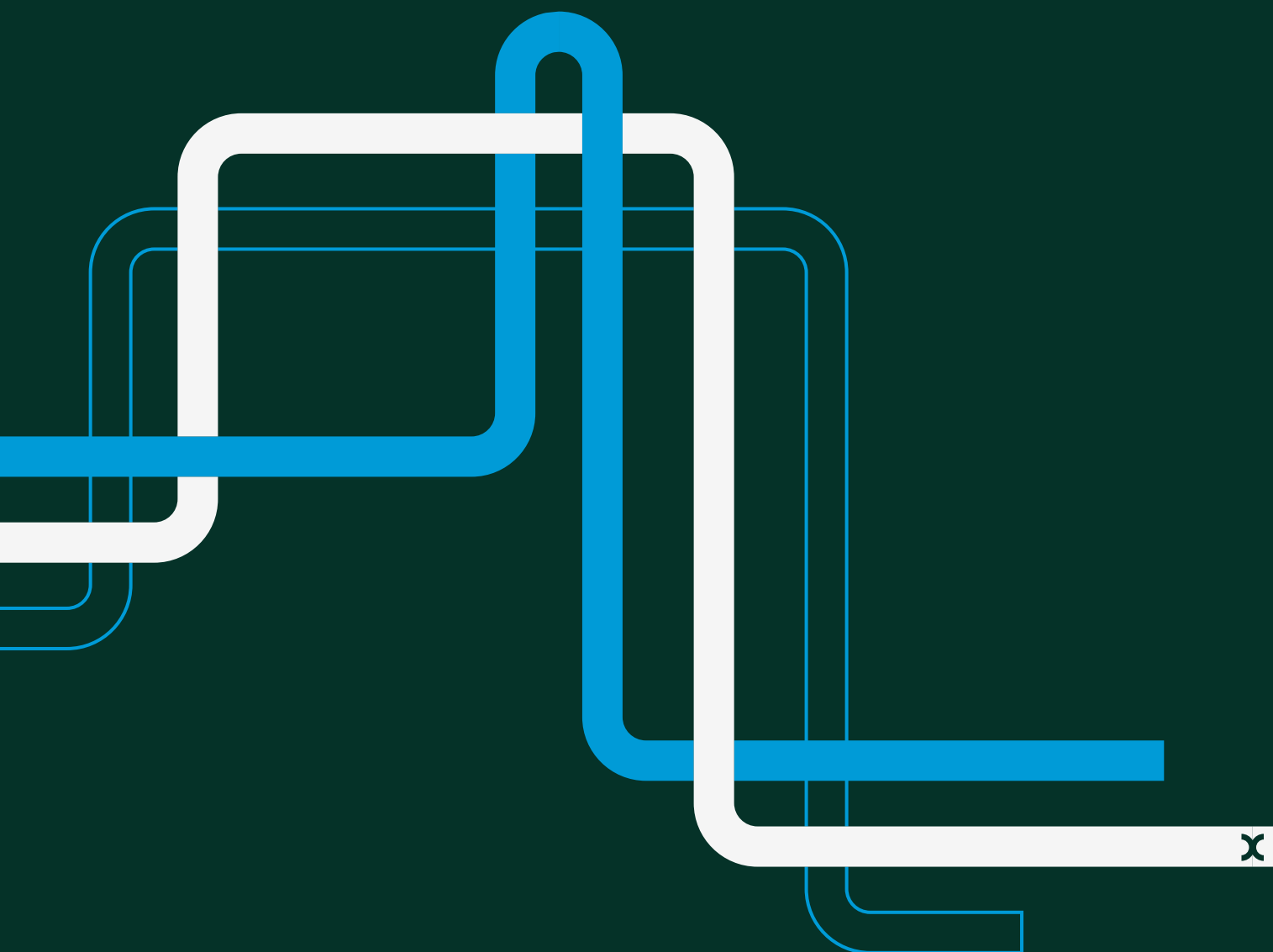


Assessment of Ofwat's indicative ODI rates for PR24

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Prepared for South Staffs Water

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1 Introduction

1.1 Context

In August 2023, Ofwat published the indicative PR24 outcome delivery incentive (ODI) rates that companies are expected to use in their PR24 business plan submissions. These rates would apply unless companies provide compelling evidence to support the use of alternative ODI rates.¹

The proposed PR24 ODI rates are significantly higher than their PR19 counterparts. For example, relative to asymmetrical PR19 penalty rates, the symmetrical PR24 ODI rates are higher for 111 of the 117 company-performance commitment pairs (or 95% percent of the cases where penalty rates were applicable at PR19). On average, the symmetrical PR24 rates are 253% greater than underperformance rates at PR19 (and 477% greater than outperformance rates—see Appendix A1).

A concern at present is that the majority of the industry is not currently reaching its performance targets across the majority of the common performance commitment (PC) areas that have been proposed for PR24. Companies are thus already facing significant ODI penalty payments based on the relatively lower PR19 rates.²

Additionally, company underperformance against Ofwat's performance commitment levels (PCLs) over PR19 so far may continue into PR24, based on indications from available data. There is thus a significant risk that companies would face even greater net penalty payments over PR24, given the following.

- Ofwat has stated that it will assume, as the default position for PR24 PCL determination, that companies will meet their PR19 PC levels by 2024/25 (with adjustments to the baseline position only in cases where there is sufficient and convincing evidence of material over- or underperformance).³ Based on historical performance to date, on average the industry is not on track to reach several of its 2024/25 targets (such as PCC, water supply interruptions, mains repairs, and potentially also leakage).⁴

¹ Ofwat (2023), 'PR24: Using collaborative customer research to set outcome delivery incentive rates.', August, p. 49 and Appendix 3, pp. 79-80.

² See for example Ofwat (2023), 'Water company performance report 2022-23', 26 September, p. 26.

³ Ofwat (2022), 'Creating tomorrow, together: Our final methodology for PR24. Appendix 9 – Setting expenditure allowances', December, pp. 70–71; and Ofwat (2021), 'Assessing base costs at PR24', pp. 64–78.

⁴ Ofwat (2023), 'Water company performance report 2022-23', 26 September, pp. 13, 15, 17 and 19.

- Initial indications are that Ofwat will significantly reduce the extent of protections offered. For example, the number of penalty-only PC/ODI areas is set to increase with the addition of serious pollution incidents (for which the PCL is zero incidents)⁵ and the expansion in scope of the discharge permit compliance PC (which will also cover water services at PR24).⁶ Furthermore, both legislated compliance PCs at PR19 (compliance risk index, or CRI, and discharge permit compliance) had deadbands, within which the penalty only ODI rates would not apply. However, Ofwat has stated that CRI will be the only PC to retain a deadband at PR24⁷ (which is expected to be at a lower rate).⁸
- While PR24 PCLs are still to be determined, indications from Ofwat are that it intends to set even more stretching PCLs at PR24.⁹

In this context, South Staffs Water (SSC) has asked Oxera to assess what the impact of the PR24 indicative rates would have been, had they been effective over the first three years of PR19 (all else being equal). This note and accompanying Excel model summarises our methodology for (and results from) this assessment.

1.2 The thought experiment

Our approach is based on the following thought experiment:

What would the current level of ODI payments have been over the first three years of PR19, had the proposed PR24 ODI rates been implemented instead of the current PR19 rates?

We thus assume the same outturn performance, deadbands, caps and collars that have been in effect across the relevant PCs over the first three years of PR19. We therefore do not account for any potential: (i) decrease in protections across the relevant PCs at PR24; or (ii) any new

⁵ Ofwat (2022), 'Creating tomorrow, together: Our final methodology for PR24. Appendix 9 – Setting expenditure allowances', December, p. 66.

⁶ Ofwat (2023), 'Creating tomorrow, together: Our final methodology for PR24.', December, p. 59.

⁷ Ofwat has stated that it will not use deadbands for any other PCs but CRI at PR24. See Ofwat (2022), 'Creating tomorrow, together: Our final methodology for PR24. Appendix 8 – Outcome delivery incentives', December, pp. 68-71.

⁸ Ofwat notes that in setting the deadband for CRI it '*would expect to see an improving profile over the 2025-30 period.*' – Ofwat (2022), 'Creating tomorrow, together: Our final methodology for PR24. Appendix 8 – Outcome delivery incentives', December, p. 71.

⁹ As stated by the regulator in Ofwat (2022), 'Creating tomorrow, together: Our final methodology for PR24.', December, pp. 3 and 80-83, and detailed in Ofwat (2022), 'Creating tomorrow, together: Our final methodology for PR24. Appendix 9 – Setting expenditure allowances', December, section 4.

PCs introduced at PR24 (but for which there were no pre-existing PCLs and accompanying ODI rates over PR19).

If, under this indicative analysis, the extent of penalty payments would have been significantly worse than what has transpired to date (all else equal), it suggests that even greater penalty payments may be expected at PR24 (given the skew towards underperformance across PCs and the even more stretching PCLs and less protections expected at PR24)

We detail on the approach and the data used in section 2 below, before discussing the main results and conclusions from the indicative analysis in section 3. Further details are provided in Appendix A1 and the accompanying Excel model.

2 Methodology

Below we detail our approach, indicating the data series used and highlighting the main characteristics of the PR19 ODI payment framework's design that are most relevant to the analysis.

2.1 Data, time period and scope of PCs considered

The analysis focuses on the seven common PCs applicable to water-only companies like SSC (as well as the water and sewerage companies). This includes water quality contacts (WQC), leakage (LEA), per capita consumption (PCC), water supply interruptions (WSI), mains repairs (MRP), unplanned outage (UNO) and water quality as measured through the compliance risk index (CRI).

We conduct our assessment over the first three years of PR19, for which outturn data is available (2020/21 to 2022/23). For all PCs except water quality contacts, we can compare historical outturn performances (in line with the latest PR24 PC definitions) against PCLs for the full period from 2020/21 to 2022/23. For WQC, a complete series of data is only available over 2020/21 to 2021/22, and in line with the PR19 definition.

The data used for the analysis is as follows (with original sources also provided in the accompanying Excel model):

- **Outturn performance:** for performance over 2020/21 to 2021/22, we use Ofwat's official 'Historical performance trend data for PR24', as published in April 2023.¹⁰ Where available, we update the outturn data with provisional data as published in companies' latest annual performance reports (APRs) for 2022/23.
- **PR19 ODI rates, PCLs, deadbands, caps and collars:** As published in the relevant '*Outcomes performance commitment appendix*' per company at the time of the PR19 final determinations.¹¹
- **PR24 ODI rates:** As provided to companies through Ofwat's top-down ODI risk models and published on Ofwat's website.¹²

¹⁰ See Ofwat (2023), 'Historical performance trend data for PR24. Version 2', 4 April. [Excel], available at: <https://www.ofwat.gov.uk/publication/historical-performance-trends-for-pr24-v2-0/>.

¹¹ Available at: <https://www.ofwat.gov.uk/regulated-companies/price-review/2019-price-review/final-determinations/>

¹² See Ofwat (2023), 'PR24: Using collaborative customer research to set outcome delivery incentive rates', August, Appendix 3, pp. 79-80. Available at: <https://www.ofwat.gov.uk/publication/pr24-using-collaborative-customer-research-to-set-outcome-delivery-incentive-rates/>.

2.2 Structure of PR19 PCs and ODI payments

The PR19 ODI framework has a very specific structure, much of which has been streamlined for PR24, but forms the basis of this analysis. The most pertinent elements (and how we account for them) are as follows.

- **Deadbands:** These are underperformance 'grace' areas where ODI rates do not yet apply, generally used for penalty-only PCs like CRI (at PR19 and PR24). While the PR19 PCL for CRI is zero (as a legislated compliance PC area), Ofwat allowed for a deadband up to a CRI score of two to allow for some fluctuation in the measure based on factors that are outside of company control (but which are still measured in the CRI metric).¹³ What is not captured in this analysis (which is focused solely on the subset of water-only PCs), is the impact of removing deadbands on other PCs like discharge permit compliance.¹⁴
- **Caps and collars:** Across all of the seven PCLs considered, at PR19 Ofwat put in place outperformance caps and underperformance collars (except for the penalty-only CRI, where collars do not apply). These provide the limits to which out- /underperformance rates apply, in calculating the penalty/bonus payments per company. Note that both the caps and collars have rarely been binding over the first three years of PR19, but we indicate the few instances where they have been applied in the relevant sheets per PC area in the accompanying Excel model.¹⁵ At time of writing, Ofwat has not indicated what the equivalent caps and collars will be over PR24, and we thus assume the PR19 caps and collars throughout.
- **Standard/outperformance and tiered rates:** At PR19, Ofwat specified standard and enhanced ODI rates, as well as tiered ODI rates for different PCs—where different ODI rates would apply depending on the specific performance range above/below the specific PCL. Ofwat has stated that enhanced ODI rates will similarly be in place for leakage and PCC over PR24¹⁶, but it has not yet specified the level of these enhanced rates. We also note that the enhanced and higher tier rates have generally not applied over PR19. To ensure a like-for-like comparison, we compare the relevant 'base' rate at PR19 (be it

¹³ Ofwat (2022), 'Creating tomorrow, together: Our final methodology for PR24. Appendix 8 – Outcome delivery incentives', December, pp. 68 – 71.

¹⁴ As discussed above, CRI is the only area where Ofwat expects to retain a deadband at PR24.

¹⁵ In sum, caps have been binding in only two instances across WQC (over two years), three instances for WSI and MRP and two instances for UNO (all over a three year period).

Outperformance collars have only binded in one instance for LEA and MRP, two instances for UPO, and (a slightly greater) nine instance for WSI and 21 instances for CRI, all over the three year period.

¹⁶ Ofwat (2022), 'Creating tomorrow, together: Our final methodology for PR24.', December, p.60.

the standard or lower tier rate) to the similarly 'standard' indicative PR24 rates provided from Ofwat's top down models.

- **Symmetric PR24 vs asymmetric PR19 rates:** The largest difference (and streamlining) in the ODI framework from PR19 to PR24 is the rate structure. At PR19, Ofwat used asymmetrical rates for underperformance and outperformance payments. Furthermore, outperformance rates are not always applicable, and where they apply, they are generally lower in absolute terms than the corresponding underperformance rates.¹⁷ At PR24, Ofwat has thus equalised and simplified the rates structure, but at much higher absolute levels (shown in Appendix A1).

Note that while the PR24 ODI structure is thus simpler, it is also expected to offer much fewer protections to companies, exposing them to greater financial risk (against a background of potentially persistent industry-wide underperformance).

Lastly, note that our analysis also abstracts away from in-period determinations and adjustments made by Ofwat to company's ODI payments (which are generally calculated annually, but with payments effectively subject to a two-year lag).¹⁸ For this thought experiment, we thus assume that the PR19 ODI rates applicable are as published at the time of the PR19 final determinations, and the total annual incentive payments per year are calculated based on that year's actual out-/underperformance multiplied by the relevant PR19 or PR24 ODI rate. This is done, in part, to ensure a like-for-like comparison of the impact of the rates in our 'what if' scenario.

¹⁷ See Appendix 1.

¹⁸ More details on the in-period determinations and adjustments made over 2020/21 to 2022/23 available on Ofwat's website, available at: <https://www.ofwat.gov.uk/regulated-companies/price-review/in-period-odi-determinations/>.

3 Results and conclusions

The table below shows that the increase in ODI rates from PR19 to PR24 would have significantly increased the total net penalty payments, almost threefold from £354m to £968m (for the subset of common water PCs considered). However, much of this is driven by the increase in PCC ODI payments, where the impact of COVID-19 on consumer demand has seen a universal and significant increase in underperformance against initial PR19 PCLs. We understand that on the basis of this unforeseen shock to consumer demand patterns, Ofwat will make a determination on the appropriate PR19 ODI rates and -payments at the end of the current price review period. Given that the PR19 PCC rates and payment regime are thus likely subject to change, we also consider the results without PCC.

However, even when excluding PCC, the proposed PR24 rates would still have significantly increased the industry's penalty payments to date, by c. £80m (or 29%) across the subset of common water-only PCs considered.

Figure 3.1 Impact of applying PR24 rates to PR19 performance

PCs	Net penalty payments (£m)		
	PR19	PR24	Change
Water quality contacts	0.10	0.46	0.36
Leakage	16.41	2.47	- 13.93
PCC	81.91	615.25	533.34
Water supply interruptions	139.08	311.67	172.59
Mains repairs	35.13	6.33	- 28.80
Unplanned outage	8.17	- 72.02	- 80.19
CRI	73.55	103.85	30.31
Total	354	968	614
Total (excl. PCC)	272	353	80

Source: Oxera analysis from Ofwat data.

Note: Net underperformance penalties are indicated as positive, whilst outperformance bonus payments are negative.

Note that the latter result is a conservative estimate. Firstly, companies generally have been subject to fewer outperformance rates at PR19 (on PCs where underperformance rates do indeed apply). Most notably, at PR19 only one company has an outperformance rate for mains repairs

and only seven had the same for water supply interruptions, while all companies had underperformance rates on these PCs ¹⁹. This asymmetry in rates means that even in cases where companies outperformed at PR19, they would in many cases not have received outperformance payments. This compares to the universally applicable PR24 rates. In our analysis, PR24 bonus payments would thus still apply in these cases. Second, as discussed above, Ofwat has indicated that it intends to put in place fewer ODI payment protections over PR24, while continuing to set more stretching PCLs.

We thus conclude on the basis of this thought experiment that there is significant risk that companies could face even greater net penalty payments over PR24, especially if there is not greater alignment between PCLs and companies' actual performance levels than what there have been over the first three years of PR19.

¹⁹ See the 'PR19 ODIs' sheet in the accompanying Excel model.

A1 ODI rate comparison: PR19 vs PR24

The tables below compare the relevant PR19 ODI rates per company (where applicable) to the equivalent indicative ODI rates from Ofwat for PR24 (all in 2017/18 prices). Note that in contrast to the symmetrical rates that Ofwat has proposed for PR24, PR19 underperformance (bonus) rates and underperformance (penalty) rates were asymmetrical.

Below, we compare PR24 symmetrical rates to both PR19 penalty and bonus rates. However, note that the comparison to the PR19 penalty rates are the most informative for the purposes here given that:

- First, PR19 penalty (rather than bonus) rates have been the most likely to apply, given that companies have generally underperformed against PR19 PCs over the first three years of the current price review period (as discussed in-text above).
- Second, penalty rates were significantly more prevalent at PR19 (with penalty rates available across all companies on all PCs except water quality contacts).²⁰ For the seven common water PCs considered here, penalty rates applied across all 119 PC-company pairs, while bonus rates only applied to 61 such instances.

Table A1.1 shows that all the PR24 outperformance rates are always greater than their PR19 counterparts (for the 61 cases where PR19 rates applied). PR24 rates are on average 477% greater and between 16% and 3,162% larger on any given PC-company pair (all in 2017/18 prices). For PR19 underperformance rates, Table A1.2 shows that the rates increased in 111 of the 117 instances (where comparable penalty rates applied at PR19).²¹ The average increase is 253%, ranging between -33% and 2,483% on any given PC. Overall, PCC observed the highest average increase in rates across companies for both bonus (979%) and penalty rates (745%).

Further details on the calculations underlying the tables below are available in the '*ODI Rates % changes*' sheet of the accompanying Excel

²⁰ For water quality contacts, five companies (HDD, NES, SVE, UU and YKY) had no financial incentive rates at PR19.

²¹ Note that on WQC, for two companies ODI rates were not defined on a comparable basis between PR19 and PR24, and thus excluded from the table below that is, for HDD and SVE, PR19 rates applied to the absolute number of complaints received, and not the normalised measure)..

model, with the actual PR19 and PR24 rates (in 2017/18 prices) available on the respective '*PR24 ODIs*' and '*PR19 ODIs*' sheets.

Table A1.1 Change in ODI outperformance rates from PR19 to PR24 (%)

PCs	ANH	WSH	HDD	NES	SVE	SWB	SRN	TMS	U UW	WSX	YKY	AFW	BRL	SSC	PRT	SEW	SES
WQC	1,024 %	313%		61%		1,947 %	112%		11%	732%	65%		2,555 %	506%		648%	
Leakage	102%	209%		192%	36%	19%	222%	44%	202%	101%	218%	232%	169%	122%	229%	16%	28%
PCC	585%			1,088 %		329%	1,527 %	497%	842%	542%	1,171 %	526%	2,990 %	956%	1,056 %	625%	
WSI	46%	78%		49%	155%	773%	247%	109%	172%	235%	43%	116%	332%	183%	249%	277%	84%
Mains repairs				185%	173%	3,162 %	167%	50%	243%					383%			
UNO														140%			
CRI																	

Notes: (i) change rates are calculated in real terms (17/18 prices), (ii) Missing data generally due to PR19 rates not being applicable of or different basis to which ODI rates are applied at PR19 and PR24 (the case for water quality contacts for HDD and SVE, only).

Table A1.2 Change in ODI underperformance rates from PR19 to PR24 (%)

PCs	ANH	WSH	HDD	NES	SVE	SWB	SRN	TMS	UUW	WSX	YKY	AFW	BRL	SSC	PRT	SEW	SES
WQC	462%	313%		34%		1,395%	77%	1,504%	-7%	594%	37%	486%	2,115%	405%	329%	218%	191%
Leakage	58%	163%	333%	150%	36%	-28%	67%	13%	152%	34%	164%	176%	590%	85%	176%	-33%	6%
PCC	471%	900%	550%	950%	968%	293%	540%	552%	685%	349%	959%	491%	2,483%	695%	881%	625%	270%
WSI	46%	78%	107%	49%	155%	74%	247%	109%	172%	235%	43%	116%	332%	183%	249%	277%	84%
Mains repairs	149%	189%	298%	87%	-10%	106%	75%	18%	93%	178%	104%	58%	83%	64%	49%	126%	69%
UNO	95%	133%	82%	31%	21%	-15%	43%	84%	82%	247%	33%	51%	106%	59%	115%	68%	100%
CRI	90%	102%	98%	1%	36%	105%	29%	47%	104%	-28%	37%	40%	102%	104%	105%	35%	32%

Notes: (i) change rates are calculated in real terms (17/18 prices), (ii) Missing data for water quality contacts for HDD and SVE (given different unit basis to which ODI rates applied in PR19 vs PR24).

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