



APA VTS response to AER Information request

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| <i>AER Reference</i> | IR003 |
| <i>Topic</i> | Inflation |
| <i>Date of response</i> | 3 March 2017 |
| <i>Public/Confidential</i> | Public |

3.1 Applying annually updated inflation

Does APA intend to apply the annually updated inflation series (row 431 of tab 'PTRM input' in the workbook 'APA VTS – B2 – Post Tax Revenue Model – 20170103 – Public.xlsm') to index a number of other components (and potentially all components) within the PTRM?

If so, please supply an amended version of the PTRM that implements APA's proposed treatment of inflation. Please also provide supporting information that aligns with the amended PTRM, including (but not limited to):

- section 4.6.2 of the access arrangement
- section 10.4.2 of the access arrangement information
- section 6.3.5, 6.3.6 and 10.5.3 of the access arrangement submission.

APA VTS's goal is to ensure that depreciation recovered through revenue in the RFM, and depreciation recovered via reference tariffs determined from the total revenue of the PTRM, are aligned. Their alignment, which can be achieved using an annually updated inflation series in the VTS PTRM, should promote achievement of the NGO and the revenue and pricing principles by ensuring that APA will neither under recover, nor over recover, its depreciation allowance due to a variation in inflation rate compared to forecast.

After discussion with the AER, we agree there may be benefit in extending annual updating of inflation to forecast opex as this includes the forecast of inflation as an input.



The same argument does not apply to the rate of return, which does not have the forecast of inflation as an input.

APA's proposal does not extend to indexing the rate of return on equity. Nor does APA's proposal extend to indexing the rate of return on debt.

The AER's rate of return guideline does not use forecast inflation as an input, and further does not include an annual updating of inflation.

An amended version of the APA PTRM (APA VTS-B2-Post Tax Revenue Model-20170103-Public-Updated for inflation links 20170221.xlsm) is provided with this response to AER information request IR003.

This model incorporates the following changes made to the VTS PTRM which was lodged with the VTS Access Arrangement revision proposal:

- "Assets" tab cells G6 - P6 now link to "PTRM input" tab cells G431 - P431;
- "Analysis" tab cells G6 - P6 now link to "PTRM input" tab cells G431 - P431;
- "WACC" tab cells H6 - P6 now link to cell G6 on "WACC" tab;
- "X factors" tab cells G10 - P10 now link to "PTRM input" tab cells G431 - P431; and
- "X factors" tab cells G44 to P44 now link to "PTRM input" tab cells G431 - P431.

3.2 Applying annually updated inflation

If APA intends to refer to the annually updated inflation series when calculating some building block components, but to refer to constant initial expected inflation (cell G424 of tab 'PTRM input') when calculating other building block components:

- What is your rationale for combining two inflation series in this way? How would this approach promote the ARORO and NGO?

If APA intends to refer to the annually updated inflation series when calculating all building block components (that is, throughout the PTRM):

- What is your rationale for combining this annually updated inflation series with the (constant) nominal return on equity? What is your rationale for combining this annually updated inflation series with the (annually updated) nominal return on debt, noting that the inflation update will ex post adjust the inflation outcome paired with the previous year's debt update? How would this approach promote the ARORO and NGO?



As APA has noted in its submission supporting the VTS Access Arrangement revisions proposal, the annual updating of the inflation series in the PTRM is intended to bring into alignment depreciation calculated in the PTRM, and the recovery of capital effected by inclusion of that depreciation in total revenue and reference tariff calculation, with the depreciation recovered through revenue assumed in the RFM.

If the depreciation in the RFM and the PTRM are not aligned, there will be either an over-recovery or under-recovery of the service provider's investment in the VTS. Neither over-recovery, nor under-recovery, is conducive to future efficient investment in the pipeline system, or to the efficient operation and use of the system. Neither over-recovery nor under-recovery of capital is in the long term interests of consumers of natural gas. Relative to the current practice of adopting an inflation forecast in the PTRM, and actual inflation in the RFM, APA's proposal promotes the NGO.

APA has proposed to align depreciation in the RFM and the PTRM by using, in the PTRM, for the indexation of the capital base and the calculation of depreciation, a series of, effectively, actual inflation rates, which will vary over time.

The NGR require that the nominal rates of return on equity and debt used to estimate the allowed rate of return be estimated in such ways that they contribute to the achievement of the ARORO. This approach (which does not consider inflation as an input) is adopted by the AER in its Rate of Return Guideline, which APA considers promotes the ARORO, and which APA has itself adopted.

3.3(a) Lags in inflation measures

Does APA propose to replace 2018 forecast inflation with 2018 actual inflation (an unlagged actual inflation series in the PTRM), or does APA propose to replace 2019 forecast inflation with 2018 actual inflation (a one year lagged actual inflation series in the PTRM)?

APA VTS does not propose to replace the 2018 forecast of inflation used in the PTRM with 2018 actual inflation.

APA VTS has proposed that, prior to a final decision on the VTS Access Arrangement revision proposal, the forecast of inflation be updated to be the actual inflation measured as the year-on-year change in the CPI to the June quarter 2017.

When the reference tariff is to be varied, in 2018, for effect from 1 January 2019:

- (a) the inflation for 2018 would not be varied; and



- (b) the inflation for 2019 (and for the future years of the access arrangement period) would be the actual inflation measured as the year-on-year change in the CPI to the June quarter 2018.

APA proposes, in effect, to use a one year lagged actual inflation series in the PTRM.

3.3(b) Lags in inflation measures

The AER's template RFM applies a 'partially lagged' approach to adjust for actual inflation outcomes—that is, it applies one year lagged actual inflation to some components within the RFM, and unlagged actual inflation to other components. APA's VTS access arrangement proposal includes a proposed RFM for the 2013–17 access arrangement period that uses forecast inflation (not actual inflation outcomes). Please clarify whether APA does not intend to use forecast inflation in the RFM for the 2018–22 period, when this is submitted at the next access arrangement review.

APA's use of forecast inflation (and not actual inflation outcomes) in the RFM for 2013-2017 has the purpose of aligning depreciation recovered through revenue in the RFM with the recovery of depreciation via the reference tariffs set for the period 2013-2017. It is a transitional measure.

APA's proposed updating of inflation in the PTRM during the period 2018-22 is, then, intended to ensure that recovery of depreciation via the reference tariffs during that period will be approximately equal to the depreciation recovered through revenue in a future RFM for the 2018-22 period which uses actual inflation.

APA does not intend to use forecast inflation in a future RFM for the 2018–22 period when that model is submitted at the next access arrangement review. The use of forecast inflation in the 2013-17 period is a transitional measure. APA expects that the depreciation recovered through revenue in the RFM (calculated using actual inflation) and the capital base at the commencement of the next access arrangement period (1 January 2023) will be approximately equal, with any difference largely account for by differences between forecast capital expenditure (in the PTRM) and actual capital expenditure (in the RFM).

3.3(c) Lags in inflation measures

What inflation approach does APA intend to apply in the RFM covering the 2018–22 access arrangement period? What components will use lagged actual inflation and what components will use unlagged actual inflation? How will this reconcile with the inflation approach adopted in the PTRM and annual tariff variations across the 2018–



22 period? Please provide a version of the RFM that implements this approach.

When re-determining VTS reference tariffs for the access arrangement period expected to commence on 1 January 2023, APA VTS intends to use, in the RFM for the period 2018-22, the inflation approach currently used by the AER when applying the RFM.

APA VTS's intention is to achieve, in the future, an alignment of the depreciation and asset values determined in the RFM using actual inflation, with those in the PTRM, by annually updating inflation in the PTRM.

3.4 Implications for return on capital

If APA intends for the return of capital building block to be matched in the PTRM and RFM, how does this better achieve the ARORO?

Is a total return/revenues set in nominal terms preferable to a return set in real terms?
If APA considers total revenues set in nominal terms preferable to real terms, why does APA consider this to be preferable?

APA is of the view that the requirement of rule 87(4), that the allowed rate of return be determined on a nominal vanilla basis, drives the setting of total revenue in nominal terms.

3.5 Tariff variation mechanism

Under the CPI-X framework, inflation outcomes are typically not used to calculate tariffs in the first year of an access arrangement period, but rather the single, fixed expected inflation rate from the PTRM is used to calculate first year tariffs. In subsequent years of the access arrangement period, one year lagged actual inflation is used to update tariffs. The net effect is that expected inflation is applied to revenues in year 1, and one year lagged inflation is applied in years 2, 3, 4 and 5 (given a five year access arrangement period).

Under APA's proposed tariff variation mechanism the single, fixed expected inflation rate from the PTRM is used to calculate first year tariffs. However, when setting subsequent year's revenue, the prior year's revenue is valued using actual inflation for that year. The change in revenue value arising from the difference between forecast and actual inflation is then reflected in tariffs for the subsequent year. There will be an equivalent adjustment in the following access arrangement period to reflect the difference between forecast and actual inflation in year 5 of the current period. The net effect is that actual inflation is applied to index revenue in all years of the access arrangement period.

3.5(a) Have we correctly described the operation of APA's proposed tariff variation



mechanism?

3.5(b) If not, please describe in detail the correct operation of the mechanism.

3.5(c) Does this approach promote consistency across PTRM, annual tariff updates and RFM?

The AER has correctly described the operation of the proposed tariff variation mechanism.

APA's approach is intended to achieve reasonable consistency across the PTRM, annual tariff updates and the RFM, although specific values (for example the capital base in a given year as determined in the PTRM and in the RFM) may not be exactly the same.