

20 September 2019

Mr J Cox
Acting Chair
Australian Energy Regulator
GPO Box 3648
SYDNEY NSW 2001

Dear Mr Cox

Regulatory Treatment of Inflation-Request for Review

SA Power Networks submitted its Regulatory Proposal in January 2018. In the proposal SA Power Networks applied a placeholder estimate of expected inflation of 2.47%, to be updated in the Revised Proposal for the latest available information.¹

The estimate of expected inflation is used to calculate the deduction from the annual revenue requirement for the purposes of clause 6.4.3(b)(1)(ii) and S6.2.3(c)(4) of the National Electricity Rules (NER). The deduction is necessary to avoid double-counting of inflation (through the application of a nominal rate of return and an inflation adjusted regulatory asset base).

The estimate was arrived at applying the AER's methodology for expected inflation stipulated in the PTRM namely:

- forecasts of inflation published by the RBA were used for the first two years of the 10-year term;
- the mid-point of the RBA's target band for inflation was used for the remaining 8 years; and
- the geometric average of the ten yearly figures was used as the estimate of expected annual inflation over the regulatory period.

(the RBA method)

The application of the method set out in the PTRM is mandated by clause 6.3.1(c)(1) of the NER, which requires SA Power Networks' building block proposal to be prepared in accordance with the PTRM. The PTRM must set out the manner in which the Distribution Network Service Provider's annual revenue requirement for each regulatory year of a regulatory control period is to be calculated. Clause 6.4.2(b)(1) of the NER requires the PTRM to include a method that the AER determines is likely to result in the best estimates of expected inflation for the regulatory control period. SA Power Networks and the AER are bound by the approach in the PTRM.²

The current methodology for estimating expected inflation was reviewed by the AER in 2017. The outcome of the review was to make no change at that time to the methodology.

¹ SA Power Networks 2020-25 Regulatory Proposal, Attachment 3, page 9, section 3.6.

² Confirmed by the Australian Competition Tribunal in *Application by SA Power Networks* [2016] ACompT11 at [619].

However, since the 2017 review and since SA Power Networks Regulatory Proposal was submitted, market conditions and inflation expectations have declined dramatically. SA Power Networks' view is that the RBA method does not currently produce an outcome consistent with inflation expectations. It is clear that the RBA method does not presently result in "the best estimates of expected inflation" and maintaining the RBA method in the PTRM will result in a failure to comply with clause 6.4.2(b)(1) of the NER. The basis for this position is set out in more detail below.

The structure of the NER is such that the negative adjustment to the revenue requirement is intended to be an estimate of forward-looking inflation expectations. The AER's approach seeks to estimate those expectations over a 10-year period, and then applies a single expected inflation estimate. It is crucial for effective signals around the maintenance of efficient investment in, and use of, the distribution network that the estimate used is the best possible estimate of expected inflation, reflective of the entire period. This estimate being materially incorrect has the effect of producing windfall gains or losses to networks without there being any cost-efficient means to manage the risk.

In current market conditions, the deduction from the annual revenue requirement under 6.4.3(b)(1)(ii) applying the RBA method vastly exceeds inflation expectations over the regulatory control period and the 10-year period, resulting in a significant under-recovery of revenue by networks. By way of example, if expected inflation is 0.5% below the expected inflation estimate determined applying the RBA method, over the 2020-25 period, SA Power Networks nominal revenue will be in the order of \$40 million less than it should have been.

The purpose of this letter is to request that the AER undertake a new review of the methodology for estimating expected inflation specified in the PTRM and invoke the consultation procedures in Part G of Chapter 6 of the NER to amend that methodology. The Australian Competition Tribunal has confirmed that a review of this sort may take place at any time and in conjunction with a distribution determination process, so that a network is not prejudiced from advancing an alternative approach to that specified in the PTRM.³

SA Power Networks requests that the review be commenced urgently with a view to it being completed before SA Power Networks distribution determination for the 2020-25 period is made in April 2020 so that SA Power Networks is provided with an opportunity to recover at least its efficient costs.

The 2017 Inflation Review

Prior to the global financial crisis, the AER used the bond break-even (Fisher equation) approach. In 2008, the AER moved to the RBA method due to illiquidity in the bond market which was distorting the breakeven inflation estimate. At that time, it was generally accepted that the RBA approach, in those market conditions, was likely to result in the best estimate of expected inflation.

In 2017, the AER undertook a review of its inflation methodology. In broad terms, it considered four potential approaches for estimating expected inflation:

- the RBA method;
- the bond breakeven approach;
- the swap method; and
- estimates based on surveys.

³ Application by SA Power Networks [2016] ACompT11 at [618].



The AER acknowledged that all approaches have strengths and weaknesses. The outcome of the review was a decision by the AER that the RBA method had the greatest strengths and fewest weaknesses and therefore provides the best estimate of expected inflation. The RBA method was maintained and no change to the PTRM was made. The AER said that the RBA method is preferred “due to it being relatively congruent with long term inflation expectations (as compared to other methods considered), robust, simple to employ, transparent and easy to replicate.”⁴

In the review the AER accepted that the RBA method is predicated on the use of the mid-point of the RBA’s target band for inflation as an anchor for long term inflation expectations. The AER formed the view that the evidence before it did not indicate long term expectations had “de-anchored” from the mid-point of the RBA’s target band.⁵ The RBA itself noted in correspondence to the AER during the review that the AER’s approach would not capture a change in long-term inflation expectations if that were to occur.⁶

The AER indicated it would regularly review survey evidence on long term inflation expectations and if these deviated substantially from the mid-point of the RBA target band (used in the RBA method), it would seek advice from the RBA.⁷

Since the AER’s final position in the inflation review was published in December 2017, market conditions have changed substantially. As demonstrated below, current evidence clearly shows that inflation expectations have declined and may have de-anchored from the mid-point of the RBA target band.

The decline in expectations and the gap that SA Power Networks contends now exists between inflation expectations and the results of applying the RBA method are such that seeking advice from the RBA is not enough. A review of the inflation estimation method in the context of the PTRM must be commenced as soon as possible.

Current inflation expectations and the RBA target band

There are two components to the RBA method that is currently adopted by the AER:

- the AER takes RBA forecasts for each of Years 1 and 2 of its 10-year inflation period; and
- the AER takes the 2.5% mid-point of the RBA target band for each of Years 3 to 10.

Since the AER’s 2017 inflation review, it has become apparent that a de-anchoring has occurred in relation to both components.

It must be noted that the 2.5% is the mid-point of the RBA’s target band. It is not an inflation forecast. The RBA’s inflation targeting regime supports action to achieve 2% inflation when inflation is less than 2% and to reduce inflation to 3% when it is above 3%. The regime does not support action to achieve 2.5%. Therefore, even if inflation recovers to 2%, no further action could be expected to increase inflation to 2.5% or above.

⁴ AER: Regulatory treatment of inflation, Final position, December 2017, page 45.

⁵ AER: Regulatory treatment of inflation, Final position, December 2017, page 45.

⁶ Letter from RBA to AER dated 5 July 2017.

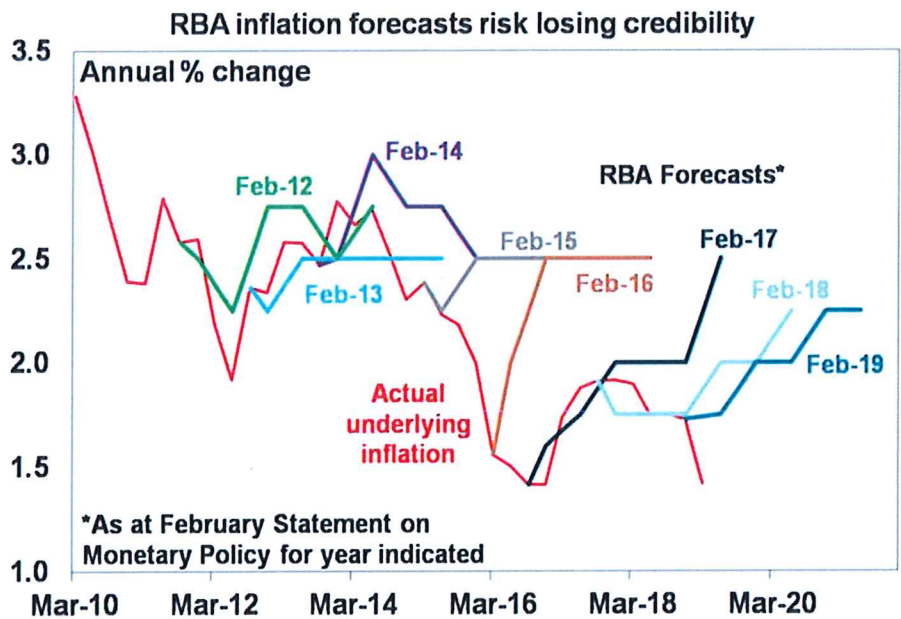
⁷ AER: Regulatory treatment of inflation, Final position, December 2017, page 45, 48.



The de-anchoring of RBA forecasts for Years 1 and 2

Over recent years, it has become apparent that the process that the RBA uses to forecast inflation over the forthcoming two years involves a consistent and material bias. For several years now, the RBA has been forecasting increases in inflation that have not materialised. Since the AER's 2017 inflation review, the evidence of a systematic bias in the RBA's forecasts has become compelling in its prolonged consistency and its departure from other forecast methods.

In a recent research note, AMP Capital has noted that the RBA has consistently forecast inflation returning quickly towards the mid-point of its target band, even as actual inflation has consistently moved in the opposite direction. This is illustrated in the figure below, which shows that, in forecast after forecast after forecast, the RBA has badly mis-estimated actual inflation.

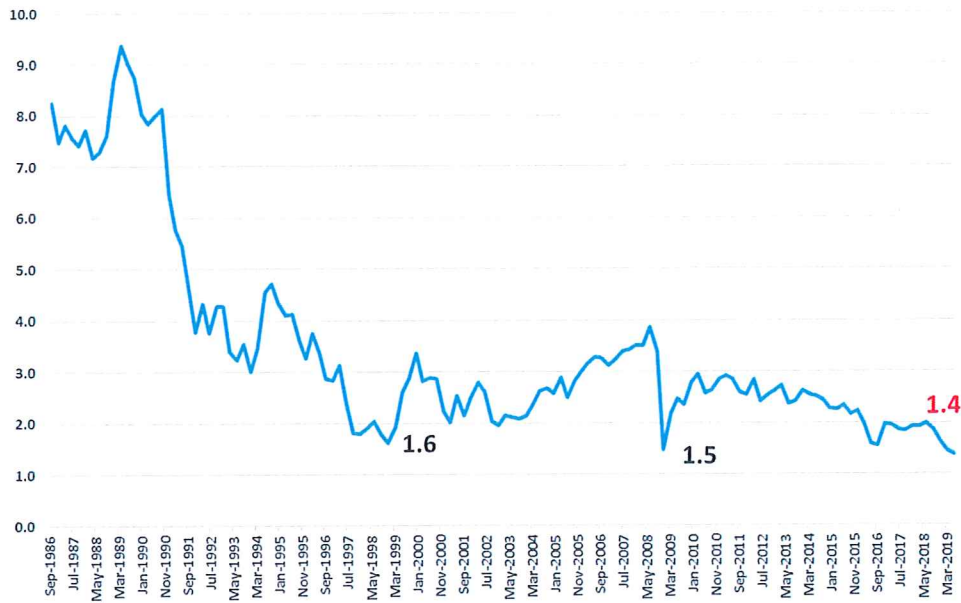


The figure above shows that, in 2017 when the AER's inflation review was conducted, the RBA was forecasting inflation to return to 2.5% within two years. Two years later, actual inflation has turned out to be only 1.5%. Indeed, since 2014, the RBA has uniformly over-estimated future inflation, in most cases by a material amount.

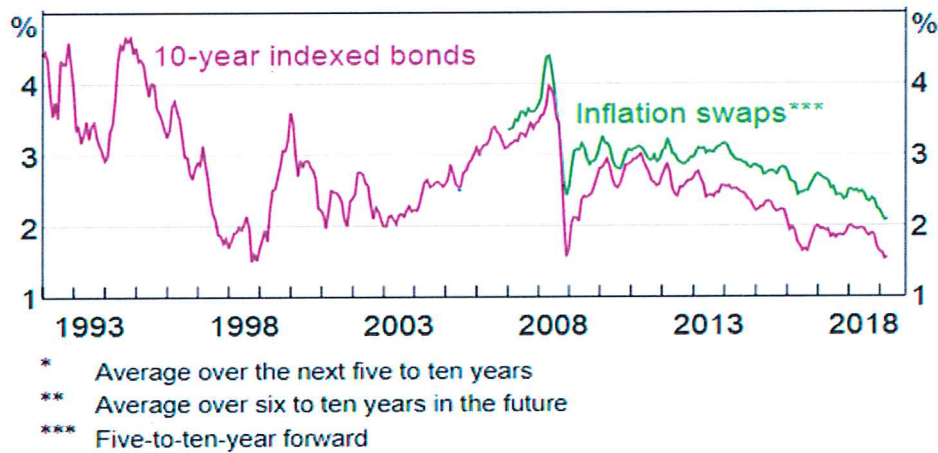
Even as the RBA continues to forecast steep increases in inflation in the near term, market-based estimates of inflation are now at record lows. The break-even 10-year inflation rate is currently at a record low of 1.4%, as illustrated in the figure below.



Break-even 10 year inflation rate (1986-2019)



Similarly, inflation swaps are also at historical lows, having followed indexed bond yields down materially since the 2017 inflation review.



In summary, since the 2017 inflation review, the evidence of a de-anchoring between the mid-point of the RBA’s target band for inflation and actual inflation outcomes has become compelling. Since 2014, every RBA forecast of 1-year and 2-year ahead inflation has turned out to be materially above actual inflation outcomes. Over that time, the RBA has made over 130 forecasts⁸ and every one of them has been above the actual inflation outcome. This has occurred over a period where market-based forecasts are indicating record low inflation expectations.

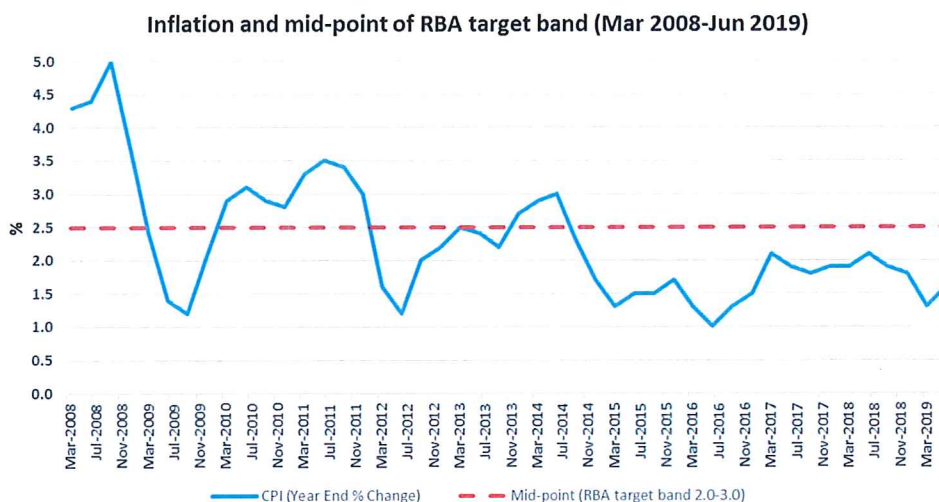
⁸ One- and two-year forecasts are made every month.



The de-anchoring of the RBA method for Years 3 and beyond

The second element of the AER's RBA method is the adoption of a 2.5% figure for inflation in years 3 to 10 of the AER's 10-year period for inflation.

Since November 2011, the AER's approach to setting Year 3 inflation (ie as at November 2014) to 2.5% has resulted in an over-estimate. That is, for approximately 8 years, the AER's approach has over-estimated Year 3 inflation. This is illustrated in the figure below, which shows that inflation has been lower than 2.5% consistently since late 2014.



Even if the best forecast is that inflation will return to 2.5% in Year 10, the AER's assumption that inflation will already recover to 2.5% by Year 3 has proven to be consistently incorrect for several years now. That is, it is now clear that there has been a de-anchoring between observed outcomes and the AER's assumption that inflation will always return to 2.5% by Year 3.

Moreover, market data suggests that long-run (10-year) inflation expectations remain materially below 2.5%, as the breakeven and inflation swap estimates show above.

A recent ANZ research report, titled *Inflation expectations: anchoring at the wrong point*, concludes that 2.5% is no longer an appropriate long-run estimate (a copy of which is attached to this letter):

Market-based inflation expectations, both short and long term, have fallen a lot over the last year.

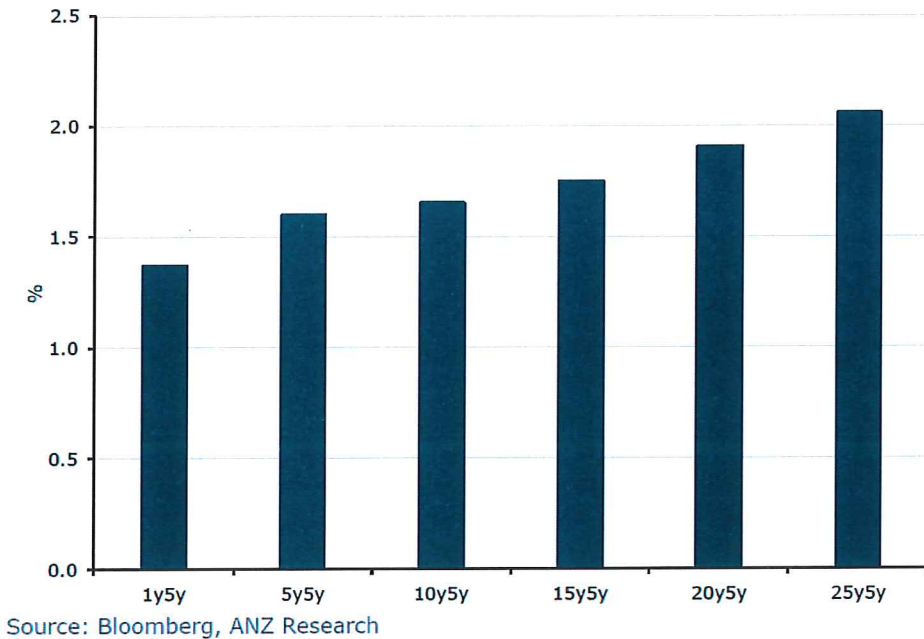
Worryingly for the RBA, the market now expects inflation to average around 1.5% over the next 10 years and to stay below 2% for around 25 years.

Most measures of inflation expectations have been moving in the same direction – down. Less than a year ago, the market in the short term expected inflation to average less than 2%, but it still expected inflation to rise and average 2% within 10 years. Now the market does not see the RBA making much progress on getting inflation to pick up.

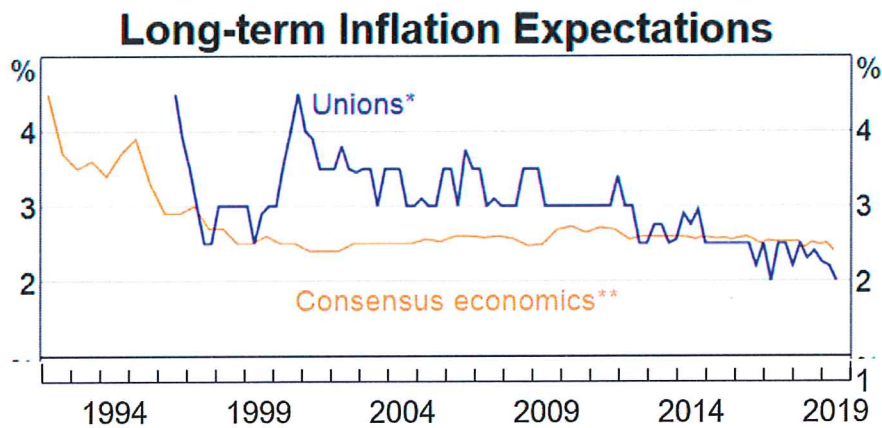
This suggests that the market is seeing this new low-interest-rate environment continuing for a long time, in part due to structurally lower inflation outcomes. What's more, current implied forward rates indicate that the market is not expecting inflation to return to the target band for another 25 years (Figure 3).



Figure 3. Implied forward-start swap rates indicate how long inflation is expected to undershoot the target band



Survey estimates of long-run inflation expectations are also at historical lows, as illustrated in the figure below.



* Average over the next five to ten years
 ** Average over six to ten years in the future
 *** Five-to-ten-year forward
 Sources: Australian Council of Trade Unions; Bloomberg; Consensus Economics; RBA; Workplace Research Centre; Yieldbroker

The evidence of a de-anchoring between the assumption of inflation returning to 2.5% within 3 years and actual inflation outcomes has become compelling since the 2017 inflation review. There is currently no evidence of any forecast suggesting that inflation will return to 2.5% within 3 years.

Even the RBA (whose inflation forecasts have been consistently and materially optimistic for many years now) has conceded that:

Looking ahead, inflation is still expected to pick up, but the date at which it is expected to be back at 2 per cent has been pushed out again. Over 2020, inflation is forecast to be a little under 2 per cent and over 2021 it is expected to be a little above 2 per cent.⁹

Rate of Return Impacts

As the AER is fully aware, the yield on Commonwealth government bonds used to determine the risk-free rate under the 2018 Rate of return instrument is now some 150 basis points lower than at the time of the making of the instrument and reflects the heavily suppressed market conditions that can be seen in the evidence above. The 10-year CGS yield is at never seen before lows, as illustrated in the figure below.



Source: Bloomberg.

The allowed return on equity has fallen from 6.1% at the time of the making of the Instrument to 4.5% for a determination made today. This is a “one for one” reduction in the allowed return on equity resulting directly from the falls in bond yields. It is illogical and unreasonable to think that the required return on equity for the benchmark efficient entity has declined so severely in such a short period of time. The rate of return produced by the 2018 instrument, in present market conditions, cannot reflect efficient financing costs of the benchmark efficient entity.

SA Power Networks acknowledges that the 2018 Instrument is binding. However, the sharp decline in the allowed return due solely to the decline in bond yields is a factor the AER must take into account in considering SA Power Networks regulatory proposal, including the achievement of the national electricity objective, as well as this request for a review of the approach to estimating expected inflation. It also highlights the need for expediency in a review of the inflation method in the PTRM.

The effect of the AER maintaining its current method is to provide revenue allowances below that which provide an opportunity for a regulated NSP to have an opportunity to recover at least its efficient costs.

⁹ RBA, Opening Statement to Senate Economics Committee, 9 August 2019.

Summary

The material presented in this letter is not intended to be a fulsome presentation of all the evidence relevant to the question of the appropriate method to use to derive the best estimate of expected inflation. However, SA Power Networks' position is that it should be clear to the AER that the basis upon which it decided the RBA method was the preferred method in December 2017 no longer holds. The AER and the RBA have acknowledged that the current method may not be the best approach if there are changes in long term inflation expectations.

Current market conditions are unprecedented. Interest rates and bond yields are at record lows. There is now no reasonable basis to say that inflation expectations reflect either RBA short term forecasts, or the mid-point of the RBA's target band.

Next Steps

As always SA Power Networks would be very happy to discuss this letter and the request for an inflation review with the AER. SA Power Networks is also aware that, together with Energy Networks Australia, the AER has convened an Inflation Working Group to discuss this issue. SA Power Networks supports the Inflation Working Group and intends to contribute through that process.

SA Power Networks requests that a review of the inflation methodology and the PTRM (applying the distribution consultation procedures) be commenced urgently with a view to it being completed in time to be applied in SA Power Networks distribution determination for the 2020-25 period. This would require changes to be implemented prior to April 2020 to ensure that SA Power Networks has an opportunity to recover at least its efficient costs for the 2020-25 period.

The review should consider all options available for estimating expected inflation given the extraordinary conditions faced by all stakeholders.

Should you have any further queries please do not hesitate to contact Patrick Makinson, Company Secretary, on [REDACTED] or by email [REDACTED]

Yours sincerely

[REDACTED]

Robert Stobbe
CHIEF EXECUTIVE OFFICER
GPO Box 77, ADELAIDE SA 5001

