

Jemena Limited

Submission on AER's Discussion Paper on Regulatory Treatment of Inflation

Public

29 June 2017





An appropriate citation for this paper is:

Submission on AER's Discussion Paper on
Regulatory Treatment of Inflation

Contact Person

Sandeep Kumar
Manager Regulatory Analysis & Strategy
Ph: 03 91738218
sandeep.kumar@jemena.com.au

Jemena Limited

ABN 95 052 167 405
Level 16, 567 Collins Street
Melbourne VIC 3000

Postal Address

PO Box 16182
Melbourne VIC 3000
Ph: (03) 9713 7000
Fax: (03) 9173 7516

TABLE OF CONTENTS

- 1. INTRODUCTION 4
- 2. ESTIMATION METHOD 5
 - 2.1 Objective 5
 - 2.2 Jemena recommendation 6
- 3. REGULATORY FRAMEWORK 8
 - 3.1 Objective 8
 - 3.2 Jemena recommendation 8

1. INTRODUCTION

Jemena welcomes the Australian Electricity Regulator's (AER) discussion paper on Regulatory treatment of inflation and Australian Competition and Consumer Commission (ACCC)/ AER working paper No.11 on Best estimates of expected inflation: a comparative assessment of four methods. The two papers include a review of -

- i) the different techniques for measuring market expectations of inflation that can be used in AER's post tax revenue model (PTRM); and
- ii) network businesses' concern that the current treatment of inflation may not deliver an efficient rate of return if there is a mismatch between forecast and actual inflation.

The ACCC/AER working paper compared and ranked various inflation forecasting methods and rated AER's current method as the best approach. The AER's discussion paper seeks to consult on matters relevant to whether or not any changes are required to the its current method for measuring expected inflation given the conclusions reached by ACCC/AER working paper. The AER paper also invites recommendations from stakeholders on whether any change is required to the regulatory framework and models for treatment of inflation to adjust for the mismatch between forecast and actual inflation.

Subsequent to these publications, the AER also held a public forum on 14th June 2017 to discuss these matters with the network businesses and customers. We acknowledge and appreciate AER's proactive consultation on this issue and the engagement with different stakeholders.

The Energy Networks Australia (ENA) engaged Cambridge Economic Policy Associates (CEPA) to review ACCC/AER working and discussion papers in relation to inflation forecasting methods. CEPA prefers use of breakeven method over AER's current method.¹

For simplicity we have divided our response into two sections – the first relates to measurement of expected inflation and the second relates to treatment of inflation in the current regulatory framework. Our recommendations to the AER are predicated on making changes that are sustainable over time, promote efficient regulatory outcomes and reinforce predictability and stability of the regulatory regime.

¹ CEPA, Best Estimate of Inflation Expectations: Assessment of Approaches, Page 30

2. ESTIMATION METHOD

2.1 OBJECTIVE

The National Electricity Rules (NER) 6.4.2 (b)(1) states that the contents of the post-tax revenue model must include (but are not limited to):

'a method that the AER determines is likely to result in the best estimates of expected inflation'

The Rule 74 of National Gas Rules (NGR) states that a forecast or estimate:

(a) must be arrived at on a reasonable basis; and

(b) must represent the best forecast or estimate possible in the circumstances.

The NER and NGR require use of the best estimate of expected inflation in the determination of revenue allowances. The ACCC/AER in the working paper state that²: –

'Expected inflation' in best estimates of expected inflation does not correspond to inflation outcomes but corresponds to market expectations of inflation. The objective is to determine which method is likely to result in best estimates of expected inflation, not best estimates or forecasts of actual inflation. This is a definition of, rather than a refinement to, expected inflation. The definition is necessary since forecast accuracy of inflation outcomes is not the focus of the comparative assessment.

The above statement clarifies that the regulatory framework requires use of best estimate of 'market expectations' of inflation and not outturn/actual inflation. In determining the best estimate on this basis the ACCC/AER undertake an evaluation of four different methods (RBA inflation forecasts and target band, bond break even method, zero coupon inflation swap method and surveys) against a set of criteria it considers are desirable in regulatory context, these criteria include relative congruence, robustness, transparency, replicability and stability. The ACCC/AER paper note that –

all else equal, a method that produces best estimates is one where the estimator is robust and more closely corresponds to market expectations of inflation over a ten year forecast horizon. And for the purposes of economic regulation, a method that is likely to result in best estimates is one that is the most transparent, replicable and simple to employ.

The ACCC/AER and AER papers rank the market based measures, bond break even and zero coupon inflation swap methods, lower than RBA inflation forecasts and target band (AER's current approach) because they find that the market-based estimates suffer from potential biases and risk premia issues. The papers state that it is difficult to measure the net effect of these biases and risk premia, and even if one could measure these using historical data, it is difficult to ascertain if the historical magnitudes of the biases and risk premia is prevalent in current bond prices. They conclude that for market based methods to produce unambiguously better estimates of expected inflation, investors must be risk neutral and the assumptions of efficient markets, such a highly liquid trade, insignificant transaction costs, perfect information and ease of arbitrage are required.

CEPA in its report for ENA also acknowledges the existence of biases in the market based measures but notes that -³

² ACCC/AER Working Paper Series, Best estimates of expected inflation: a comparative assessment of four methods para 9c

³ CEPA, Best Estimate of Inflation Expectations: Assessment of Approaches, Page 30

Ofgem have acknowledged that the presence of distortions in its breakeven inflation analysis, however it has assumed away any impact on the breakeven inflation rate.

Contrary to ACCC/AER's ranking, CEPA rates the bond breakeven method as the most preferred approach for measuring expected inflation and demonstrate it being used by a number of other regulators.

Despite having an alternative preference to the ACCC/AER, CEPA identify that a glide path method might be an improvement over the current approach.⁴ The current AER approach involves a direct movement from RBA's short term inflation forecasts to RBA's target range mid-point. A glide path method would involve a gradual movement from RBA's short term inflation forecasts to the mid-point of its target range. It recognises slower reversion to mid-point inflation target and is used by Commerce Commission of New Zealand.

2.2 JEMENA RECOMMENDATION

If there is a change warranted from AER's current approach, we consider it should be non-controversial and must be 'principle driven' and not 'estimate driven'. In other words, the change should be undertaken only if it provides an improvement in the current estimation method and is unlikely to open up frequent future consultations just because the estimate has moved adversely for one stakeholder or the other.

The ACCC/AER share an important concern in their paper noting that -

If the expected value of outturn inflation and the 10 year expected inflation estimate are equivalent (i.e. $E(CPI) = Exp Inf_{10\text{ year est}}$) then the allowed equity return and that received are equivalent in an NPV sense. However, actual expected equity returns increase if the 10 year inflation expectations estimate is biased downward. This leads to incentives for the networks to ensure that the 10 year inflation expectation estimate is as low as possible.

The choice of estimation method is going to impact the revenue allowances in the next regulatory period and it is not evident whether the market based measures would produce lower estimates than the estimates from AER's current method. The glide path method is similar to AER's current approach and is not impacted by incentive to target a lower inflation estimate.

Among the two market based measures ACCC/AER considered, the AER favours zero coupon inflation swaps method while CEPA prefers the bond break even method. The inability to measure biases that impact the two market based methods, and the theoretical arguments and justifications for one method over the other, would require more time to resolve in light of the above mentioned ACCC/AER's concern.

We consider there are improvements that can be made to the existing method and recommend the AER consider adopting a glide path method; this would require a linearly interpolated path between the RBA short term CPI forecast for two years and mid-point of RBA's inflation target of 2.5%. It reflects the current global experience that inflation rates take time to revert to mid-point inflation target. This refinement to AER's current approach is consistent with ACCC/AER's view that –

If 10 year market expectations of inflation are anchored within the RBA inflation target band and are stable over time, then the AER's estimates may be congruent with market expectations of inflation. The stability of the AER's estimates may also imply that such estimates are robust to phenomena that have little influence on long term market expectations of inflation.

⁴ CEPA, Best Estimate of Inflation Expectations: Assessment of Approaches, Page 31

We believe that applying a glide path within AER's approach would make it more reflective of market expectations of inflation.

3. REGULATORY FRAMEWORK

3.1 OBJECTIVE

We understand from AER's discussion paper that the intent of the regulatory framework is to keep the real prices stable for consumers while allowing network businesses to receive an efficient nominal rate of return on their investment. The paper states that -

During the annual pricing decisions and reference tariff variations the X factors are combined with actual inflation to create the allowed revenue for the coming year. In this way the prices faced by consumers and the revenues received by the networks change by actual inflation, but are constant in real terms (while ignoring other non-inflation factors).

and

During the PTRM process a nominal rate of return for equity is calculated and is then adjusted using inflation expectations (similar to debt). This incorporates an expected measure of inflation rather than actual inflation. The return is then transformed back into a nominal value during the annual revenue pricing process using outturn inflation.

The AER also notes that the allowed and actually received equity return are equivalent in an NPV sense if the expected value of outturn inflation and the 10 year expected inflation estimate are equivalent. However, if there is a mismatch between the expected and outturn inflation, the investors would be overcompensated or undercompensated. That is, the consumers would be paying more or less than they should for the efficient provision of network services if there is a mismatch.

A key question that needs to be addressed is whether the framework currently allows for removing this mismatch caused due to forecast error and whether a change to remove this forecast error is desirable.

3.2 JEMENA RECOMMENDATION

We prefer that if there is a change required to regulatory models and/or regulatory framework to remove the forecast error, then this should be undertaken in a way that is neutral to all stakeholders. Therefore any change should initiate from the next regulatory period and not allow for clawback for loss to network businesses in the current regulatory period.

The change to regulatory models should be simple and easy to understand for consumers and other stakeholders and should not create volatility in prices by requiring annual adjustments to revenue allowances.⁵ In our view there are three potential options that are available to AER that and do not require annual adjustments –

⁵ AER's Discussion Paper on Regulatory Treatment of Inflation, Page 38 – 'To address the stated mismatch, APTPL proposed to annually recalculate the relevant X factors to incorporate actual (outturn) inflation – similar to the annual return on debt update'

Table 3–1: Options for treatment of forecast error

Description	Do nothing	Post period adjustment to revenue	Post period adjustment to RAB
Rationale	The forecast error is not expected to be material.	No matter how good an estimate is there will always be a forecast error and this can be fixed through post period revenue adjustment.	The forecast error can be significant and the framework may be changed to remove this error through post period roll forward of RAB.
Risk to consumers and network businesses	The forecast error does not expose consumers and network businesses significantly to warrant an adjustment or true up.	The post period adjustment delivers an efficient rate of return and is neutral to all stakeholders.	The post period adjustment delivers an efficient rate of return and is neutral to all stakeholders.
Adjustment required	Continue with current PTRM and RFM without any adjustment for forecast error.	Allow for a revenue adjustment for previous period forecast error in the PTRM revenue adjustment section. This will help spread the overall revenue adjustment over 5 years. No change required in the RFM.	Adjust the RAB roll forward in the RFM for the forecast error. No change required in the PTRM.

The AER has the option of addressing the forecast error or leave it unaddressed and focus on just improving the estimating method to reduce the forecast error. However, to get to a ‘do nothing’ decision, AER needs to be sure that forecast error would be minimised by adopting suitable forecasting method and the impact of consumers and network businesses would only be negligible.

Alternately, if the AER wants to protect both consumers and businesses from the forecast error risk then it could look to apply a true-up to remove this risk. CEPA note in their report that⁶ –

Ofgem apply a true-up adjustment to protect both consumers and network companies against difference between forecast RPI growth and actual RPI growth.

A number of experts have indicated that the forecast error exposes network businesses to bankruptcy risk on the debt portion of financing by potentially compromising the ability of the network businesses to meet the estimated costs of nominal interest payments.⁷ It also exposes consumers to inflation risk that may overcompensate the network business in periods of high inflation rates.

We recommend AER take this consultation as an opportunity to reduce/eliminate inflation forecast risk from the regulatory framework – make changes that are sustainable and don’t require frequent consultation based on estimates reported by different methodologies. A true-up mechanism would help reach such an outcome.

Our preferred true-up mechanism is the **post period adjustment to revenue** as discussed in Table 3-1 above. It is independent of current period outturn inflation and is neutral to all stakeholders. It would be first implemented in the 2026-30 period PTRM (assuming Victorian regulatory cycle) to adjust for forecast error in 2021-25 period.

⁶ CEPA, Best Estimate of Inflation Expectations: Assessment of Approaches, Page 32

⁷ CEG, Best Estimate of Expected Inflation, Report for Ausnet Transmission; M.Lally, Review of further WACC Issues, Report for Commerce Commission of New Zealand

3 — REGULATORY FRAMEWORK

The impact of forecast error on 2021-25 revenue allowance can be spread over 5 years as a revenue adjustment in the 2026-30 PTRM. We also recommend that the AER assess whether the adjustment for only debt component of financing is sufficient to minimise the risk.

We recommend further consultation on this true-up mechanism as well as on using glide path method for measuring forecast inflation.