110.1	114.7	119.5	123.0	126.0	129.2
Cost to serve	\$/MWh	19.1	19.6	20.0	20.5	21.1	21.6	22.1	22.7	23.2	23.8	24.4	25.0	25.7	26.3	27.0
Retail sales	GWh	5,563	5,629	5,629	5,629	5,629	5,629	5,629	5,629	5,629	5,629	5,629	5,629	5,629	5,629	5,629
Implied CFD margin	\$/MWh	21.8	7.1	12.8	16.0	15.7	15.5	15.2	15.0	14.7	14.4	14.0	13.7	13.7	13.8	13.9
Net CFD sales	GWh	-656	-608	-608	-608	-608	-608	-608	-608	-608	-608	-608	-608	-608	-608	-608
Average NZAS energy sales price	\$/MWh	47.8	49.0	50.2	51.5	52.8	54.1	55.4	56.8	58.2	59.7	61.2	62.7	64.3	65.9	67.5
LWAP_nzas	\$/MWh	65.8	77.5	69.9	70.2	74.0	78.0	82.1	86.3	90.7	95.3	100.1	105.0	108.2	110.9	113.7
NZAS contract sales	GWh	5,011	5,011	4,273	3,504	3,504	3,504	3,514	3,504	3,504	3,504	3,514	3,504	3,504	3,504	3,514

Figure 14: Cash flow forecasts

		FY14F	FY15F	FY16F	FY17F	FY18F	FY19F	FY20F	FY21F	FY22F	FY23F	FY24F	FY25F	FY26F	FY27F	FY28F
Operating Activities																
Operating EBITDAF	\$m	555.7	584.4	555.1	568.0	588.4	611.7	637.2	665.5	695.6	727.5	760.5	920.3	948.9	972.7	996.8
Net interest paid	\$m	-79.7	-79.7	-79.9	-79.7	-91.5	-91.5	-91.7	-91.5	-91.5	-91.5	-91.7	-91.5	-91.5	-91.5	-91.7
Cash Tax paid	\$m	-104.9	-110.7	-101.6	-105.0	-106.9	-113.0	-119.4	-127.0	-134.9	-143.4	-151.8	-196.2	-203.7	-209.8	-215.6
Net Other Cash Movements	\$m	-21.7	1.6	0.4	-1.9	-0.5	-0.7	-0.8	-1.2	-1.3	-1.4	-1.4	-15.3	-1.3	-0.9	-0.8
Net cash flow from Operating Activities	\$m	349.5	395.5	374.1	381.5	389.6	406.5	425.3	445.8	467.9	491.3	515.6	617.3	652.4	670.6	688.6
Investing Activities																
Purchase of PP&E	\$m	382.2	111.7	31.9	32.7	33.5	34.4	35.2	36.1	37.0	37.9	38.9	39.9	40.9	41.9	42.9
Purchase (sale) of all other intangibles	\$m	20.9	30.7	31.5	32.3	33.1	33.9	34.8	35.6	36.5	37.4	38.4	39.3	40.3	41.3	42.4
Net CF (inflow) Investing Activities	\$m	403.1	142.4	63.4	65.0	66.6	68.3	70.0	71.8	73.6	75.4	77.3	79.2	81.2	83.2	85.3
Financing Activities																
Ordinary Dividend Paid to S'holders	\$m	-313.6	-294.9	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7
Net cash (Outflow) Financing Activities	\$m	-313.6	-294.9	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7	-294.7
Net Increase/Decrease in Cash	\$m	-367.2	-41.8	15.9	21.7	28.2	43.5	60.5	79.3	99.6	121.1	143.6	243.3	276.4	292.6	308.6

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FIRST NZ CAPITAL

Auckland

Level 39, ANZ Centre, 23-29 Albert Street PO Box 5333, Auckland

Havelock North

The Doctor's Cottage, Freephone 52 Te Mata Road Phone PO Box 28153, Havelock North Fax DX

Freephone 0800 Phone С

Fax DX

+64 9 3 +64 9 3

0800 562 543

+64 6 877 9074

+64 6 877 9079

MA 76506

Wellington

) 805 584	Level 14,	Freephone	0800 800 968
302 5500	171 Featherston Street	Phone	+64 4 474 4400
377 6761	PO Box 3394, Wellington	Fax	+64 4 496 5311
CX 10165		DX	SX 11175
	Nelson		

1st Floor, 164 Hardy Street	Freephone	0800 502 828
PO Box 114, Nelson	Phone	+64 3 548 8319
	Fax	+64 3 548 0593
	DX	WC 70001