

### SSC04g – PR24 Data table commentary – Long Term Strategies

#### Contents

Contents
LS1
LS2
LS3
LS3a 8
LS3b9
LS5
LS7

For AMP8 descriptions, please see OUT4 for detail.

Line Reference	Commentary
LS1.1	Water supply interruptions. As we move closer to zero supply interruptions in the long term, we will experience diminishing returns on investment and exhaust operational change improvements. However, we have ambitions to keep improving on this measure to deliver the best service possible to our customers. Therefore, we forecast a 23% reduction each AMP from the previous AMPs end year position, which is based on historic levels of performance improvement. This reflects our customers views that they are less concerned about a small number of supplies interruptions, and would prefer us to focus our attention in other areas.
LS1.2	Compliance risk index (CRI) Target set to zero as CRI is a compliance measure and we will always aspire to zero failures.
LS1.3	Customer contacts about water quality As we move closer to zero on contacts in the long term, we will experience diminishing returns on investment and exhaust operational change improvements. However, we have ambitions to keep improving on this measure to deliver the best service possible to our customers. Therefore, we forecast a 33% reduction each AMP from the previous AMPs end year position, which is based on historic levels of performance improvement.
LS1.4	n/a- waste measure
LS1.5	n/a- waste measure
LS1.6	<ul> <li>Biodiversity</li> <li>We will continue to evaluate opportunities for delivery of biodiversity improvements across our supply area and maintain the areas we have improved already.</li> <li>For PR24, a new approach to assessing biodiversity has been adopted and we need to continue to assess our existing schemes and future schemes with this new framework, which we will continue with over the next 12-18 months.</li> <li>Much of our current biodiversity programme is driven by the Water Industry National Environment Programme, which is currently not projected past AMP8. We will continue to evaluate our requirements for enhancement activity as any future requirements become apparent.</li> </ul>
LS1.7	<ul> <li>Operational GHGs</li> <li>This target is based on our net zero strategy, which includes: <ul> <li>Leakage and consumption reductions to reduce the amount of water to treat and pump.</li> <li>Small scale renewables</li> <li>Turning off our gas engine at Hampton Loade in 2039 when it has reached end of life</li> <li>Other energy efficiency measures such as electric vehicles, pump efficiency and chemical reductions.</li> </ul> </li> <li>This target does not go to zero by 2050 as we have followed Ofwat's guidance to exclude PPAs from the target. Our PPA ambitions will cover the remainder of the emissions to reach net zero on location-based emissions. As per OUT4, we believe PPAs should be included in the target, as they are one of the best solutions available for Water Only companies, as identified by Jacobs Net Zero Technology review.</li> </ul>
LS1.8	n/a-waste measure
LS1.9	Leakage This reflects the combined ambitions of our South Staffs and Cambridge region- please see details of regional ambition in lines 21 to 22.
LS1.10	Per Capita Consumption

	This reflects the combined ambitions of our South Staffs and Cambridge region- please see details of regional ambition in lines 23 to 24.
LS1.11	Business Demand This reflects the combined ambitions of our South Staffs and Cambridge region- please see details of regional ambition in lines 25 to 26.
LS1.12	n/a-waste measure
LS1.13	Serious pollution incidents Target set to zero as it is a compliance measure, and we will always aspire to zero failures.
LS1.14	Discharge permit compliance Target set to 100% as it is a compliance measure and we will always aspire to 100% compliance.
LS1.15	n/a-waste measure
LS1.16	n/a-waste measure
LS1.17	n/a-waste measure
LS1.18	Mains repairs Mains repairs is historically a very volatile measure, and we expect it to increase in volatility with climate change causing extreme weather patterns. However, we are increasing our mains renewals programme in AMP8 and plan to continue this in the future to offset the impact of changing weather patterns. We proposed a 7% reduction on mains bursts each AMP based on historic performance improvement trends.
LS1.19	Unplanned Outage As we move closer to zero unplanned outage in the long term, we will experience diminishing returns on investment and exhaust operational change improvements. However, we have ambitions to keep improving on this measure to deliver the best service possible to our customers. Therefore, we forecast a 23% reduction each AMP from the previous AMPs end year position, which is based on historic levels of performance improvement.
LS1.20	n/a-waste measure
LS1.21	Leakage SST Long term forecast set to meet 50% reduction by 2050 as set by the Environment Act. All interim targets met on this glidepath. Note that the figure shown is a 3 year rolling average, unlike the EA target. End of 2049-50 actual figure is set to 50% reduction or 36.8MLD
LS1.22	Leakage CAM Long term forecast set to meet 50% reduction by 2040 as set by the Environment Act. This is needed to deliver the demand reductions required in Cambridge due to expected high growth, abstraction reductions and it being a water stressed area. All interim targets met on this glidepath except the 2027 20% reduction target as this did not give us enough time to deliver the improvements needed. We quickly catch up and surpass the interim target. Note that the figure shown is a 3 year rolling average, unlike the EA target. End of 2039-40 actual figure is set to 50% reduction or 7.3MLD. We maintain this position between 2040 and 2050.
LS1.23	Per capita consumption SST Long term forecast meets 122 l/p/d DYAA by 2038 and 110 DYAA by 2050 as set by the Environment Act. DYAA is 8.2% higher so we target 112.8 l/p/d by 2038 and 101.7 l/p/d by 2050. The delivery of our metering strategy over AMP8 and 9 along with further water efficiency measures will ensure we meet out long term targets.
LS1.24	Per capita consumption CAM Long term forecast meets 122 l/p/d DYAA by 2038 and 110 DYAA by 2050. DYAA is 4.9% higher so we target 116.3 l/p/d by 2038 and 104.9 l/p/d by 2050. The delivery of our metering strategy over AMP8 and 9 along with further water efficiency measures will ensure we meet our long- term targets.
LS1.25	Business demand SST This target follows the profile of WRMP24 in the long term. This also considers growth assumptions. The glidepath meets the all interim targets of 9% by 2038 and 15% by 2050.

LS1.26	Business demand CAM This target follows the profile of WRMP24 in the long term. Cambridge has been specifically identified by DLUHC as an area for commercial growth - with science parks accounting for a large proportion of this growth. For this reason, business consumption is increasing over the period of the LTDS. Our forecast includes delivery of water efficiency savings equivalent to the Environment Act targets of 9% by 2038 and 15% by 2050.
LS1.27	n/a-waste measure
LS1.28	n/a-waste measure
LS1.29	n/a-waste measure
LS1.30	n/a-waste measure
LS1.31	n/a-waste measure
LS1.32	n/a-waste measure
LS1.33	26MI/d relates to Grafham Transfer which commences from 2031/32
	In 2036/37 Fens Reservoir becomes available and this delivers 44 Ml/d of benefit, as shown from 2035/40 box onwards. At this stage, we cease the transfer from Grafham so this benefit is no longer included.
	From 2040/41 onwards, we also have 7 MI/d a benefit from the new surface water treatment works on the River Cam, therefore our total supply benefit from this stage is 51 MI/d.
LS1.34	n/a wastewater

This table requires a split of performance into base expenditure. As we expressed in our responses to Ofwat's previous 'what base buys' data requests, it is clear to us that performance improvement across time is, in almost all cases, delivered by a mix of both traditional enhancement activity and ongoing business as usual base activity. Unfortunately, however, we do not in most cases have direct data to be able to set out how much enhancement or base activity directly contributes to performance commitments historically. In our responses to Ofwat's previous data requests on this topic, we provided narrative rationale for where we think there is are contributions to performance from base and/or enhancement. We have used these same principles, looking forward at our PR24 plans, to populate this table, along with any direct PC impacts we can quantify from our proposed enhancement schemes.

Line Reference	Commentary
All lines	We followed the same principles for assessing What Base Buys as for AMP8 expenditure, outlined in detail in table commentary for OUT2 and OUT3. For our long approach also refer to LTDS main document Section 2.3: Balancing base and enhancement expenditure to deliver out long-term commitments.

Line Reference	Commentary
[Found on RHS of table e.g. SUP1A.1]	[Brief summary of methodology for data- inc. key assumptions made, reasoning for year-on-year differences, variation from 2022-23 actuals]
LS3.1	Post AMP8 assumed we continue biodiversity and conservation activities to support no/low regrets spend
LS3.2 LS3.7	At this stage, assumed zero post AMP8 as the scale of abstraction reduction is unknown and highly uncertain – will be largely dependent on the outcomes of our AMP8 WINEP investigations to inform future requirements
LS3.8	New PC – no enhancement requirements have been identified at this stage
LS3.9. – LS3.12	At this stage, assumed zero post AMP8 as the scale of abstraction reduction is unknown and highly uncertain – will be largely dependent on the outcomes of our AMP8 WINEP investigations to inform future requirements
LS3.13	Supply side schemes likely to fall under DPC/other finance vehicles have been excluded as per guidance and only include supply schemes below the threshold of DPC in our Cambridge region as identified in our WRMP
LS3.14 - LS3.15	Demand side options as identified in our WRMP options assessment.
LS3.16	Assume no interconnectors for the period. Note related investment is covered under resilience line LS3.36
LS3.17 – LS3.26	Our metering investment profile to meet the requirements of our WRMP and 2035 target of full metering as per core pathway
LS3.27 – LS3.30	Includes our water quality investment as identified in our core pathway
LS3.31 – LS3.35	Include our lead activities building from AMP8 and AMP9 and ramping up later AMPs
LS3.36	Resilience includes storage schemes and no/regrets scheme to meet ambition
LS3.37	Assumed a similar AMP run rate for SEMD to me no/low regrets SEMD regulations and guidance
LS3.38	Cyber investment included to meet DWI CAF targets and risk-based run rate approach to meet minimum standards
LS3.39	Net zero assumes a renewables/other to support net zero ambition

#### LS3a

Line Reference	Commentary
LS3a.19	Extra spend in AMP10 for internal interconnectors for resilience support
LS3a. 31-33	Water quality interventions treatment/storage required starting from end of AMP9 and ramped up in AMP11/12 to meet high climate change scenario if comes to pass
LS3.a 39	Resilience spend required in AMP11/12 to support storage requirements to meet high climate change scenario

# LS3b

Line Reference	Commentary
LS3b.17	the demand side options show the need for additional water efficiency schemes comes in from AMP9 due to delay in metering particularly increase seen in AMP10 to ensure we meet the environment act targets.
LS3b. 20-29	Metering investment activity post AMP8 is slowed down to reflect slow tech scenario

Line Reference	Commentary
LS5.1 – LS5.2	Abstraction low and high scenario - No change, as per core pathway
LS5.3	Climate change low scenario - No change, as per core pathway
LS5.4	As per LS3a high climate change scenario. 2035 will be a key decision if need to adapt and does trigger small water quality investment (advanced oxidation treatment) but key trigger point will be in 2040 for both resilience and water quality investment schemes are required.
LS5.5 – LS5.6	Demand low and high scenario, no change, as per core pathway
LS5.7	As per LS3b low tech scenario demand side schemes start to come in from AMP9 onwards where the decision point will be 2030 where additional demand management options brought forward and metering investment is slowed down as per scenario and a step up is shown AMP10 due to the delay in metering. Likelihood is only 40% because if AMP8 goes to plan as per core and geared up may not be immediately require to follow the alternative pathway.
LS5.8	High tech scenario - No change, as per core pathway

Line Reference	Commentary
	We have used Ofwat's required approach for the calculation of long-term bill impacts as set out in Appendix A2 of the final guidance on long term strategies for core and the two alternative pathways,
	The WACC as submitted in our business plan of 3.69% CPIH real.
	• An average asset life of 55 years which is consistent that for enhancement expenditure in our AMP 8 plan.
	• The level of operating costs remains consistent over the period, in line with AMP 8.
	• Incorporated tax and retail margin.
LS7.1 – LS7.3	We have used a bill calculator for our core pathway and our two alternative pathways. These have been submitted as requested. See files:
	• Bill calculator_Core pathway.xls
	• Bill calculator_High climate change.xls
	Bill calculator_Low tech.xls
	Consistent with our business plan submission, we have excluded Fens Reservoir from both the core and alternative pathways. Please see appendix SSC03 for more information