ActewAGL
for you

Mr Warwick Anderson
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Australian Energy Regulator
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28 June 2017

Dear Mr Anderson

Regulatory treatment of inflation

ActewAGL Distribution (AAD) welcomes the opportunity to respond to the Australian Energy Regulator (AER) discussion paper on the regulatory treatment of inflation. The discussion paper covers two broad issues raised by service providers. First, whether the AER's current approach to forecasting inflation results in the best estimate of expected inflation. Second, whether inflation is appropriately compensated in the regulatory framework with particular reference to its treatment in the post-tax revenue model (PTRM) and the asset base roll forward model (RFM).

While these two issues are considered separately below, they are interrelated. Forecast inflation is used in determining the indexation adjustment that is removed from the total revenue requirement in a given regulatory period. If forecast inflation is too high (low) – that is, if actual inflation turns out to be materially lower (higher) than had been forecast – this deduction will be too large (small). This will lead to under-recovery (over-recovery) of costs, as the asset base at the beginning of the subsequent regulatory period is indexed by actual inflation.

If a consistent approach is used for inflation in the PTRM and RFM then the risk of under or over recovery is removed and the approach to forecasting inflation becomes less important. Conversely, if the current practice of using actual inflation in the RFM and forecast inflation in the PTRM continues then the accuracy of the forecasting approach is essential.

1. Best estimate of expected inflation

AAD supports the conclusions set out in the report prepared by Cambridge Economic Policy Associates (CEPA) for the Energy Networks Association (ENA). CEPA's assessment of alternative approaches to forecasting inflation identifies the breakeven

methodology as the preferred option[1]. In undertaking its assessment, CEPA places greater weight on congruence with the market expected inflation criterion than other criteria and identifies approaches as usable or not usable from a transparency and replicability point of view.

CEPA finds that the breakeven approach ranks highly in terms of forecasting market expected inflation, it meets the transparency and replicability test, it aligns with the regulatory framework, it is a market based approach and is supported by regulatory precedent in Australia and internationally.

In reaching its conclusion, CEPA makes the following observations:

- While the breakeven approach contains potential biases, such biases are also present in other parameter estimates used within the regulatory framework and attempting to adjust for them would undermine the transparency and replicability criteria. CEPA notes that, based on the evidence assessed, with no adjustment for potential biases the breakeven method may overestimate inflation.
- Inflation expectations from swaps, breakeven and the AER's current approach are no longer equivalent. Over the past two years in particular, breakeven inflation has moved significantly below the AER's current approach, while the inflation swaps approach is only slightly below the AER's current approach.
- There are plausible explanations for why breakeven inflation estimates reflect expectations better than the current approach. These include the central banks reduced ability to affect inflation through monetary policy, global forces bringing about a 'lower for longer' scenario and the broadening of the RBA's remit which places greater weight on financial stability and may mean the RBA targets the lower part of its band.
- A glide path may be an improvement over the AER's current approach. There are clear indications that inflation over the course of the next price control period could remain below the mid-point of the RBA band and as such a more gradual reversion to this target would better reflect market estimates of expected inflation.

CEPA's conclusion is consistent with the arguments that AAD has previously made in support of the breakeven approach to forecasting inflation[2] which can be summarised as follows.

- AAD supports a market-based estimate of inflation as this is more likely to be consistent with expectation of inflation reflected in the nominal rate of return and more likely to be reflective of actual inflation over the regulatory period. Under such an approach, AAD is more likely to be able to recover its efficient costs, since the inflation forecast used to calculate the indexation deduction from the revenue requirement will

[1] The breakeven method involves estimiating expected inflation as the difference between the yields-to-maturity on 10 year nominal Commonwealth Government Securities (CGS) and 10 year indexed CGS.

[2] AAD 2016, Revised 2016-21 Access Arrangement Proposal, Appendix 5, Rate of return, gamma and inflation, p130-136. AAD 2016, Application for leave and application for review by the Australian Competition Tribunal, paragraph 153-202.

be more consistent with actual inflation, which is used to roll-forward the RAB over time.

- The AER's approach to forecasting inflation based on RBA forecast/targets no longer delivers outcomes similar to the breakeven method. There has also been a material divergence between the RBA forecasts/targets and out-turn inflation, with evidence demonstrating that actual inflation has been significantly lower than RBA forecasts and well below the RBA's target band.
- The AER's reasoning for moving away from the breakeven method in 2008 to its current RBA forecast/target based method was based on the bias in indexed CGS yields caused by a scarcity of these bonds. This scarcity issue no longer exists. Therefore, it is appropriate to return to the market-based approach previously used by the AER to forecast inflation.
- Over the medium term, it is more likely that actual inflation will be below the mid-point of the RBA's target range. With the RBA cash rate at record low levels, the power of monetary policy to spur economic growth and increases in the inflation rate is now more limited. This implies that it is no longer reasonable to expect inflation to revert to the middle of the RBA target range over the medium term. Accordingly, in current market conditions, a methodology that assumes medium term inflation would be at or around the mid-point of the RBA target range is likely to over-estimate inflation.

2. Treatment of inflation in the PTRM and RFM

In October 2016, Frontier Economics prepared a report for the ENA on the treatment of inflation in the AER's PTRM and RFM[3]. This report was submitted to the AER in the context of a RFM review. In this paper, Frontier showed that mismatches between the AER's forecast and actual inflation in the PTRM and RFM can lead to businesses over/under recovering relative to the nominal returns used by the AER when determining maximum allowed revenues. Specifically, if actual inflation is lower than inflation forecast by the AER, regulated businesses will earn nominal returns that are lower than the nominal returns allowed by the AER when determining maximum allowed revenues – and vice versa.

Frontier demonstrated that the magnitude of such mismatches can be material. For instance, over/under recovery of allowed returns by a margin of 0.5% due to bias in the AER's inflation forecast would result in a revenue impact of approximately +/- $16 million per annum for an average-sized electricity distribution network service provider.

Frontier Economics noted that current market expectations are that inflation will remain below the RBA's midpoint target for some time. If these expectations are realised, future outturn inflation will be below the AER's' forecast of inflation, which would lead to under-recovery of efficient costs by regulated businesses. Frontier recommended the AER give

[3] Frontier Economics 2016, Comments on treatment of inflation in the AER's PTRM and the RFM, A report prepared for the Energy Networks Association, October.

urgent attention to address this issue.

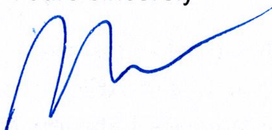
One approach to addressing the issue is to adopt the best estimate of expected inflation which, for the reasons set out above, would involve adopting the breakeven method for forecasting inflation. This would minimise the mismatch between forecast and actual inflation and hence the over/under-recovery of costs.

An alternative approach (or additional adjustment) would be to address the inflation mismatch by using a consistent approach to inflation in both the RFM and PTRM. This would remove the risk for both consumers and service providers associated with mismatches between forecast and actual inflation. It would also eliminate the incentive to propose unrealistically high or low estimates of inflation, as the impact would be neutralised by aligning the inflation used in the RFM and PTRM.

In AAD's view, careful consideration needs to be given to potential options for aligning inflation in the RFM and PTRM with a focus on transparency, predictability and minimising volatility for customers.

If you wish to discuss any aspect of our response, please do not hesitate to contact Alexis Hardin, Manager Regulatory Finance and Strategy on 02 6248 3033 or alexis.hardin@actewagl.com.au

Yours sincerely



David Graham

Director Regulatory Affairs and Pricing