SRN-DDR-025 Energy
Cost Evidence Case

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from Southern Water

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1. Introduction

In our October business plan, we submitted SRN16 Real Price Effects Frontier Shift, in this document we explained our approach to RPEs and the impact of the cost of energy. As previously explained, the conflict in Ukraine has led to levels of energy price inflation in the UK close to 45%, which is 35 percentage points above CPIH inflation in Q3 2022. The full effect of this is not reflected in the botex historical baseline due to company practices relating to hedging several years out. Many of these hedges were entered into prior to Russia-Ukraine. However now that these hedges are rolling-off the forward looking energy price is materially higher than suggested in the botex baseline. This means that high inflation in energy has lifted the future energy cost requirements significantly higher compared to the historic average.

In our business plan we requested an uplift of cost allowances, and we requested this in the reconciliation adjustment. We welcome Ofwat recognising that this is an issue for the industry and applying a model adjustment, although the methodology needs to be updated in order to be calibrated correctly to reflect the industry's actual cost of energy.

Given the importance of energy costs and the potentially material impact that updating may have on allowances and cash flows, we are keen to work with Ofwat in the period to Final Determination (FD) as the proposals are finalised.

2. Ofwat's proposed approach

We were pleased to see that Ofwat has acknowledged the challenge that we, and the sector as a whole, face with respect to energy costs and has proposed a solution. Ofwat's proposal has three elements:

- First, an uplift on base costs that captures the difference in energy costs at the end of the model estimation period with the average over the period;
- Second, an ex ante forecast of the change in energy cost wedge (expected energy cost inflation over and above expected retail (CPIH) inflation) over AMP8; and
- Third, an end of AMP true-up to capture outturn energy costs (as measured by the proposed DESNZ index) with the forecast of the index used for the ex ante forecast of energy costs.

We welcome the overall approach that Ofwat has proposed, it is a pragmatic solution to the energy cost challenge facing us in AMP8.

There are aspects of Ofwat's proposal that we believe need adjustment to correctly calibrate the effect. For example, the proposed second stage (the ex ante RPE) have important cash-flow implications for us. The overall materiality will depend on the final proposed adjustments that will not be known until FD as various inputs to the calculation need to be updated. However, we comment on these updates and the likely materiality of the updated proposals later in this note.

2.1. Updating Ofwat's approach

While the basic approach proposed by Ofwat is a pragmatic solution to the challenge facing the industry, there are some aspects of the approach that need to be reconsidered and updated.

These fall basically into three categories:

- Areas where the methodology needs to be changed;
- Areas where we believe alternative inputs would be appropriate; and
- Areas where the inputs need to be updated for new evidence.

We address each in turn.

2.2. Updating the methodology

As we have already noted, Ofwat's proposed approach has important cash-flow implications for us and the sector as a whole.

These cash-flow implications primarily arise because of the ex ante RPE adjustment, which in Ofwat's draft determination proposal is greater than the uplift in base costs, and the risk that it is wrong. As we discuss later in this note, the outturn electricity index value for 2023/24 is significantly different to the forecast used by Ofwat (including being of a different sign) and this alone could swing the overall allowance for the sector by over £1 billion. This is material.

Consequently, the risk that the forecasts used for the ex ante adjustment are wrong and potentially lead to significant costs being borne by the sector for much of the AMP is a huge concern.

Addressing this concern would be best handled through removing the ex ante RPE adjustment and solely relying on the end of AMP true-up mechanism to protect consumers and companies. This will also help

address other concerns that we have with the inconsistency in the choice of indices and the fact that with the existing uncertainty and volatility any forecast is going to be wrong.

A further aspect of the cash-flow implications that should be explicitly acknowledged is that an end of AMP true-up should be through an opex adjustment, not botex, since none of the allowance should be capitalised.

2.3. Updating the inputs

Our primary concern around the inputs to Ofwat's proposed methodology relates to the:

- Choice of index for historic electricity costs; and
- Use of different price indices for historic electricity costs and forecast ones and the potential for inconsistencies that this causes.

Choice of historic electricity costs

Ofwat has proposed that the DESNZ Seasonally Adjusted Electricity prices for industrial consumers (quarterly, including CCL) – column I in Table 3.3.2 of Industrial Energy Price Indices published by the UK Government.[1] CEPA, in its report for Ofwat, considered two possible price indices – the non-domestic extra large industrial user index (column I of table 3.4.2) and the one preferred by CEPA and Ofwat (from table 3.3.2).

We believe that further reflection on which index is most appropriate should be undertaken. The analysis presented in the CEPA report is brief and does not find a great deal of difference in its assessment of the different DESNZ indices. Consequently, the analysis should be made more comprehensive. We agree with the findings of the WaterUK report from Baringa which places greater emphasis on the alternative index of non-domestic extra large industrial user index (and also the very large industrial user index).[2]

The choice of historic index is also important for the incentives that it creates for companies to hedge electricity costs. Using the same index for historic uplift and the end of AMP true-up would mean that:

- A single assumption about hedging is being used to create consistent targets and incentives for companies to measure their own hedging strategy against
- Consumers are protected against companies following poor hedging strategies as the index assumed level of hedging is being passed-on to consumers.

As the Baringa report highlights, using different indices with different underlying assumptions about the degree of hedging creates unrepresentative situations and biased results.

Different historic and forward looking indices

The fact that different indices are used to establish the historic uplift and the ex ante RPE raises more fundamental concerns for us than those linked to the choice of historic index. By using different indices there is a risk of inconsistent incentives and inefficient costs being allowed. As high-lighted in the Baringa report,

[11] Accessible Industrial energy price indices - GOV.UK (www.gov.uk)
[22] See Section 2, *Ofwat's draft determination proposals for the treatment of energy costs in AMP8*, Baringa for WaterUK, August 2024.

the mix of Ofgem and Bloomberg forward looking indices with the DESNZ historic index also creates an unrealistic and unrepresentative reduction in forecast costs owing to the different underlying hedging assumptions in the indices. This has implications for both consumers and companies and is discussed in more detail in the Baringa report.

As we have outlined above, for cash-flow and financeability reasons we believe that this element of the proposal should be removed. No ex ante RPE adjustment should be made and consequently the end of AMP true-up can be against the same index as is used for the historic uplift.

If this proposal is not accepted, then we believe the following points should be considered.

In an ideal world, the index used should be:

- available to determine the historic uplift;
- forecastable so that ex ante value can be established for AMP8; and
- available for a subsequent true-up.

Of these, the second aspect, that of being forecastable, is the least important (although it can still have an important impact on prices and cash-flow both during the AMP and into future AMPs). This is because the ex ante forecast is just a tool to set the ex ante cost profile – the true-up plays the key role of ensuring that the efficient price is being passed-through.

Ofwat's proposals make the approach unduly complicated and introduce a forecast that can be quite volatile. If the index chosen for the historic uplift cannot be forecast for AMP8 a preferable solution could be to choose an arbitrary but stable realistic guestimate of electricity costs and apply that when setting the ex ante allowances. It is as likely to be correct as (or at least no worse than) the more complicated index used by Ofwat in the draft determination proposals. The outturn values of the historic index could be used for the true-up, so ensuring that there is consistency in the calculation of electricity inflation. A simpler approach could be to just impose a small reduction, say 1% or 2%, per annum to reflect the general expectation of a reduction in energy costs but also reflects the uncertainty about the quantum and timing of such reductions.

2.4. Updating the values

There are two inputs that need to be updated for FD, these updates affect both the uplift and the RPE. The updates are of:

- The outturn values for the DESNZ index and any update to forecast values; and
- The underlying allowances generated through the Botex models.

Each of these is discussed in turn and then their implications for the application of Ofwat's methodology are considered. Where there is more than one approach to implementing the update we discuss the options and consider any strengths/weaknesses that they may have.

Updated DESNZ index

Irrespective of which index is chosen for the historic uplift, what is clear is that DESNZ has published updated information covering the period to the end of calendar Q1 2024 (published on the Government websites on 27th June 2024).

This information provides a sufficient update to allow a full out-turn value for 2023/24 to be incorporated into the calculations.

The values for the 2023/24 are:

- Ofwat's forecast value: -16%

- DESNZ industrial electricity: +18.8%
- DESNZ non-domestic extra large electricity consumer: +8.5%.

The swing is between 25% and 35% and has a significant impact on the electricity allowance.

There are two ways in which this swing can be incorporated, through updating the:

- ex ante RPE; or
- uplift by the additional year and remove the first year of the ex ante forecast index RPE.

The first approach provides approximately an additional £1.9 billion of total energy cost adjustment for the sector (around £95m for us) while the second approach adds about £1.4 billion of costs (around £80m for us). In both cases what was an overall negative electricity adjustment becomes a positive one (with Southern receiving a positive total additional energy allowance of between £65m and £85m).

The significant difference in the impact is partly a reflection of the inconsistency that arises between the two different indices and how they are captured by the methodology.

If no other updates were required then a debate about what is the right approach would be needed. However, we believe that other updates are required.

Updating the Base Allowances

The second source of updated information is the APR 23/24 data that has been finalised and which can be used to update the:

- base totex models; and
- power cost shares.

Updating the base totex models allows new modelled allowances to be estimated for AMP8. These can then be:

- split by power cost shares to generate company specific energy cost base allowances;
- uplifted by the new out-turn data on electricity costs to the end of 23/24; and
- adjusted for the ex ante RPE, starting from a year later than the Ofwat DD model applied.

Note it is not yet possible to fully replicate Ofwat's expected base totex models owing to some data issues with the APR and the need for some of the Ofwat calculated inputs to be updated. However, assumptions can be made which allow estimates of the models to be generated. Using a range of plausible estimates we believe that the sector AMP8 water allowance could increase by between £70m and £380m while the sector AMP8 wastewater network plus allowance could experience a change of between -£40m and £350m. Our estimate of the change in the BioResources allowance for the sector is a reduction of around £135m.

It would be possible to use these ranges as well as updated power cost shares to generate a new revised electricity cost adjustment. The table below provides a summary of the estimated allowances based on one set of assumptions. As such it is indicative of the likely impact that will be seen once Ofwat finalises its models (and if it continues to apply the ex ante RPE adjustment).

Table 1: Estimated energy adjustment (£m 2022/23 prices)

Basis of estimate	Wholesale water	Water network plus	BioResources	Total
		Sector		
DD model	-124.45	-119.26	39.90	-203.81
Updated DESNZ index	685.25	658.96	-139.77	1,204.45
APR 24 Update	769.41	734.54	--245.54	1,258.41
		Southern Water		
DD model	-3.27	-8.98	1.71	-10.54
Updated DESNZ index	18.07	49.63	-4.39	63.31
APR 24 Update	17.39	51.86	-4.74	64.51

What is clear from the table is that the most material update is that of the outturn historic electricity index. Updating the models, cost shares, etc. adds approximately another £100m in this example, which is less than 10% of the adjustment that arose from updating for the out-turn historic electricity cost index. We think this scale of relative impact between updating the underlying electricity index and including an extra year in the botex models is likely to be the case, although it will depend on Ofwat's FD models and efficiency assumptions.

2.5. Implications for approach/methodology

Overall, we believe that a full update of the methodology to capture the latest year of outturn data should be undertaken. Assuming that Ofwat wants to continue the ex ante RPE adjustment, which we argue should be dropped, the update should be done through a revised:

- uplift capturing the additional year and new allowances and power cost shares; and
- forecast RPE over a shorter period.

3. Conclusion

As initially stated, we are pleased that Ofwat has sought to address the energy cost challenge that the sector is facing and we see the DD proposals as ones that can be developed and updated to provide a stable cost base for AMP8. This is important both for consumers and companies.

There are aspects of the methodology that need to be considered. Specifically:

- The use of an ex ante RPE adjustment for AMP8 which creates significant cash-flow risk for us and the sector as a whole. This was illustrated by the out-turn data for 2023/24 which could change sector cash-flows by over £1 billion. We believe that no ex ante RPE adjustment should be made and the focus for the RPE should be entirely end of AMP.
- The use of different indices for the historic uplift and RPE creates unnecessary complexity and inconsistency. This can be addressed through removing the ex ante RPE adjustment and using the historic index for the RPE end of AMP true-up.
- If Ofwat is unwilling to remove the ex ante RPE adjustment, it should at a minimum adopt an alternative approach which does not raise the cash-flow and financeability concerns identified above
- It should also be made clear that any end of AMP true-up will be reflected in opex as this reflects a cash cost for the business.

Out-turn values for 23/24 are now available for electricity costs as well as information needed to update the base totex models and AMP8 allowances. Just considering the out-turn electricity costs for 23/24 has a material impact on allowances. Our initial estimate of what the APR update could change shows a much smaller impact, although the actual impact will depend on Ofwat's Final Determination models.

We see these proposals as an important step towards PR24. We would be happy to work with Ofwat to finalise these proposals as work is completed for FD.