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APPENDIX SES069: RORE RANGES

This appendix provides the supporting analysis and assumptions that inform our RoRE ranges as presented in Chapter 8 – Financing Our Plan.

Ofwat has requested that companies provide additional commentary to accompany and explain the development of the RoRE ranges and specifically the data provided within the RR30 risk and return data table. This appendix also serves as the supporting commentary for the RR30 data table.

A. Introduction

- 1. In Chapter 8: Financing our plan aligning risk & return, we describe our assessment of risk and RoRE ranges and explain how our central, P10 and P90 scenarios have been calculated. This appendix provides the supporting analysis and assumptions that inform those RoRE ranges. In the subsections below we detail:
 - The approach and assumptions that we have adopted to develop scenarios for each of the components of the RoRE range.
 - Any variations from Ofwat's approach taken in chapter 2 of Appendix 10 aligning risk and return of its Final Methodology.
 - What mitigating factors have been considered as part of developing the RoRE analysis for our business plan.
 - Where the detail for bespoke uncertainty mechanisms or notified items are located within our business plan.

B. Wholesale totex and retail cost scenarios

Our analysis and assumptions

- 2. The actual level of totex we spend may be higher or lower than the level forecast in our plan. This will be influenced by:
 - Input price movements (energy, materials, labour);
 - Weather, including the extent and effects of severe weather events;
 - Economic conditions (which can affect the number of new connections to our network, activity levels, bad debt, etc.);
 - Output/outcome requirements: for example, required outcomes may depend on regulatory decisions that have not as yet been settled;
 - Mix/scope of capital works that in practice need to be delivered during the AMP vs. the anticipated mix of work in our business plan/Ofwat allowances; and
 - The inherent uncertainties over how capital projects should be structured, the inputs that may be required to deliver a given outcome and the supply chain requirements that may apply in the delivery of the works.
- 3. To develop our P10 and P90 estimates for totex we considered:
 - Our outturn experience to date in AMP7 as regards wholesale and retail spend vs.
 Ofwat allowances.



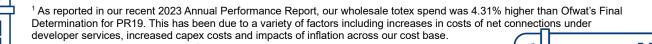


- Industry and SES Water specific data on actual totex vs allowances for 2015-2020 period (PR14) and more historic price control periods (2000-2015).
- The degree to which the factors that may impact our actual totex (see above) can be mitigated / controlled by management actions.
- Whether industry data on cost out/under performance during PR14 (the basis for Ofwat's indicative RoRE range in its PR24 final methodology) is likely to be reflective of the cost risk inherent to our PR24 business plan.
- 4. To calculate our P90 ranges, we have assumed a 6% underspend on our forecast wholesale totex (with a 50% sharing factor) and an 8% underspend on our forecast retail costs. These variations are based on our review of historic outturn expenditure relative to our annual cost allowances. We also include a provision for a 5% underspend on other costs, e.g., developer services, that may impact our returns.
- 5. To calculate our P10 ranges, we have assumed a 6% overspend on our forecast wholesale totex (with a 50% sharing factor) and a 12% overspend on our forecast retail costs. Similar to the P90, we also include a provision for a 5% overspend on other costs, e.g., developer services, that may impact our returns.
- 6. Our assumptions are based on actions we can take as a company to manage and control our costs and our more recent outturn performance on costs which has been a period where we have faced considerable volatility and pressures on our costs from increases in our input prices (e.g., chemicals) and changes in economic conditions.¹
- 7. Table 1 below summarises the assumptions that we have made on totex scenarios to develop our RoRE ranges. The Avg £m column is the average p.a. £m impact after adjusting for a 25% corporation tax rate of the P90 and P10 case we have used to populate the RR30 data table. The % RoRE figure is the average RoRE value for the AMP as calculated in RR30.

Table 1: Totex scenarios

Totex scenarios	High case	(P90)	Low case (P10)		
Totex Scenarios	% RoRE	Avg £m	% RoRE	Avg £m	
Wholesale water costs	1.00%	1.69	-1.00%	-1.69	
Retail costs	0.27%	0.46	-0.41%	-0.69	
Other control costs	0.08%	0.13	-0.08%	-0.13	
Total	1.35%	2.28	-1.49%	-2.51	

- 8. In Chapter 7 (Explaining our costs) and Chapter 10 (Delivery of our plan) we set out the actions that we will take to manage our costs to drive efficiencies and mitigate the risk of cost overruns. In summary:
 - We have in place capital budgeting monitoring and governance processes that are applied to all of our capital spend.



- We have effective procurement processes in place to manage our supply chain and seek wherever possible cost certainty/fixed-rate contract structures from our suppliers when tendering capital works programmes.
- As part of our financial year budgeting and APR process our management team and Board monitor the delivery of ongoing cost efficiency programmes and our totex performance vs. price control allowances.

Variations from Ofwat's approach

9. Ofwat assumes a P10 and P90 totex over/underspend of ±8.5% in Chapter 2 of Appendix 10 – aligning risk and return. In comparison, as set out above, we have assumed a narrower risk range of ±6.0%. We believe that the narrower range is more representative of our totex performance since 2000, with a maximum underspend of 5.4% in PR99 (2000-2005) and a maximum overspend of 1.9% in PR04 (2005-2010). Table 2 below compares our historical cost performance (vs. Ofwat's allowances) to the industry wide analysis (price control averages and industry P10/P90) included in Annex A to Appendix 10 of Ofwat's Final Methodology.²

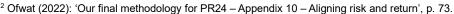
Table 2: Industry and SES historic performance of costs vs. allowances

	2000-05	2005-10	2010-15	2015-20	Average
Industry average	4.7%	0.0%	0.5%	-0.4%	1.2%
Industry P10	-0.5%	-4.8%	-6.8%	-8.4%	-
Industry P90	11.5%	4.3%	7.0%	8.5%	-
SES Water	5.4%	-1.9%	3.8%	-0.3%	1.7%

Source: Ofwat

Note - Negative performance implies a company has overspent and underperformed its' allowance.

- 10. Our narrower range also reflects the internal actions we believe we can take to manage and control our costs and our recent outturn performance on totex vs. allowances even during a period where we have faced considerable volatility and pressures on our costs from increases in our input prices (e.g., chemicals) and changes in economic conditions. However, given uncertainties looking forward to the PR24 period, particularly regarding the delivered price of energy we will face and how this will be captured in Ofwat's totex allowances, we have adopted a slightly wider range of ± 6.0% than what our historical performance suggests, in part to account for this input price inflation risk.
- 11. On retail costs, Ofwat assumes a range of between -19% underspend and +10% overspend in Chapter 2 of Appendix 10 aligning risk and return. In comparison, we have assumed a range of -8% (underspend) and +12% (overspend) based on expert judgement of the cost pressures we may face. The negative skew in our range reflects our view that even with our internal approach to managing costs and actively mitigating the risk of cost overruns over the PR24 period, we face a number of headwinds going into AMP8 e.g., associated with input price inflation and also our cost performance against Ofwat allowances in PR14 and PR19 has historically been an overspend scenario. For example, in PR14 Ofwat estimates we overspent our allowances by 15%. Our assumption of a 12% overspend in a relatively unlikely P10 scenario, reflects our expectation that the level of PR14 overspend is an unlikely scenario going forward given initiatives we have and will put in place going into the next AMP.³



³ See discussion in Chapter 7 – Explaining our costs.

12. We note our RoRE is significantly more sensitive to percentage changes in totex and retail costs compared to what is assumed by Ofwat for the notional company in its PR24 final methodology document. For example, Ofwat assumes that a 19% retail underspend will generate a +0.3% RoRE impact. We estimate a 19% retail underspend for SES Water would result in a c. +0.6% RoRE impact. This pattern can be explained by variations in the ratio of retail costs to regulated equity between SES Water and the average notional company in Ofwat's RoRE analysis.⁴

C. Financing scenarios

Our analysis and assumptions

- 13. We have carefully considered the risks that are inherent in the financing and delivery of our PR24 business plan. Ofwat's final methodology and the RR30 data table guidance require us to assume notional gearing/capital structure for the purposes of preparing our RoRE ranges and to identify the expected financing risk related to the allowed cost of debt in two areas, namely:
 - Inflationary impacts; and
 - Performance on raising new debt.
- 14. In its PR24 final methodology, Ofwat indicates the risk that the cost of embedded debt differs from the central estimate that will be reflected in its own modelling of the notional company's balance sheet as of 31 March 2025 should not be reflected within the RoRE financing risk ranges. We disagree with this view, as given the specific circumstances associated with the embedded cost of debt that we will in practice face during the next AMP⁵ it will have a material impact on the expected balance of risk and reward from the delivery of our plan. We have, therefore, considered financing risk from both the perspective of the notional company capital structure and our actual capital structure with the latter taking into consideration:
 - Our expected embedded debt performance; and
 - Specific risks in the next AMP in raising new debt.
- 15. Our assumptions of the RoRE range under a notional capital structure, which have been used to populate RR30, are set out in Table 3. Again, the Avg £m column is the average p.a. £m impact of the P90 and P10 case used to populate the RR30 data table. The % RoRE figure is the average RoRE value for the AMP as calculated in RR30.

Table 3: Financing scenarios – notional capital structure

Financing scenarios	High case	e (P90)	Low case (P10)		
Financing Scenarios	% RoRE	Avg £m	% RoRE	Avg £m	
New debt issuance	0.06%	0.10	-0.09%	-0.15	
Inflationary impacts	0.61%	1.03	-0.61%	-1.03	
Total	0.67%	1.13	-0.70%	-1.18	

Source: SES analysis

⁴ The same applies for wholesale totex, whereby we estimate that an overspend/underspend of 6.0% results in a RoRE impact of ±1.00% for SES Water, whereas Ofwat's assumption for the notional company of overspend/underspend of 8.5% results in a RoRE impact of ±1.00%.

⁵ As we previously demonstrated in our PR19 business plan submissions, this was efficiently raised debt consistent with prevailing market rates at the time of issuance.

Variations from Ofwat's approach

- 16. We have used a consistent set of assumptions as Ofwat for estimating the inflationary impacts related to the cost of debt. The 'leveraging' effect on equity returns from unexpected inflation where there are fixed rate debt obligations is difficult to estimate precisely and is sensitive to the assumptions chosen (in particular, to the proportion of fixed rate debt). We have therefore used the assumptions that Ofwat has set out in its Final Methodology as a reasonable estimate for forming our RORE range.⁶
- 17. There are a number of reasons why there could be a difference between the cost of new debt and the iBoxx measure that Ofwat has signalled it will use to set the price control WACC allowance. These include:
 - There may be timing differences between when the company secures new debt from that assumed by Ofwat for calculating the new cost of debt allowance. The use of the iBoxx effectively assumes a smooth debt issuance profile, whereas in practice our borrowing will be lumpier than this.
 - As a small and, therefore, relatively infrequent issuer, we are particularly exposed to timing risk in our debt issuance particularly in a relatively volatile rate environment as has been experienced in the past few years.
 - There may be differences in the amount of new debt that needs to be secured than the assumption that is used by Ofwat to set the allowed cost of debt.
 - The rate at which the new debt is raised could be different to the assumption that Ofwat uses to set the allowance (average of A/BBB iBoxx). As a small company, we are particularly exposed to the risk that we may not be able to meet the benchmark rate that is assumed in Ofwat's standard WACC calculations.
- 18. We consider that as a small, and relatively infrequent issuer, the risk of us out or underperforming Ofwat's new cost of debt allowance is greater than the indicative RoRE range of 0.7% (outperformance) to 0.3% (underperformance) in the final methodology. As we discuss in Chapter 8, we are expecting a programme of new debt issuance in the next AMP and our ability to recover in full the cost of this new debt issuance, during a volatile period for debt markets, is an important issue and risk for us.
- 19. Absent of any allowance for a small company premium on the allowed new cost of debt, we consider a more conservative range of 0.4% (outperformance) to 0.6% (underperformance) is appropriate for our RoRE range. Converting this into RoRE terms gives a range between -0.09% and 0.06%, i.e., an expectation of a higher reasonable downside risk compared to upside risk, in contrast to Ofwat's expectation that the upside risk (i.e., scope for outperformance) is greater than the downside risk.
- 20. As discussed above, embedded debt performance can also affect returns because of differences between our actual, efficiently incurred embedded debt costs, and the allowance that is provided for in Ofwat's allowed return on capital. Ofwat has stated that because the RoRE assessment should be based on the notional company structure, the impact of embedded debt effects should not be included in the RoRE analysis, because the central allowed cost of embedded debt is reflected in the company balance sheet at the 31 March 2025. However, in practice, we expect to under-perform in relation to Ofwat's embedded debt allowance given our legacy index-linked debt will only start to be repaid in the second half of the forthcoming AMP. While the precise impact on RoRE in AMP8 is difficult to estimate given the complexity of the financing plan (Chapter 8 –

⁶ Inflation impact ranges are calculated using the following equation: Inflation variation x (1 − Proportion of IL debt) x (Gearing / 1 − Gearing) x (1 − Tax rate). We have used an inflation variation assumption of +/-1%, index linked debt proportion of 33% (consistent with Ofwat guidance), a notional gearing assumption of 55% and a tax rate of 25%. Note we believe there is an error in the formula stated in Ofwat's final methodology Appendix 10 which uses the proportion of non-IL debt in the formula above which we understand to be inconsistent with the objective of the calculation set out.

financing our plan) the impact could be material (we estimate the impact could be 0.4-0.9% RoRE p.a. in AMP8).⁷ While we have not reflected this in our RR30 submission, it means we expect to face a further downward skew in expected RoRE in AMP8 than is apparent from the RoRE ranges that reflect a notional company financing structure.

D. Outcome delivery incentives (ODI)

Our analysis and assumptions

- 21. We have a well-established and robust process for managing and mitigating ODI performance risks. Each ODI within the company has a business owner and performance meetings are held on a monthly basis to monitor our performance and where necessary take mitigating actions to improve performance. A regular status update is provided to the CEO and the broader Executive Leadership Team of performance against the price control ODIs and other performance KPIs that we monitor on a regular basis. ODI performance is also an area where we provide regular reporting updates to our Board.
- 22. Where under-performance is identified:
 - We undertake a root cause analysis of the factors that are driving the underperformance against the price control performance commitment (PC) and the degree to which they are under/outside our control.
 - We develop an action plan for how performance can be improved and the specific steps that are within our control to meet the performance commitments we have made to our customers.
- 23. As we set out in Chapter 3 Our Track Record, we also have a strong track record of industry leading and predictable performance against our PCs. For these reasons, we are confident in our ability to mitigate scenarios of ODI underperformance and to robustly forecast our expected level of performance looking forward to the next AMP.⁸
- 24. To understand the potential revenue impact of our package of PCs and ODIs, we undertook a bottom-up analysis of historical outturn industry data and supplemented this with expert/management judgements. In summary:
 - we first created a benchmark for strong/weak performance for each PC based on the distribution of historic performance relative to target (where data is available) for all companies across AMP7, i.e., based on three-years of outturn data. This approach followed the methodology set-out in Ofwat's top-down ODI modelling;
 - we then estimated the P10/P90 performance level for each PC at PR24 by applying the benchmark performance level to an indicative view of an Ofwat PR24 PCL;
 - we then applied the P10/P90 performance levels alongside Ofwat's indicative set of ODI rates for PR24 in order to calculate the financial impact of these performance levels on RoRE: and
 - we finally applied expert/management judgement to adjust the performance levels implied by the bottom-up industry assessment in cases where the calculated performance level does not appear realistic or achievable.
- 25. In the final step of the analysis, we sought to account for the high likelihood that sector wide P10/P90 performance data in the current AMP will overstate the overall level of risk in our business plan because:

⁸ See Chapter 6 – The outcomes we will deliver, and Chapter 10 for detailed discussion of why we consider our proposed performance commitments are both stretching and achievable and underpinned by a robust delivery plan.



⁷ This has been estimated taking into consideration differences in bond values and indexation charges between RPI and CPIH.

- it is less likely for performance to be at the extreme level under two PCs at the same time; and
- there may be reasons e.g., based on our current performance levels to not expect that sector wide performance data is applicable to the delivery of our performance commitments in the next AMP.
- 26. We also undertook a top-down cross check of our how our assumptions of ODI risk in the round compared to sector wide ODI performance in aggregate, based on three-years of outturn data as discussed further below.⁹
- 27. Our ODI P10 and P90 scenarios are set out in Table 4 below. This analysis does not include Operational GHG Emissions and Biodiversity on the basis that Ofwat has not yet proposed any ODI rates yet. As we are also not in a position to propose any rates at this stage of the price review either, these PCs are excluded from our current ODI RoRE analysis, i.e. assumed to have no impact on our estimates, however this will be revised post draft determinations. The ranges, however, do include the impact of our bespoke softening ODI in the P10 case.

Table 4: Outcome delivery incentives scenarios

ODI scenarios	High case	e (P90)	Low case (P10)		
	% RoRE	Avg £m	% RoRE	Avg £m	
ODI	1.49%	2.53	-3.12%	-5.25	

Note: All common and bespoke PCs relevant to SES Water were included in our P90/P10 analysis.

Variations from Ofwat's approach

- 28. Table 4 shows that in our view the overall ODI package is negatively skewed. Our high case scenario is broadly consistent with, albeit lower than, the assumption Ofwat presented in its RoRE range in its final methodology, i.e., +2% as central estimate. However, our low case scenario sits outside the -2% central estimate range that Ofwat adopted for in its range for the price control period.
- 29. This is particularly driven by the downside risk that we consider is associated with the stretching ambitions and performance targets reflected in our plan and how we assess Ofwat may set the PR24 company-specific and common PCLs. In particular, the assessment of downside risk is driven by the PCC and Business demand performance commitments, as discussed in Appendix SES024 ODI Design & Calibration.
- 30. We set out in further detail the assumptions and analysis that informed our indicative ODI RoRE range in Annex A to this appendix and how this compares with the approach that we understand Ofwat has taken to assess ODI RoRE.

E. Measures of experience

Our analysis and assumptions

31. We have assumed for the purposes of the RoRE range on measures of experience that the high and low cases approximate the upper and lower penalties/rewards under Ofwat's current proposals for the incentive design, given that these incentives are all

⁹ This included adjustments to sector data that we considered were not applicable to delivery of the performance commitments in our PR24 business plan.



relative measures. The downside skew in the range reflects the greater percentage of revenue that Ofwat has signalled may be at risk in the event companies incur underperformance payments, in particular for D-MeX.¹⁰ The table below sets out our customer measure of experience P10 and P90 scenarios.

Table 5: Customer measures of experience scenarios

Measures of	High o	case	Low case		
experience	% RoRE Avg £m		% RoRE	Avg £m	
C-MeX	0.70%	1.18	-0.70%	-1.18	
D-MeX	0.10%	0.17	-0.20%	-0.34	
BR-MeX	0.05%	0.08	-0.10%	-0.17	
Total	0.85%	1.44	-1.00%	-1.69	

Source: SES analysis

Variations from Ofwat's approach

- 32. Our assumptions are generally consistent with Ofwat's indicative RoRE range as set out in the Final Methodology document, except for C-MeX where, based on ±18% of retail revenues, we estimate that our RoRE range could be closer to c. 0.7% on average. 11 We note that aspects of the C-MeX incentive design are still under review by Ofwat and as a result this is an early estimate of the risk that we may face under this incentive, but seeks to account for the increased revenue that is expected to be at risk.
- 33. Based on our financial modelling we estimated a slightly lower impact of the BR-MeX (as a RoRE %) than Ofwat's indicative RoRE range in the final methodology based on assumptions of the percentage of wholesale revenues that are recovered from our business customers. However, the difference was small and Ofwat has signalled in the final methodology it will review whether the revenue at risk under this incentive remains appropriate, so we have aligned our range with Ofwat's (+0.05% to -0.10% RoRE).
- 34. As we noted in our response to Ofwat's draft methodology, we consider there are some limitations to the design of Ofwat's measures of experience incentives in PR24. Given those inherent limitations, we do not consider it appropriate that they give rise to a negative skew to the RoRE range, primarily via the D-MeX incentive, as Ofwat's own indicative RoRE analysis assumes. Nevertheless, in Chapter 10 we discuss how we propose to deliver strong performance for our customers across the range of customer measures of experience that Ofwat expects to put in place for PR24.

F. Revenue and other impacts

Our analysis and assumptions

35. Our working assumption is that we will not incur any penalties under the Revenue Forecasting Incentive (RFI) under our central case. However, under the P10 (low) case,

¹⁰ In Appendix 8 – Outcome delivery incentives, of the Final Methodology Ofwat note "For PR19, payments depend on where a company scores relative to both the median company and either the highest or lowest performing company scores. Companies that score above the median company receive standard outperformance payments of up to 6% of that year's actual developer services revenue, while those that score below incur underperformance payments of up to 12%. The median company does not receive any payments." Ofwat (2023): 'PR24 Final Methodology – Appendix 8'

¹¹ We have estimated the maximum and minimum penalties based on ±18% of our projected retail revenues and the projected average regulated equity in our financial modelling.

we assume we could incur a maximum penalty of -0.05% of RoRE across the PR24 period, as illustrated in the table below. ¹²

Table 6: Revenue & other impacts

Revenue &	High case		Low case		
other	% RoRE Avg £m		% RoRE	Avg £m	
Revenue	NA	NA	-0.05%	-0.08	
Other	NA	NA	0.00%	0.00	
Total	NA	NA	-0.05%	-0.08	

Source: SES analysis

Variations from Ofwat's approach

36. Our assumptions are consistent with Ofwat's indicative RoRE range as set out in the Final Methodology document.

G. Mitigating factors

37. As discussed in Chapter 8 (Financing Our Plan) our assessment of risk associated with the delivery of our business plan presents an asymmetric profile skewed to the downside, primarily due to the exposure to the large adverse impacts of not meeting some of the ambitious performance commitment targets (mainly on PCC and Business demand) and underperformance risks related to our financing costs. Nonetheless, our RoRE analysis has carefully accounted for a range of mitigating factors which are outlined below.

Mitigations against cost overrun

- 38. As noted above, there are actions that we will take to manage our costs to drive efficiencies and mitigate the risk of cost overruns. In summary:
 - we have in place capital budgeting monitoring and governance processes that are applied to all of our capital spend;
 - we have effective procurement processes in place to manage our supply chain and seek wherever possible cost certainty/fixed-rate contract structures from our suppliers when tendering capital works programmes; and
 - as part of our financial year budgeting and APR process, our management team and Board monitor the delivery of ongoing cost efficiency programmes and our totex performance vs. price control allowances.

Mitigations against poor ODI performance

39. We also have a well-established and robust process for managing and mitigating ODI performance risks. As discussed above, each ODI within the company has a business owner and performance meetings are held on a monthly basis to monitor our performance and where necessary take mitigating actions to improve performance. A regular status update is provided to the CEO and the broader Executive Leadership Team of performance against the price control ODIs and other performance KPIs that we monitor on a regular basis. ODI performance is also an area where we provide regular

¹² We note this is potentially a conservative assumption given that our actual £m penalty in practice may be higher as a % of our regulated equity. For the purposes of our RoRE analysis, we have adopted this simplifying assumption.



reporting updates to our Board and have a track record of industry leading and predictable performance against our PCs (see paragraph 25 above).

H. Bespoke uncertainty mechanisms

- 40. As discussed in Chapter 8 (Financing our plan) and set out in Appendix SES024: ODI design & calibration, we are advocating for the inclusion of additional ODI uncertainty mechanisms on Business Demand, Per Capita Consumption, Discharge Permit Compliance and Serious Pollution incidents ODIs for PR24.
- 41. These proposed uncertainty mechanisms take the form of either caps and collars on the ODI rewards and penalties, or the introduction of a deadband to strike a more appropriate balance of risk and reward where: the PCs are new and therefore uncertain; and/or we consider we have put forward high sector ambition; and/or PCs and ODIs have the potential to be a significant source of skew in the outcomes package; and/or factors impacting ODI performance are likely to be outside of company control (e.g., the degree and pace of PCC reduction customers are willing to implement / accept).
- 42. We provide a short summary of each uncertainty mechanism in Table 7 below. Appendix SES024 describes the proposed uncertainty mechanisms in further detail.

Table 7: Proposed bespoke uncertainty mechanisms.

Performance Commitment	Description of proposed uncertainty mechanism
Business Demand	A deadband of ±1.5% in addition to Ofwat's proposed cap and collar of ±0.4% of RoRE. A deadband would allow a degree of flexibility in terms of our performance and in combination with a cap and collar of ±0.4% of RoRE, 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.
Per Capita Consumption	A cap and collar of ±0.4% of 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. This rate is also consistent with Ofwat's ranking of RoRE risk from customer research ¹³ .
Discharge permit compliance	A collar of -0.2% of RoRE. 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 to SES Water. Hence, we believe a narrower collar set at -0.20% of RoRE would be appropriate.
Serious pollution incidents	A collar of -0.5% of RoRE. This would reduce our risk exposure under our P10 scenario which assumes one serious pollution incident across the PR24 period. The proposed collar is in line with Ofwat's indicative collar levels, as described in its PR24 Final Methodology.

Source: SES Water

43. The impact of the proposed uncertainty mechanism on the ODI RoRE range (P10/P90) is illustrated in Figure 1.

¹³ See p.44 https://www.ofwat.gov.uk/wp-content/uploads/2023/08/PR24-Using-collaborative-customer-research-to-set-outcome-delivery-incentive-rates-.pdf

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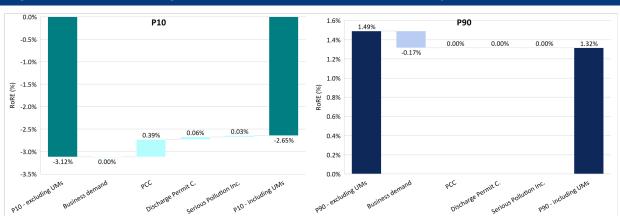


Figure 1: ODI RoRE range P90/P10 without and with uncertainty mechanisms¹⁴

Source: SES analysis

- 44. As we discuss in Chapter 7 Explaining our costs, and the supporting appendix on cost efficiency benchmarking (Appendix SES005.B) we are also in favour of Ofwat considering a form of uncertainty / risk sharing mechanism to manage the volatility and forecasting uncertainty associated with input prices during AMP8, in particular in relation to energy and chemicals prices.
- 45. We have not reflected the impact of such an uncertainty mechanism in our RoRE ranges given how this should be applied will depend on how Ofwat approach energy and other input price trends in its cost modelling for PR24 (both in the base year cost in AMP7 and over the period of AMP8). If designed appropriately and consistently with how Ofwat approaches the treatment of input price inflation in its cost modelling, we would expect this to help mitigate some of the cost risk that we face in the next AMP.
- 46. We look forward to further engagement with Ofwat on how an appropriate, and targeted, set of ODI and cost related uncertainty mechanisms could be introduced at Ofwat's draft determinations, while continuing to retain strong incentives on the industry to deliver high levels of performance improvement.

¹⁴ We do not find an impact of the uncertainty mechanism on business demand at the P10 level because under the assumptions in the analysis, the -0.4% collar binds regardless of whether the UM is applied or not. This is discussed in more detail in Appendix SES024: ODI Design & Calibration

Annex A - PCs & ODIs - impact on RoRE

Accounting for interactions between individual performance commitments

- 47. RR30 contains rows to input data for the high and low case ODI scenarios for the following components:
 - Water ODIs;
 - Wastewater ODIs
 - · Retail ODIs; and
 - Additional controls.
- 48. As a water-only company, we do not have any wastewater ODIs and do not have any specific retail ODIs either. The Additional control component is not relevant to SES Water either. As such, the only two rows containing data in relation to the ODI scenarios is RR30.7 and RR30.28. We accounted for interactions between individual performance commitments in our P10 and P90 scenarios by applying expert judgement to adjust the performance levels implied by our bottom-up industry assessment.
- 49. In this annex we describe our approach in more detail.

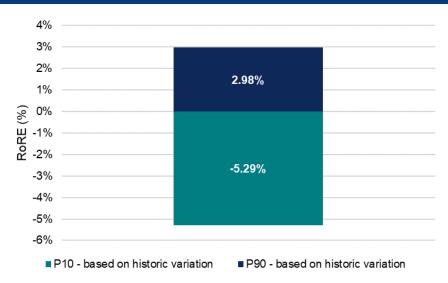
ODI scenarios: Bottom-up approach using industry data and expert judgement

- 50. We have followed a similar methodology to Ofwat's ODI models to construct our own view of what a reasonable P10/P90 range will be for each PC. We created a benchmark for strong/weak performance for each PC based on the distribution of historic performance relative to target (where data is available) for all companies across AMP7, i.e., based on three-years of outturn data.
- 51. We estimate the P10/P90 performance level for each PC at PR24 by applying the historic benchmark of performance level relative to target against our assessment of an indicative Ofwat PR24 PCL. As such, we used historical variation in performance relative to target that is delivered by other companies to benchmark our future performance.
- 52. We then take the P10/P90 performance levels alongside Ofwat's indicative set of ODI rates in order to calculate the financial impact of these performance levels on the RoRE. The outcome of this approach on the RoRE is illustrated in Figure A1 below.¹⁵
- 53. This bottom up ODI range, based on historic performance variation across all companies, produces a wide ODI RoRE range between -5.29% to +2.98%. This is materially above the range presented by Ofwat in its final methodology. i.e., +/- 2% RoRE. Upon close review of the result illustrated in Figure A1, we decided that the approach to forecast P10/P90 performance based solely on historic performance variation produced results that did not appear to be realistic or achievable for PR24. For example, in some cases this approach returned P10 performance levels that we considered to be materially below a minimum level of realistic performance over PR24 for SES Water.
- 54. Our next step was therefore to apply expert judgement to adjust the performance levels implied by the bottom-up industry assessment in cases where the calculated performance level did not appear realistic or achievable. Our application of expert judgement also accounted for the fact that it is less likely to simultaneously achieve positive / negative performances across all PCs at the same time relative to achieving a positive / negative performance in a single PC.

¹⁵ As noted in the main part of this appendix, this analysis does not include Operational GHG Emissions and Biodiversity on the basis that Ofwat has not proposed any ODI rates yet.



Figure A1: PR24 ODI RoRE for SES based on the historic variation in performance relative to target across companies.



55. Table A2 below illustrates performance at the P10 and P90 levels after the application of the expert judgement that we applied in the analysis. The use of the performance levels illustrated in Table A2 result in a narrower PR24 ODI RoRE range between -3.12% to +1.49% as illustrated in Figure A2 below.

Figure A2: PR24 ODI RoRE range for SES after adjustments for expert judgement



Source: SES analysis

56. After application of expert judgement, our P90 case is broadly consistent with the assumption Ofwat presented in its RoRE range in its final methodology, albeit slightly lower. However, the P10 case still sits materially outside of the -2% central estimated range that Ofwat adopted for in its range for the price control period, although broadly aligned with the lower end of Ofwat's range of -3 per cent.



Table A1: Forecast PC performance at P90 and P10 levels after the application of SES expert judgement

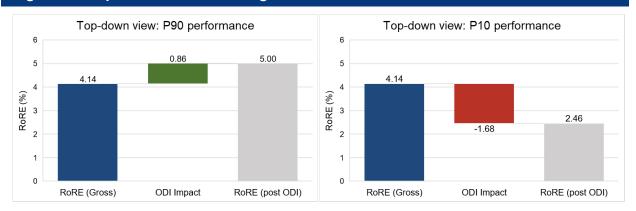
£ outturn	Units	P90/P10	2025/26	2026/27	2027/28	2028/29	2029/30
NA/OI	Minutes per property	P90	00:02:30	00:02:20	00:02:10	00:02:00	00:01:50
WSI		P10	00:07:00	00:06:50	00:06:40	00:06:30	00:06:20
	% reduction from	P90	-16.00%	-20.00%	-24.00%	-28.00%	-31.00%
Leakage	2019/20	P10	-12.50%	-15.00%	-17.50%	-19.00%	-21.50%
D00	% reduction from	P90	-7.70%	-8.60%	-9.00%	-10.00%	-11.00%
PCC	2019/20	P10	1.50%	0.00%	-3.00%	-5.00%	-7.00%
	# repairs / 1000	P90	45.0	42.0	39.0	36.0	32.0
Mains Repairs	km of mains	P10	85.5	79.8	74.1	68.4	64,0
	% of peak week	P90	0.0%	0.0%	0.0%	0.0%	0.0%
Unplanned Outages	production.	P10	2.1%	2.0%	1.9%	1.8%	1.7%
Operational GHG	K 000- / MI	P90	-	-	-	-	
Emissions	Kg CO2e / ML	P10	-	-	-	-	
Customer Contacts	# contacts /	P90	0.36	0.36	0.36	0.36	0.36
about Water Quality	1000 people	P10	1.00	1.00	1.00	1.00	1.00
During and Demand	% reduction from	P90	-7.08%	-8.08%	-9.08%	-10.08%	-11.08%
Business Demand	2019/20	P10	0%	-1%	-2%	-3%	-4%
D: 1: 'i	Net change in	P90	-	-	-	-	-
Biodiversity	biodiversity	P10	-	-	-	-	-
0 . 0	"	P90	-	-	-	-	
Serious Pollution Inc.	# of incidents	P10	1	0	0	0	С
Discharge permit	0/	P90	100%	100%	100%	100%	100%
Com.	%	P10	80%	80%	80%	80%	80%
Compliance Risk	ld	P90	0	0	0	0	0
Index	Index score	P10	2	1	2	1	2
Water softening	Deviations from	P90	0	0	0	0	C
	oftening target	P10	6	6	6	6	6

ODI scenarios: Top-down sense check using industry data

- 57. To sense-check the ODI RoRE ranges, we also reviewed P10/P90 impacts on performance if performance across the package of ODIs were to align with the aggregate P10/P90 level observed across all companies in AMP7.
- 58. We estimate the impact of ODI performance for each water and wastewater company across AMP7 (excluding serious pollution incidents, operational GHG emissions, biodiversity, discharge permit compliance, and water softening) using the indicative forward-looking ODI rates and caps/collars Ofwat has proposed for SES over AMP8.
- 59. We estimate the impact of each performance level on our AMP8 RoRE. We then estimate the P10/P90 RoRE impact out of this distribution.
- 60. The benefit of this top-down approach is that it reduces the risk of compounding extreme positive and negative performances across each PC.
- 61. The top-down review estimates that the P90 performance level would represent a 0.86% increase in RoRE while the P10 performance level would represent a 1.68% decrease in RoRE, as shown below.

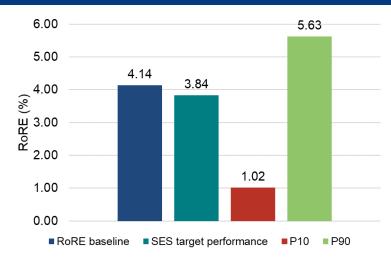


Figure A3: Top-down ODI RoRE range sense check



62. This compares to a bottom up RoRE (post ODI) range of 1.02% (vs 2.46% top-down view) and 5.63% (vs 5.00% top down view), as shown in Figure A4.

Figure A4: Bottom-up ODI RoRE range



Source: SES analysis

Note – SES target performance is calculated based on our business plan outcome ambitions and an indicative assessment of how Ofwat might set individual PCLs based on statements in its Final Methodology

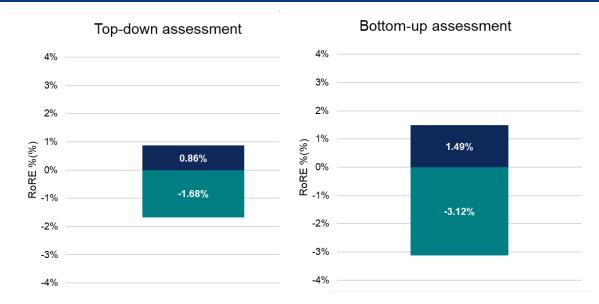
- 63. Our analysis based on historic evidence and expert judgement suggests that the risk range for AMP8 is not symmetric. The top-down and bottom-up evidence suggests that companies face a higher level of downside risk associated with the package of ODIs established for AMP8 relative to the upside risk.
- 64. The RoRE ranges that have we have presented in the main business plan and are used to populate RR30 adopt a wider ODI risk range than is implied by the top-down sense check, but a narrower ODI risk range than is implied by a pure bottom-up approach before the expert judgments in our analysis. ¹⁶ We consider this is appropriate in light of the challenging PCL targets and downside risks that could impact key ODIs in the next AMP, in particular, our capacity to continue to deliver our stretching leakage reduction targets from a starting point of industry leading performance and

¹⁶ Our analysis of industry evidence produced more extreme P10 (-8.24% ODI impact) and P90 estimates (+3.59% ODI impact).



- uncertainties around the delivery of demand reduction under the PCC and business demand ODIs.
- 65. Figure A5 below compares the top-down and bottom-up evidence we considered in developing our RoRE range for RR30.

Figure A5: Comparison of bottom-up and top-down assessment - ODI impact on RoRE



Alternative approaches

- 66. We note that an alternative approach to the analysis we have set out above could have been to model our ODI risk using an integrated Monte Carlo based methodology. A simpler approach was used given the challenges with the industry data and making appropriate assumptions of the distribution of ODI outcomes.
- 67. We consider the simpler approach taken that relies on expert judgement is also more intuitive to understand and explain, including where the key risks in delivery of our business plan are likely to lie (e.g., around PCC reduction targets).

