

ELECTRICITY AND GAS INFORMATION DISCLOSURE SEMINAR

JAMES COOK HOTEL GRAND CHANCELLOR, WELLINGTON
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Return on Investment and Regulatory Profit

Presentation to Information Disclosure Seminar
March 2013



1. Purpose of ROI measure
2. The “Building Blocks” and ROI
3. IRR approach
 - Simple IRR approach
 - The monthly cash flows threshold test
4. Purpose of Regulatory Profit Disclosure
5. Key changes from 2008 ID Requirements
6. Line items
7. Note disclosures
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1. Purpose of ROI measure

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- For interested persons to assess whether the Part 4 purpose is being met.
- Commonly used measure of profitability which allows interested persons to compare relative performance of firms of different sizes.
- Allows interested persons to compare a supplier's profitability to what an efficient firm in a workably competitive market could expect to earn (its cost of capital).
- Key determinants are regulatory profit and regulatory investment value

2. The “Building Blocks” and ROI

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$$\begin{aligned} \text{ROI}^* \text{ (vs WACC)} &= && \text{(Regulatory revenue} \\ & && \text{- Term credit spread differential allowance} \\ & && \text{- Depreciation} \\ & && \text{- Opex} \\ & && \text{- Regulatory Tax} \\ & && \text{+ Other regulated income} \\ & && \text{+ Revaluations)} \\ & && \text{/RIV} \end{aligned}$$

* Prior to 2012 disclosure year but disclosed now per 2(iv): Year-End ROI Rates for Comparison Purposes

2. The interest tax shield adjustment

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ROI—comparable to a vanilla WACC

-

Leverage (%)

44%

Cost of debt assumption (%)

Corporate tax rate (%)

ROI—comparable to a post tax WACC

-

2. Derivation of ROI from IRR

*Asset Value at beginning of year = Sum of Discounted Net Cash Flows during year
+ Discounted Asset Value at end of year*

where:

$$= \sum_i \frac{NCF_i}{(1 + IRR)^{p_i}} + \frac{AV_1}{1 + IRR}$$

IRR = internal rate of return

NCF_i = *i*th net cash flows during the year

p_i = proportion of year elapsed *i*th net cash flow

AV₁ = asset value at year-end.

In simplified terms, the year-end ROI for EDBs is:

$$\frac{\text{Revenue} - \text{Depreciation} - \text{Opex} - \text{Tax} + \text{Revaluations}}{RAB(\text{beginning of year})}$$

3. Simple IRR approach – schedule 2(ii)

2(ii): Information Supporting the ROI

(\$000)

Total opening RAB value			
<i>plus</i> Opening deferred tax			
Opening RIV			
Operating surplus / (deficit)			
<i>less</i> Regulatory tax allowance			
<i>less</i> Assets commissioned			
<i>plus</i> Asset disposals			
Notional net cash flows			
Total closing RAB value			
Adjustment resulting from asset			
<i>less</i> allocation			
<i>less</i> Lost and found assets adjustment			
<i>plus</i> Closing deferred tax			
Closing RIV			

3. Benefits and criticisms of IRR approach

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Benefits:

- The most accurate assessment of the return on an investment is a cash-based internal rate of return (IRR) calculation over the lifetime of that investment.
- Mid-year ROI a more accurate basis for interested persons to assess financial performance.
- IRR can easily take account of monthly revenues and expenditure to provide a better estimation of returns than using a mid-year ROI.

• **Criticisms in submissions**

- Not well understood, less intuitive
- Greater accuracy not needed
- Requires Excel to solve

3. The monthly cash flows threshold test –schedule 2(iii)

2(iii): Information Supporting the Monthly ROI

Cash flows

(\$000)

	Total regulatory income	Expenses	Tax payments	Assets commissioned	Asset disposals	Notional net cash flows
Month 1						-
Month 2						-
Month 3						-
Month 4						-
Month 5						-
Month 6						-
Month 7						-
Month 8						-
Month 9						-
Month 10						-
Month 11						-
Month 12						-
Total	-	-	-	-	-	-

	Opening / closing RAB	Adjustment resulting from asset allocation	Lost and found assets adjustment	Opening / closing deferred tax	Revenue related working capital	Total
Monthly ROI - opening RIV	-			-		-
Monthly ROI - closing RIV	-	-	-	-	-	-
Monthly ROI - closing RIV less term credit spread differential allowance						-
Monthly ROI— comparable to a vanilla WACC						-
Monthly ROI— comparable to a post-tax WACC						-

4. Purpose of Regulatory Profit Disclosure

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Reasoning:

- Regulatory profit represents the returns earned by the supplier's business activities which are regulated under Part 4.
- This differs from whole-of-entity profits, both in scope of activities and how profit (including tax) is calculated and presented.
- Information on regulatory profit helps interested persons assess whether suppliers are earning an appropriate economic return over time.

5. Key changes from 2008 ID Requirements

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- Change from gross line charge revenue to line charge revenue
- Presentation of AC Loss rental rebates
- Capital contributions and vested assets no longer in regulatory income
- Introduction of term credit spread differential allowance
- Change in tax methodology
- Note disclosures have been reduced

5. Key changes from 2008 ID Requirements - Capital contributions and vested assets

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- Capital contributions are contributions received from a customer or another third party for the purpose of constructing or enhancing an asset.
 - Now netted off RAB value
- Vested assets are those assets which are constructed by a third party, and are transferred to the supplier. Vested assets may be transferred for no consideration or for partial consideration.
 - Cost to regulated supplier
 - If no cost nil, therefore no effect on regulatory income

6. Line items - total regulatory income

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- All income associated with the supply of regulated services is regulated.
- All regulated revenue is recognised in the year that it is received so that there is no transfer of revenues between years.
- Line charge revenue is net of non-discretionary discounts, but not discretionary discounts (also called distributions). Specifically revenues are to be disclosed before the deduction of any financial distributions.

6. Line items - other regulated income

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Other regulated income means income associated with the **supply** of [regulated] **services** other than-

- a. through **prices**;
- b. investment-related income;
- c. **capital contributions**; or
- d. **vested assets**.

Sale of scrap

disposed asset means, for the purpose of-

- a. Part 2, an asset that, in the **disclosure year** in question, has been sold or transferred, or has been irrecoverably removed from the [regulated supplier's] possession without consent but is not a **lost asset**

6. Line items – operational expenditure & pass-through and recoverable costs

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- Operating costs excludes-
 - a. a cost that is treated as a cost of an asset by **GAAP**;
 - b. amounts that are depreciation, tax, subvention payments, revaluations or an interest expense, in accordance with their meanings under **GAAP**;
 - c. **pass-through costs**; and
 - d. **recoverable costs**
- Where values disclosed as related party transactions, values used should be consistent

6. Line items – total depreciation

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- Straight line depreciation method must be applied as the standard depreciation profile
- Allocated depreciation relevant to regulatory profit
- For asset with an opening value = $[1 \div \text{remaining asset life}] \times \text{opening RAB value}$.
- Flexibility in respect of the asset lives used under certain circumstances
- The sum of depreciation

6. Line items – total revaluations

- Revaluations treated as income in accordance with IM
- Revaluations calculated in schedule 4(iii)

4(iii): Calculation of Revaluation Rate and Revaluation of Assets

CPI4
 CPI4-4
 Revaluation rate (%)

Total opening RAB value
less Opening RAB value of fully depreciated, disposed and lost assets
 Total opening RAB value subject to revaluation

Unallocated RAB *		RAB	
(\$000)	(\$000)	(\$000)	(\$000)

6. Line items - term credit spread differential allowance

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Schedule 5(c):

- A firm with long-term debt may incur a credit spread that, due to the long maturity of that debt, is greater than what is assumed in the WACC. This greater cost is known as the term credit spread differential.
- Three components: term credit spread difference, cost of executing an interest rate swap, debt issue cost readjustment.
- The term credit spread differential allowance allows regulated suppliers to recognise the greater credit spread on long-term debt as an expense in regulatory profit.
- Schedule only to be completed if weighted average original tenor of debt portfolio (qualifying and non-qualifying debt) is greater than 5 years

6. Line items - IRIS

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Schedule 3(iii): Incremental Rolling Incentive Scheme:

- Non-exempt EDBs and GPBs
- Specified only under CPP IM

Schedule 3(v) – self insurance allowance (CPP only)

Schedule 14

- Material components of other regulated income
- Mergers and acquisitions expenditure
- Reclassifications
- Transparency about components important not only for assessment by interested persons but also for DPP purposes as ID will inform future resets

2.7.1(2)

Where an item disclosed in accordance with clause 2.3.1 is classified differently from the previous year, the explanatory notes in Schedule 14 must include the-

- (a) nature of the item reclassified;
- (b) value of the item in the current **disclosure year** and in the previous **disclosure year**;
- (c) classification of the item in the previous **disclosure year**;
- (d) classification of the item in the current **disclosure year**; and
- (e) reason why the item has been reclassified.

8. Some record keeping considerations

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- Record of calculation of inputs to regulatory profit schedule (where not calculated within other schedules)
- Record of high level analysis of monthly cashflows for monthly cashflows threshold test
- Detail of calculation of inputs to monthly cashflows IRR schedule if required
- Calculation of weighted average original tenor of debt portfolio
- Sum of unallocated depreciation of an asset calculated over its asset life

These slides formed the basis of the seminar presented to suppliers and auditors by Commission staff in March 2013. They are intended to be used as general guidance only, and do not replace or summarise the information disclosure determinations themselves. In order to comply fully with the requirements of the determinations, suppliers and auditors should read the EDB, GDB and GTB determinations published on 1 October 2012. These documents can be found at:

- <http://www.comcom.govt.nz/current-electricity-information-disclosure-requirements/> for EDBs; and
- <http://www.comcom.govt.nz/gas-information-disclosure/> for GPBs.

www.comcom.govt.nz

CONTACT

To contact the Commission with information about false or misleading trading practices, or anti-competitive behavior by businesses:

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