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**REPORT 3**  
(1215/55/IM)

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**HEDGE ACCOUNTING**

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**1 PURPOSE OF REPORT**

As the Subcommittee is aware, the Council will apply NZ IFRS for the financial year ending 30 June 2007 (including comparative information for the prior year), and is therefore currently preparing for implementation of the new financial reporting standards. NZ IAS 39: *Financial Instruments: Recognition and Measurement* (NZ IAS 39) is a very detailed, rules-based standard. The most significant impact for the Council relates to the accounting treatment of derivatives. The key requirements are as follows:

- All financial assets and liabilities (including derivatives) must now be recognised in the Statement of Financial Position.
- Derivates must be accounted for at fair value at each reporting date with changes in fair value taken to the Statement of Financial Performance unless hedge accounting is achieved. If so, changes in value are recognised in a manner consistent with the recognition of gains and losses on the hedged item.

The Council has a small portfolio of derivatives in the form of interest rate swaps with a face value of \$102 million. The Council needs to decide whether it will apply hedge accounting in respect of these derivatives, or the alternative fair value accounting.

The transitional provisions within NZ IAS 39 state that:

*“Transactions entered into before the date of transition to IFRSs may not be retrospectively designated as hedges. The designation and documentation of a hedge relationship must be completed on or before the date of transition to IFRSs if the hedge relationship is to qualify for hedge accounting from that date.”*

This means that the decision on hedge accounting must be made and appropriate systems implemented before the commencement of the first accounting period for which NZ IFRS will apply. This is the comparative period for the adoption period - for the Council this means a deadline of 1 July 2005.

This paper analyses the options and the Council’s ability to assert compliance thereof, and recommends a preferred approach for the Subcommittee’s review and approval. This paper also incorporates analysis from our independent accounting advisors, Price Waterhouse Coopers (PWC).

## **2 RECOMMENDATIONS**

It is recommended that the Subcommittee:

1. *Receives the information.*
2. *Notes that derivative financial instruments will be recognised within the financial statements in accordance with NZ IFRS.*
3. *Notes that changes in fair value of derivative financial instruments will be recognised within the Statement of Financial Performance, unless the Council achieves hedge accounting in which case they will be deferred within the Statement of Financial Position.*
4. *Approves the recommendation that the Council seek to achieve hedge accounting for derivative instruments from 1 July 2005.*

## **3 ACCOUNTING FOR DERIVATIVES**

### **3.1 What is a derivative?**

A derivative is a financial instrument with all of the following three characteristics:

- Its value changes in response to the change in a specified index
- It requires no (or insignificant) initial net investment
- It is settled at a future date.

Derivatives are commonly used to minimise interest costs on borrowings, to provide certainty over interest or foreign exchange rates or to reduce foreign exchange risk when dealing in international markets. The most common derivatives are interest rate swaps and options, foreign exchange swaps, futures and forward rate agreements.

The Council has a small portfolio of derivatives in the form of interest rate swaps with a face value of \$102 million. Swaps are agreements between two parties to exchange a series of cashflows in future periods according to an agreed formula. The Council is swapping its variable interest rate debt cashflows to fixed rate debt cashflows to limit our exposure to rises in interest rates.

Under current NZ GAAP these derivatives are not required to be recorded within the Statement of Financial Position. Instead, the Council is required to disclose the existence of these swaps and their face and fair values within the notes to the financial statements.

### **3.2 How are derivatives accounted for under NZ IFRS?**

On implementation of NZ IFRS, the Council will be required to recognise all derivatives in the Statement of Financial Position and measure them at fair value. Fair value is “the amount for which an asset could be exchanged, or liability settled, between

knowledgeable, willing parties in an arm's length transaction." If there is an active market, quoted price is the best evidence. For interest rate swaps, pricing is determined by market conditions relating to the respective interest rates, credit ratings and the term of the swap.

Subsequent changes in value will be accounted for through the Statement of Financial Performance (fair value accounting) unless hedge accounting can be achieved. If hedge accounting is achieved then changes in fair value are deferred within equity reserves in the Statement of Financial Position.

### **3.3 What is hedge accounting?**

Hedging means designating one or more hedging instruments so that the change in their fair value is an offset, in whole or in part, to the change in fair value or cash flows of a hedged item. The objective of hedge accounting is to recognise and measure the hedging instrument and the position being hedged on symmetrical bases. They are then carried on the Statement of Financial Position at the same value, and offsetting gains and losses are reported in the Statement of Financial Position in the same period.

A hedging instrument is a designated derivative whose fair value or cash flows are expected to offset changes in the fair value or cash flows of a designated hedge item. A hedged item is an asset, liability, firm commitment or forecasted future transaction that exposes the entity to the risk of changes in fair value or changes in future cash flows.

Hedges may be categorised as either cash flow hedges or fair value hedges. A cash flow hedge is a hedge of the exposure to variability in cash flows that:

- Is attributable to a particular risk associated with a recognised asset or liability or a forecasted transaction; and
- Will affect reported net profit or loss.

An interest rate swap on variable rate debt (ie floating to fixed) is a cash flow hedge (hedging exposure to changes in future interest cash flows.) The Council's use of swaps to change floating rate debt to fixed rate debt constitutes a cash flow hedge.

### **3.4 What are the rules for hedge accounting?**

Hedge accounting can only be achieved if certain detailed rules are followed:

- Hedging relationships must be formally documented at inception and documentation must include:
  - The entity's risk management objective and strategy for the hedge
  - The entity's method of assessing effectiveness of the hedge
  - The hedging instrument
  - The hedged item
  - The nature of the risk being hedged (eg interest rate, foreign exchange)

- The designation of a hedge cannot be made retrospectively.
- The hedging relationship must be highly effective, both retrospectively and prospectively.
- Effectiveness testing must be completed at least every reporting period.
- Forecast transactions can only be hedged if they are “highly probable” and ultimately impact the profit and loss.

NZ IAS 39 does not specify a single method for assessing hedge effectiveness. A hedge is normally regarded as highly effective if, at inception and throughout its life, the entity can expect changes in the fair value or cash flows of the hedged item to be almost fully offset by the changes in the fair value of cash flows of the hedging instrument and actual results are within a range of 80% to 125%. The method of testing should be specified in the original documentation.

If the above requirements are met and hedge accounting is achieved then (in certain circumstances) the unrealised gain or loss on the hedging derivative is deferred within equity and released to the Statement of Financial Performance when the hedged transaction impacts it. However, any ineffectiveness in the hedge is recognised immediately in the Statement of Financial Performance.

#### **4 IS THE COUNCIL ABLE TO ASSERT COMPLIANCE WITH HEDGE ACCOUNTING REQUIREMENTS?**

As previously noted, the requirements for hedge accounting fall into three categories:

- Documentation
- Effectiveness testing
- Probability of forecasts

##### **4.1 Documentation**

NZ IAS 39 requires that:

*“(a) At the inception of the hedge there is formal designation and documentation of the hedging relationship and the entity’s risk management objective and strategy for undertaking the hedge. That documentation shall include identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the entity will assess the hedging instrument’s effectiveness in offsetting the exposure to changes in the hedged item’s fair value or cash flows attributable to the hedged risk.”*

This requirement is not expected to be onerous if appropriate templates are used on an ongoing basis. For example:

**XYZ Company Hedging Files**

Date: 1/1/X0

On 1/1/X0, XYZ Company entered into a pay 7% fixed, receive 30-day CP interest rate swap. The swap is designated as a cash flow hedge of the interest rate risk on the forecasted rollover of the bottom £100 million layer of 30-day CP borrowings. The hedge will be assessed for effectiveness using the shortcut method\* (i.e., assumption of no ineffectiveness) because all of the critical terms of the hedged item (bottom layer of CP) and the hedging instrument match.

As an initial step the Council would need to formally document the hedging relationships for all existing swaps by 1 July 2005. Again, this is unlikely to be onerous and is able to be completed within the timeframes.

## 4.2 Effectiveness testing

For hedge accounting to be applied, NZ IAS 39 requires that:

*“ (b) The hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk, consistently with the originally documented risk management strategy for that particular hedging relationship.*

*(d) The effectiveness of the hedge can be reliably measured, ie the fair value or cash flows of the hedged item that are attributable to the hedged risk and the fair value of the hedging instrument can be reliably measured.*

*(e) The hedge is assessed on an ongoing basis and determined actually to have been highly effective throughout the financial reporting periods for which the hedge was designated.”*

The key requirements are:

- Effectiveness testing assesses the extent to which changes in the fair value of the hedging instrument offset changes in the fair value/cash flow of the hedged item (for the risk hedged).
- The hedging relationship must be highly effective on both a retrospective and prospective basis
  - If no, then no hedge accounting
  - If yes, then some ineffectiveness may still occur and the ineffective portion goes to the Statement of Financial Performance.
- Effectiveness must be assessed at annual and interim reporting dates – period by period or cumulative since inception.

The basic effectiveness requirement is that gains and losses on the hedged item and the hedging instrument must be expected to almost fully offset. This is referred to as the prospective test. In addition, actual gains and losses must offset within a range of 80-125%. This is the retrospective test. The requirements of the prospective test are not the same as the requirements of the retrospective test. PWC guidance concludes that the prospective test is more restrictive than the retrospective one. PWC state that “Almost fully offset means a relationship of approximately 95-105% between the two items. This

should be tested based on historical data over a period at least as long as the proposed hedging relationship.”

An important point to note is that the standard does not specify a method for assessing hedge effectiveness. However, it requires that the method chosen be documented at the inception of the hedging relationship. Also, it requires that the assessment of effectiveness must be based on the objective of management’s risk management strategy and that the method of assessing effectiveness must be reasonable and consistent with other similar hedges unless different methods are explicitly justified.

A number of approaches are possible, from simple dollar offset comparison to complicated regression analysis. There is a need to balance the complexity, cost and precision (the more complex models tend to offer a greater certainty of achieving effectiveness). Given the Council’s derivative portfolio is of limited size and complexity, dollar offset is considered sufficient. This effectively compares changes in the fair value or cash flows of the hedging instrument with those of the hedged item.

Effectiveness is more likely to be achieved if the principal terms of the hedging instrument and of the hedged item are the same. For example, an interest rate swap is likely to be an effective hedge if the notional and principal amounts, term, repricing dates, dates of interest and principal receipts and payments, and basis for measuring interest rates are the same for the hedging instrument and the hedged item.

We have completed an assessment of the interest rate exposures for the Council’s current portfolio. This shows that the reset dates on the swaps and the hedged item (debt) have not always been aligned. This introduces ineffectiveness into the hedging relationship and would result in a portion of the change in fair value of the swap being recorded in the Statement of Financial Performance immediately. There is also a risk that the ineffectiveness could result in the hedging relationship falling outside of the 80 to 125% range which would mean that the Council would not be able to apply hedge accounting for that hedging relationship. Council Officers are currently working to align the terms of the portfolio to ensure effectiveness for hedge accounting purposes.

### **4.3 Probability of forecast transactions**

NZ IAS 39 requires that:

*“(c) For cash flow hedges, a forecast transaction that is the subject of the hedge must be highly probable and must present an exposure to variations in cash flows that could ultimately affect profit or loss.”*

The Council’s swaps extend out to 2014, while the majority of our bank facilities are short term. In order to obtain hedge accounting for these, the Council will need to demonstrate that the forecast debt and floating interest payments are highly probable (90%).

This will require the Council to demonstrate that its forecasts are robust. Potential difficulties include the effect of delayed capital expenditure and unplanned asset sales, both of which result in volatility of net borrowings. The effect of this volatility on the Council's ability to meet the "highly probable" test is mitigated by the fact that the Council's policy is only to cover 70% of forecast debt in line with financial projections. To ensure this requirement is actively monitored and managed, this information and analysis will be included in regularly treasury reporting.

## **5 SHOULD THE COUNCIL SEEK TO ACHIEVE HEDGE ACCOUNTING?**

It is important to recognise that hedge accounting is a choice. If the potential impact on profit of changes in the fair value of financial instruments is considered to be acceptable then it may not be worthwhile to incur the additional administrative costs of documentation and effectiveness testing necessary to achieve hedge accounting. However, as the Council enters into swaps to reduce its exposure to interest rate risk, intuitively stakeholders may expect the accounting treatment to be consistent with the economic objective (i.e. stakeholders will expect the Council to apply hedge accounting.)

### **5.1 Advantages**

The primary advantage of achieving hedge accounting is that it reduces the volatility of reported results. Increased predictability of results will assist the Council with its long term financial forecasting and in communication with its external stakeholders. While mark to market adjustments through the Statement of Financial Performance in the core Council financial statements will not impact on the calculation of rates, it may be difficult to explain to external stakeholders why variances in reported results are arising from derivative transactions that are intended to make cash flows more predictable. In essence then, achieving hedge accounting ensures that the financial statements adequately reflect the economic substance of hedging relationships – the purpose of entering into hedge transactions is to provide a greater degree of certainty regarding cash flows and it is therefore inappropriate for such hedges to increase the volatility of reported results.

Once the appropriate procedures have been put into place, compliance with the hedge accounting requirements of NZ IAS 39 will become less onerous, because formal documentation requirements can largely be met by cross-referencing new deals to an appropriately-amended treasury policy and IAS 39 compliant treasury system implemented for performing prospective and retrospective effectiveness testing.

### **5.2 Disadvantages**

Perceived disadvantages include:

- Meeting the requirements for hedge accounting will impose additional workloads on treasury/accounting staff, particularly during the initial period of NZ IFRS adoption.
- The requirements of IAS 39 are very complex and new to New Zealand accountants and auditors. As a result there is likely to be a high degree of uncertainty around application of the standard in the initial period.
- An economic hedge does not necessarily equal an accounting hedge. Hedging is an economic concept of taking an action to mitigate risk. Hedge accounting is designating one or more hedging instruments so changes in fair value (cash flow for non-derivative) is an offset, in whole or in part, to changes in fair value /cash flow of the hedged item. Therefore, compliance with hedge accounting requirements will not always mean the achievement of an effective economic hedge.

### **5.3 Stress testing**

In conjunction with our external advisors, the Council has performed some financial analysis of mark to market sensitivity. The objective of the financial analysis, simulation and stress testing was to observe mark to market results under alternative interest rate scenarios on the Council's interest rate control limits given the projected 12 month debt figure over a ten year period. The aim was to determine the materiality of mark to market movements and potential volatility in relation to fair value accounting.

The results showed that the probable annual Statement of Financial Performance adjustments lie between a range of –NZ\$4.5 million and +NZ\$5.5 million (with 95% confidence). This is considered to be significant, and is likely to attract the attention of stakeholders.

### **5.4 Comparison to other councils**

As the Sub-Committee is aware, the Wellington City Council is a leader in the local government sector in terms of our preparation for the implementation of IFRS. We understand that Christchurch and Dunedin City Councils intend to achieve hedge accounting, while many other councils are yet to determine their preferred accounting treatment for derivative financial instruments. As noted earlier, if councils intend to adopt hedge accounting, then a decision must be made and appropriate systems implemented before the commencement of the first accounting period for which NZ IFRS will apply. This is the comparative period for the adoption period, and for councils means a deadline of 1 July 2005. Councils who have not made a firm commitment to hedge accounting and established appropriate systems by the required date may be forced to fair value account through the Statement of Financial Performance.

## **6 RECOMMENDATION**

Although achieving hedge accounting requires an entity to meet considerable documentation and effectiveness testing conditions, these disadvantages are outweighed by the advantages of achieving hedge accounting (reduced volatility of reported results and the reflection of the economic substance of hedging relationships in the financial statements). In addition, work performed to date has confirmed that the hedging strategies and derivatives entered into by the Council are relatively straightforward and that hedge accounting should therefore be more easily achieved.

It is therefore recommended that the Council seek to achieve hedge accounting for derivative instruments from 1 July 2005.

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