MEUG pilot Economic Profit Analysis of Contact Energy Ltd. 28th January 2022 – public

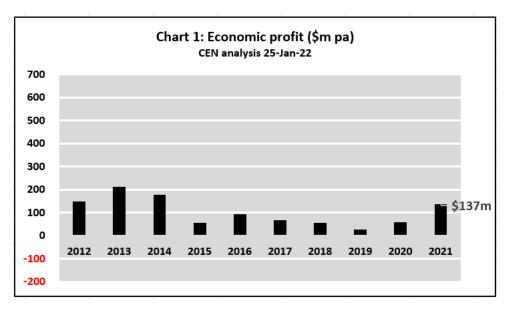
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Purpose and background

- This memorandum summarises the initial pilot Economic Profit Analysis (EPA) for Contact Energy Ltd (CEN). The first pilot EPA was for Meridian Energy Ltd (MEL). An update of the MEL analysis was published 20th September 2021.¹ MEUG is undertaking EPA to gain better insights into the economic profit trends over the last decade by individual generators and the industry.
- 2. This memorandum does not compare in detail the results for CEN and MEL apart from the key difference in revaluation policy. Other comparative analysis is under consideration.
- 3. The analysis is dated 25th January 2022 and is for the 10 years ending 30th June 2021. The template for data aggregation used for MEL was applied and modified as necessary for CEN. This process of undertaking pilot EPA for each generator naturally involves revisions as new information emerges. We adopted 10 years for CEN rather than 19 years for MEL because of time constraints to meet the Electricity Authority submission deadline on the Wholesale Market Review. Despite truncating the number of years for the analysis, we did not complete the analysis by close of submissions. Hence this memorandum has been lodged with the Authority as a supplementary submission.

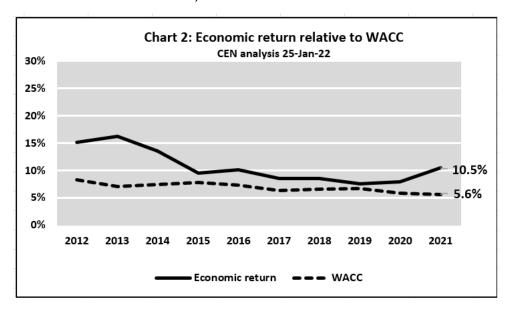
Key results of the pilot EPA for CEN

- 4. The following two charts illustrate the same key EPA metrics as the last updated results for MEL. To assist initial comparisons with MEL the scale on the Y-axis for each chart is the same as the scale used for the MEL analysis¹. The ten-year trend from the CEN analysis is shown, whereas the MEL analysis was for 19 years.
- 5. Economic profit (i.e., Economic Value Added or EVA) in 2021 for CEN was \$137m. EVA over time is illustrated in Chart 1. There have been no economic losses.



¹ Refer http://www.meug.co.nz/node/1157

- 6. A positive EVA means Net Operating Profit after Tax (NOPAT) exceeds the economic capital charge, being the Weighted Average Cost of Capital (WACC) times capital invested. In competitive markets individual companies and the industry in some years will have a positive EVA (earn economic profits), other years a negative EVA (incur economic losses). Over a long period of time cumulative EVA for the industry should trend to zero, whereas for individual companies EVA can be more volatile and need not correlate with the average industry trend.
- 7. Chart 2 illustrates economic return, being NOPAT divided by average capital invested as a percentage, relative to WACC over the 10-years 2012 to 2021. The economic return in 2021 was 10.5% and WACC 5.6%. Economic profit margin, being the percentage difference between economic return and WACC, was 4.9% for CEN in 2021.



- 8. Chart 2 illustrates a step change decrease in economic profit margin in 2015 and that has persisted to 2021. The average economic profit margin over those 7-years was 2.3%.
- 9. The results of the pilot EPA for CEN are, as expected in a pilot analysis, our initial view of trends over the last decade. As we found when updating the initial pilot MEL EPA, lessons can be learned leading to changes in how adjustments from audited financial information to economic inputs are treated. To facilitate transparency of the analysis and allow feedback from interested parties, MEUG will shortly publish a report "Contact Energy Limited, Financial performance summary and data summaries 2012 to 2021, Base Model 2022 at 25 Jan 2022". The same template information, including cost of capital assumptions, were released for MEL with the update of the pilot MEL EPA.²

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² Refer http://www.meug.co.nz/node/1160.

Revaluation policy is the key difference between CEN and MEL when calculating economic profit

- 10. As noted in paragraph 2 above we will be considering a high-level comparison of the pilot EPA results for CEN and MEL to date subject to noting the results in aggregate will give no clear view of economic profits trends for the industry. A view of trends for the industry requires pilot EPA for the other two largest suppliers. Comparing the updated pilot MEL results with these results for CEN is not straight forward because the MEL analysis started when the business was first established over 19 years ago whereas the CEN analysis has been truncated to 10-years and no adjustments made for prior history, except for revaluations.
- 11. The fundamental difference between CEN and MEL when calculating economic profit trends is revaluation policy and related effects. MEL adopts periodic revaluations and has a policy to mark to market, whereas CEN ceased revaluations in 2010 and has since had a policy of using deemed historic cost. EPA reverses revaluations so that a common basis is used to assess financial and economic performance. Hence the EPA for MEL was more complex with more adjustments required for transforming financial data to economic information compared to CEN. The rationale by CEN deciding to cease periodic revaluations was set out in the notes to the 2010 Financial Statements. The relevant extract from the notes follows:

Changes in accounting policies

The accounting policies set out below have been applied consistently to all years presented in these financial statements.

Contact adopted a policy of revaluing its core generation plant and equipment from the commencement of the Group.

Contact has relied upon an independent valuation of such assets for determining a fair value. As there is a limited market for trading comparable generation assets in New Zealand, the valuation has primarily relied upon a discounted cash flow analysis of the estimated long-term cash flows from the generation plant and equipment. Given the long life (up to 100 years) of such assets, the valuation is very sensitive to any variation in assumptions. Events like the global financial crisis have added increased uncertainty to the independent valuation assumptions. The range in the current independent valuation has correspondingly increased compared with prior valuations, such that a single point fair value within the valuation range is difficult to reliably determine.

In the alternative, the cost valuation basis is considered a reliable basis for measurement of generation plant and equipment. Cost also provides relevant information about the long-term cash-generating performance of the core generation plant and equipment, which is the primary objective for Contact in owning the plant and equipment. For example, core metrics such as return on capital invested in plant and equipment can be calculated without adjustment to the return, or the investment, for the impact of asset revaluations. Cost aligns with global industry practice for similar long life core operating assets. Cost also aligns with the policy of Contact's ultimate parent Origin Energy Limited (Origin).

Contact has elected to make a voluntary change in accounting policy in relation to the measurement basis for generation plant and equipment and move to a cost basis as it is reliable and more relevant. The change in accounting policy has been applied retrospectively to 1 October 2004, the date of Contact's transition to NZ IFRS and the date of acquisition of 51.4 per cent of the shares in Contact by Origin. Fair value at 1 October 2004 is considered deemed historical cost owing to the impracticability of determining actual cost back to the original asset purchase date. As a result of the change, the revaluation reserve at 1 October 2004 (\$1,547.6 million) has been transferred to retained earnings. In addition, the revaluation in 2007 (\$401.1 million) and the consequential deferred tax (\$120.3 million) have been reversed.