Attachment PWCR01.5

PowerWater

Return on Debt Transition

Response to the AER’s Draft Decision

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Overview

In our Initial Regulatory Proposal, we proposed using the trailing average approach to set the return on debt allowance for the 2019-24 regulatory control period without incorporating any transition mechanism.[1]

The Australian Energy Regulator's (AER's) Draft Decision rejected this and instead adopted a 10 year transition from an on-the-day rate to a trailing average – starting in the 2019-20 regulatory year – because:

- our current allowed rate of return is not set via an annually updating return on debt, and
- an immediate transition to the trailing average is unlikely to be revenue neutral.

The Draft Decision did not provide further detail; however, these points were further explained in the explanatory statement to the AER's draft 2018 Rate of Return Guideline (Draft 2018 Guideline).[2] We discuss this further in Chapter 1.

We continue to maintain our Initial Regulatory Proposal position that a transition is not appropriate for us because:

- our tariffs over the current 2014-19 regulatory control period were *not* set using an on-the-day approach – and so that approach should not be used as the starting point for determining what, if any, return on debt transition should apply to us over the 2019-24 regulatory control period
- the rate of return (including the return on debt) adopted in the Utilities Commission's (UC) Network Price Determination was replaced (or modified) by a Ministerial Direction[3] – which means that the UC Determination has no role to play in determining what, if any, return on debt transition should apply to us over the 2019-24 regulatory control period
- the Ministerial Direction effectively set our return on debt allowance at a level that meant that our average return on debt allowance over the 2009-19 period was much more consistent with a trailing average

[1] See, for instance, Power and Water, *Return on Debt Transition*, Attachment 1.10 to the IRP, 31 January 2018.

[2] AER, *Rate of return guidelines, Explanatory statement*, 10 July 2018, pp. 334–335.

[3] See, PWC01.16 - NTG - Ministerial Direction - 2014-19 Revenues - 31 Jan 18 - PUBLIC. The revenue from this Ministerial Direction was codified in the NT NER.

approach than an on-the-day approach – which means that adopting a trailing average over the 2019-24 regulatory control period (without transition) is more revenue neutral than adopting a transition from an assumed on-the-day rate approach, and

- our proposed approach does not give us a windfall gain (which we explain further in **Chapter 3**).

Given our unique circumstances, there is no basis to apply a transition from an on-the-day rate – which does not reflect our effective return on debt allowance – to a trailing average approach – which does. We discuss this further in **Chapter 2**.

We also note that:

- this is the first time that we will be subject to regulation by the AER under the NT National Electricity Rules (NT NER) – adopting the trailing average for us will not set a precedent that will affect other service providers that have been regulated by the AER for multiple regulatory control periods, and
- ultimately, the AER must develop a rate of return guideline (Final 2018 Guideline) that applies automatically to set the rate of return allowances for all service providers that it regulates, including us – the guideline *can* be applied to give effect to our proposal without undermining this requirement (which we explain in **Chapter 4**).

Finally, we have discussed our proposed approach with AER staff and board members since the Draft Decision and the explanatory statement to the Draft 2018 Guideline were published – we appreciated these opportunities. We look forward to discussing our proposal further, if helpful to the AER's making its Final Decision for our 2019-24 regulatory control period or the Final 2018 Guideline.

1. Summary of AER's draft position

The AER has adopted a transition to a trailing average return on debt for all service providers that it regulates. Although the AER's rationale used to justify doing so has evolved over the last few years, the core concern appears to us to be that networks will receive a windfall gain unless there is a revenue difference between the approaches (or 'regimes') used to set the return on debt allowances.

The AER's concern that service providers should not receive a windfall gain makes sense to us.

Given this history, it is not surprising that the AER's Draft Decision adopted the same transition for us as it has applied to other service providers. In our case, the AER justified doing so because in its view:

- our current allowed rate of return is not set via an annually updating return on debt, and
- an immediate transition to the trailing average is unlikely to be revenue neutral.

The explanatory statement to the Draft 2018 Guideline also raised the concern that our proposed approach would be backward looking and incorporate past estimates of the cost of debt – which could introduce bias into outcomes and most likely would lead to windfall gains or losses (albeit without actually testing whether it would or not).

1.1 Why transitions have been adopted in the past

The AER has determined that a 10-year trailing average approach to estimate the return on debt reflects an efficient approach and one that can contribute to the allowed rate of return objective (ARORO).

In the 2013 Rate of Return Guideline, the AER adopted a 10-year transition between the previous on-the-day approach and the 10-year trailing average. The Draft Decision proposes to adopt the same approach for us with the first year of the transition commencing in the 2019-20 regulatory year.

The AER's explanatory statement to the Draft 2018 Guideline notes that the trailing average portfolio approach was implemented with a transition period of 10 regulatory years "*to allow a progressive change between two different* *approaches of setting the allowed return on debt – a transition from an 'on-the-day' approach to a trailing average approach*".[4]

1.2 What a transition is intended to do

Our reading of the explanatory statement is that the AER considers that in changing from an on-the-day approach to the trailing average approach the following primary objectives must be met to meet the ARORO and the National Electricity Objective (NEO):

- the switch between regimes (or approaches) should be revenue neutral, therefore contributing to the achievement of the ARORO
- the change in approach should not result in an increase or decrease in the value of the benchmark efficient entity, and
- there should be no windfall gains or losses arising from the change in approach.

We agree that these objectives are important – which all essentially boil down to the final '**No Windfall Gains Test**' objective.

Crucially, the objectives appear to have been applied by the AER on the assumption that the relevant service provider *has been* subject to an on-the-day approach in the preceding regulatory control period and therefore should transition from that approach.

As we explain in Chapter 2, we do not consider that this assumption can be – or should be – applied to us. And, as we explain in Chapter 3, we consider that our proposal passes the 'No Windfall Gains Test'.

[4] AER, *Rate of return guidelines, Explanatory statement*, 10 July 2018, p. 330.

2. Why a transition is not needed for us

Logically, a starting point for applying a transition would be the method used to set the return on debt allowance in the immediately preceding regulatory control period. *If* that method was the on-the-day approach, then it makes sense to apply a transition to a trailing average method.

However, that 'if' does not apply to us for the reasons explained below. We provided some further detail in Attachment 1.10 to our Initial Regulatory Proposal, which we do not repeat here.

2.1 Current period tariffs were adjusted to reflect a lower rate of return

In the current 2014-19 regulatory control period, our effective return on debt allowance was not calculated by reference to an on-the-day approach:

- in **April 2014** the UC (NT) made a Network Price Determination under the Network Access Code (NT) and in it used the on-the-day approach to set the return on debt allowance
- however, on **19 June 2014** our Shareholding Minister issued a Ministerial Direction – under section 8(5)(b) of the *Government Owned Corporations Act* (NT) – directing us to apply an alternative (and lower) revenue requirement to that set out in the UC's Network Price Determination.

The Ministerial Direction stated that "*This lower revenue amount reflects a reduction in the return that the Territory expects to earn from its investment in the Power and Water Corporation*". At the time – as now – the NT Government is the sole debt and equity holder of Power and Water Corporation. The revenue reduction, therefore, reflected the NT Government's intent to receive a lower return across its debt and equity investment in us than it would otherwise have received *if* the UC Network Price Determination applied.

The Ministerial Direction did not, however, re-calculate the rate of return nor specify the method used to determine the return on debt (or equity). Rather the direction was made by reference to the total revenue allowance only.

Importantly, we are applying the lower alternative revenue requirement to set tariffs over the 2014-19 regulatory control period and our customers are receiving the benefit of that.

2.2 The NT NER explicitly references the Ministerial Direction

The NT NER recognised the status of the Ministerial Direction as the relevant starting point for current period allowances, including the return on debt.

Specifically, clauses 6.4.3(a)(5A) and (b)(5A) of the NT NER require that any revenue increments or decrements arising in the 2014-19 regulatory control period are calculated by reference to the modification made in the Ministerial Direction before these are carried over to the 2019-24 regulatory control period.

This is not surprising given that the NT Government was responsible for *both* that Direction – as made by the Shareholding Minister – and implementing the NT NER in the NT.

The result is that in the 2014-19 regulatory control period our return on debt allowance reflects the outcome of the reduced return mandated by the Ministerial Direction, not any application of an on-the-day approach. This is effectively codified in the NT NER. The critical assumption, therefore, underpinning the Draft Decision's transition to the trailing average approach – that the 2014-19 return on debt allowance was set using an on-the-day approach – does not apply to us.

To us, this means that we should either start with the Ministerial Direction when determining whether a return on debt transition is required in the 2019-24 regulatory control period or we should start afresh. We elaborate on these options below.

2.3 Either, the Ministerial Direction is the appropriate reference point for the 2014-19 return on debt allowance

In these unique circumstances, the starting point for considering whether we should be subject to a transition is the Ministerial Direction. As noted above, the method used to determine our return on debt under the Ministerial Direction is not identified.

However, given that the trailing average approach takes a 10 year historical average, it is logical to look over the prior two regulatory control periods (10 years) to determine our average return on debt regulatory allowance. This provides a logical starting point for the 2019-24 regulatory control period.

Our analysis shows that, over the past two regulatory control periods, our average return on debt was **6.36%**.[5] This substantially reflects the 10 year trailing average of **6.37%** included in our Initial Regulatory Proposal, both calculated using fair yield curves for bonds with credit ratings in the BBB band.

[5] See, for instance, Power and Water, *Return on Debt Transition*, Attachment 1.10 to the IRP, 31 January 2018.

Our revised estimate is slightly lower than this – at **6.00%** – with the reduction due to:

- adjusting the trailing average to comply with the Draft 2018 Guideline by averaging bond yields from BBB band *and* A band curves (rather than just those from BBB curves) – which reduces the trailing average by about 25 basis points, meaning that an equivalent BBB trailing average is about 6.25% (compared to the 6.36% noted above), and
- updating the trailing average to incorporate more recent market yields – which are lower.

This analysis shows that our effective average return on debt allowance over the past two regulatory control periods already largely reflects a trailing average allowance.

Applying these circumstances to the AER's objectives noted in section 1.2 above means that:

- implementing a trailing average approach in the 2019-24 regulatory control period (with no transition) will be revenue neutral to us because it will reflect a continuation of our existing effective return on debt allowance
- therefore, there will be no change in the value of the benchmark efficient entity, and
- there will also be no windfall gain or loss to us or our customers if the trailing average is applied because the current average return on debt allowance is simply being continued and aligns with our efficient cost of debt – we explain this further in section 3 below.

2.4 Or, there is no relevant reference point as we are starting afresh under the NT NER from the 2019-20 regulatory year onwards

That is, another way of looking at our unique circumstances is that there is no return on debt reference point for the current regulatory control period, either because no 'method' was specified in the Ministerial Direction or because this is the first time that we will be regulated under the NT NER and by the AER.

Under this interpretation, there is no change in regime to be mindful of – and so, if the end goal is to get to a trailing average return on debt, then there is no need to transition to it. There is no existing regime to transition from.

Our return on debt is being estimating for the first time by the AER under the NT NER. Taking this approach, the relevant question is how should the return on debt be estimated such that it reflects the efficient financing costs of the benchmark efficient entity?

The AER has determined that a 10-year trailing average approach is efficient and should be used to estimate the return on debt for network service providers. That approach should be applied 'afresh' to us for our first regulatory control period under the NT NER, being 2019-24.

Alternatively, if a transition is needed because the new regime – being the trailing average – is different from the current regime, then there is no basis to assume that the latter was the on-the-day approach. At best, the current regime is indeterminate. This reinforces why it is appropriate to look at the return on debt 'afresh' for the 2019-24 regulatory control period.

2.5 What this all means – our proposal *is* consistent with the rationale underpinning the transition

Given the above, it is not necessary or logical to apply an approach to us that transitions from an on-the-day approach to a trailing average approach. The relevant 'regime' applying to the current 2014-19 regulatory control period is the UC Network Price Determination *as modified by the Ministerial Direction*. The original UC Network Price Determination is not the relevant starting point anymore.

The modifications made mean that we do not start with an on-the-day approach and are why we proposed initially – and maintain now – that the trailing average approach (without transition) should be applied to us.

Recognising this reality *would be* consistent with the objectives that underpin the AER's rationale for adopting transitions for other service providers (as summarised in section 1.2 and explored in section 2.3). As such, it would not create a precedent that undermines the transitions adopted for those service providers because their return on debt allowances in periods prior to their transitions *were* set using the on-the-day approach (unlike us).

Moreover – as explained in Chapter 3 – we will not receive a windfall gain if no transition is applied. We will, however, make a windfall loss if the AER's proposed transition is applied.

3. Why we will not receive a windfall gain

To us, the AER is effectively applying a 'No Windfall Gains Test' to underpin its return on debt transition – we agree that a service provider should not receive a windfall gain (or loss) when transitioning from one approach to setting the return on debt allowance to another.

Given our circumstances, our proposal passes this test. We explained why in some detail in Attachment 1.10 to our Initial Regulatory Proposal. However, to ensure that these are clear, we capture their essence here in response to the Draft Decision.

3.1 The on-the-day approach to setting the return on debt allowance gives a roller coaster revenue path (see Figure 3-1)

This volatility is not something that benefits either customers or service providers and was a key reason why there was almost unanimous support across both groups to amend the National Electricity Rules to allow for a trailing average approach and for the AER to adopt it.

3.2 The 10 year trailing average approach gives much smoother prices, which avoids shocks for customers

This approach fits conventional debt management practices far better than the on-the-day approach, as most service providers stagger their debt raising over time. There is just far too much risk to refinancing all debt at the start of every five year regulatory control period – which is the practice assumed within the on-the-day approach.

This means that a trailing average is better for *both* customers and service providers. It is more efficient all round and fits the AER's implicit conclusion – reflected in its decision to move every service provider it regulates to a trailing average – that it better promotes the NEO.

3.3 Even under the on-the-day approach many service providers chose to continue with conventional debt management practices

This made sense. Rather than adopting a debt management approach that sought to minimise interest rate exposure by refinancing (or using hedges to mimic such refinancing) at the start of every regulatory control period, many service providers continued to stagger debt raising to avoid the significant swings in financing costs that could result.

Conventional debt management practices are usually dominated by long term fixed interest rate bonds in a way that closely aligns to a trailing average – which is why a 10 year trailing average was chosen by the AER.

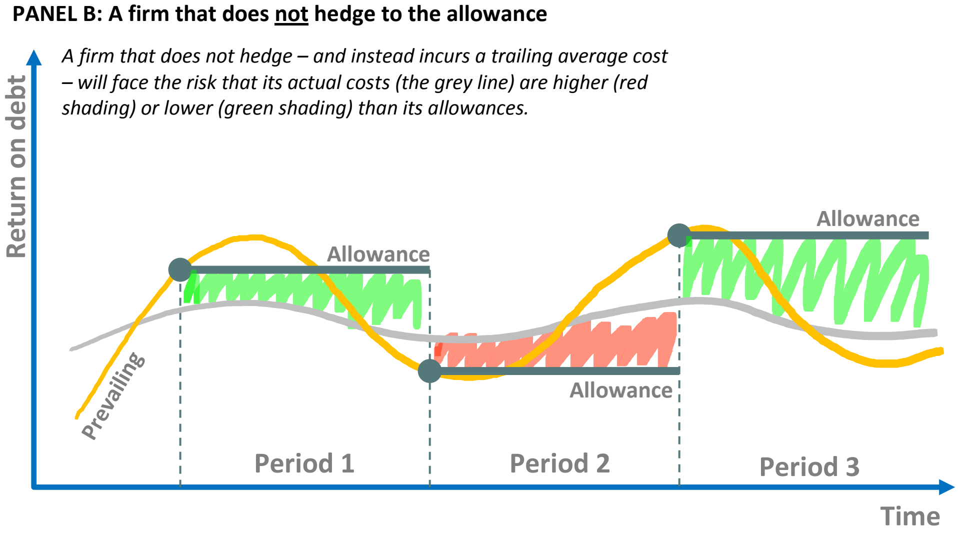
Service providers that had not changed their debt management by hedging to the on-the-day return on debt allowance, had probably done so for several reasons, including because:

- the market for hedges was not deep enough – which was a concern raised by larger service providers, and
- there is a 'friction' when moving away from conventional debt management practices – where some service providers may have been reluctant to move from a conventional practice to an unconventional one that is unfamiliar to them, requires additional effort to apply, requires new or different skills and expertise required, or otherwise creates new risks that they may not understand.

In essence, these service providers judged that the cost from retaining a conventional debt management practice – one that is unlikely to align the cost of debt with an on-the-day regulatory allowance – does not outweigh the friction (or transition costs) created by moving to an unconventional debt management practice. There is some logic to this.

A major factor in this judgment is the conclusion that over time the cost of debt that they incur through their long-term bonds is similar to the revenue from an on-the-day return on debt allowance, *over the long term*. That is, the unders and overs set out in Figure 3-1 should average out over that long term.

Figure 3-1 – Stylised example – on-the-day approach to setting the return on debt allowance [Reproduction of Panel B in Figure 2.1 of Attachment 1.10]



PANEL B: A firm that does not hedge to the allowance

A firm that does not hedge – and instead incurs a trailing average cost – will face the risk that its actual costs (the grey line) are higher (red shading) or lower (green shading) than its allowances.

Service providers that operate under a return on debt allowance set using an on-the-day approach, but do not hedge to it – instead adopting traditional debt management practices – will experience the 'unders' (shown in red) **but would have had the benefit of the 'overs' (in green) in the previous period to help fund those 'unders'**.

3.4 That same logic applies to us

If we had to transition the return on debt allowance from an on-the-day approach to a trailing average approach:

- our allowance would not cover our efficient cost of debt as we use traditional debt management practices consistent with a 10 year trailing average approach, and
- we would have had no corresponding 'over' in the 2014-19 regulatory control period to help fund the shortfall (the green in Figure 3-1).

In that case, **we would be making a windfall loss**.

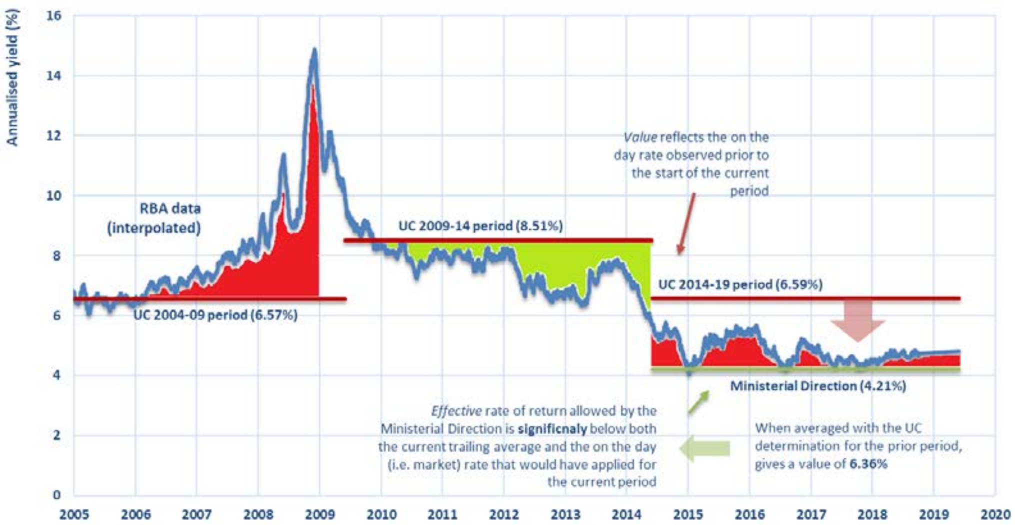
However, if the return on debt allowance for the 2019-24 regulatory control period was set using a 10 year trailing average (with no transition), then our future revenue would be consistent with the efficient costs of implementing our actual debt management practices. The allowed return on debt for the 2019-20 regulatory year would be consistent – or at least not inconsistent – with the return on debt allowance for the 2014-19 regulatory control period.

With the return on debt allowance set this way (i.e. without a transition), we would not benefit from any windfall gain. Nor would we be impacted by a change in value of the benchmark efficient entity.

The AER is rightly concerned about windfall gains where a service provider has 'banked' the 'overs' from the return on debt allowance received in one regulatory control period, but had no need to use it to cover the unders in the next regulatory control period if it had moved to the trailing average, with immediate effect. This is not the case for us.

This is shown in Figure 3-2, which applies the logic set out in Figure 3-1 to our actual circumstances. The red shading in the 2004-09 and 2014-19 periods reflect periods of 'unders'. The green shading in the 2009-14 period reflects a period of 'overs'. The net result is that we are coming off of a period of under recovery – which illustrates why we cannot make a windfall gain if a trailing average is used to set the return on debt allowance for the 2019-24 regulatory control period (without transition).

Figure 3-2 – Prevailing versus trailing average return on debt [Updated version of Figure 3.1 of Attachment 1.10]



Source: Reserve Bank of Australia (RBA) for prevailing return on debt (in blue). UC and the Ministerial Direction for allowed rates of return (in red and green lines). PWC analysis.

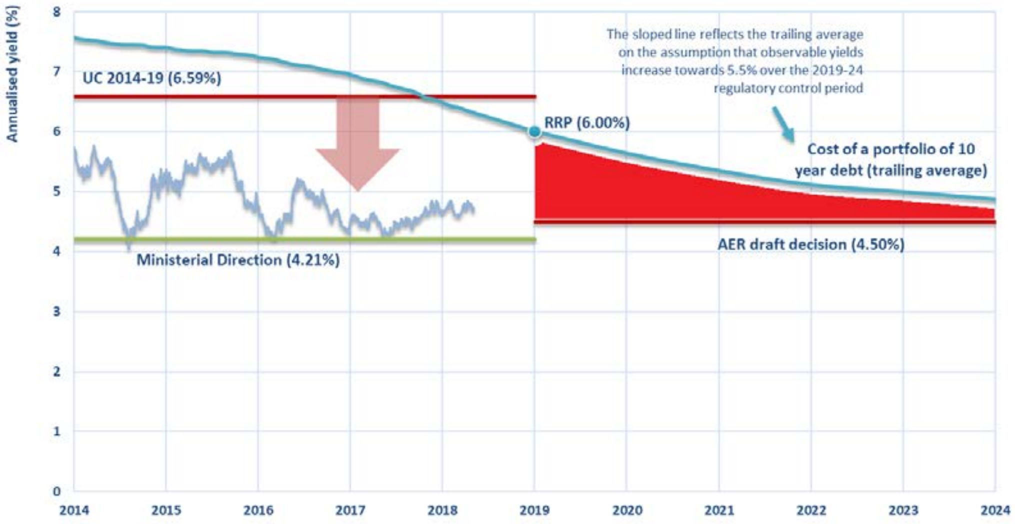
Within this environment, we have managed our debt funding needs using a portfolio of debt instruments agreed with the Department of Treasury and Finance and issued with regular frequency – akin to a trailing average. As explained in section 3-3, this debt management approach is a legitimate way for service providers like us to manage the swings in return on debt allowances from one regulatory control period to the next when set using the on-the-day approach.

Pausing at the end of the 2014-19 regulatory control period shows that we are coming off a period of under-recovery. Our concern, then, is that *if* the AER Draft Decision were retained then we would face another period of under-recovery over the 2019-24 regulatory control period – which would ultimately lead to a windfall loss for us (and a gain for customers).

As shown in Figure 3-3, if we project forward the return on debt data over the 2019-24 period and overlay the cost of a conventional debt portfolio (a portfolio of 10 year debt ie the smooth blue line), then we face a noticeable under-recovery relative to that cost if that decision is adopted – a windfall loss (i.e. the red shaded area). If, instead, a trailing average were adopted as we propose, then there would be no such windfall loss or gain (when assessed against that cost) for us or our customers.

This conclusions aligns with our analysis in section 2.3 above that explains why our proposal to adopt a trailing averaging without transition over the 2019-24 regulatory period meets the AER's objectives noted in section 1.2.

Figure 3-3 – Projected return on debt over the 2019-24 regulatory period



Source: Reserve Bank of Australia (RBA) for prevailing return on debt (in blue). UC and the Ministerial Direction for allowed rates of return (in red and green lines). PWC analysis. The trailing average is projected forward assuming that the observed cost of debt tends towards 5.50% by the end of the 2019-24 regulatory control period.

4. How our proposal can be applied automatically

We are very aware that ultimately the AER must adopt a Final 2018 Guideline that can be applied automatically, without material discretion needed on its part. Moreover, we understand that, if the binding guideline legislation is implemented in the Northern Territory, then the Final 2018 Guideline will need to apply to us automatically too.

Given that requirement, there are several ways that the trailing average approach could be applied automatically to us. Two examples are set in Table 4-1.

Table 4-1 – How the trailing average could be implemented automatically

Option	Description	Guideline change
1.	Stipulating that the first year of the transition within the AER’s transition formula (as set out in its Draft 2018 Guideline) is the 2009/10 year.	No, Draft 2018 Guideline can be applied as is
2.	An alternative would specify a variation of the AER’s formula to apply where neither an on-the-day approach nor the AER’s transition applied in the immediately preceding regulatory control period.	Yes, for example, as a slight update to the existing Clause 8 in the Draft 2018 Guideline: *“The allowed return on debt for **regulatory year** t must be calculated as follows:* *(a) Where, immediately prior to the **regulatory control period**, the service provider’s revenue has included (for example, as a building block) a return on debt reflecting an on-the-day rate of return, or pursuant to a transition from an on-the-day rate of return to a trailing average portfolio approach:* *[EXISTING FORMULAE FROM DRAFT 2018 GUIDELINE, CLAUSE 8]* *(b) Otherwise:* $k_t^d = \frac{1}{10}\sum_{n=t-9}^{t} R_n$ *Where: [DEFINITIONS AS BEFORE]”*