

December 2019

# PR19 final determinations

**Hafren Dyfrdwy – Cost efficiency  
final determination appendix**

## **PR19 final determinations: Hafren Dyfrdwy – Cost efficiency final determination appendix**

## About this document

This document is a cost efficiency appendix to 'PR19 final determinations: Hafren Dyfrdwy final determination'. This document provides further details of the company specific issues related to cost allowances and is structured as follows:

- Section 1 provides a summary of our decisions on the company's cost adjustment claims;
- Section 2 provides a summary of our decisions on the company's enhancement proposals, by enhancement area;
- Section 3 provides our decision on costs proposed by the company under the transition programme;
- Section 4 provides our decision on unit cost adjustments related to the WINEP/NEP uncertainty mechanism.

Further information on our assessment of and our approach can be found in the 'Securing cost efficiency technical appendix' and the various excel feeder models that we have published.

## 1. Cost adjustment claims

Table 1 summarises our consideration and allowances for the cost adjustment claims submitted by the company. For completion we include all claims that were part of our draft determination decisions, as well as additional or revised claims the company submitted in its representation to the draft determination. We give further details in our published cost adjustment claim feeder model for Hafren Dyfrdwy.

**Table 1: Cost adjustment claims and our allowed totex adjustments, 2020-25 (£ million of 2017-18)**

Description of Claim	Value of company claim	Our allowed adjustment	Rationale for decision
Reducing lead in water networks	2.9	2.9	We provide the full allowance to enable the company to progress strategies to meet the Welsh Government's Water strategy for Wales, 'Reducing Lead in Wales' from 10ug/l to 5ug/l. Our decision is unchanged from draft determination assessment.
Enhancing biodiversity and well-being in water resources	1.9	0.9	The company claims additional expenditure to cover investment on the National Environment Programme obligation to enhance biodiversity through the Environment (Wales) Act 2016 and its responsibility to contribute to wider well-being goals in Wales. We make a partial allowance by applying a 50% challenge to the requested cost, on the basis of insufficient evidence of need for investment under the Well-being of Future Generations (Wales) Act 2015. We allocate 34% of our allowance to the ecological improvements enhancement line (£0.3 million) and 64% to the Environment (Wales) Act 2016 (£0.6 million). The company has not raised substantive issues in its representation and we retain our draft determination assessment. See 'Hafren Dyfrdwy final determination' for further information.
Maintaining reservoir safety	4.3	2.8	The company requests additional expenditure to comply with more stringent requirements from the Reservoirs Act 1975. We make a partial allowance following evidence of appropriate optioneering and external technical assurance, but challenge the efficiency of the requested cost. We allocate £2.3 million to reservoir safety and £0.5 million to resilience. The company has not raised substantive issues in its representation and we retain our draft determination assessment. See 'Hafren Dyfrdwy final determination' for further information.

## 2. Enhancement assessments

Our approach to assessing enhancement expenditure is detailed in our publication ‘Securing cost efficiency technical appendix’. We generally assess enhancement expenditure separately for each enhancement category, as defined by the individual enhancement cost lines in company business plan tables. We assess multiple lines together where there is a potential for costs to be apportioned differently by companies and where there is some synergy between programmes.

Our preferred method of assessment is benchmarking analysis. Where the investment area does not lend itself to statistical modelling we rely more on the evidence provided by companies in their business plans. We follow a risk-based process of having a lighter touch (‘shallow dive’) assessment for low materiality costs and a more thorough assessment of the evidence (‘deep dive’) of high materiality costs.

Tables 2 and 3 summarise our consideration and allowances for the enhancement expenditure cost lines submitted by the company. We give further details in our published enhancement feeder models for Hafren Dyfrdwy.

**Table 2: Assessments of water enhancement expenditure, 2020-25 (£ million of 2017-18)**

<b>Enhancement cost</b>	<b>Company view in August 2019 business plan (after reallocations)</b>	<b>Our final determination allowance</b>	<b>Rationale for decision</b>
Improving taste / odour / colour	1.8	1.3	We assess this expenditure with a deep dive approach. We disallow the cost of the work to air valves and surge protection (£0.4 million) as we consider these to be base maintenance costs. We allow the remaining cost.
Meeting lead standards	2.9	2.9	We use a benchmark model to make allowances for these costs. For Hafren Dyfrdwy we make an additional allowance over and above the modelling results due to the expectation

			set by the Welsh Government in the Water Strategy for Wales (2015) to meet a tighter lead target.
Investment to address raw water deterioration	0.2	0.2	We shallow dive these costs due to their low materiality and make the full allowance because Hafren Dyfrdwy's company shallow dive efficiency factor is zero.
Metering (excluding new connections) for meters requested by optants, customers and businesses	0.8	0.8	We use a benchmark unit cost model to make allowances for this activity. Hafren Dyfrdwy is more efficient than our benchmarks and we allow the requested costs.
Resilience	1.7	0.5	We use our deep dive approach and challenge the need of the proposed investments. See 'Hafren Dyfrdwy Water final determination' for further information.
Security	0.4	0.4	We use our shallow dive approach to set security allowances. The company has spent below average historically so we allow these costs in full.
Total clean water WINEP	5.1	3.9	We use our shallow dive approach to set allowances, applying the company specific efficiency challenge only, for invasive non-native species, although for Hafren Dyfrdwy. The company's shallow dive efficiency factor is zero and we allow all these costs in full. The programme for ecological improvements at abstractions is partially assessed through a shallow dive and partially through our cost adjustment claim process. We use our deep dive approach to set allowances for the programme to meet the Eels regulations (England and Wales) 2009. In this case we find insufficient evidence that the company considers a full range of appropriate options and we apply a 20% challenge to costs.
Aggregated free form lines	5.0	2.9	The company submits free form lines related to Reservoir Safety (£3.8 million), and Environment (Wales) Act 2016 and Well-being of Future Generations (Wales) Act 2015 (£1.1 million). We make partial allowances of £2.3 million and £0.6 million respectively under the cost adjustment claims discussed in Table 1. See 'Hafren Dyfrdwy final determination' for further information.
<b>Total water enhancement</b>	<b>17.8</b>	<b>13.0</b>	

**Table 3: Assessments of wastewater enhancement expenditure, 2020-25 (£ million of 2017-18)**

Enhancement cost	Company view in August 2019 business plan (after reallocations)	Our final determination allowance	Rationale for decision
Total NEP in the round allowance	2.7	2.6	<p>We base our NEP allowance of £2.6m on our modelled allowance subject to a programme level adjustment of 9.6%. Our comparative assessment of total NEP costs reveals considerable differences between companies providing evidence of the scope for efficiency gains for lagging companies. Our programme level adjustment includes a catch-up challenge set at the level of the “upper quartile” company and further a frontier shift challenge as we consider there to be significant scope for innovation in this area.</p> <p>We derive our allowance from the output of cost benchmarking models except where we conduct a shallow or deep dive. Our shallow dive assessments allow the costs in full for the programme relating to wastewater investigations. We assess the requested costs for conservation drivers by a deep dive assessment and allow the cost in full as the evidence is sufficient.</p>
<b>Total wastewater enhancement</b>	<b>2.7</b>	<b>2.6</b>	

### **3. Transition expenditure**

Hafren Dyfrdwy does not request any expenditure under the transition programme.

## 4. NEP uncertainty mechanism

Our totex allowance for companies operating in Wales includes an allowance for environmental obligations set out in the National Environment Programme (NEP) issued by Natural Resources Wales. Some of the requirements in the NEP are not expected to be confirmed until December 2021 at the earliest, which is after we make our final determinations in December 2019.

Unconfirmed requirements in the NEP are known as 'amber' schemes. Where we make an allowance for amber schemes, we use a mechanism to adjust our totex for schemes which are later confirmed as not required.

Table 4 sets out the adjustments we will make for each non-trivial scheme in Hafren Dyfrdwy's NEP that is currently unconfirmed, if the scheme is confirmed as not required for the period 2020-25. Further to the company's representation on our draft determination we have deleted three NEP wastewater investigations from this table on the grounds of their non-material costs. We will make the adjustments at the end of the control period. Our adjustments are based on the company's totex estimates (after reallocations) as adjusted by our company specific efficiency factor or, in the case of wastewater schemes, by the ratio of our final totex allowance for the NEP programme to the company's estimate (after reallocations).

**Table 4: NEP uncertainty mechanism – cost adjustments for unconfirmed NEP schemes included in our final determination (£ million in 2017-18 prices)**

Unique ID	Scheme category / name	Company's totex unit rate	Our allowed totex unit rate
WINEP/NEP ~ Nutrients (P removal) at ASPs and filter bed works			
7CST0107 7CST0111 7CST0123 7CST0126	CHURCH STOKE STW, GUILDSFIELD STW, MONTGOMERY STW, NEWTOWN (DOLFOR LOCK) STW	None proposed	N/A (Customer protection afforded by performance commitment and associated ODI)
WINEP/NEP ~ Event duration monitoring			
7CST0138	EDM improvements	None proposed	£0.037m
WINEP/NEP ~ Conservation drivers			
7CST0141	Implementation of quick win measures identified by the site audit/investigation	None proposed	£0.102m
WINEP/NEP ~ Invasive non-native species			
7CST0140	Addressing issues with INNS, including provision of support to community project where complementary to STW/DVW activities	None proposed	£0.075m

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Ofwat  
Centre City Tower  
7 Hill Street  
Birmingham B5 4UA

Phone: 0121 644 7500  
Fax: 0121 644 7533  
Website: [www.ofwat.gov.uk](http://www.ofwat.gov.uk)  
Email: [mailbox@ofwat.gov.uk](mailto:mailbox@ofwat.gov.uk)

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