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Meridian Energy

Pre-IPO initiation

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Pre-IPO initiation

Cash cow

Utilities

Meridian Energy (MEL) is being priced with an attractive initial dividend yield and a semi-deferred payment structure that sees retail investors pay NZ$1.00 per instalment receipt now and no more than NZ$0.60 in May 2015. MEL has the capacity to pay out significantly more than net earnings each year in dividends for the foreseeable future. Downside risks relate primarily to the Labour-Green NZ Power proposal, which we believe has a low chance of implementation. While we think in the long term MEL could be at least neutral to Tiwai Point closing (after an initial adjustment period), a more likely scenario is a reduction in contracted volumes from 2017, which could work to MEL's shorter-term advantage. We conclude a fair value range of NZ$1.70 to NZ$1.86.

Year end	Revenue (NZ$m)	PBT (NZ$m)	EPS (c)	DPS (c)	P/E (x)	Gross yield at NZ$1.60 (%)
06/12	2,570	158	2.9	2.8	55.2	2.4
06/13	2,711	427	11.5	9.8	13.9	8.8
06/14e	2,440	261	7.3	10.5	21.9	8.4
06/15e	2,559	293	8.2	11.5	19.5	9.2

Source: Meridian Offer Document, Edison Investment Research estimates. Note: PBT and EPS are on an unadjusted basis; P/E and gross yield at NZ$1.60.

Attractive offer structure

The instalment receipt structure is an attractive way for investors to buy shares in the IPO, but does create an obligation to pay the balance in May 2015. The very attractive intervening dividend yield of 13.4% on the instalment receipt price (of NZ$1.00) is a major draw for investors.

Stable earnings outlook

The earnings outlook for MEL is for steady, low growth earnings over the forecast period contained in the Offer Document through FY15. MEL's dividend policy will see c 140% of net earnings paid to shareholders. Low debt levels, strong cash flows and a sharply lower capex profile from the second half of FY14 leaves plenty of medium-term scope for the return of further capital to shareholders.

Valuation: Fair value between NZ$1.70 and NZ$1.86

Our valuation analysis has four components; our DCF valuation concludes a range of NZ$1.75 to NZ$1.85 per share while our dividend growth valuation points to a range of NZ$1.70 to NZ$1.86 per share. Overall, we conclude a fair value range of NZ$1.70 to NZ$1.86. With MEL's cash-rich profile, P/E is our least favoured valuation method. We think the market will trade MEL primarily on a yield basis.

Political risk the major concern

The major downside risk investors must assess is the Labour-Green NZ Power policy. If implemented in full, our analysis suggests an unrisked value impact to MEL of up to NZ$0.70/share. Importantly, however, we think the probability of the NZ Power proposal being implemented to its full potential extent is low and that the offer price more than accounts for the current risk adjusted impact to MEL.

3 October 2013

Price range	**NZ$1.50-1.80**
FY13 net debt	NZ$797.4m
Free float	49%
Code	MEL/MELCA
Primary exchange	NZX
Secondary exchange	ASX

Business description

Meridian Energy is a generator and retailer of electricity in New Zealand. The company produces its electricity entirely from renewable resources, principally hydro in the South Island, and owns wind assets in Australia. It is New Zealand's largest electricity generator.

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This report has been commissioned by NZX to support the Meridian Energy IPO

Investment summary

Company description: New Zealand's largest generator

MEL is New Zealand's largest electricity generator, providing 30% of New Zealand's power from 100% renewable resources. The company's largest customer is the Tiwai Point aluminium smelter that in FY13 accounted for 38% of total GWh sold by MEL. In addition to being the largest generator in the wholesale electricity market, MEL also supplies 14% of the retail market through its Meridian and Powershop brands and has a range of commercial and industrial customers.

Offer structure: Attractive yield

The New Zealand government is selling 49% of MEL via an IPO. It will retain the remaining 51%. Investors are being offered the ability to buy shares via instalment receipts, with NZ$1.00 payable now and the balance (of no more than NZ$0.60 for a retail investor) due in May 2015. Between the offer and the payment of the second instalment, investors will be entitled to receive full dividends and retain full rights of share ownership. Shares and instalment receipts will each be able to be traded on the NZX and ASX. Until the second instalment is paid, investors will receive an extremely attractive gross dividend of 13.4%. However, if the share price falls, investors will still be required to make the second payment in full in May 2015.

Valuation: Supportive of offer price range

Our valuation approach has four components; our DCF valuation concludes a range of NZ$1.75 to NZ$1.85 per share, while our dividend growth valuation points to a range of NZ$1.70 to NZ$1.86. Overall, we conclude a fair value range of NZ$1.70 to NZ$1.86 per share, with a weighted mid-point of NZ$1.75 per share. Given MEL's cash-rich investment profile, P/E is our least favoured valuation method. We think the market will trade MEL primarily on a yield basis, given the attractive yield.

Exhibit 1: Valuation overview

Valuation method	Upper	Lower	Mid point	Method
DCF	NZ$1.85	NZ$1.75	NZ$1.80	DCF model
Dividend growth model	NZ$1.86	NZ$1.70	NZ$1.78	Dividend growth model
EV/EBITDAF	NZ$1.75	NZ$1.53	NZ$1.64	Range of 9x to 10x 12-month forward EBITDAF
P/E	NZ$1.44	NZ$1.29	NZ$1.36	Range of 17x to 19x 12-month forward EPS
Weighted average	NZ$1.82	NZ$1.66		
Weighted mid point		NZ$1.75		

Source: Edison Investment Research estimates

Financials: Cash and dividends the focus

MEL has stated that its dividend policy will be based on operating cash flow rather than earnings. While this will result in >140% of net earnings being distributed annually, it does mean that no more than 75% of dividends will carry imputation credits, making its distributions less tax efficient compared to other major listed companies for New Zealand investors. By focusing on operating cash flow, MEL seems to be implying that underlying earnings growth will be subdued over the next few years and that it will generate surplus cash well ahead of earnings. We share this cautious assessment of the outlook for future new generation projects, and the outlook for energy demand and prices.

Sensitivities: Political risk the major long-term issue

Key sensitivities to our assumptions are:

- The Labour-Green NZ Power proposal is clearly MEL's major long-term downside value risk. While we consider the risk of implementation to the extent stated as low, in our view it still remains the key long-term threat for investors.
- On balance, with the adjustment path afforded by its new supply contract, we view the potential downsize and/or closure of Tiwai Point as a potential long-term net positive for MEL, after an initial adjustment phase.
- Recent generation over-build and a near-term outlook for low demand growth leave the market facing significant overcapacity and the prospect of prevailing price weakness. Offsetting this, MEL is well insulated as the lowest-cost supplier of must-run generation to the market. Generators that operate higher variable (fuel) cost plants face the strongest competitive pressure and are the most likely to be squeezed from the market.

Company background

Overview

MEL was established in 1999 when the Crown formed three state-owned enterprises (SOEs) from what was the Electricity Corporation of New Zealand. MEL operates as a generator and retailer of electricity and relies on third parties for the transmission (Transpower) and distribution (local distribution companies) of electricity. It owns and operates a large portfolio of renewable (hydro and wind) generation and has a large retail customer base. MEL also holds an exclusive contract to supply New Zealand's largest electricity customer, the Tiwai Point aluminium smelter.

The government is selling 49% of MEL in a public share offer via the sale of instalment receipts. It is retaining a 51% shareholding, a position that would require an act of parliament to change. The offer to New Zealand retail investors is at a fixed price of not more than NZ$1.60 per share. The institutional offer is to be priced between NZ$1.50 and NZ$1.80 per share, with the final price to be announced after the close of the offer period. If the final price is above NZ$1.60 in the institutional offer then retail investors will pay NZ$1.60. If the final price is below NZ$1.60, retail investors will pay the final price. The instalment receipts will be paid to NZ$1.00 on application with the balance due in May 2015. The amount of the second (and final) instalment will be determined from the final offer price. For practical purposes in this report we assume a final offer price of NZ$1.60 per share.

The instalment receipts will have a market capitalisation of NZ$2.56bn at the retail offer price, making MEL one of the largest companies by market capitalisation on the NZX, although the market capitalisation will not reflect the full value of the company until the final instalment is paid in May 2015.

Generation assets

MEL owns and operates seven hydro stations and four wind farms in New Zealand. It also owns one wind farm in Australia and is constructing two further wind farms, one in New Zealand and one in Australia. Exhibit 2 summarises the company's generating assets. In the year to June 2013 MEL accounted for 30% of total New Zealand electricity generation. 87% of MEL's generating capacity is hydro and this accounts for 90% of the company's output. The 13% balance is wind generation.

Unlike most other markets, wind generation in New Zealand operates without subsidies and pricing received from the wholesale market is the same for wind generation as it is for all other forms of generation. Wind farms in New Zealand also enjoy far higher load factors compared to other

markets; MEL's portfolio average wind capacity factor of almost 37% for FY13 compares to an equivalent average in the UK of around 25-30%, and a global average of around 25%.

Exhibit 2: Meridian Energy's generation assets

Generation asset	Type	Location	Scheme	Capacity (MW)	FY13 production (GWh)	Load factor %
Operating						
Manapouri	Hydro	South Island	Manapouri	800	4,546	64.9
Benmore	Hydro	South island	Waitaki	540	2,154	45.5
Ohau A	Hydro	South Island	Waitaki	264	1,029	44.5
Aviemore	Hydro	South Island	Waitaki	220	950	49.3
Ohau B	Hydro	South Island	Waitaki	212	875	47.1
Ohau C	Hydro	South Island	Waitaki	212	865	46.6
Waitaki	Hydro	South Island	Waitaki	90	499	63.3
West Wind	Wind	North Island	N/A	143	475	37.9
Te Apiti	Wind	North Island	N/A	91	291	36.5
Te Uku	Wind	North Island	N/A	64	198	35.3
White Hill	Wind	South Island	N/A	58	188	37.0
Mt Millar	Wind	South Australia	N/A	70	166	27.1
Total operating				2,694	12,070	51.1
Under construction						
Mill Creek	Wind	North Island	N/A	60	N/A	44.7
Mt Mercer	Wind	Victoria, Australia	N/A	131	N/A	31.6

Source: MEL Offer Document, Edison Investment Research estimates

The weighted average age of MEL's generating portfolio is 36.6 years, with the majority of the hydro stations commissioned in the 1970s and 1980s. Each of MEL's wind farms have been built in the last decade. MEL has undertaken regular maintenance and upgrades to its hydro plant and is currently undertaking a maintenance upgrade on its smallest hydro station, Waitaki, to improve its operating efficiency.

Retail business

As at 30 June 2013 MEL had almost 270,000 retail customers, just over 2,100 commercial customers, 15 financial contract customers (industrial customers with contracts for difference, or CFDs) and 239 spot market customers. MEL's single largest customer is the Tiwai Point aluminium smelter, which accounted for 38% of MEL's energy sales in FY13 by volume.

Exhibit 3: Meridian customer breakdown

Customer group	Number of customers	FY13 GWh	MWh/customer	Customer share %	Load share %
Meridian retail	218,466	2,923	13	80.3	22.7
Powershop retail	51,271	506	10	18.8	3.9
Commercial	2,101	2,232	1,062	0.8	17.4
Tiwai Point aluminium*	1	4,886	4,886,000	0.0	38.0
Financial contract*	14	2,127	151,929	0.0	16.5
Spot market	239	181	757	0.1	1.4
Total	272,092	12,855	47	100	100

Source: Meridian Energy Offer Document. Note: *Estimated.

Board and management

MEL's board comprises a mix of corporate governance, public company, retail and electricity sector experience. The average tenure of the nine board members is two years and six months, with the longest-serving director appointed five years ago. The chair, Chris Moller, is also chair of Sky City Entertainment Group. Four other directors have public company experience either as CEOs (current and past) or as current directors. The board can be viewed as a 'safe pair of hands', which is appropriate given the medium-term outlook for the company and the sector.

The senior management team has been restructured and refreshed over the past two years, reflecting a change in focus from asset development to cost control and operating efficiency. Since his appointment in early 2012, CEO Mark Binns has brought a new focus to core business and cost management. Since joining he has restructured the generation development team and has either cancelled or deferred nearly all development projects.

Capital structure and capex

MEL has a strong balance sheet with net debt of NZ$797.4m at 30 June 2013 and equity of NZ$4,688m, providing a debt/capital ratio of 14.5%. MEL is forecasting a rise in the debt/capital ratio to 19.6% in FY14 and 19.7% in FY15. The interest cover ratio was 4.4x for FY13 and is forecast at 4.0x and 4.5x for FY14 and FY15 respectively. All of these ratios are well within bank covenant limits as set out in MEL's FY13 financial report. MEL also has NZ$200m of bonds traded on NZX. As a debt issuer, MEL carries a BBB+ credit rating from Standard & Poor's. By way of comparison, the net debt/market value of European electricity utilities ranges between 80% and 90%. At an issue price of NZ$1.60, MEL's net debt/market value ratio is forecast to be 27.3% in FY14 and 27.0% in FY15.

Once it has commissioned two new-build wind farm projects in the second half of FY14, MEL is projecting a sharply lower forward capital expenditure profile. Market conditions make it unlikely that any material new generation projects will be built for at least five years. MEL forecasts 'maintenance' capital expenditure of NZ$65m pa, which is well below forecast depreciation of NZ$222m in FY14 and NZ$233m in FY15. Thus over the next few years MEL should generate significant free cash flow that could become available to shareholders.

Industry overview

Structure

The New Zealand electricity industry is divided into four key business areas: generation, transmission, distribution and consumption. The generation and retailing markets are competitive and dominated by the five main players with a number of smaller operators. Barriers to entry into the generation space are high, although barriers relate primarily to capital intensity, consenting and construction, rather than being of a regulatory nature. Barriers to entry into the retail market are low and there are over 20 companies competing for customer business.

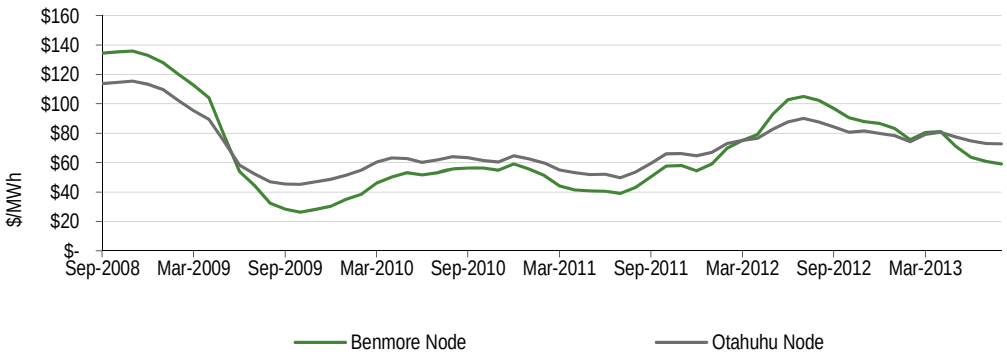
High voltage transmission is provided by Transpower, a government-owned natural monopoly. Regulated 'lines' companies provide lower voltage local distribution to customer connection points. Generators and retailers cannot own distribution companies, although distribution companies can to a limited extent provide generation and sell energy. The key regulators are the Electricity Authority and the Commerce Commission. System operation and control is provided by Transpower.

Generation

Generators sell energy into the wholesale market, with retailers and major customers purchasing energy back from the market priced at half-hourly intervals at various nodes (grid connection points) across the network. Pricing across nodes is influenced by factors including hydrology, plant availability, demand peaks, transmission constraints and local load factors.

Over the past 12 months the reference price at the Benmore node in the South Island has averaged NZ$59.09/MWh, with NZ$72.80/MWh at the Otahuhu node in the North Island.

Exhibit 4: 12-month moving average prices Benmore and Otahuhu nodes



Source: The Electricity Authority

The Ministry of Business, Innovation and Employment's (MBIE) long-run marginal cost model for new generation estimates that the lowest-cost new generation (geothermal) would require a price of NZ$85.40/MWh to become economic. Current market prices are below new entrant levels and reflect the current overcapacity in the market, supporting the widely held view that the outlook for new generation projects is broadly unfavourable.

Exhibit 5 presents a breakdown of the NZ power market by generator and fuel type. The five largest generators account for more than 94% of installed capacity, with the balance accounted for by a number of smaller generators (eg Todd Energy) and industrial co-generators (eg Fonterra, NZ Steel, Carter Holt Harvey). MEL's asset base has a strong bias towards the South Island, where nearly 90% of its capacity sits. Of its main competitors, MRP is North Island focused, while Contact Energy, Genesis Energy and TrustPower own and operate generation assets in both islands.

In 2010, in an intervention intended to increase competition by more evenly balancing the generation portfolios of the three generator-retailer SOEs, the government legislated to require MEL to sell its two Tekapo stations, totalling 185MW, to Genesis Energy. MEL also entered into virtual asset swap agreements with Genesis and Contact Energy, providing it with generating capacity in the North Island and Genesis and Contact Energy with increased generating capacity in the South Island. The virtual swaps expire in 2025 but can be renewed.

Exhibit 5: New Zealand installed generation by operator and type (MW)

Generation type/ generator	Biomass	Diesel	Gas	Geo	Hydro	Wind	Total	Share
Meridian Energy	-	-	-	-	2,338	356	2,694	29.0%
Genesis Energy	-	-	1,185	-	686	-	1,871	20.1%
Mighty River Power	-	-	170	266	1,038	-	1,474	15.9%
Contact Energy	-	155	998	303	680	-	2,136	23.0%
TrustPower	-	-	-	-	396	197	593	6.4%
Big 5	-	155	2,353	569	5,139	553	8,769	94.3%
Others	72	-	212	140	74	33	530	5.7%
Total	72	155	2,565	709	5,213	586	9,299	100.0%
Share	0.8%	1.7%	27.6%	7.6%	56.1%	6.3%	100.0%	

Source: Electricity Authority, Ministry of Business, Innovation and Employment

Hydrology, locational risk

In a normal year, 55-60% of New Zealand electricity supply is generated from hydroelectric capacity, with the majority produced from the southern hydroelectric system, a substantial proportion of which is operated by MEL. Hydro generating capacity is limited by reservoir operating constraints that plant owners must observe while operating each unit. When rainfall or snowmelt inflows are weak for extended periods, as has been the case on multiple occasions during the past 10-15 years, hydro generation becomes constrained and must be substituted by other forms of generation, typically from standby thermal generation. As the market's dominant hydro generator, MEL is the generator that is most exposed to adverse hydrology conditions.

Transmission constraints abating

In most years the majority of generation is in the South Island. However, most electricity demand is concentrated in the North Island, particularly around Auckland. Transmission capacity is therefore fundamental to sector efficiency and, ultimately, company performance. A high voltage direct current (HVDC) link between the North and South islands provides two-way supply capacity to the market. Capacity on the HVDC link has previously been a significant constraint for generators, which has exacerbated supply-side system stress.

Over the past five years Transpower has been leading a major investment programme that has included substantial upgrades and expansions to the HVDC link. Combined with a series of other major transmission expansion projects also being completed, particularly in the central North Island and Auckland regions, system transmission constraints are expected to reduce significantly over the next 12-18 months. This should result in substantially reduced intra-period wholesale price volatility.

Demand

Vertical integration is a central aspect of the New Zealand electricity system, to the extent that the five largest generators are also the five largest retailers. Vertical integration provides significant risk management benefits to generator-retailers by enabling companies to run internal hedging positions between their generation and retail businesses. Net positions are shown in Exhibit 6.

Retail, industrial, commercial

Residential consumers account for around a third of electricity demand in New Zealand but nearly 86% of all physical connections (ICPs). MEL's single largest customer (via CFDs) is the Tiwai Point aluminium smelter, which in FY13 accounted for 38% of MEL's total production. MEL's retail customers account for a further 26.6%, with commercial customers accounting for 17.4%. The balance of 18% is large CFD customers and sales on the spot market.

Exhibit 6: Generation-retail market positions and shares

Retailer	FY13 generation GWH	Market share %	FY13 sales GWh	Market share %	Net position GWh	Net position %	ICPs at August 2013	Market share
Meridian Energy	12,070	31.8	12,674	36.0	-604	95.2	278,282	13.8%
Genesis Energy	7,212	19.0	5,354	15.2	1,858	134.7	548,679	27.3%
Mighty River Power	6,462	17.0	5,252	14.9	1,210	123.0	393,888	19.6%
Contact Energy	9,879	26.0	8,277	23.5	1,602	119.4	454,529	22.6%
TrustPower	2,330	6.2	3,683	10.5	-1,353	63.3	219,059	10.9%
Big 5	37,953	100%	35,240	100%	2,713		1,894,437	94.2%
Others							116,003	5.8%
Total							2,010,440	100.0%

Source: Electricity Authority, Ministry of Business, Innovation and Employment, Company Reports

An extensive government-funded TV, radio and print advertising campaign since 2010 has resulted in a sharp upswing in retail competition and churn. Around 20% of retail customers switched power

companies annually, up sharply since 2010, making New Zealand one of the most competitive retail markets globally. In mid-2012 the campaign was extended to small and medium businesses.

Demand outlook

Until the global financial crisis, electricity demand growth was running at a 10-year average of 1.8% per year. However, since 2010 demand has fallen by over 1,000MWh per year (-2.5%) and is expected to register another fall in CY14. Most of the drop in demand has come from industrial sectors such as wood, paper manufacturing, chemicals and basic metals. Per-household residential demand has also fallen 2.7% over the same timeframe. MBIE's reference case expects demand to remain soft until 2015 after which it is expected to grow at not more than 1.2% per year. Tiwai Point sits as a standalone component within this outlook, which we discuss further below.

Generation oversupply

The weak demand outlook exacerbates an existing oversupply of generation due to a five-year period from 2008-13 that saw substantial new build generation programmes completed by most operators. Since the start of 2008, more than 1,830MW of new generation has been commissioned, with a further 266MW to be commissioned by the end of CY14. Over this time some older capacity has been removed from the market, such as the decommissioning by Genesis Energy of one of Huntly's four 250MW units and recent confirmation that a second 250MW unit would be placed into long-term storage before the end of CY13, so the net growth is somewhat less. Most of the growth in generation capacity has been in geothermal (980MW), gas (720MW) and wind (363MW). Geothermal has the lowest marginal cost of new generation build options with gas (depending on gas contracts) the most expensive.

In the face of very soft demand and the commissioning of new and more efficient plants, owners of older, less efficient, higher-cost plants face pressure to shut or reduce operations. The generation oversupply picture focuses on these expensive plants, as it is in this marginal space where market balances are determined. However, new generation will not earn its cost of capital if the market price continues to sit below the new entrant cost. The closure or mothballing of plants could improve the supply/demand dynamic despite potential short-term price disruption.

Regulation

The electricity sector is subject to a number of layers of formal regulatory oversight and informal political attention and influence.

As noted, the generation and retail components of the electricity sector are competitive, with most regulation and oversight focusing on the efficient operation of the market and delivery (transmission and distribution) of energy. Prices are set in the market and generators, by and large, are price takers, although large industrial customers tend to operate with CFDs that provide price certainty with generators making up any shortfall (or gaining a benefit) on delivery.

The market reforms of 2010 addressed a number of imbalances and have assisted in lifting retail competition. Grid investments and upgrades by Transpower are also removing constraints that will allow the market to operate more efficiently and reduce price volatility.

Energy pricing has recently been an area of growing political interest as politicians look to options to address a perceived problem with rising energy prices. The focus for intervention options has tended to fall on the generation and retail ends of the market, despite clear evidence that local distribution costs have accounted for most (more than 60%) of real-term increases to household electricity prices. Wholesale energy costs have accounted for only 27% of the increase.

NZ Power proposal

In April 2013, the opposition Labour and Green parties together announced that, in an attempt to lower the cost of electricity to consumers, if elected to government in late 2014 they would move to establish a new Crown entity (NZ Power) to act as a central planning agency for the electricity sector. The policy states that NZ Power would act as a single buyer to purchase all power in the wholesale electricity market and "have the power to set prices based on operating costs and a fair return on capital". NZ Power would also require generator-retailers to separate their upstream and downstream businesses into standalone operations with separate management and boards.

The absence of implementation detail leaves the sector facing an environment of substantial uncertainty. The implications for the sector are substantial, and not just for the generation sector where hundreds of existing bilateral electricity supply contracts would probably need to be rewritten or amended to accommodate the proposal.

Generators buying gas are also said to be avoiding negotiations to contract further gas due to concern that, if the NZ Power proposal was implemented, they as thermal plant operators would not hold decision rights over when or even if they would be able to generate and dispatch to market. Implementation costs have been estimated by Labour-Green at NZ$100m, although in our view if the proposal were implemented to its stated design the true economic costs would be substantially higher.

The proposal's key plank is its targeting up to NZ$700m pa in cost savings, which would be delivered largely at the expense of lower prices to be offered by NZ Power to operators of mature renewable generation. In practical terms, this will involve owners of older hydro and geothermal plant being required to accept much lower pricing for their output. For plant owners, the financial and economic impact of full implementation would likely be severe. With its portfolio, Meridian is in our view clearly the player that is the most exposed and has the most to lose.

However, the government would also likely be a significant loser from NZ Power, given as a 51% shareholder it will still fully consolidate the two largest hydro generators, MEL and MRP. Write downs in asset values as market values are revised back towards historic cost, reductions in profitability and thus dividend paying ability for both companies would have a direct impact on the government's financial position and cash flow.

The great imponderable is whether a Labour-Green government would push ahead with this proposal given the extent of difficulties involved with implementation, the likely self-inflicted damage to its own financial position and the disruption to market arrangements.

Investment considerations

Exhibit 7 summarises what we consider to be key aspects of strength, weakness, opportunity and threat for MEL as an investment proposition. Of those listed, the recent changes to the Tiwai Point contract and the NZ Power proposal present respectively the strongest opportunity for the company and the greatest weakness/risk.

Tiwai Point

Over the past 12-18 months the future of Tiwai Point has generated much speculation. Among this, we think the likelihood of the smelter closing has been overblown. What is clear is that the New Zealand Aluminium Smelters (NZAS) facility, which is 79.4% owned by global mining major Rio Tinto, is not profitable at the current point in the cycle and is relying on a substantial upswing in aluminium market conditions to re-establish ongoing viability. However, this situation is not unique to Tiwai Point in Rio Tinto's portfolio. We believe Tiwai Point operates around the middle of the smelting cost curve, implying there to be a stronger case for a number of other plants closing before

Tiwai Point, particularly given the price premium for the ultra-high grade aluminium Tiwai Point produces. Also, the outright closing of Tiwai Point would according to management accelerate NZ$200-300m of environmental exit costs, thus even if the plant were to operate at close to cash break-even for some time, management would likely still prefer to avoid or defer these costs.

We consider a more likely scenario to see Rio Tinto exercise the option in its revised contract with MEL to reduce its contracted purchases from MEL in 2017, from the current 572MW to 400MW. This does not imply that smelting operations would reduce, as it is likely that NZAS would look to purchase the difference in the wholesale market. If off take were to remain at 572MW, the pricing under the contract would revert to the pre-2007 levels, which are thought to sit significantly above both the revised price under the new contract and also the current wholesale market price. A reversion to pre-2007 pricing would likely be beneficial to MEL, but not to NZAS. If NZAS does exercise its option to reduce its contracted purchases from MEL in 2017, MEL would have an additional 172MW to sell. In all likelihood, MEL would achieve more favourable pricing than it would realise under the NZAS contract. This would flow directly through to operating cash flow and earnings. Due to Manapouri being towards the very bottom of the electricity merit order, the impact on the market would likely be muted. A third-party generator (or possibly MEL itself from a competitive tender process) would supply Tiwai Point its required 172MW, implying that overall market dynamics would be unlikely to materially change.

If Tiwai Point were to close outright, which we consider at this point unlikely, the impact would mostly fall on the higher-cost thermal generators via a fall in the wholesale price. After a possible initial period of price dislocation (which could have a negative short-term impact on MEL), this would squeeze higher-cost plants from the market and accelerate plans to withdraw costly or inefficient capacity. Even with a likely fall in wholesale prices, as a low-cost producer MEL would still be able to sell power from Manapouri at a significant margin, assuming transmission is unconstrained.

NZ Power proposal

The NZ Power proposal represents in our view the most significant long-term risk to MEL, as much about the proposal remains unknown. Our analysis concludes the specified savings of NZ$700m pa to imply a 28% ($21/MWh) reduction in average wholesale prices based on FY13 results for generators across all generation types. The NZ Power proposal suggests that most of the burden of this ‘saving’ will fall on older plant, being hydro and some geothermal, thus the impact on MEL would likely be materially greater than the pan-sector average.

We consider the likelihood of NZ Power being implemented to its specified extent as low, due to (1) the practical likelihood of a Labour-Green government coming to power in Q4 of CY14 (current polling would suggest a lower than 50% probability); and (2) the enormous implementation difficulties that would need to be overcome to implement what would constitute an entirely new set of electricity market arrangements.

In our view, if the proposal was to become government policy, there would be strong incentives for the sector to ‘sue for peace’ to reach an agreement with the government that provides it the political outcome it desires (cheaper power prices for households) without a complete recast of electricity sector arrangements, roles and responsibilities.

The likely impact on MEL if NZ Power were implemented at the start of FY19 (1 July 2018) would be approximately NZ$0.70/share based on our DCF analysis. However, adjusting to take account of our spot estimate for the risk-weighted likelihood of NZ Power being implemented to the stated extent reduces this to NZ$0.15/share. Based on our DCF valuation of NZ$1.80/share, an impact of NZ$0.15/share would still leave our DCF valuation above the indicated retail offer price of NZ$1.60/share. Accordingly, we consider that the indicative IPO price range has already accounted for the risked impact of NZ Power downside, insofar as those likely impacts can be estimated.

Exhibit 7: MEL SWOT analysis

Strengths	Weaknesses	Opportunities	Threats
Strong dividend flow – MEL has stated that dividends will be based on 80% of adjusted operating cash flow, resulting in a forecast dividend payout ratio on NPAT of 144% in FY14 and 140% in FY15, inferring gross yields of 8.4% and 9.2% respectively. These impressive metrics are representative of MEL's strong underlying cash generation profile. With capex forecast to fall sharply over the next few years MEL will have the capacity to pay out significantly more than NPAT for at least five years, if not longer.	**NZ Power** – The Labour-Green NZ Power policy proposal represents a major exposure to MEL. While the detail of the proposal remains scant and the timing and likelihood remain uncertain, there appears little doubt that if Labour is able to form a government from the November 2014 election there is the potential for significant structural change to the sector, which could have a material impact on MEL's business model.	**Tiwai Point** – Edison sees the likely reduction in NZAS take from its Tiwai Point supply contract from 572MW to 400MW in 2017 as a likely net positive for MEL. Exercise by NZAS would allow MEL to sell 172MW into the market at prices that are likely to be higher than those that apply under the revised Tiwai Point contract. Supply-side impacts on the generation sector are likely to be felt most by high cost thermal generators, which will withdraw capacity from the market. As an operator of low-cost, must-run hydro generation, MEL should remain relatively unaffected, assuming unconstrained transmission.	**Regulatory/political** – The Electricity Authority is seeking to alter the HVDC payments structure, which as proposed would benefit MEL. However, there is strong push back from other generators and major users. As the November 2014 election nears there is the potential for the threat of further political intervention, with the potential for uncertain outcomes.
Resilience of operating cash flow – MEL has in our view among the most stable operating cash flow profile of its peers. Its vertically integrated model and net-long position (below) provide substantial insulation against its key operational risk exposure: hydrology.	**Dry year risk** – Hydrology is MEL's key operational risk exposure. Excluding its Tekapo units, which are now owned by Genesis Energy, over the past 10 years hydro output has ranged from a low of 9,790GWh in 2012 to 12,095GWh in 2005, or a range of 2,305GWh. MEL's hydro storage is equal to 2,200GWh of generation or around 20% of hydro generation in an average year. Important also is MEL's hedge book, which now includes a portfolio of thermal backup arrangements to mitigate dry year risk.	**Capital management** – MEL's strong cash and dividend policy will deliver large dividend flows to shareholders. However, because dividends are to be based on operating cash flow, dividends will not be fully imputed, making them less tax efficient for shareholders. Should future balance sheet capacity allow (which we think it will), an attractive alternative would be to distribute cash more tax effectively to shareholders by developing a pro-rata share buyback plan, thereby boosting investor returns.	**New uneconomic generation** – Although in our view now unlikely, particularly given the upgrade in governance arrangements taking place across generators as the SOE sell-down model continues, the possibility of generators committing to building further new uneconomic generation cannot be ruled out. If this did occur this could disrupt market pricing and have a negative impact on MEL's profitability. Currently, wholesale market prices are 15% below the cheapest new generation plant LRMC, which should constrain new build for the foreseeable future.
Long generation – As the dominant hydro generator in the market MEL is exposed to dry year risk. However, by maintaining a net-long market position the company holds flexibility to insulate against dry periods and can avoid (depending on the severity of the dry period) needing to procure large volumes of expensive generation to meet its contractual obligations. In the dry FY12 year the company's operating cash flow fell by only 12%.	**Water rights** – MEL is dependent on existing water access and usage consents on the Waitaki River and Lake Manapouri. The consents run out in 2025 and 2031 respectively. The government is also progressing reforms of fresh water management in New Zealand that may have a negative impact on the company's future operations. Applications for new water consents could result in MEL being able to draw less water for generation in the future.	**Transpower grid investments** – The completion of the HVDC link at the end of 2013 will enable the development of a true national electricity market and remove a number of the constraints that have limited MEL's ability to export electricity to the North Island. Further, grid developments in Southland will allow MEL to ship up to 75% of Manapouri's output to the North Island from 2015, reducing its reliance on and exposure to its Tiwai Point route to market.	

Source: Edison investment Research

Valuation

Our valuation analysis draws on four different approaches. With the strong emphasis on MEL's financial profile and investment case on cash flow and dividend, we have weighted our analysis in favour of cash-based methods. Our primary valuation methods are discounted cash flow (DCF) analysis, which focuses on bottom-up forecasting of financial projections and the Gordon's growth model (GGM), which focuses on capitalisation of dividend flows. We have constructed a detailed DCF model to support both analyses. We also analyse for earnings-based metrics EV/EBITDAF and P/E. P/E is our least preferred valuation method.

Our DCF modelling has adopted the FY14 and FY15 prospective financial information (PFI) estimates presented in the Offer Document. In our view, these estimates are conservative and there is material upside risk in each of FY14 and FY15 (and, therefore, beyond) in the estimates. Upside is largely as a result of the PFI reflecting conservative capacity utilisation assumptions compared with our read of historic averages.

Our DCF is based on the following assumptions:

- annual demand growth of 1% per year;
- price growth at no greater than the rate of inflation;
- no new generational build by MEL given its minimal portfolio of consented projects; and
- focus on operating cost management.

Exhibit 8 summarises the conclusions of our DCF analysis.

Exhibit 8: DCF valuation summary

	NZ$m		
Forecast period	3,460	WACC	8.38%
Terminal value	1,950	Cost of equity	9.50%
NPV to capital	5,411	Ungeared cost of equity	8.78%
Less net debt	798	Terminal growth rate	2.00%
NPV to equity	4,613		
Value per share (NZ$)	1.80		

Source: Edison Investment Research estimates

We conclude a DCF valuation of MEL of NZ$1.80, implying a 12.5% upside to the fixed retail offer price of NZ$1.60 per share.

Exhibit 9: Valuation overview

Method	Upper	Lower	Mid point	Method
DCF	NZ$1.85	NZ$1.75	NZ$1.80	DCF model
Div growth model	NZ$1.86	NZ$1.70	NZ$1.78	Dividend growth model
EV/EBITDAF*	NZ$1.75	NZ$1.53	NZ$1.64	Range of 9x - 10x 12 month forward EBITDAF
P/E	NZ$1.44	NZ$1.29	NZ$1.36	Range of 17x - 19x 12 month forward EPS
Weighted averages	NZ$1.82	NZ$ 1.66		
Weighted mid point		NZ$1.75		

Source: Edison Investment Research estimates. Note: *EBITDAF is earnings before interest, tax, depreciation, amortisation and fair value adjustments for mark to market.

Sensitivities

The key sensitivities for MEL are the impact of NZ Power and Tiwai Point contract changes:

- We assess the risk adjusted impact of NZ Power to be NZ$0.15/share, which would reduce our DCF valuation from NZ$1.80 to NZ$1.65.
- The impact of MEL selling the 172MW of spare capacity into the market increases our DCF valuation by NZ$0.06/share, reflecting our view that MEL should, over the medium term, be able to sell this capacity into the market at a higher comparative price. We have assumed MEL

is able to increase the value of this capacity by half the difference between our assumed Tiwai sale price and the spot market price in FY18 and achieve the full spot market price in FY19.

Peer group valuation

Exhibit 10: Peer group comparison – 12-month forward comparison

Company	Currency	Price	Market cap millions	EV/ EBITDA x	Net debt/ EBITDA	P/E x	Gross yield	Price/ book value
Meridian Energy	NZ$	1.60	4,101	9.3	2.0	21.2	8.4%	0.9
Contact Energy	NZ$	5.40	3,960	8.9	2.3	18.5	7.3%	1.2
Mighty River Power	NZ$	2.27	3,178	8.5	2.1	19.0	8.1%	1.7
TrustPower	NZ$	7.03	2,206	10.3	3.3	16.6	8.2%	1.4
Origin Energy	A$	14.41	15,823	10.4	3.7	19.2	3.5%	1.1
AGL Energy	A$	15.47	8,571	7.9	1.9	13.2	4.3%	1.1
Australasian stocks	Average – excluding MEL			9.2	2.6	17.3	6.3%	1.3
Iberdrola SA	€	4.34	27,081	6.9	3.3	11.2	6.5%	0.8
EDP	€	2.72	9,946	6.7	4.2	9.2	7.1%	1.1
EDP Renovaveis	€	3.87	3,379	5.8	2.9	16.2	1.9%	0.6
Fortum	€	16.56	14,711	9.5	3.3	13.4	5.7%	1.3
Verbund	€	17.01	5,910	9.9	3.8	20.6	2.6%	1.2
Enel Green Power	€	1.63	8,155	6.6	2.7	13.3		1.0
European stocks	Average			7.8	3.4	14.1	4.8%	1.0
All stocks	Average – excluding MEL			8.7	3.3	16.4	6.1%	1.2

Source: Bloomberg, MEL Offer Document. Note: Prices as of 2 October 2013.

Compared to its Australasian peer group, MEL is trading in line on an EV/EBITDA basis but well ahead on a P/E basis. Edison does not consider EPS to be as important a valuation measure for MEL given its policy of basing its dividend payout ratio on adjusted operating cash flow. Because of this, MEL is likely to trade at a premium on a P/E basis, making it less relevant than dividend yield as a valuation metric.

MEL's prospective dividend yield is the highest among the Australasian generators and is also significantly higher than its European peer group. In respect of the European peer group, MEL is most comparable to Fortum Corporation, which is listed on the NASDAQ OMX Helsinki Exchange. Fortum trades on a higher EV/EBITDA multiple, but on a lower dividend yield and P/E multiple. Fortum also has 50% more debt than MEL. The lower overall debt of the Australasian stocks, and MEL in particular, compared to the European peers allows for higher dividend yields and thus valuations overall.

North American utilities trade on higher earnings multiples (P/E and EV/EBITDAF) than the European peers, however, the different market arrangements in the US and Canada make comparisons difficult between these and Australasian stocks.

Financial summary

Exhibit 11 summarises the actual financial performance of the company over the past three financial years and also includes the two forecast years included in the PFI. As noted, we consider the FY14 and FY15 forecasts to be conservative as they incorporate comparatively soft asset utilisation assumptions. With the structure of its dividend policy, earnings and cash flow upside to the PFI estimates would clearly present further upside benefit to shareholders.

Exhibit 11: Financial summary

NZD '000s	2011	2012	2013	2014e	2015e
June	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
Revenue	2,053	2,570	2,711	2,440	2,559
Cost of Sales	(1,071)	(1,780)	(1,766)	(1,502)	(1,578)
Gross Profit	982	791	946	938	982
EBITDA	660	477	585	548	590
Intangible Amortisation	0	0	0	0	0
Exceptionals	0	0	0	0	0
Operating Profit	506	309	498	311	353
Other	(14)	(68)	43	28	18
Net Interest	(108)	(83)	(114)	(78)	(78)
Profit Before Tax (FRS 3)	384	158	427	261	293
Tax	(81)	(83)	(132)	(73)	(82)
Profit After Tax (FRS 3)	303	75	295	188	211
Average Number of Shares Outstanding (m)	2,563	2,563	2,563	2,563	2,563
EPS - (IFRS) (c)	11.8	2.9	11.5	7.3	8.2
Dividend per share (c)	6.3	2.8	9.8	10.5	11.5
Gross Margin (%)	47.8	30.8	34.9	38.4	38.4
EBITDA Margin (%)	32.1	18.5	21.6	22.5	23.1
Operating Margin (before GW and except.) (%)	24.7	12.0	18.4	12.7	13.8
BALANCE SHEET					
Fixed Assets	7,833	8,122	6,971	7,123	7,067
Intangible Assets	47	27	55	47	40
Tangible Assets	7,721	7,964	6,769	6,954	6,865
Investments	65	132	148	121	162
Current Assets	627	571	766	443	440
Stocks	3	5	4	4	4
Debtors	241	298	262	266	266
Cash	368	214	383	73	73
Other	15	54	117	99	96
Current Liabilities	(570)	(593)	(521)	(446)	(493)
Creditors	(271)	(346)	(374)	(313)	(326)
Short term borrowings	(298)	(248)	(147)	(133)	(167)
Long Term Liabilities	(2,959)	(3,274)	(2,529)	(2,513)	(2,483)
Long term borrowings	(1,275)	(1,578)	(1,034)	(1,061)	(1,015)
Other long term liabilities	(1,684)	(1,696)	(1,495)	(1,453)	(1,468)
Net Assets	4,931	4,826	4,688	4,606	4,530
CASH FLOW					
Operating Cash Flow	369	322	417	339	429
Net Interest	0	0	0	0	0
Tax	0	0	0	0	0
Capex	(265)	(525)	(276)	(402)	(138)
Acquisitions/disposals	838	0	153	0	0
Financing	0	0	(1)	0	0
Dividends	(684)	(141)	(100)	(260)	(279)
Net Cash Flow	258	(343)	193	(323)	12
Opening net debt/(cash)	1,470	1,205	1,611	797	1,121
HP finance leases initiated	7	(190)	2	0	0
Other	(0)	127	620	0	(0)
Closing net debt/(cash)	1,205	1,611	797	1,121	1,109

Source: MEL Share Offer Document, MEL annual reports

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