

Brook: New Zealand Electrical Utilities

Investing in electricity is not as risk-free in New Zealand as in other places around the world. Those pondering entering into the Government's mixed ownership model of Mighty River Power need to know that, as with most investing, there's no such thing as a sure bet.

Wednesday, April 3rd 2013, 10:51AM

by Brook Asset Management

By Stefan Stevanovic, Investment Analyst

The Mighty River Power IPO process, part of the Government's 'Mixed Ownership Model', is now underway. It is anticipated that two other gentailers (a term coined for vertically integrated electricity utilities, which generate electricity and sell it on the retail market), Meridian and Genesis, will also follow suit and New Zealand investors will be placed at the front of the queue to acquire majority stake ownership. Assets like these are normally considered as stable and defensive investments; however, the New Zealand electricity market is unique, exposing investors to risks not necessarily inherent in other electrical utility sectors.

Globally electric utilities are usually perceived as defensive assets due to their low earnings volatility, inelastic demand, high dividend yield and having high barriers to entry due to their natural complexity and capital intensive infrastructure. Electric utilities fall in the low risk low reward category and in general tend to outperform in bear markets and underperform in bull markets. They supply essential services and exhibit natural monopolistic characteristics. In order to prevent them from exploiting this position, they tend to be heavily regulated by local authorities. It is this regulation that gives electric utilities some of their defensive qualities as it restricts them from making abnormal profits for their shareholders and eliminates competitive pressures which are a prominent tenet of a free unregulated market.

In New Zealand, electrical utilities are not regulated to supply power at a cost to serve or a capped rate of return basis. They compete against one another in the wholesale electricity spot market where they make supply offers in 52 different grid injection points across New Zealand every half an hour, 24 hours a day. So far this is nothing unusual, but what differentiates New Zealand's electricity market from the rest of the world is its bias towards hydro as a fuel supply, the risks associated with hydro and the continued widening of imbalance between consumption and generation. The pre-eminent fuel for electricity in New Zealand is water (hydro), which accounts for approximately 55% of total capacity. Of that total hydro capacity, two thirds is generated in the South Island catchments, making the region a significant supplier of base load electricity. In comparison, most of thermal peaking generation (i.e. coal/gas) is generated in the North Island. Such large regional dependence on water exposes the gentailers to adverse hydrological conditions and this is further magnified by the fact that the catchments have extremely low storage capacity. For example, if you were to decommission all plants and rely solely on hydro you would have approximately 1.5 months of generation to meet normal demand levels, while Brazil has a multi-year storage capacity period. This risk is further amplified by the current transmission constraints of the High Voltage Direct Current (HVDC)

network, which links North and South Islands via Benmore and Hayward substations. Simply, the HVDC is physically constrained in how much power can be delivered from north to south. The HVDC constraint mixed in with dry/wet risk can cause significant volatility in wholesale prices and can disconnect the pricing between the North and South Island by as much as 80MW/h, exposing the gentailers to earnings volatility.

The demand and supply dynamics of the New Zealand electricity market require a mention too. In the past 20 years, consumption has steadily grown around 1.6% pa. However, in the last few years this growth seems to have plateaued where average annual national consumption has been around 38TWh. Of that total demand, the Tiwai Aluminium Smelter consumption accounts for approximately 14%, making it the largest single consumer in New Zealand. Located in Bluff and powered by one of the world's most efficient hydro power stations, the Manaopouri Power Station, it has struggled to make a profit due to increased production costs and suppressed global aluminium prices, c1900 USD/t. Rio Tinto, a majority Tiwai JV partner, has announced it intends to divest or shut down a number of its global aluminium smelters as part of its \$AU5 billion cost out initiative. If the Tiwai Smelter were to shut down it would be a gradual process, however the extra supply of generation that will progressively be added to the wholesale electricity market at close to zero cost will undoubtedly have a dour impact on wholesale prices.

Putting Tiwai aside, the current imbalance between demand and supply is expected to further widen if consumption growth does not improve, as three current developments (Te Mihi, Ngatamariki and Mill Creek) will add a further 384MW (c4% of current generation) of extra capacity by 2014, putting further pressure on wholesale prices. Thankfully we are seeing some rationalisation in the market as gentailers have postponed significant capital expenditure on potential developments and those that are still running old, inefficient plants are in the process of mothballing or retiring units (i.e. Genesis). Nonetheless, the available supply capacity is now approximately five years ahead of the expected demand curve.

The Government estimated it will raise approximately \$5 billion - \$7 billion once it divests its 49% share of the three state-owned gentailers. Depending on how the New Zealand Stock Exchange decides to account for the new listings, either free float or pro forma basis, then based on current market values the gentailers could make up somewhere between 20% - 30% of the New Zealand market; hefty weight when you consider the likes of MSCI World, S&P500 and ASX200 having a utility sector weighting less than 4%. The New Zealand market will undoubtedly change significantly in the next few years as partial privatisation of state-owned enterprises progresses. However, despite the sector's near term issues, it will still appeal to those investors who will put a premium on the infrastructure that is vital to powering our economy and to those seeking long-term growth potential and dividend income.

Brook Asset Management Limited ("Brook") is a member of the Macquarie Group. The views and opinions expressed in this article are those of the relevant author and do not necessarily reflect the views or opinions of Brook or any other member of the Macquarie Group. This article is based on information obtained from sources believed to be reliable but we do not make any representation or warranty that it is accurate, complete or up to date. We accept no obligation to correct or update the information or opinions in it. Opinions expressed are subject to change without notice. No member of the Macquarie Group accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of any information in this article and/or further communication in relation to this article. Brook is not an authorised deposit-taking institution for the purposes of the Banking Act 1959 (Cth of Australia), and Brook's obligations do not represent deposits or other liabilities of Macquarie Bank Limited ABN 46 008 583 542. Macquarie Bank Limited does not guarantee or otherwise provide assurance in respect of the obligations of Brook. Macquarie Bank Limited is a company incorporated in Australia and authorised under the Banking Act 1959 (Australia) to conduct banking business in Australia. Neither Macquarie Bank Limited, Brook nor any other member of the Macquarie Group are registered as a registered bank in New Zealand by the Reserve Bank of New Zealand under the Reserve Bank of New Zealand Act 1989 (New Zealand).