TRANSPOWER NEW ZEALAND LIMITED

# Supplementary Submission to the Commerce Commission on the review of Asset Valuation Methodologies

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TRANSPOWER

## Introduction

On 28 November 2002, Transpower presented an oral submission to the Commerce Commission ("the Commission") at the conference on the Review of Asset Valuation Methodologies ("the Conference"). During that presentation the Commission asked a number of questions on specific aspects of Transpower's submission. The purpose of this supplementary submission is to respond to the Commission's specific request for an example illustrating the potential for different outcomes for Transpower's investment programme through the application of both the ODV and historical costs methodologies. This submission also briefly provides the Commission with further information and clarification concerning a number of other issues raised during Transpower's oral submission. As this submission is supplementary in nature, it should be read in conjunction with Transpower's submission on the Commission's October 2002 discussion paper on Asset Valuation Methodologies (the "main submission").

At the outset, Transpower would like to reiterate a key premise of its submissions to date to the Commission that underpins its preference for the use of a historical cost methodology for future asset valuations. This is that, even if the technical deficiencies identified by Transpower and the Commission in the 4$^{th}$ Edition of the ODV Handbook ("the Handbook") were to be corrected in a revised edition, Transpower's main concern arising from the ongoing use of the ODV methodology itself would remain. This concern is that the asymmetric risk that arises under the ODV methodology creates an inherent disincentive for dynamically efficient new investment in the transmission services market. Taking into account the special regulatory regime that Part F of the EGB Rulebook imposes in the transmission market, Transpower believes that the use of historical cost in relation to transmission service assets is both justified and appropriate as a means to avoid the creation of asymmetric risks, over and above any desire for a consistent approach to be adopted in relation to other electricity lines businesses.

The body of this submission provides:

- A worked example concerning the treatment of a line upgrade that compares the application of the historical cost and ODV methodologies to Transpower's investment programme;
- A summary of Transpower's view on the merits of distinguishing the transmission services market as a separate market from distribution markets versus the desirability of adopting a consistent methodology for Transpower and other electricity lines businesses going forward; and
- Supplementary information concerning Transpower's treatment of assets not assigned values in the Handbook and the alignment of the valuation methodology with FRS-3.

## Comparison of Historical Cost and ODV Methodologies Applied to Transpower's Investment Programme

The Commission has requested an illustration comparing how the historical cost and ODV methodologies might apply to Transpower's future investment programme and their differential impact. In response to this request, the attached appendix provides an analysis of a line upgrade under both historical cost and ODV approaches to illustrate the divergent outcomes. The comparison examines the valuation and revenue treatment under each methodology of the investment required to increase the rating of a 220kV transmission line from 1960 amps to 3280 amps. Such an upgrade represents a typical element of Transpower's future investment programme.

In making the requested comparison, Transpower has assumed that the problems identified with the current version of the Handbook by the Commission and by Transpower in its main submission have been corrected. This allows a comparison of the fundamental differences between the ODV and historical cost methodologies concerning the economic treatment of investment. Under these circumstances, the only value losses to the shareholder arise from timing differences between when capacity is put in place and when it is recognised in the ODV and the expected impact of stranding losses.

**What the Example Illustrates**

In summary, the application of the historical cost methodology allows the recovery of the full economic cost of investment over the 55-year life of the asset in a simple and straight-forward manner, with the NPV of future cash flows discounted at the cost of capital (WACC) being equivalent to the initial investment. In contrast, the ODV methodology requires a set of complex calculations in order to derive a set of investor returns, which must be based on an allowed rate of return higher than the WACC in order to ensure that on average the full economic cost of the investment is recovered.

In the example illustrated in the appendix, the allowed rate of return must be 35% higher than WACC, in order for the expected present value of the investment under the ODV methodology to be equal to the cost of that investment. This result is based on a very small stranding risk (0.25% per annum), highlighting one of the difficulties that the Commission would face in attempting to set an appropriate level of compensation for asymmetric risks under an ODV methodology.[1]

Under the historical cost methodology the allocation of stranding risk is determined through contract negotiation. Under the ODV methodology optimisation and stranding risk are always allocated to the transmission provider.

Allocating these risks to the transmission provider creates potential for moral hazard. Transmission customers are experts in distribution management, and they are much closer to end consumers than transmission providers. As a result transmission customers have some control over the way changes in end consumer demand

[1] The relationship between the stranding risk assumption and the adjustment required to the allowed rate of return is approximately linear. For a 1 in 4000 risk (0.025%) the allowed rate of return would need to be 30 basis points higher than WACC.

manifests itself as demand for transmission services. This can create incentives for transmission customers to "encourage" transmission investment over which they have some influence in terms of future utilisation and thus some influence over the potential for optimisation or stranding. This incentive can lead to inefficient investment on the part of transmission customers, and unnecessary stranding of transmission assets.

While the illustration shows that it is, in theory, possible to achieve an NPV neutral outcome under either methodology, the historical cost approach does this in a simple and transparent way, without the need for compensating revenue adjustments for revaluations or adjustment of the allowed rate of return (see below).

**Assumptions Made in the Model**

The following assumptions have been made in developing the model applied in the example in the appendix:

- As noted above, the ODV methodology modelled represents a "perfect" ODV - in the sense that most of the issues with the current methodology stipulated by the Handbook have been assumed away and nominal differences between building block replacement costs and actual costs have been treated as fully recoverable.

- For simplicity the model assumes the full recovery of operating and maintenance costs and tax. As a result these costs do not affect the outcome of the analysis and can, therefore, be omitted.

- The model also assumes zero inflation so that the ODV value, once struck, is unchanged. Assuming that the treatment of re-valuations arising from replacement cost movements is symmetrical, the treatment of inflation should be NPV neutral, so that such adjustments can be ignored.

- Capital costs are based on values from the Handbook, assuming that 50% of the route traverses hilly terrain. A value of 4% has been added to the Handbook building block values for the "interest during construction" factor. In calculating the ODV impact of the upgrade it has been assumed that the existing line is fully depreciated and is being fully replaced. There is, therefore, no depreciation write-down in the first period of the investment.

- The model assumes that the line reaches full capacity 25 years into a 55 year life. With a 10 year planning horizon for optimisation there is a 15-year period where there is significant excess capacity or "pre-investment". As a result the asset is optimised down in the first period, then progressively optimised back up over 15 years.[2] The model uses a straight-line method to extrapolate an optimised replacement cost.

[2] A correct treatment would adjust the building block used for each year in the comparison, but this would overly complicate the analysis.

- All re-valuation adjustments are recovered through the revenue requirement, including the difference between actual cost and MEA replacement cost at the time of the investment[3].

- The model includes a bottom line adjustment to the investor return for expected losses from stranding. This adjustment is based on a Monte-Carlo analysis of progressive stranding risk, where the risk of stranding is 0.25% per annum. The value of stranded assets is treated as unrecoverable.

**Cost of Capital and Investment Funding Issues**

Transpower acknowledges that both historical cost and ODV methodologies, applied consistently across the life of an asset, can result in normal returns being earned over time. However, the ODV methodology can only achieve this financial outcome through direct adjustment of the allowed rate of return on investment (i.e. a margin over WACC) to compensate for the cost recovery risks on particular assets subject to write-down, stranding or other circumstances leading to under-recovery of costs.

Even with this adjustment to the ODV methodology, the investor may still have a financial incentive to delay investment. If an investor earns a margin over WACC to compensate for stranding risks (and that margin is set ex ante) the investor has an incentive to delay investment to reduce the risk of stranding while still enjoying the margin set in order to compensate for the stranding risk.

It is Transpower’s view that the use of an ODV methodology can also have the effect of raising the cost of capital – when compared with a historical cost approach. Application of an “evolving” ODV methodology will necessarily increase the perception of regulatory risk due to the possibility of ongoing changes in replacement costs, write-downs and optimisation, as well as evolution in the application of the methodology itself. The effect of perceived regulatory risk in the case of Transpower will be magnified in the future, as Transpower undertakes significantly increased levels of investment (as discussed in more detail below).

The perceived regulatory risk under ODV will tend to increase Transpower’s cost of debt and cost of equity as investors seek a premium in recognition of the increasing exposure of Transpower’s future cash flows to unpredictable and typically unfavourable ODV risks. This higher cost of funding will feed into an increased cost of capital.

By comparison, under a historical cost regime, over time, investors would adjust their expected returns in accordance with the low risk associated with Transpower’s cash flows narrowing the required debt margin over the risk-free rate and the cost of equity.

[3] Note that in the model it is assumed that there is no difference between actual and MEA replacement costs.

**Planning Horizons and Pre-investment**

In addition to the potential cost of capital impacts, Transpower is particularly concerned about the detrimental effects that the ODV methodology could have on significant investment decisions that Transpower is likely to face in the near future. As Transpower indicated to the Commission at the Conference, demand projections are showing that significant new investment will be required to increase grid capacity and maintain system security, in the face of projected demand increases, to 2020 and beyond. While the investigation into alternative investment options is at an early stage, Transpower estimates that the cost of new investment to progressively upgrade the grid, over and above the normal investment levels required to fund ongoing replacement of existing assets at the end of their lives, is likely to be between $500 million and $1 billion.

It is vital that the regulatory regime for transmission services provides the incentives necessary to ensure that any such major investment is undertaken in the most efficient manner possible.

Decisions around the timing of upgrades are often affected by non-financial issues, such as the reduced ability to take assets out of service for maintenance outages as capacity grows, the need to renegotiate easements and other issues of property access, and the engineering condition of the assets to be upgraded.

Investment decisions are likely to be increasingly influenced by these factors in the future, especially as grid utilisation approaches maximum capacity and significant upgrades to the network are required.

It is likely to be more cost effective to undertake major upgrades to grid capacity by utilising the existing "footprint" of the grid; e.g. upgrading an existing 220 kV line to 330 kV rather than building a new 220 kV or 330 kV line in parallel.

As capacity utilisation increases the ability to take major lines and circuits out of service reduces. Indeed, as noted in Transpower's oral submission, the window of opportunity for upgrading the grid in this fashion will eventually close, i.e. when the loading on key circuits reaches the point where major outages are no longer feasible. In this case the only option for upgrading capacity would be to construct a completely new line in parallel with the existing one.

Notwithstanding this capacity effect, it is, in any event, often cost effective to take the opportunity of a line being out of service for significant maintenance or refurbishment to upgrade the line's capacity in line with projected future growth. For example, rather than like-for-like replacement of a conductor (with one of similar capacity) it is typically more efficient to take the opportunity of a major outage to install a higher capacity conductor (i.e with spare capacity in the short-term) in anticipation of future demand growth[4].

[4] While not germane to the present argument, it is worth noting that the consequences of any "over investment" in comparison to the consequences of "under-investment" are not symmetrically distributed. In a public welfare sense any "over investment" is compensated by the effects of additional capacity in reducing the costs of energy transmission (through reduced losses and fewer constraints), improved security of supply and any attendant environmental benefits. This contrasts with

Efficient investment decisions would be made after comparing the present value of the full lifetime costs of different investment alternatives. The result may be that the most efficient solution overall is to upgrade capacity in advance of when the full capacity is needed.

However, under the ODV methodology, assets that provide excess capacity are optimised down to a value that correlates only with the capacity required to satisfy the 10-year forecast. This reduces the return on assets available to investors over the life of the investment. The incentives created as a consequence may not lead to the investment decision that is most efficient once the full lifetime costs of the alternatives are taken into account.

## Distinguishing Transmission and Distribution Markets

At the Conference the Chair commented that consistency of the approach to asset valuation going forward across the whole electricity lines industry would, in principle, be desirable. As the Chair noted, this aspiration does not mean that consistency was "necessary". While Transpower agrees that, all things being equal, consistency is a desirable principle, Transpower believes that this is far from the Commission's overriding concern.

As the Commission acknowledged in its March 2002 discussion paper on the Regulation of Electricity Lines businesses, the transmission and distribution of electricity occur in discrete functional markets.[5] Transmission services are provided in a national transmission services market, while electricity distribution services are provided in separate local or regional distribution markets. The range of functions performed by Transpower in providing transmission services is, therefore, distinct from the functions undertaken by local and regional distribution companies. Consequently, the regulatory regime must, as far as possible without unduly compromising administrative efficiency, anticipate and consider the differences in the separate transmission and distribution markets.

Fundamentally, there is nothing in Part 4A of the Commerce Act ("the Act") that requires the Commission to select the same methodology for Transpower going forward as it has determined appropriate for electricity lines businesses that provide services in distribution markets. In fact, in Transpower's view, the Act reflects the fact that the regime applies to distinct markets involving electricity lines assets by referring to both transmission and distribution service markets.[6]

In particular, if the Commission were to determine that the continued use of ODV were appropriate for the distribution market and, in the interests of consistency make a similar determination in respect of the transmission market, the potential detrimental effects that ODV can have on transmission investment decisions, and the difficulties Transpower has experienced to date in applying ODV, cannot easily be overcome. In

the detriments that can occur in the event of "under-investment" in transmission capacity which can be potentially much larger if constraints arise and/or security of supply is threatened.

[5] Paragraph 5.11.

[6] See, for example, ss 57E, 57E(1) and 57G(1)(a).

Transpower's particular circumstances, a historical cost methodology is, as Transpower argued in its conference submission, the best mechanism for ensuring that dynamically efficient outcomes are achieved in the transmission services market going forward and regardless of what might be the preferred methodology in relation to other electricity lines businesses.

While, Transpower acknowledges that elements of the ODV rules could be changed to attempt to address the risk of loss of investor value under the ODV methodology and that compensating changes could be made to other elements of the thresholds and control regime, the increases in complexity and cost that would result would outweigh any benefits from consistency of approach.

Transpower believes that two factors are particularly relevant to the Commission's consideration of whether the same asset valuation methodology should apply for future valuations in both markets: the existence of Part F of the EGB Rulebook and the importance of grid security to the national interest.

**Part F of the EGB Rulebook**

The transmission services market is characterised by a unique regulatory environment that, in the future, can be expected to include the application of Part F of the EGB Rulebook. Part F will provide a discipline on Transpower to ensure that the chief concern with historical cost valuations – overbuild or 'gold-plating' – is avoided. The processes defined in the Rulebook will ensure that transmission investment decisions going forward meet customer needs and are only made after consideration of alternatives to transmission, including whether or not to maintain the current level of transmission services.

In so doing, Part F provides a proxy to deliver outcomes that would occur in a competitive market. The Part F rules ensure that investment decisions are driven by customers who can, under the rules, agree to proposed investments or seek alternatives, including the possibility of alternatives transmission providers. The application of a replacement cost methodology to provide a discipline on investment decisions is not therefore required in the transmission services market[7].

While the Commission's authorisation of the EGB Rulebook is under appeal, the determination itself still stands. If the appeal is successful, the Rulebook may change and a further application for an authorisation will be made or, alternatively, the Government will exercise its statutory power to appoint a statutory EGB to regulate lines businesses. Either way, the Commission can, and indeed should, anticipate that Part F will remain a feature of the regulatory environment for the transmission services market.

[7] The role for benchmarking of capital costs to ensure the productive efficiency with which monopoly transmission services are provided was addressed in Transpower's submission to the Commission on the discussion paper on price control thresholds (Refer Paragraph 171 "Submission to the Commerce Commission on the proposed regulation of Electricity Lines Businesses" May 2002).

### Grid Security

The risk that the potential for optimisation and write downs under ODV will result in avoidance or delay of transmission investments has particular implications for Transpower's role in ensuring grid security. Delays in investment decisions can erode security margins and increase the risk of loss of supply. The consequences of ODV as a barrier to investment in the transmission market are, therefore, a matter of concern for the whole electricity industry and for the wider economy.

## Miscellaneous Issues

### Treatment of Other System Fixed Assets and Non-System Fixed Assets

At the Conference the Commission also asked how Transpower treats assets that are not specified by the Handbook.

The definition of "system fixed assets" includes some assets that are not explicitly assigned values in the Handbook. These include assets such as communication assets, service centres, and minor fixed assets (such as furniture, fittings, software etc). Communication assets are included with transmission assets in the definition of system fixed assets for information disclosure purposes. Other minor system fixed assets are included in Transpower's valuation using depreciated historical cost as a proxy for market values. This treatment is adopted based on the materiality of the value of these assets to Transpower's overall value and acknowledging the relatively short economic life (and thus rapid depreciation) of the assets.

### Clarification of Accounting Standard FRS-3

As discussed during the course of Transpower's submission at the Conference, accounting standards (FRS-3) do allow assets to be recorded at historical cost and do not require assets to be revalued.

In particular, FRS-3 provides, as part of the standard for the initial recording of assets:

"5.3 An item of property, plant and equipment must initially be recognised at its cost, which includes costs directly attributable to bringing the item to working condition for its intended use."

The standard goes on to address asset revaluations (Transpower's italics).

"7.1 Subsequent to initial recognition, an item of property, plant and equipment *may* be revalued…"

"7.2 …the annual revaluation of items of property, plant and equipment is *not* required by this standard…"

# Appendix 1: Comparison of Historical Cost and ODV Valuation Methodology

**Capital Assumptions**

| Asset | Description | Unit Building Block Cost | Length | Unadjusted Building Block Cost | Interest During Const. | Length Hilly | Length Flat | Terrain Factor Hilly | Terrain Factor Flat | Replacement Cost |
|---|---|---|---|---|---|---|---|---|---|---|
| | | $000/km | km | $000 | | % | % | | | $000 |
| **Asset Being Replaced** | 220kV DCST 1960 2/Zebra 75 deg | 362.8 | 50 | 18140 | 1.04 | 50% | 50% | 1.07 | 1.00 | 19526 |
| **New Asset** | 220kV DCST 3280 2/Chukar 75 deg | 538.91 | 50 | 26946 | 1.04 | 50% | 50% | 1.07 | 1.00 | 29004 |

| | | | |
|---|---|---|---|
| Capacity Differential | 60% | % | *Used in extrapolating replacement cost changes as assets are optimised back in.* |
| Value Differential at 60% capacity | 67% | % | *Used in extrapolating replacement cost changes as assets are optimised back in.* |
| Cost of Capital | 7.40% | % | *Transpower's current cost of capital. Derived using expanded Brennan-Lally method.* |
| Capital Cost of Upgrade | 29004 | $000 | *From above.* |
| Ratio MEA Cost to Capital Cost | 100% | % | *Variable for assessing the impact of a first period difference between Actual and ODV replacement cost* |
| Replacement Cost at 100% Capacity | 29004 | $000 | *Used in extrapolating replacement cost changes as assets are optimised back in.* |
| Asset Expected Life | 55 | years | *Expected economic life - from Handbook.* |

| Year | | | Units | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 20 | 30 | 40 | 50 | 55 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Capacity Utilisation Calculation** | | | | | | | | | | | | | | | | | | |
| Capacity utilisation year 1 | | 60% | % | | | | | | | | | | | | | | | |
| Year asset reaches 100% capacity | | 25 | years | | | | | | | | | | | | | | | |
| Planning Horizon | | 10 | years | | | | | | | | | | | | | | | |
| Capacity Utilisation | | | | 60% | 62% | 63% | 65% | 66% | 68% | 70% | 71% | 73% | 74% | 90% | 100% | 100% | 100% | 100% |
| Planning Capacity | | | | 74% | 76% | 78% | 79% | 81% | 82% | 84% | 86% | 87% | 89% | 100% | 100% | 100% | 100% | 100% |
| **Economic Stranding** | | | | | | | | | | | | | | | | | | |
| Stranding Risk | 1 in 400 | 0.25% | % | | | | | | | | | | | | | | | |
| Cumulative Stranding Risk | | | % | 0% | 1% | 1% | 1% | 1% | 2% | 2% | 2% | 2% | 3% | 5% | 8% | 11% | 13% | 15% |

| Investor Returns Under Historical Cost Methodology | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 20 | 30 | 40 | 50 | 55 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Opening Value | | $000 | 29004 | 28477 | 27949 | 27422 | 26895 | 26367 | 25840 | 25313 | 24785 | 24258 | 18985 | 13711 | 8438 | 3164 | 527 |
| Closing Value | | $000 | 28477 | 27949 | 27422 | 26895 | 26367 | 25840 | 25313 | 24785 | 24258 | 23731 | 18457 | 13184 | 7910 | 2637 | 0 |
| Depreciation | | $000 | 527 | 527 | 527 | 527 | 527 | 527 | 527 | 527 | 527 | 527 | 527 | 527 | 527 | 527 | 527 |
| Capital Charge | | $000 | 2146 | 2107 | 2068 | 2029 | 1990 | 1951 | 1912 | 1873 | 1834 | 1795 | 1405 | 1015 | 624 | 234 | 39 |
| Investor Return after Tax | | $000 | 2674 | 2635 | 2596 | 2557 | 2518 | 2479 | 2440 | 2400 | 2361 | 2322 | 1932 | 1542 | 1152 | 761 | 566 |
| **PV of Investment** ***(should equal initial cost)*** | $29,004 | $000 | *Yes* | | | | | | | | | | | | | | |

| **Investor Returns Under ODV Methodology** | | | | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **20** | **30** | **40** | **50** | **55** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Assumed Impact of Optimisation | | % | | 79% | 81% | 82% | 83% | 84% | 86% | 87% | 88% | 90% | 91% | 100% | 100% | 100% | 100% | 100% |
| Opening ORC | | $000 | | 22975 | 23352 | 23728 | 24105 | 24482 | 24859 | 25236 | 25613 | 25989 | 26366 | 29004 | 29004 | 29004 | 29004 | 29004 |
| Opening ODRC | | $000 | | 22975 | 22927 | 22866 | 22790 | 22702 | 22599 | 22483 | 22353 | 22209 | 22052 | 18985 | 13711 | 8438 | 3164 | 527 |
| Closing ODRC | | $000 | | 22557 | 22503 | 22434 | 22352 | 22257 | 22147 | 22024 | 21887 | 21737 | 21572 | 18457 | 13184 | 7910 | 2637 | 0 |
| Revaluations | | $000 | | -6029 | 370 | 363 | 356 | 349 | 343 | 336 | 329 | 322 | 315 | 0 | 0 | 0 | 0 | 0 |
| Deduction of Revaluations From Income | | $000 | | 6029 | -370 | -363 | -356 | -349 | -343 | -336 | -329 | -322 | -315 | 0 | 0 | 0 | 0 | 0 |
| Depreciation | | $000 | | 418 | 425 | 431 | 438 | 445 | 452 | 459 | 466 | 473 | 479 | 527 | 527 | 527 | 527 | 527 |
| Capital Charge | | $000 | | 1700 | 1697 | 1692 | 1686 | 1680 | 1672 | 1664 | 1654 | 1643 | 1632 | 1405 | 1015 | 624 | 234 | 39 |
| Investor Return | | $000 | | 8147 | 1751 | 1760 | 1768 | 1776 | 1782 | 1787 | 1791 | 1794 | 1796 | 1932 | 1542 | 1152 | 761 | 566 |
| Expected Stranding Losses | | $000 | | 0 | 45 | 135 | 179 | 245 | 310 | 374 | 438 | 500 | 582 | 886 | 870 | 767 | 335 | 0 |
| Net Investor Return | | $000 | | 8147 | 1706 | 1626 | 1590 | 1531 | 1472 | 1412 | 1353 | 1294 | 1214 | 1046 | 672 | 384 | 427 | 566 |
| **PV of Investment** ***(should equal initial cost)*** | $22,197 | $000 | | *No* | | | | | | | | | | | | | | |
| Investors Expected Loss | -$6,807 | $000 | | | | | | | | | | | | | | | | |
| **Rate of Return Required for Investment Under ODV** | | | | | | | | | | | | | | | | | | |
| Adjustment to WACC | 35% | % | *Calculated using goalseek.* | | | | | | | | | | | | | | | |
| Rate of Return Required to Compensate | 10.0% | % | *(1+adjustment)*WACC* | | | | | | | | | | | | | | | |
| Adjusted Capital Charge | | $000 | | 2289 | 2284 | 2278 | 2271 | 2262 | 2252 | 2240 | 2227 | 2213 | 2197 | 1892 | 1366 | 841 | 315 | 53 |
| Adjusted Investor Return | | $000 | | 8736 | 2294 | 2212 | 2174 | 2113 | 2051 | 1989 | 1926 | 1863 | 1779 | 1533 | 1023 | 601 | 508 | 580 |
| **PV of Investment after adjustment** ***(should equal initial cost)*** | $29,004 | $000 | | *yes* | | | | | | | | | | | | | | |
| differential | $0 | $000 | | | | | | | | | | | | | | | | |