

A large circular graphic composed of various white line-art icons on a teal background. The icons include a person with a headset, a cloud with circuit lines, a "net zero" circle with a leaf, a water drop with a checkmark, a target, a person at a computer, a hand holding a water drop, a person with an upward arrow, a leaf, a person, a water drop with a gear, and a glass of water. The central text is overlaid on a white circle within this graphic.

APPENDIX SES024 ODI DESIGN AND CALIBRATION

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APPENDIX SES024: ODI DESIGN AND CALIBRATION

In this Appendix we set out our views on how Ofwat should develop its outcome delivery incentive (ODI) design proposals as set out in its Final Methodology to strike an appropriate balance of risk and reward.

We comment on Ofwat's recently published proposals on using a top-down methodology to set ODI rates and set out a series of proposed changes to the ODI design on PCC, Business Demand, discharge permit compliance, serious pollution incidents. We also set out a proposed water softening ODI rate.

In some cases (e.g., PCC and business demand) these proposals are intended to help better manage the risks associated with delivery in performance areas that are to a degree outside of company management control. In other cases, the proposed ODI design changes are intended to reflect the unique and specific context of Water only Companies (WoCs) such as ourselves, and the circumstances of our softening obligation in PR24.

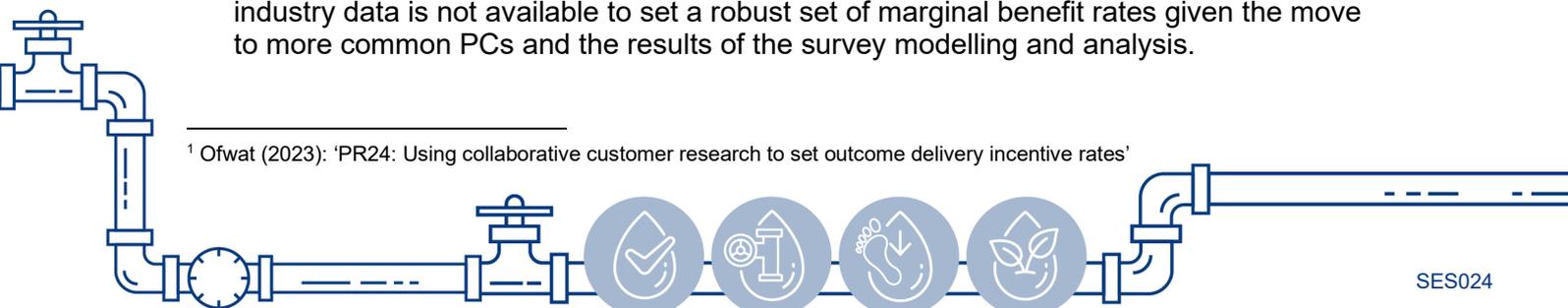
A. Introduction

1. In this appendix we set out our proposals on how Ofwat should develop its ODI design proposals from its Final Methodology and our views on Ofwat's recent publication on how it intends to set ODI rates. The document is structured as follows:
 - Section B – provides our comments on Ofwat's recent publication of indicative ODI rates based on a top-down methodology.
 - Section C – sets out a series of proposed changes to the ODI design for Business Demand, PCC, discharge permit compliance and serious pollution incidents.
 - Section D - sets out our proposals for setting the water softening ODI rate for our proposed bespoke Performance Commitment (PC).
2. We look forward to further engagement with Ofwat on these points to ensure PR24 strikes an appropriate balance of risk and reward.

B. Comments on Ofwat's indicative ODI rates

3. Following Ofwat's publication of the results of its bottom-up assessment, we are satisfied with Ofwat's alternative approach of using a top-down approach to set ODI rates in PR24 (see Annex A to this appendix for Ofwat's indicative ODI rates). As Ofwat's recent publication on using collaborative research to set the ODI rates demonstrates¹, while the intentions in principle of using a common 'bottom-up' approach were justifiable, the industry data is not available to set a robust set of marginal benefit rates given the move to more common PCs and the results of the survey modelling and analysis.

¹ Ofwat (2023): 'PR24: Using collaborative customer research to set outcome delivery incentive rates'



4. Prior to Ofwat signalling its recent move to a top-down approach, we had shared Ofwat's concern that the marginal benefit estimates (and resulting ODI rates) from the bottom-up approach would not be robust for PR24. We also had concerns that the level of risk companies could be exposed to would exceed the expected return on regulatory equity (RoRE) of ± 1 to $\pm 3\%$ each year that Ofwat had signalled was its expected RoRE range for ODIs in the PR24 Final Methodology.
5. We continue to have some concerns regarding the potential for a negative skew in the RoRE range for PR24 as discussed in Section 8 – 'Risk and Return' but consider that the proposed move to a top-down ODI rate methodology to be an understandable change in Ofwat's PR24 process. Our concerns regarding our potential RoRE range for PR24 relate to the level at which Ofwat may set its PC targets and how those compare to the performance levels at which we have proposed to set our own outcome targets, which we consider to be stretching and ambitious. The level of delivery risk that could materialise if Ofwat's PC targets are substantially more ambitious than our own targets, could be substantial, particularly on PCs such as PCC and Business Demand, which are not entirely in our direct control to manage (as we discuss below).
6. Ofwat has guided companies that they must use its top-down indicative ODI rates in their business plans or provide compelling evidence to support any alternatives. Where companies use these indicative ODI rates, Ofwat has also encouraged companies to provide feedback on both the top-down approach and the indicative rates as part of their business plan submission. In the subsections below, we set out our comments on Ofwat's stated principles for generating ODI rates, the general top-down approach that has been applied and Ofwat's indicative ODI rates.

Ofwat's principles

7. We agree that Ofwat should reflect customer preferences for different service outcomes in setting indicative ODI rates. Given the streamlining and simplification of PCs on a common basis, we also support Ofwat setting consistent valuations across all companies wherever possible. However, as we discuss in Section C below there may be valid reasons why a common approach to all companies may not result in an appropriate ODI and RoRE range; for example, once the unique and specific circumstances of WoCs such as ourselves are taken into consideration.
8. We understand the objective in principle that the ODI rates should provide a strong incentive to companies to deliver good service outcomes. However, it is also important to recognise that for a number of the PCs, outturn performance levels will be driven by factors that are both within and outside companies' control to manage. This means that while there may be good reasons to set strong incentive rates, and to focus PR24 RoRE risk in the areas that customers value most, there may still be a significant concern. Although an individual ODI rate may in and of itself appear reasonable, it could expose companies to a high level of risk once considered alongside what Ofwat believe a stretching but achievable level of performance is for PR24 and what may be the factors outside companies' control to manage that could impact performance levels.²
9. As a result, we consider that Ofwat should add another principle to guide its top-down approach to generating ODI rates and the adoption of uncertainty mechanisms (e.g., caps and collars) that might apply to the ODI design: the level of PC-specific RoRE risk should be proportionate to the degree of risk across the performance range that is within company control to manage.

² For example, the impact of weather or performance improvements being reliant on customer behavioural change.

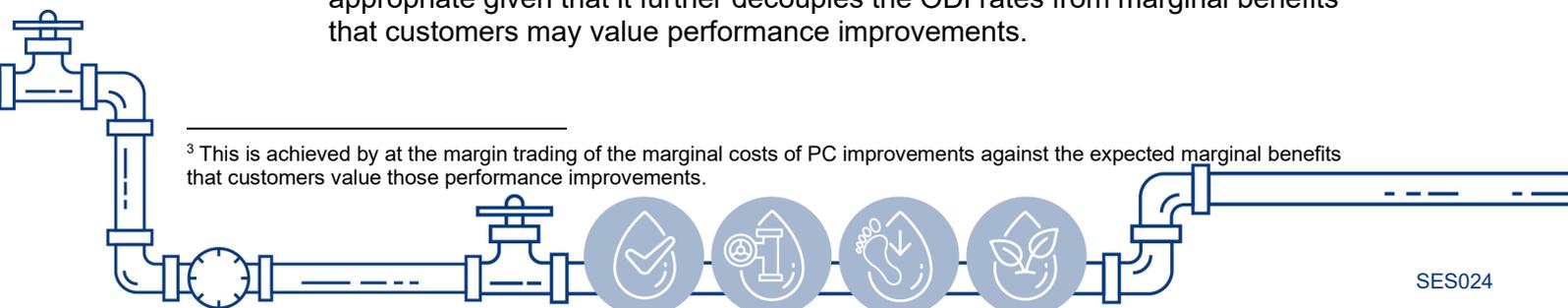


10. This additional principle has guided our own proposals for a series of uncertainty mechanisms that we consider should be applied within the final ODI design for PR24 (as we discuss in Section C below).

Comments on Ofwat's top-down methodology

11. Overall, the approach as set out by Ofwat in its recent ODI rate publication is clear and transparent, and aspects of the approach align with how we have in principle approached the assessment of our RoRE range for the PR24 period. The methodology can be transparently built upon via an iteration of the key assumptions and inputs to the calculations and potentially informed by feedback from the customer research, either on an industry wide, or company specific basis. It is intended to be grounded in the same level of risk in the ODI package that was embedded into PR19.
12. Nevertheless, we have the following comments on the methodology Ofwat has adopted.
- (i) The RoRE allocation of risk for the common PCs appears to be driven by, and the result of, backward-looking historical data. The average RoRE calculation per PC of 0.5% is premised on existing ODI rates that were to start with based on very different company-specific valuation and research programmes and historic performance for only a couple of years of data. The assumption of the approach also appears to be that averaging of performance and data across the industry gives a fair indication of the average allocation of risk for common PCs. While this may be a pragmatic approach for creating a starting assumption to then adjust the RoRE allocation based on customer research, it reflects a series of assumptions and delinks the allocation of risk by PC from the specific circumstances of PR24 and the PCLs that may be set by PC.
 - (ii) Ofwat's original PR24 incentive design principle that ODI rates should, as far as possible, seek to reflect marginal benefits remains a sound one to ensure that companies have appropriate financial incentives to make the right choices for customers.³ However, in each of the price controls where PCs/ODIs have been used by Ofwat (PR14, PR19 and now PR24), setting of ODI rates has been imprecise as a result of the various challenges in quantifying the marginal costs and/or marginal benefits and/or customer valuations of performance improvements at a granular PC-specific and company-specific level. There was a risk of distorted incentives at the margin in PR14 and PR19, and with the proposed move to top-down ODI rates at PR24 this will continue to be a risk. How material the risk will be at an individual PC and company level is currently difficult to establish. We would encourage Ofwat to consider impacts on company behaviour as a result of the level of ODI rates it adopts in its determination and to seek to mitigate the risk of distorted incentives wherever possible.
 - (iii) Ofwat notes in passing it is likely that the average RCV across PR24 will be higher than the (2022/23) values used to derive its indicative ODI rates. In effect, this is likely to mean that the ODI rates will increase from the indicative rates provided ahead of business plan submission and Ofwat's Final Determinations. While this is consistent with the underlying principle of the top-down methodology assigning ODI risk based on a starting percentage (0.5%) of RoRE and expected regulated equity of the RCV, it appears likely that recent high inflation will have a 'leveraging' effect on the ODI rates. Ofwat should consider carefully if this is appropriate given that it further decouples the ODI rates from marginal benefits that customers may value performance improvements.

³ This is achieved by at the margin trading of the marginal costs of PC improvements against the expected marginal benefits that customers value those performance improvements.



(iv) There are a number of aspects, in particular the level of ambition that is reflected in the PCLs, that will impact expected returns under the ODI package, and it would be expected that companies will experience a mix of out- and under performance against individual PCs. Nevertheless, Ofwat's top-down decisions on the ODI rates will still be a key driver of the level of risk in the PR24 ODI package.

As a result, and for the reasons we set out above, the allocation of risk for each PC should be considered coherently alongside forward-looking expectations of achievable but stretching PC targets, the possible drivers of out- and under performance⁴ against the PCLs, and any risk mitigations that might be applied to the ODI design. A 'building block' approach to ODI design, while inherently sensible, still requires the collective impact of those building block decisions to be considered in the round. It is important, therefore, that Ofwat undertakes cross-checks as part of the process leading up to its determination, both at an individual PC and portfolio level, to establish that the ODI package in the round is appropriate and adjusts for anomalies or company-specific circumstances, where this is applicable and appropriate.

(v) Ofwat's ranking of the PCs according to customer research valuations – reproduced in Table 1 below for information – is not inconsistent with the priorities our own customer research has identified, as discussed in Chapter 5 - 'Our customers', but there are notable differences. For example:

- Receiving high quality drinking water is consistently our customers' highest priority and is an area they are not prepared to compromise on and they expect us to take actions to address any risks.
- As reflected in Ofwat's rankings, the collaborative research showed interruptions to supply to be a top priority for customers. Discussions with our own customers are consistent with this, however when presented with information on our current performance compared to other companies, the level of priority for this PC reduces, relative to other areas.
- Our customer research ranked leakage as customers second highest priority which is to a degree inconsistent with Ofwat's ranking.

We would not support increasing the allocation of RoRE (beyond the levels suggested by the ranking in Table 1 below) for PCs such as PCC and business demand. As we discuss below, we consider there are factors outside of our control to manage that mean these ODIs already risk failing to strike an appropriate balance of risk and reward in PR24.

(vi) There are differences between WoCs and water and sewerage companies, and we consider that the process of setting top-down rates should take more account of these differences rather than trying to necessarily set a fully consistent rate for each PC across the whole industry.

One specific area where there is a potential risk in Ofwat's methodology is the various normalisation and renormalisation steps that are applied to derive the common ODI rates. We consider this process, and a set of common ODI rates more generally, could risk not appropriately accounting for differences between water-only and water and sewerage companies. Given that Ofwat has proposed a common set of indicative ODI rates which it has guided companies to use, the specific issues we face as a WoC has guided aspects of the proposals that we have made in Section C below.

⁴ And the degree to which these are outside or under companies' control.



Table 1: Ofwat ranking of the relative importance of each PC in PR24

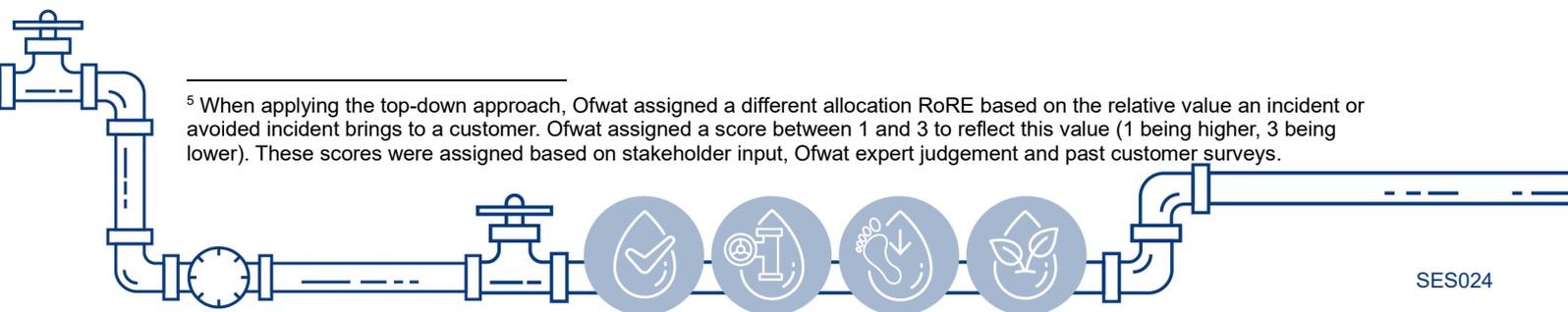
Performance Commitment	Ofwat ranking score (1, 2, or 3) ⁵	Applicable to SES Water?
Internal sewer flooding	1	No
External sewer flooding	1	No
Water supply interruptions	1	Yes
Compliance risk index (CRI)	1	Yes
Customer contacts about water quality	1	Yes
Discharge permit compliance	2	Yes
Serious pollution incidents	2	Yes
Storm overflows	2	No
Total pollution incidents	2	No
River water quality	2	No
Leakage	2	Yes
Per capita consumption	3	Yes
Business demand	3	Yes
Bathing water quality	3	No

Source: Ofwat and SES Water analysis.

C. Proposed uncertainty mechanisms

13. As we note in the main business plan (see Chapter 8 – Financing our plan) we consider there are several areas of the proposed PR24 ODI package where Ofwat should introduce a form of uncertainty mechanism as part of the ODI design. In this section we set out these proposals.
14. Consistent with Ofwat’s guidance, we have used Ofwat’s indicative ODI rates to prepare our business plan submission. However, when these rates are considered alongside expectations of performance ambitions, the level that Ofwat may set the PCL at PR24, and the drivers of out- and under performance of PCs that are within or outside company control, we consider some ODIs may not strike an appropriate balance of risk and reward without introduction of additional risk mitigations. As such, we propose a number of uncertainty mechanisms (instead of alternative ODI rates) to seek to address this issue.
15. In the subsections below we set out our proposed uncertainty mechanisms to be applicable to the ODI design for Business Demand, PCC, discharge permit compliance and serious pollution incidents. Indicative modelled impacts of the proposed changes to the ODI design, and how this may impact our RoRE, are set out in the concluding subsection to this section.

⁵ When applying the top-down approach, Ofwat assigned a different allocation RoRE based on the relative value an incident or avoided incident brings to a customer. Ofwat assigned a score between 1 and 3 to reflect this value (1 being higher, 3 being lower). These scores were assigned based on stakeholder input, Ofwat expert judgement and past customer surveys.

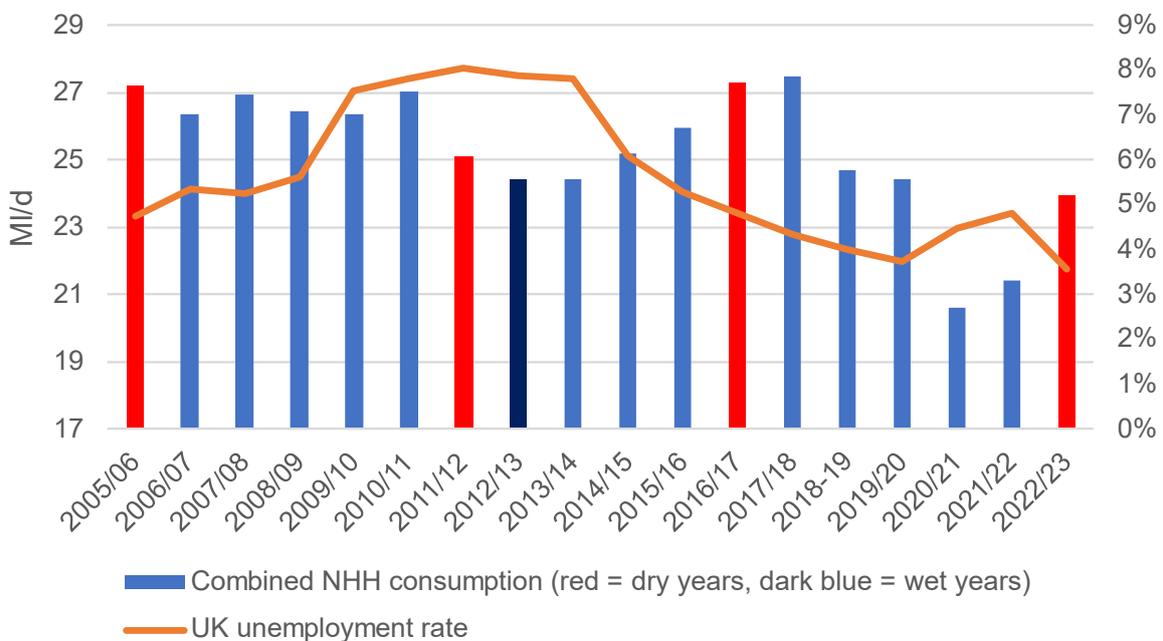


Business demand

Context and needs case for an ODI uncertainty mechanism

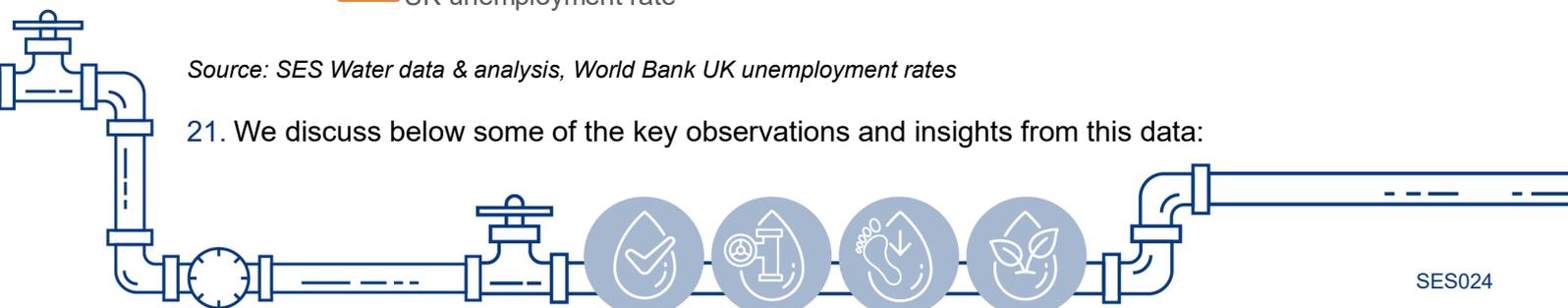
16. Ofwat has proposed an indicative symmetrical ODI rate of £±0.365m per MI/d deviation from target. Based on Ofwat’s position in its PR24 Final Methodology, the PC will be subject to a cap and a collar, but no deadband would apply.
17. Our understanding is that a cap and a collar would apply given this PC is new and, therefore, performance is more uncertain, and has the potential to be a significant source of skew in the outcomes package.
18. Despite the application of a cap and a collar for this PC, we remain concerned about how exposed this PC is to underlying economic conditions which are entirely outside of our control. Short-term business demand is heavily impacted by economic cycles and weather conditions. Whilst we have a lower overall percentage of demand from NHH than many other companies in the sector, proportionately we have a large percentage of our larger consumers that are weather dependent – allotments, golf courses, recreation, etc. – which tend to increase their consumption in dry years.
19. We expect to see significant swings in NHH demand over time, as our post-Covid experience has demonstrated so far. During the pandemic we saw a drop in NHH demand as businesses (and Gatwick airport) remained shut or lowered their output, however since then NHH demand has increased and we expect this upward trend to continue until at least 2026/27, as described in Chapter 6 of the main business plan.
20. Figure 1 below shows the combined NHH consumption between 2005/06 and 2022/23 (primary y-axis) in the SES Water region against the UK unemployment rate for the same period (secondary y-axis). The unemployment rate is used as a proxy for external downward pressure on business demand.

Figure 1: Combined NHH consumption between 2005/06-2022/23 in SES region



Source: SES Water data & analysis, World Bank UK unemployment rates

21. We discuss below some of the key observations and insights from this data:



- Generally, we observe higher demand in dry years (red bars are taken as basis of Dry Year classification from rdWRMP, except for 2022/23, which we have assumed could also be classified as a Dry Year as well); the dark blue bar represents the very wet summer of 2012/13.
- We note that metering rates were comparatively stable during the 2005/06-2022/23 period in NHH customers.
- We observe a slight decrease in NHH consumption in 2008/09 during the credit crunch/economic challenges, with lingering effects into 2009/10 but then recovering in 2011/12.
- As unemployment rises from 2008/09 onwards, we observe a decrease in NHH consumption over time, particularly from 2011/12 to 2013/14. The link between a higher unemployment rate and lower NHH consumption is especially clear in year 2011/12 – a Dry Year – where we would have expected higher NHH consumption to be higher, as observed in other Dry Years with lower unemployment rates.
- We observe a major decrease in NHH consumption because of the Covid-19 pandemic and lockdowns from 2020/21 (due to businesses and Gatwick airport being shut or reducing their output), building up again in the subsequent years.

22. Overall, this shows that there are a number of aspects that influence NHH consumption, which indicates a fairly complex picture. We expect to see significant swings in NHH consumption over time, as our post-Covid experience has demonstrated so far. Since 2022/23, NHH consumption has increased and we expect this upward trend to continue until at least 2026/27, as described in Chapter 6 of the main business plan.

23. We have developed our business plan with the objective to be ambitious in terms of the business demand reductions we will target for the next AMP. We have not sought to reduce our ambition in relation to NHH demand in the face of the uncertainties, but the performance exposure we face to external economic drivers which are outside of our control, does mean there are risks associated with the delivery of the stretching targets that we expect to be set by Ofwat as part of the final ODI package.⁶

24. Our proposed PCLs and expected performance in a P10 scenario are shown in Table 2 below.

Table 2: Business demand – SES PCL and expected P10 scenario

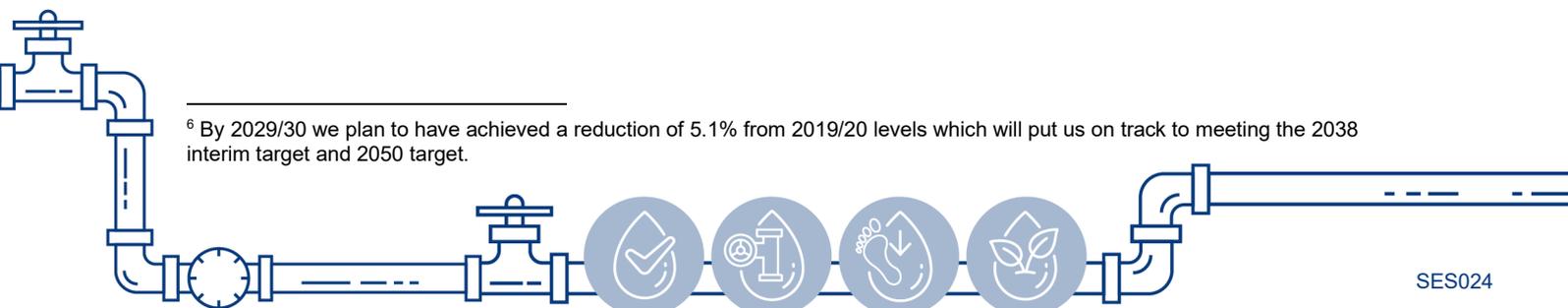
Performance	2025/26	2026/27	2027/28	2028/29	2029/30
SES PR24 performance targets	-4.70%	-3.38%	-3.96%	-4.55%	-5.14%
SES P10 scenario	0.00%	-1.00%	-2.00%	-3.00%	-4.00%

Source: SES Water analysis.

Our proposal

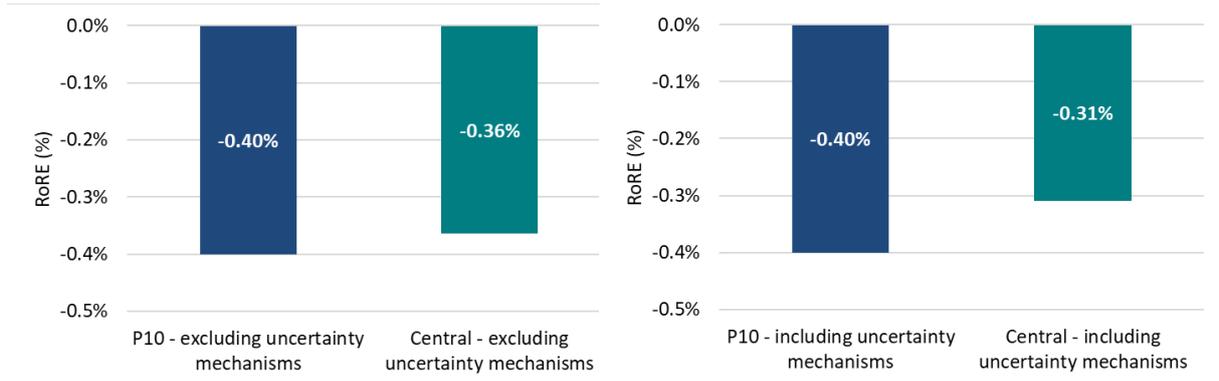
25. Because of the swings in percentage overall NHH demand that external economic drivers present from operating in our region, we advocate for the introduction of a deadband in addition to the cap and collar that Ofwat has proposed to introduce in its Final Methodology.

⁶ By 2029/30 we plan to have achieved a reduction of 5.1% from 2019/20 levels which will put us on track to meeting the 2038 interim target and 2050 target.



- 26. A deadband of $\pm 1.5\%$ around the PCL would allow a degree of flexibility in terms of our performance and in combination with a cap and collar of $\pm 0.4\%$ of RoRE⁷, it would limit our exposure to this PC whilst still incentivising us to work with retailers to reduce the demand of business customers over time.
- 27. The impact of introducing a deadband for the Business Demand PC on the RoRE under the P10 and Central Case⁸ is illustrated in below.

Figure 2: RoRE impact of our proposed Business Demand ODI uncertainty mechanism⁹



Source: SES Water analysis

PCC

Context and needs case for an ODI uncertainty mechanism

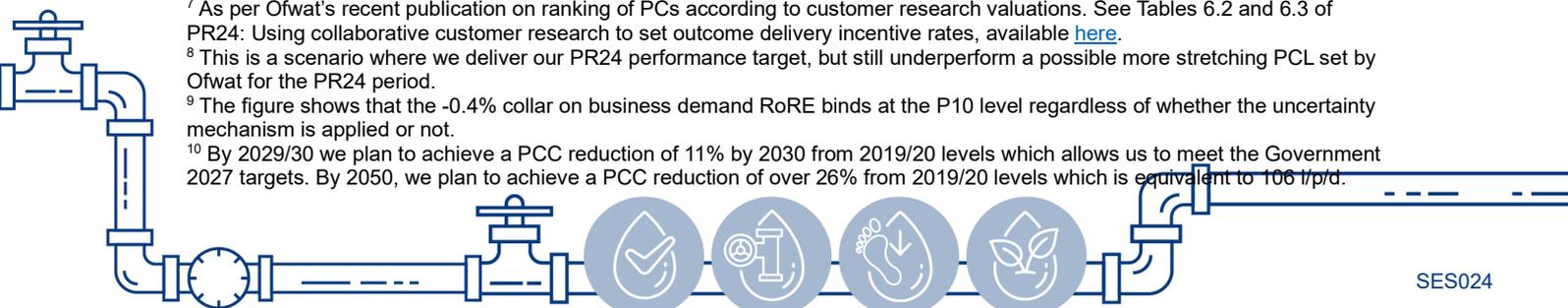
- 28. Ofwat has proposed an indicative symmetrical ODI rate of $\pounds\pm 0.269\text{m}$ per MI/d deviation from target. This is significantly higher than our existing bespoke ODI rate of $\pounds-0.104\text{m}$ (adjusted to 2022/23 prices) in PR19. Based on Ofwat’s position in its PR24 Final Methodology, the PC will neither be subject to a cap and a collar nor to a deadband.
- 29. We understand that demand reduction is important to our customers and the environment as well as to Ofwat and the Government. As a business, we are committed to reducing water consumption over time and have adopted ambitious performance targets for the next AMP as part of our business plan. However, reducing PCC is challenging for the entire sector given current levels of consumption and the reliance on customer behaviour change. Similar to business demand, we have not reduced our ambition in relation to PCC in the face of the uncertainties and the delivery challenges that we face in reducing PCC. However, it does mean there are risks associated with the delivery of the stretching targets we expect to be set by Ofwat as part of the final ODI package.¹⁰
- 30. The main factors affecting PCC levels are:
 - (i) the Covid-19 pandemic which has had profound effects on customer demand – this has caused a structural break in the PCC trends observed pre-2020 and current PCC levels have not recovered to pre-2020 levels ever since;

⁷ As per Ofwat’s recent publication on ranking of PCs according to customer research valuations. See Tables 6.2 and 6.3 of PR24: Using collaborative customer research to set outcome delivery incentive rates, available [here](#).

⁸ This is a scenario where we deliver our PR24 performance target, but still underperform a possible more stretching PCL set by Ofwat for the PR24 period.

⁹ The figure shows that the -0.4% collar on business demand RoRE binds at the P10 level regardless of whether the uncertainty mechanism is applied or not.

¹⁰ By 2029/30 we plan to achieve a PCC reduction of 11% by 2030 from 2019/20 levels which allows us to meet the Government 2027 targets. By 2050, we plan to achieve a PCC reduction of over 26% from 2019/20 levels which is equivalent to 106 l/p/d.



- (ii) the weather, with two of the last three summers being dry to very dry, thus increasing water demand, hence limiting the protection the three-year rolling average was designed to provide;
- (iii) the combination of demographic and geography served specific to our area has resulted in higher concentrations of what would have been daily commuters to central London continuing to work from home since the pandemic, which has resulted in a higher PCC increase of 12.2% in our region vs the increase on average of 9% PCC across the rest of the country^{11 12};
- (iv) higher levels of affluence across our customer base results in higher levels of water use, due to factors such as larger gardens and a higher proportion of swimming pools. The typically warmer, drier weather we experience in the South East also gives rise to higher demand, particularly during the summer months; and
- (v) behavioural change from our customers with regards to water consumption remains limited despite our marketing campaign efforts; as smart meters and tariff innovation are deployed, further PCC reductions will materialise and is central to our delivery plans for the next AMP (see Chapters 6 and 10 of the main business plan) but the level and pace of behavioural shift across our customer base remains uncertain.

31. Our draft Water Resource Management Plan (WRMP)¹³ identifies several options that can impact PCC in our region, including smart metering, innovative tariffs, household interventions (initiatives to assist households with reducing their consumption¹⁴), education programmes and Government interventions¹⁵ and actions we can take to more effectively manage our asset base. While *delivery* of a number of these initiatives are within our control to manage, in many cases their impact on PCC reduction is still reliant on the pace and level of customer behaviour change that they deliver.
32. Given the very stretching targets set by the Government for demand reduction and the fact that a number of aspects related to demand reduction are reliant on customer behavioural change and so out of our direct control, we believe this PC and associated ODI exposes us to a significant and disproportionate level of risk, as discussed in the RoRE section in Chapter 8 – Financing our plan.
33. Our proposed PCLs and expected performance in a P10 scenario are shown in Table 3 below. Our proposed PCC reduction trajectory aligns with the Government’s EIP targets. As discussed in Chapter 6 – The outcomes we will deliver, we forecast to achieve a PCC reduction of 11% (from 2019/20 levels) by 2029/30.
34. In Table 3 we also show the levels at which we assess Ofwat may set the performance commitment for PR24. While for the avoidance of doubt we consider that Ofwat should set its PCL at our proposed performance target for the PR24 period, based on statements in Ofwat’s Final Methodology of how it expects to set the entry point for the PCL going into AMP8, there is a risk that this may not be the case. The discrepancy between our proposed PCLs and expected performance in a P10 scenario, against our assessment of how Ofwat may set its PCLs, drives a concern for us in this PC, alongside our concern that we face performance exposures linked to customer behaviour change that is not fully within our control to mitigate or manage.

¹¹ See Appendix SES064 – Impact of Covid on Water Consumption
¹² Companies serving regions around London saw similar, but lower percentage increases than we have experienced.
¹³ SES Water (2023): ‘Our water resources management plan 2025 – 2075, Revised DRAFT’
¹⁴ These include household visits and self-service tools such as the Get Water Fit platform, enabling customers to review their water use and order equipment for free to install in their home.
¹⁵ Government led interventions could potentially include water labelling, minimum standards and new building regulations.

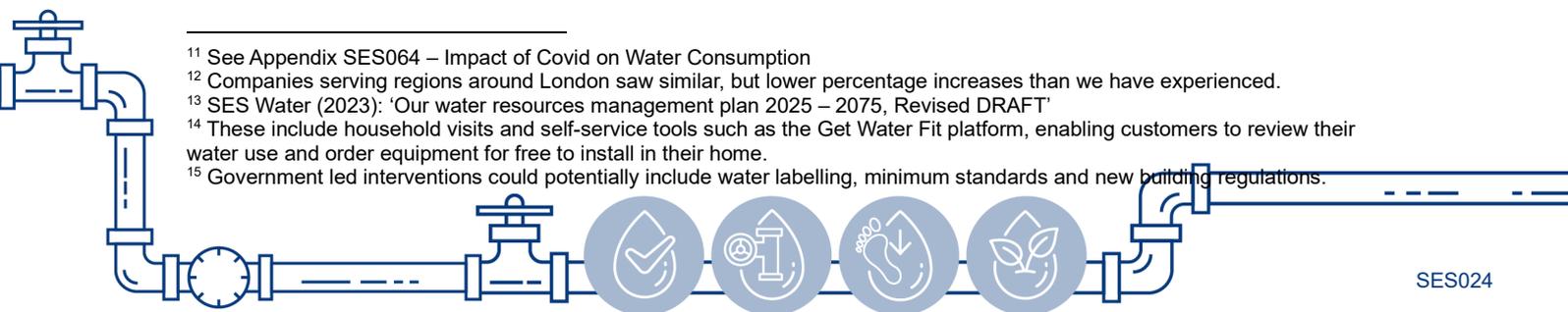


Table 3: PCC – SES PCL and expected P10 against forecast Ofwat PCL

Performance	2025/26	2026/27	2027/28	2028/29	2029/30
Indicative Ofwat PR24 PCL	-7.70%	-8.60%	-9.00%	-10.00%	-11.00%
SES PR24 performance targets	-6.60%	-7.87%	-9.00%	-10.00%	-11.00%
SES P10 scenario	1.50%	0.00%	-3.00%	-5.00%	-7.00%

Source: SES Water analysis.

Our proposal

- 35. We have considered carefully how this risk can be managed within our business and are proposing an alternative in which our risk exposure would be managed whilst encouraging us to deliver further PCC reductions and also acknowledging that some elements of PCC are outside direct control of company management.
- 36. Our proposal uses Ofwat’s indicative ODI rate of £±0.269m per MI/d deviation from target at PR24 but introduces a symmetrical cap and collar to limit our exposure to the risk of the reduction in PCC achieved is lower than the Government EIP targets in AMP8.
- 37. Consistent with Ofwat’s proposed approach to caps and collars on other PCs as well as the rankings of PCs according to customer research valuations, we would propose to **set a cap and collar for PCC at ±0.4%¹⁶ RoRE**. This would also be consistent with the Business Demand PC which will be subject to a cap and collar on the basis that it has the potential to be a significant source of skew in the outcomes package and is subject to uncertainty linked to customer behavioural change. We have modelled the impact of the addition of a collar on PCC and found that it would reduce our overall exposure in our P10 case, but not in our Central case estimate. The advantage of this proposal is that it is simple to implement and retains incentive strength whilst lowering the disproportionate downside risk under the proposal in the Final Methodology.
- 38. In its PR24 Final Methodology, Ofwat said it would make targeted use of caps and collars on individual PCs:¹⁷
 - (i) that are new or bespoke and therefore more uncertain;
 - (ii) where the benefits from high outperformance are uncertain, to protect customers and avoid over-incentivising companies; or
 - (iii) that have the potential to be a significant source of skew in the outcomes package.
- 39. As described above, we believe that the PCC PC has the potential to be a source of skew in the outcomes package and this is reflected in Chapter 8 – Financing our plan, where we describe our RoRE P10/P90 analysis.¹⁸ As noted above, we also believe that the additional of a cap and a collar for PCC would be more consistent with how the Business Demand PC is designed.
- 40. The impact of introducing a ±0.4% RoRE cap and collar for the PCC PC under the P10 and Central Case is illustrated in Figure 3 below.

¹⁶ As per Ofwat’s recent publication on ranking of PCs according to customer research valuations. See Tables 6.2 and 6.3 of PR24: Using collaborative customer research to set outcome delivery incentive rates, available [here](#).

¹⁷ Ofwat PR24 Final Methodology: Appendix 8: Outcome delivery incentives, p. 57: https://www.ofwat.gov.uk/wp-content/uploads/2022/12/PR24_final_methodology_Appendix_8_Outcome_delivery_incentives.pdf

¹⁸ Appendix SES069 – RoRE Assumptions and Ranges sets out the underlying assumptions to our assessment of RoRE risk in further detail.

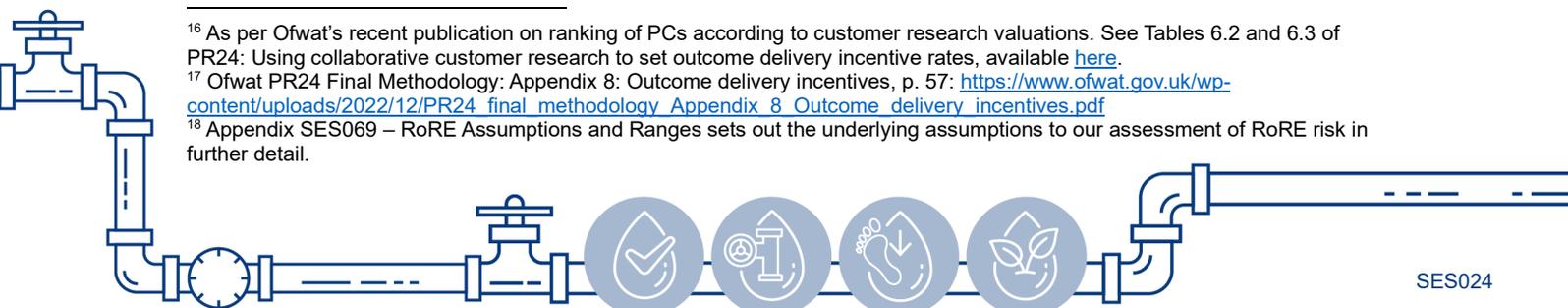
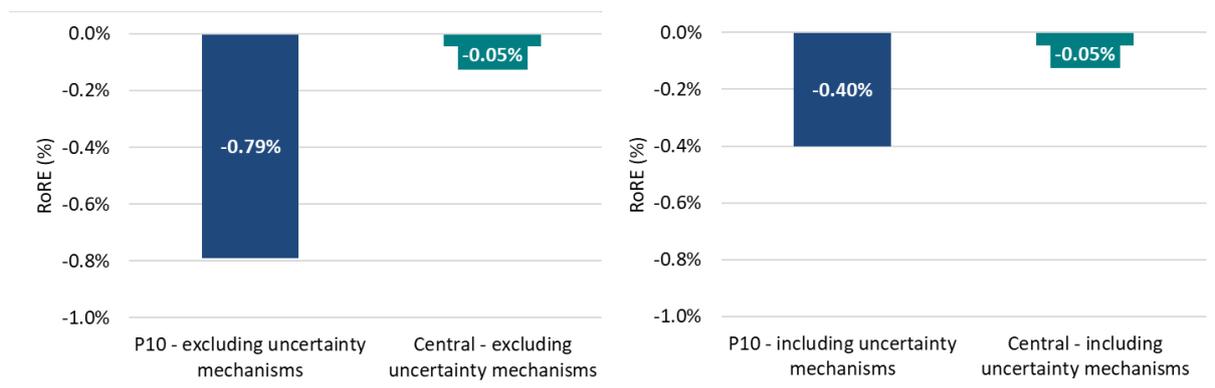


Figure 3: RoRE impact of our proposed PCC ODI uncertainty mechanism



Source: SES Water analysis

Discharge permit compliance

Context and needs case for an ODI uncertainty mechanism

- 41. Ofwat has proposed an indicative under performance only ODI rate of £-0.0293m per % deviation from percentage compliance. Based on Ofwat’s position in its PR24 Final Methodology, the PC will neither be subject to a collar nor to a deadband.
- 42. Converting Ofwat’s ODI rate per % deviation to an ODI rate per site for SES Water, this gives us a £0.586m penalty¹⁹ for every failing site (of the five sites SES Water has) in any given year. We believe this ODI rate is high for WoCs which have a lower impact of numeric consent failures from water treatment works (WTW) vs wastewater treatment works (WwTWs) on the basis that the polluting load is lesser for water treatment (i.e. inert suspended solids, minor pH or chlorine exceedances) vs highly polluting gross solids, biological (nutrients) or chemical (ammonia) loads.

Our proposal

- 43. In order to address this concern whilst maintaining the same ODI rates for WOCs and WaSCs, we propose to introduce a collar for WOCs to limit their exposure under this PC.
- 44. We first explored what a collar of -0.5% of RoRE (as per Ofwat’s recent publication on ranking of PCs according to customer research valuations) would do to our P10 scenario. In the context of the current PC definition in combination with the fact that we have a total of five sites, a collar of -0.5% of RoRE offers no additional downside protection. As such, we would advocate for a **collar of -0.2% of RoRE**.
- 45. The impact of introducing a -0.2% RoRE collar for the Discharge Permit Compliance PC under the P10 and Central Case is illustrated in Figure 4 below. A collar of -0.5% of RoRE would be too wide and have no impact in terms of the level of risk exposure we face driven by our WOC status. Hence, we consider a narrower collar set at -0.2% of RoRE would be appropriate.

¹⁹ SES Water has 5 sites. The failure of 1 site represents 20 deviations from target. The ODI in absolute terms per site is therefore 20 x €0.293m = €0.586m.

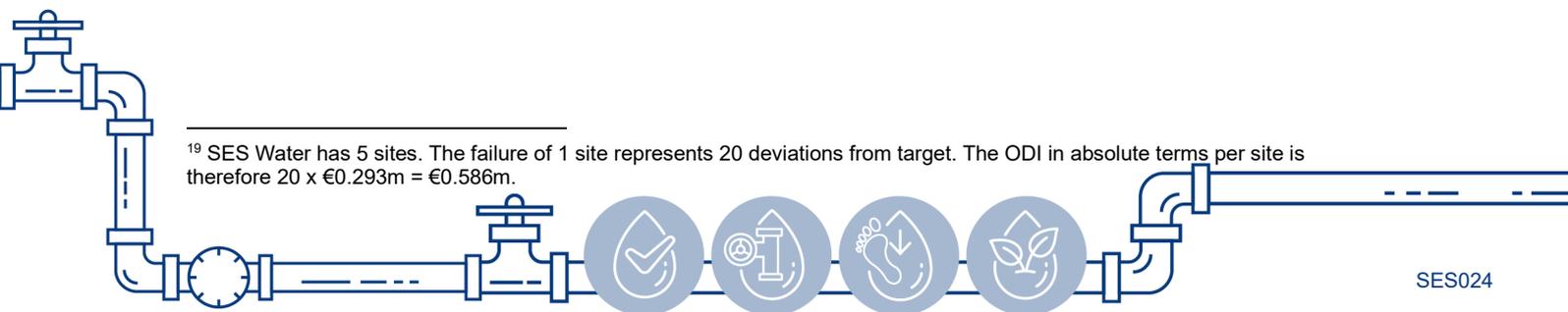
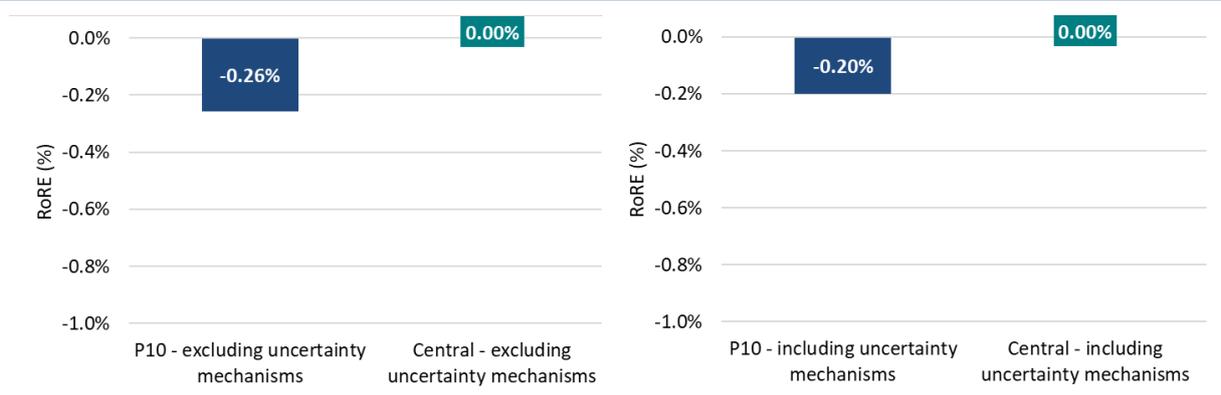


Figure 4: RoRE impact of our proposed Discharge Permit Compliance ODI uncertainty mechanism



Source: SES Water analysis

Serious pollution incidents

Context and needs case for an ODI uncertainty mechanism

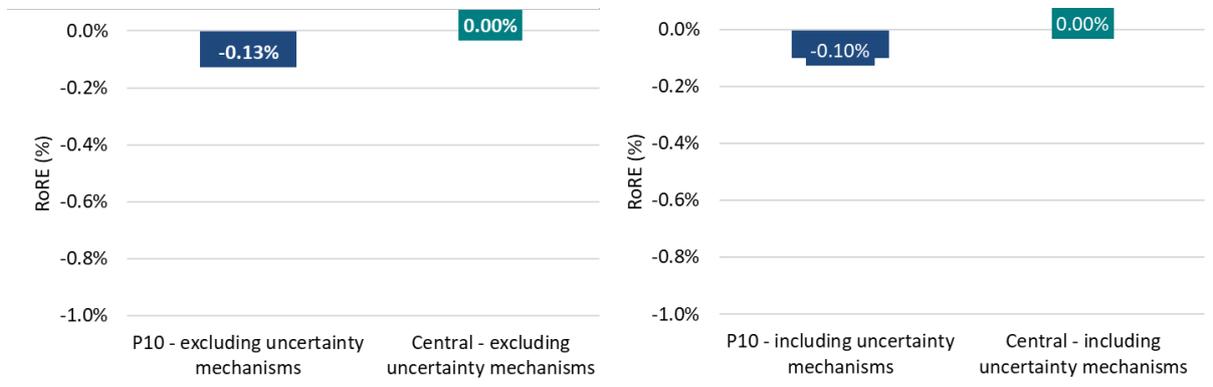
46. Ofwat has proposed an indicative under performance only ODI rate of £-1.3635m per serious pollution incident. Based on Ofwat’s position in its PR24 Final Methodology, the PC will neither be subject to a collar nor to a deadband.
47. As a WoC, pollutions are less impactful and shorter-lived (immediately after a burst main) compared to pollutions from wastewater companies. We therefore think that the current proposed indicative ODI rate is disproportionately high for a WoC.
48. This statement is offered on the following basis:
 - (a) Polluting matter from water supply-related incidents is invariably inert in its nature, with the predominant polluting effect being aesthetic, and short lived. The duration of these pollutions are also minimal as following a burst, debris from the site initially flowing into a watercourse clears after a short period of time. Additionally, the resultant flow from a burst main is controlled quickly as part of the exercise to minimise risk of supply interruptions. This is something we have improved recently due to the roll-out of our smart network, facilitating far quicker response times to bursts.
 - (b) On the contrary, pollutions from the wastewater element of WaSCs gives rise to the release of significant quantities of highly polluting gross solids, biological (nutrients) or chemical (ammonia) loads, which can give rise to significant and long-lasting impact on the receiving watercourse. Furthermore, the duration that these events can go on for – as technically no customer is reporting a service interruption if a sewer blocks or a rising main bursts, spilling wastewater to the environment – can be far longer than a burst water main. Equivalent smart sewer networks are few-and-far between which can significantly expand response times, particularly in rural areas.
49. Whilst we consider the general guidance applicable to the classification of pollution incidents is more likely to categorise a water supply incident as a category 3 or 4, we remain concerned as to the largely qualitative nature of this classification and the ongoing risk of incidents being incorrectly categorised at a higher level without all necessary justification.



Our proposal

- 50. In order to address this concern whilst maintaining the same ODI rates for WOCs and WaSCs, we propose to introduce a **collar of -0.5% of RoRE²⁰** for WOCs to limit their exposure under this PC.
- 51. The proposed collar is in line with Ofwat’s indicative collar levels, as described in its PR24 Final Methodology.
- 52. The impact of introducing a -0.5% RoRE collar for the Serious Pollution Incidents PC under the P10 and Central Case is illustrated in Figure 5 below. As highlighted in the footnote, the RoRE impact in the figure is presented as an average over five years. In our P10 scenario, we assume that there is one incident throughout the five-year period. Consequently, averaging the penalty across the five years produces the % RoRE shown in this figure which is less than the -0.5% collar.

Figure 5: RoRE impact of our proposed Serious Pollution Incidents uncertainty mechanism



Source: SES Water analysis.

Note: The RoRE impact is presented as an average over five years. In our P10 scenario, we assume that there is one incident throughout the five-year period. Consequently, averaging the penalty across the five years produced the % RoRE shown in this figure.

Summary – impact of proposed changes to PCs & ODIs on RoRE

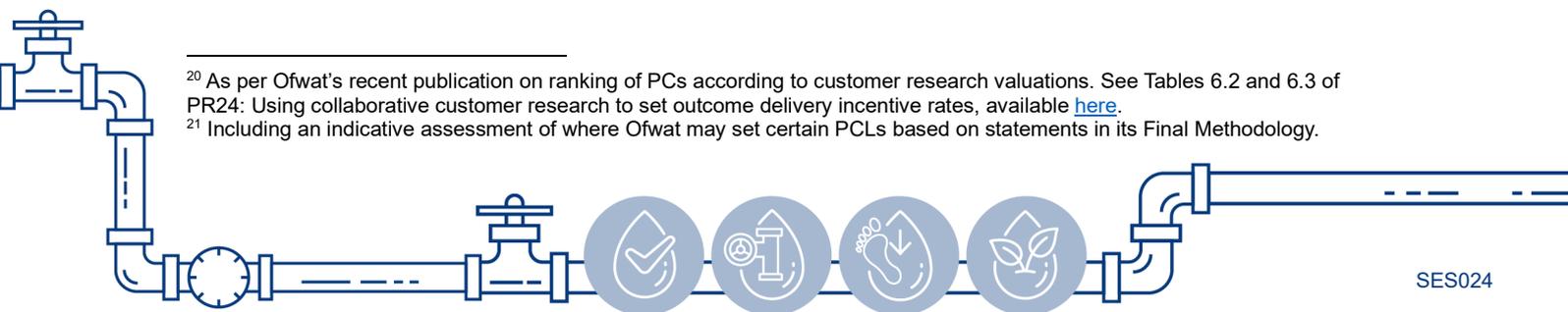
53. As set out in Chapter 8 – Financing our plan, we have modelled that our expected RoRE performance under Ofwat’s proposed PC and ODI package²¹ would be:

- 3.84% RoRE in our Central case; this is lower than the base RoRE of 4.14% due to the penalties we may incur on PCC and Business demand, depending on where PCL targets are set;
- 8.80% RoRE in our High Case (P90); and
- -2.51% RoRE in our Low Case (P10).

54. Accounting for the uncertainty mechanisms discussed above, our proposed amended PC and ODI package would be:

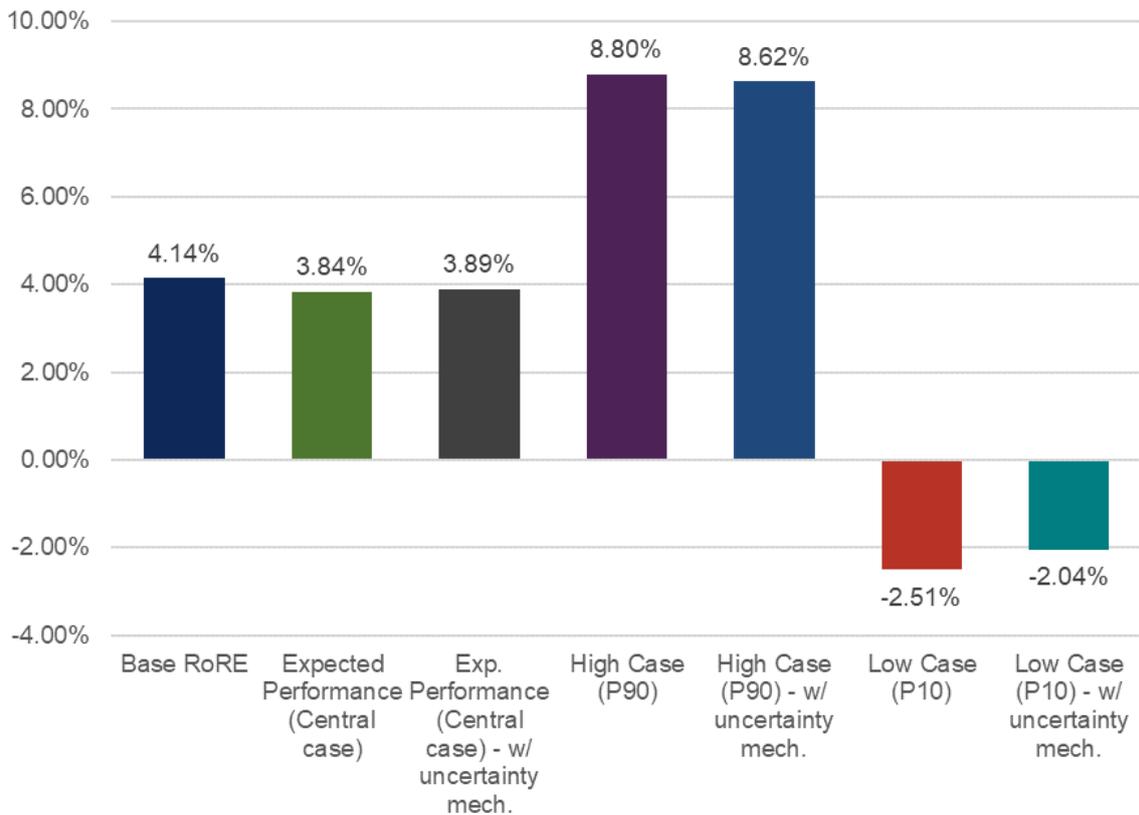
²⁰ As per Ofwat’s recent publication on ranking of PCs according to customer research valuations. See Tables 6.2 and 6.3 of PR24: Using collaborative customer research to set outcome delivery incentive rates, available [here](#).

²¹ Including an indicative assessment of where Ofwat may set certain PCLs based on statements in its Final Methodology.



- 3.89% RoRE in our Central case; this is slightly higher than the package of PCs and ODIs we modelled using Ofwat’s assumptions as the proposed deadband on the Business demand ODI reduces our downside exposure;
- 8.62% RoRE in our High Case (P90); this is slightly lower than the package of PCs and ODIs we modelled using Ofwat’s proposals as again, the deadband on the Business demand ODI reduces our upside exposure; and
- -2.04% RoRE in our Low Case (P10), which is c. 0.5% lower than the package of PCs and ODIs we modelled, premised on assumptions of the PCLs we assess Ofwat may set, the proposed indicative ODI rates and Ofwat’s stated position on the design of the ODIs in the Final Methodology.

Figure 6: Summary of SES view of PR24 RoRE ranges

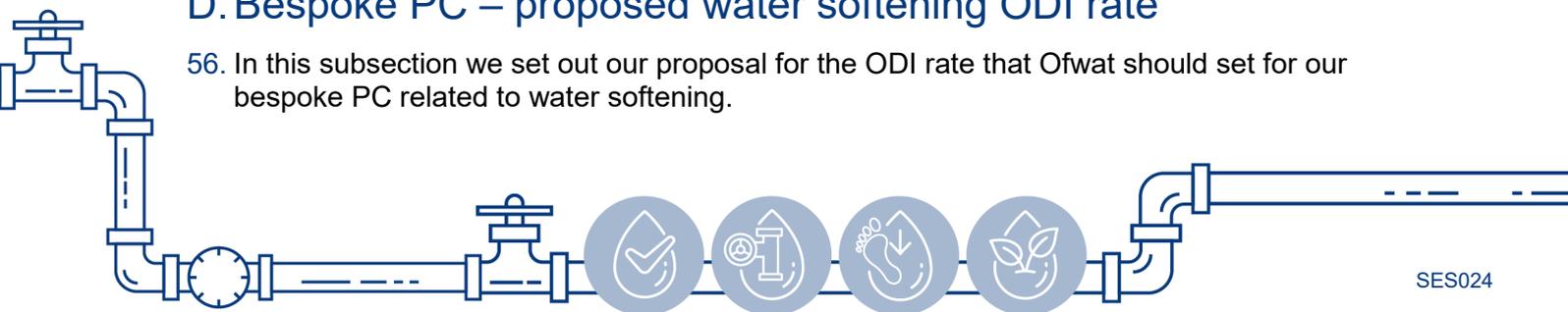


Source: SES Water analysis

55. Overall, we consider that our proposed changes to the ODI package, once considered alongside Ofwat’s indicative ODI rates for PR24, offers a more balanced package of risk and reward for the price control. As we have discussed above, we face uncertainties and drivers of PC performance, particularly in demand reduction, that are outside of our control to fully manage. These require mitigation within Ofwat’s ODI regime, alongside the targeted changes we have set out to account for our WoC status.

D. Bespoke PC – proposed water softening ODI rate

56. In this subsection we set out our proposal for the ODI rate that Ofwat should set for our bespoke PC related to water softening.



- 57. We are proposing an ODI rate of **£-0.0294m per 1 mg Ca/l deviation from target (2022/23 prices)**, which reflects the principles for how the ODI rate was set at PR19 and our assessment of the balance of fixed and variable costs we will incur in AMP8 in delivering our statutory obligation to soften.
- 58. The subsections below provide the background and context to how Ofwat has previously approached setting our softening PC and ODI and the analysis we have undertaken to inform our PR24 ODI rate proposal.

Context

- 59. In PR14, our softening PC and ODI required us to deliver the softening programme (effectively maintaining serviceability), including the delivery of the Woody site to improve its softening performance to the required standard. There was a £3m penalty if the above could not collectively be proven.
- 60. At PR19, Ofwat’s approved an ODI rate of £-0.0333m (adjusted to 2022/23 prices) per deviation for our bespoke water softening bespoke PC. This was roughly in line with the value of our cost adjustment claim (CAC) of £11.5m (2017/18 prices, comprising £3m of CAPEX and £8.5m of OPEX) for water softening at the time, i.e., failing to soften any water to any degree at any site over the five years of AMP7 would have resulted in a repayment of the full CAC to customers in the form of ODI penalties.
- 61. At PR24, our base cost CAC is £30.7m after the application of real price effects (RPEs) and our ongoing efficiency assumption, of which a bit less than half (i.e., £11.6m) is related to the CAPEX associated with the delivery of the Kenley scheme. This is substantially different from the CAPEX-OPEX split of our PR19 CAC. A breakdown of our PR24 CAC is presented in the table below.

Table 3: Summary of water softening costs after application of RPEs and OE (£m 2022/23 prices)

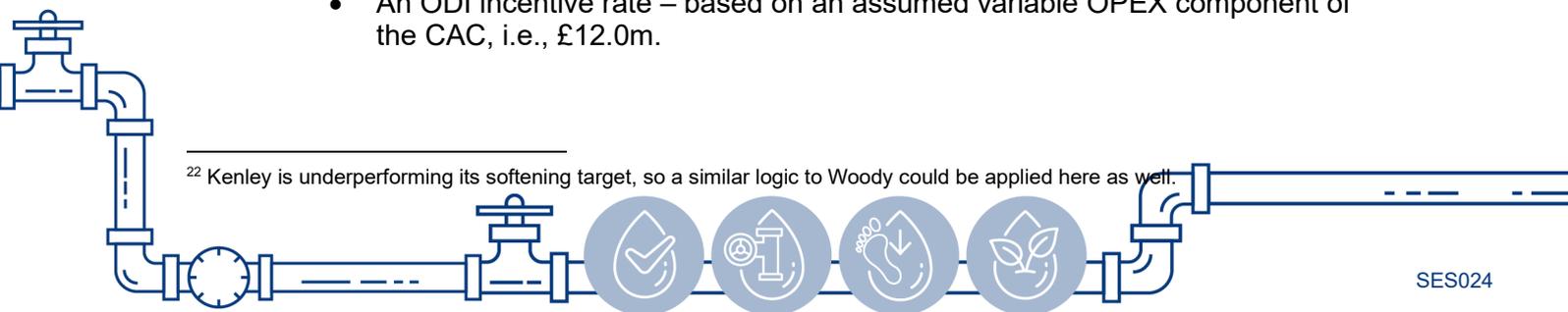
Cost	2025/26	2026/27	2027/28	2028/29	2029/30	APM8 total
OPEX	3.6	3.5	3.3	3.2	3.3	17.0
CAPEX	6.2	6.1	0.3	0.3	0.8	13.7
TOTEX	9.8	9.6	3.6	3.5	4.1	30.7

Source: SES analysis

Our proposal

- 62. We propose to set out the basis of an ODI using a blend of the PR14 and PR19 approach. We propose:
 - A consumer protection element – this is essentially part of our CAC whereby we have proposed to protect consumers from the non-delivery of the CAPEX associated with softening. In essence, we would return the money to consumers if serviceability (associated with the delivery of the Kenley scheme²² and other associated CAPEX within the AMP) was not delivered over AMP8.
 - An ODI incentive rate – based on an assumed variable OPEX component of the CAC, i.e., £12.0m.

²² Kenley is underperforming its softening target, so a similar logic to Woody could be applied here as well.



63. The rationale for excluding the fixed OPEX is that where we would need to stop softening due to wholesomeness taking priority (this only happens very occasionally), planned softening plant outage for maintenance reasons and supply chain disruption causing chemical shortages, we would still incur those fixed costs.
64. The breakdown of our water softening costs is presented in Table 4 below.
65. The cost of electricity associated with our water softening activities is composed of both fixed and variable OPEX. Across our five treatment works, we estimate that 22.3% of our electricity costs (i.e., £1.309m) are variable while the remaining 77.7% is fixed (i.e., £4.559m). Following this strict categorisation, our total variable OPEX would be £7.455m²³ instead of the £12.014m reported in the table below. As this would generate a significantly lower ODI rate than the one currently in place at PR19 and given the size of our CAC at PR24 is greater than the one approved at PR19, we have included all electricity costs as variable, to retain a similar level of ODI rate (2022/23 prices) in PR24.

Table 4: Water softening costs after application of RPEs and OE (£m 2022/23 prices)

Cost item	2025/26	2026/27	2027/28	2028/29	2029/30	AMP8 total
OPEX (fixed)	1.018	1.008	0.997	0.987	0.978	4.988
Labour	0.489	0.484	0.479	0.474	0.470	2.396
Plant maintenance	0.336	0.332	0.329	0.326	0.322	1.645
Other	0.193	0.191	0.189	0.187	0.186	0.947
OPEX (variable)	2.622	2.494	2.330	2.226	2.342	12.014
Chemicals	1.217	1.188	1.161	1.132	1.107	5.805
Electricity ²⁴	1.334	1.236	1.101	1.027	1.169	5.868
Waste disposal	0.072	0.070	0.068	0.067	0.065	0.341
Total OPEX	3.640	3.501	3.328	3.214	3.319	17.002
Total CAPEX	6.164	6.102	0.321	0.318	0.809	13.713
CAPEX (Kenley)	5.836	5.778	-	-	-	11.614
CAPEX (other)	0.327	0.324	0.321	0.318	0.809	2.100
TOTEX	9.804	9.603	3.649	3.531	4.128	30.715

Source: SES analysis

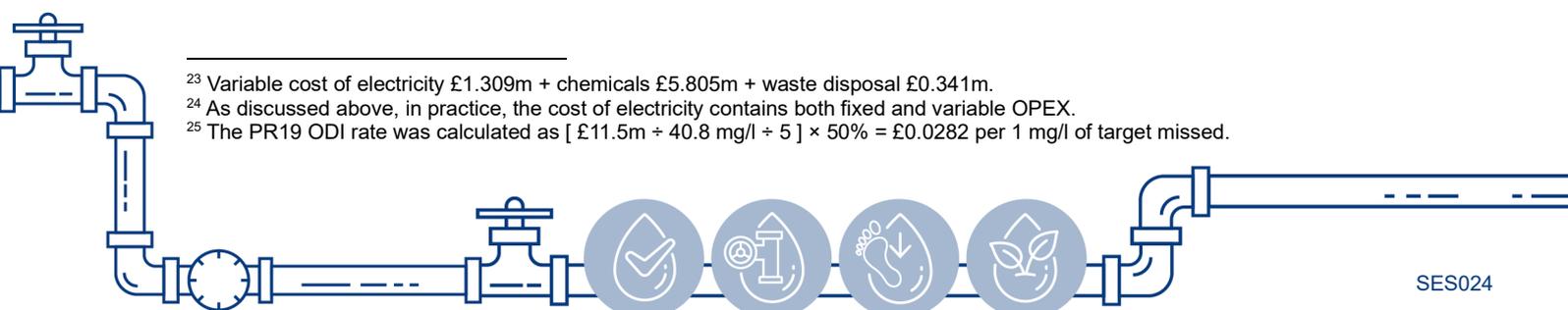
66. As a result of our proposed treatment of electricity costs, our proposed **ODI rate for PR24 is £-0.0294m per 1 mg Ca/l deviation from target**. This is calculated as follows:

$$\text{ODI rate} = [A \div B \div C] \times D^{25}$$

²³ Variable cost of electricity £1.309m + chemicals £5.805m + waste disposal £0.341m.

²⁴ As discussed above, in practice, the cost of electricity contains both fixed and variable OPEX.

²⁵ The PR19 ODI rate was calculated as [£11.5m ÷ 40.8 mg/l ÷ 5] × 50% = £0.0282 per 1 mg/l of target missed.



- A. Value of CAC subject to ODI incentive: **£12.014m** (variable OPEX including all electricity costs)
- B. Total difference between average raw water hardness and softening target: $120.8 - 80.0 = \mathbf{40.8}$ (mg/l)
- C. **Five** years during period of PR24
- D. TOTEX incentive mechanism sharing rate: 50%

ODI rate = $[\text{£}12.014 \div 40.8 \text{ mg/l} \div 5] \times 50\% = \text{£}0.0294\text{m}$ per 1 mg/l of target missed.

67. We believe this is a proportionate and robust approach which also best reflects the controllability of the delivery of the PC. It also is the natural progression of the development of the PC and ODI to reflect the component parts of the operation.



Annex A – Ofwat indicative ODI rates

Table A1: Ofwat indicative ODI rates by PC

PC	Incentive design	ODI rate under-performance (£m)	ODI rate outperformance (£m)
Leakage	Standard ODI – no cap/collar	-0.365	+0.365
	Enhanced ODI – cap set to be equivalent to 1% of RoRE	-	+0.730
Per capita consumption	Standard ODI – no cap/collar	-0.269	+0.269
	Enhanced ODI – cap set to be equivalent to 1% of RoRE	-	+0.538
Business demand	Standard ODI only – cap/collar	-0.365	+0.365
Water supply interruptions	Standard ODI – collar only	-0.180	+0.180
	Enhanced ODI – no cap	-	+0.360
Mains repairs	Standard ODI only – cap/collar	-0.031	+0.031
Unplanned outages	Standard ODI only – cap/collar	-0.290	+0.290
Operational GHG emissions*	Standard ODI only – cap/collar	TBC	TBC
Biodiversity*	Standard ODI only – cap/collar	TBC	TBC
Customer contacts about water quality	Standard ODI only – no cap/collar	-1.913	+1.913
Serious pollution incidents	Standard ODI only – no cap/collar	-1.364	-
Discharge permit compliance	Standard ODI only – no cap/collar	-0.029	-
Compliance risk index (CRI)	Standard ODI only – no cap/collar Subject to a deadband	-0.190	-
Water softening (bespoke PC)	Standard ODI only – no cap/collar	-0.0294	-

Source: SES Water, compiled from various Ofwat PR24 sources

*Note: ODI rates for biodiversity and GHG emissions will be provided by Ofwat at draft determination

