ASSET VALUATION

EnergyAustralia in its application to ACCC argued that an ODRC approach was most appropriate for its transmission assets in 2004. There are several reasons why EnergyAustralia put forward an ODRC approach for its transmission assets despite having agreed to a roll-forward for its distribution assets which are regulated by IPART. First, staff identified a sufficient number of problems with the 1998 ODRC to make a new ODRC prudent. Secondly, the ACCC's 1999 Draft Statement of Regulatory Principles stated that ODRC was an appropriate method for determining an asset base initially and was silent as to the methodology to be used for subsequent asset valuations. The DRP did however, refer to periodic revaluation of assets where this was deemed appropriate. Thirdly, the lack of guidance from ACCC as to how a roll-forward might be conducted was key in influencing EnergyAustralia's decision that in the circumstances, a new ODRC for 2004 would be most appropriate.

EnergyAustralia identified discrepancies between the 1998 and 2004 ODRC's in its application to ACCC. The issues are restated below together with further analysis on the impact on pricing outcomes.

Inconsistency with 1999 ODRC

Transmission valued as if it were distribution

One of the major thrusts of the market reform stemming from CoAG was to establish a National Grid with uniform trading and pricing arrangements. Differing valuations of transmission network assets will lead to non-uniform pricing and so prevent the achievement of this objective.

EnergyAustralia's network assets were valued by the NSW Jurisdictional Regulator for distribution on a modified ODRC basis at the commencement of the last regulatory determination, along with those of other DNSP's. This valuation was carried out by the Worley's Consortium using principles designed for valuing distribution assets and which were different to those used for TransGrid's asset valuation.

Typically, due to the relatively small number of transmission assets and their relative cost, transmission assets are evaluated in more detail than distribution assets. For example, transmission line values take into account detailed adjustments for the terrain and number of angle structures. This is due to the recognition that the costs of a single angle structure can be as high as $500,000, up to 5 times that of a standard structure. For EnergyAustralia this is a material concern as the areas where EnergyAustralia has a high density of transmission assets is also an area that requires relatively high numbers of more expensive structures to negotiate large expanses of water and hilly terrain (ie Central Coast).

Overall, SKM has estimated the magnitude of these types of unit rate differences to undervalue EnergyAustralia's total regulatory asset base by more than 8 per cent[1]. In addition, an ODRC valuation for transmission assets typically involves more detailed considerations of asset optimisation. We believe this to be a material discrepancy.

[1] This is equivalent to $55.4 million.

Lack of consistent valuation approach across NSW transmission impacts price outcomes

The approach applied to the valuation of EnergyAustralia's transmission assets in 1999 differs from that applied to TransGrid at the same time, thus resulting in inconsistency between the relative valuations of assets within NSW.

The assets of the NSW transmission businesses are incorporated into a single pricing model, in accordance with the Code requirements[2], and these differences in valuation appear as anomalies in NSW transmission prices. If national transmission pricing is implemented, these anomalies would extend throughout the NEM.

In order to rectify this situation, the basis of the 2004 SKM valuation is the same as that recently used for other transmission businesses and similar to that used by TransGrid in 1999[3].

Specific pricing impacts

The comparison between the total value of system assets reveals that there was an average increase of 12 per cent in the ORC due to revaluation effects between 1999 and 2004. There are also significant differences at an individual line level, and these are incorporated in the prices customers pay. As just one example, EnergyAustralia has examined the pricing impact on some of its largest customers. For one customer, the base price would not **increase** by 12 per cent, as might expected, but would **decrease** by 13 per cent with the 2004 valuation.

Such significant price variations caused by differences in the asset valuation approach are believed to be unacceptable and contrary to the spirit of the Code, which was always intended to deliver uniform access pricing across the National Grid.

Distorted asset age profile

As further support for an ODRC approach in 2004, EnergyAustralia, through the completion of its annual regulatory accounts, has become aware of the serious limitations of the 1999 valuation relating to the use of average ages for asset categories.

The current average ages for asset categories do not accurately portray the nature and condition of the underlying assets. This is due to the fact that aggregate ages for large asset categories used in 1999 were derived by weighting the ages of individual asset classes using their written down value. This calculation applies a higher weighting to younger assets and has the effect of distorting the underlying asset age profile.

This distortion is compounded when new assets are added to the large asset categories. This is an important factor for EnergyAustralia, which has an aging network, many parts of which are earmarked for replacement in the next decade.

EnergyAustralia has reviewed the remaining life assumptions of several classes of assets and wishes to adjust them to reflect more recent information. However, due to the lack of detailed information on asset ages included in the 1999 valuation, we do not possess the detailed information needed to modify a component within the larger asset classes, and consequently cannot adjust the regulatory lives attached to these assets.

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[2] This pricing mechanism is explained in the introduction to this submission.

[3] TransGrid's asset valuation was reviewed and adjusted for the ACCC by SKM.

EnergyAustralia believes there is risk that a roll-forward would lock in the use of remaining lives at a high level, and that EnergyAustralia will retire assets that have not been fully depreciated for regulatory purposes at the time the physical asset is replaced (ie regulatory "stranding" of the assets).

EnergyAustralia submits that the remaining lives must be reviewed, and be reviewed on a more detailed level. This is critical to ensure that the ACCC and EnergyAustralia have more accurate information on which to base their decisions.

An ODRC approach does not rely on comparison of information from one period to the next. It merely values the assets at a point in time on the basis of remaining asset lives. EnergyAustralia believes that an ODRC approach for the 2004 Determination would allow for a correction of such previous errors.

Roll-forward versus ODRC

EnergyAustralia supports the in-principle use of a "roll-forward" approach to determining the regulatory asset base. A roll-forward may significantly reduce the subjectivity associated with other forms of valuation and provide more certainty that prudent and efficient investment will earn a regulatory return over the lives of the assets. This support is contingent, however, on the regulator providing guidance on an *ex ante* basis as to what constitutes "prudent and efficient" investment and, in fact, how the roll-forward is to be undertaken.

EnergyAustralia believes that this approach is appropriate and would serve to minimise the regulatory risk associated with asset valuation methodologies relying on a high degree of regulatory discretion. Uncertainty regarding the regulatory recognition of prudent capital investment would only serve to increase the underlying cost of capital of the business, ultimately serving to increase the costs to customers and / or providing a disincentive to invest in required infrastructure.

However, before EnergyAustralia can support a roll-forward methodology, it is essential that the starting point is based on an appropriate value of the assets to be regulated. As indicated previously, EnergyAustralia submits that the 1999 ODRC valuation contained many anomalies that are of sufficient magnitude to be material. EnergyAustralia believes that it is necessary to address any errors or inaccuracies contained in the 1999 ODRC valuation so that they are not institutionalised and carried forward indefinitely in any roll-forward calculation.

Improved information

The 2004 ODRC takes into account improvements in EnergyAustralia's record keeping systems made during the course of the current determination and has highlighted that the average age of EnergyAustralia transmission assets is less than the average age of all assets of the same class.

The more accurate information resulting from these improvements has contributed to EnergyAustralia's support for a new ODRC valuation to avoid locking in past errors and inconsistencies.

As noted above, EnergyAustralia proposes that a new ODRC be applied to its opening transmission assets as at 1 July 2004. This is due not only to the errors and inconsistencies of the previous ODRC valuation, and the technical complexities that could be avoided by

completing another ODRC, but also due to the lack of guidance provided by the ACCC as to its roll-forward approach.

Uncertainty surrounding a roll-forward approach

EnergyAustralia notes that there is no one universally agreed approach to calculating a roll-forward, and in fact there are many variations in the manner in which one could be conducted. Moreover, the investment incentives and decisions of a TNSP are heavily dependent upon the approach taken by the Commission and EnergyAustralia believes it has significant value at risk depending on how the ACCC may undertake a roll-forward.

To illustrate this issue, EnergyAustralia currently has up to $140m of value at risk to its distribution business as a result of IPART's present stance on the treatment of depreciation on investment that has already been deemed as prudent.

Given that investment incentives are prospective by their nature, it is critical that they are understood ex ante to enable them to be appropriately considered prior to investment decisions being taken. As a matter of principle, EnergyAustralia does not believe that its past investment decisions should be measured by criteria that were not in place when the investments were made.

Before EnergyAustralia could consider moving away from the established ODRC approach to supporting a roll-forward approach, the ACCC would need to clearly articulate its position in detail on a number of issues, including:

- **Asset methodology** - What is the starting asset valuation methodology and when is indexation applied? What is the index to be used, and what is its basis, timing and derivation?

- **Real versus nominal framework** - Is the framework a real or a nominal one and what impact does this choice have on the timing of indexation in the RAB?

- **Capital expenditure** - How is actual capital expenditure treated if it is above or below forecast? What tests are to be applied to actual capital expenditure to determine whether they should be added to the RAB for the subsequent period, if any, and when are the tests applied? Does the ACCC propose to include a return on and/or a return of capital associated with prudent capital expenditures in excess of allowed amounts?

- **Stranding risk** - How is the stranding of assets managed and what tools are available for the TNSP's to manage stranding risk under the roll-forward?

- **Capital contributions** - How are capital contributions and the associated income tax liabilities managed?

- **Return of capital** – Will the return of capital for the subsequent regulatory period be derived using a return of capital consistent with the determination or using "actual" (ie accounting) depreciation? What are the capital maintenance and pricing objectives supporting the preferred profile and methodology? Are remaining lives reviewed, and if so how, when, and on what basis? How are changes to remaining lives managed? How is indexation managed in the depreciation profile?

- **Capitalisation & holding costs** - When are assets recognised in the RAB? If there is a delay in capitalisation, are the associated holding costs recognised? If so, how are the holding costs calculated?

- **Easements** - How are existing easements valued? How are new easements valued? What is the appropriate index to apply to easements?

There has been no information put forward by the ACCC to outline the process and mechanics of its roll-forward methodology. The ACCC in its Discussion Paper relating to the Review of the Statement of Regulatory Principles discusses the options for valuation of the asset base at the reset. However, it does not shed any light on the mechanics of a roll-forward. Therefore, the uncertainty surrounding the ACCC's roll-forward framework remains.

As mentioned above, EnergyAustralia believes that there is significant value at risk depending on the way in which a roll-forward is conducted. The ACCC has not publicly consulted on the proposed roll-forward methodology and therefore has not provided an opportunity for market participants to voice concerns regarding a particular approach.

In pursuing an ODRC for 2004, EnergyAustralia commissioned SKM to undertake a valuation in accordance with methodologies applied to similar valuations for other TNSP's in Australia and New Zealand, which was provided as one of the 14 attachments that accompanied our September 2003 submission.

Conclusions

EnergyAustralia has put forward its reasons for choosing to pursue an ODRC approach to establish the opening value of its transmission asset base. The decision was made taking into consideration a range of issues, including the fact the existing 1999 ODRC valuation contained sufficient errors that required correction so that past errors and inconsistencies are not "locked in" indefinately.

EnergyAustralia has also put its case as to why it cannot support a roll-forward framework for its transmission assets at this time given the lack of guidance by the ACCC as to the detailed approach to conducting a roll-forrward. Given the relative certainty of an ODRC approach and the lack of certainty of the ACCC's roll-forward approach, EnergyAustralia believes it is up to the ACCC to inform EnergyAustralia as to how its roll-forward framework will operate including providing responses to the 18 questions raised by EnergyAustralia in its submission, and as noted above.

Finally, EnergyAustralia believes that the onus is on the ACCC to inform EnergyAustralia as to why the approach put forward by EnergyAustralia in our submission does not meet the requirements of the Code, particularly in light of the considerable regulatory risk arising from the absence of any guidance surrounding the roll-forward mechanism.