

Portsmouth Water

Bulk Charges for NAVs – 2019/20

1. Background

Under existing legislation, Ofwat may appoint a new water company for a site (for water supply) if it is currently unserved by the incumbent water company, the incumbent gives its consent or the premise is a large user of water of at least 50 MI per annum.

Most Newly Appointed Variation (NAV) sites have to date been unserved sites and relate to a mixture of residential and mixed use developments. A developer of any new site has one of three options to provide water infrastructure on its site:-

- to work with the incumbent water company,
- to work with a Self-Lay Organisation or
- invite a NAV to build and continue to provide services to end user customers

This brief document provides an illustration of the detail underpinning any ongoing tariff we would apply to the NAV situation.

We have reviewed the guidance published by Ofwat in May 2018 and used that as a basis for our proposal.

There is significant regulatory review of all issues relating to Developers at present and further guidance is expected which may change the proposed approach.

We believe the proposed tariff is appropriate for 2019/20 in particular. We will review it further in 2020 when changes in the pricing rules for developers will come into effect.

To determine a site specific NAV tariff (as required in the Ofwat guidance) we will need to understand the detail of the site to be served by the NAV including number, usage volumes and length of mains. NAVs are therefore encouraged to talk with the Company at its earliest convenience.

Any party wishing to discuss this tariff further or discuss a specific site should contact the Company using the details below:-

Paul Treagust

Network Engineer

Portsmouth Water

PO Box 8

Havant

PO9 1 LD

p.treagust@portsmouthwater.co.uk

2. Current NAVs

Portsmouth Water has two NAV sites already in operation. We agreed with the NAV that the relevant tariff is our large user tariff as the bulk supply arrangement is similar to that of large user, namely

- delivery of a large volume of water to a single point of supply,
- one customer to manage and
- no use of the local distribution network

We intend to continue to apply our large user tariff for these two sites, though will keep this under review with the NAV.

3. Approach to tariff setting

To determine a site specific NAV tariff (as required in the Ofwat guidance) we will need to understand the detail of the site to be served by the NAV including number, usage volumes and length of mains.

Ofwat use the wholesale-minus approach to determine a tariff if there is any dispute between the incumbent and the NAV on the appropriate tariff for bulk water.

We will apply this “wholesale minus” approach to any new NAV who requests a bulk supply of water from Portsmouth Water. The following explains the steps in determining a bulk supply tariff for the NAV.

1	Relevant Wholesale Tariff	this is determined by the number and usage of the expected customers on the site.
2	Avoided on-site ongoing operating costs	these costs are implicit in the current wholesale tariff and will not be incurred by Portsmouth Water as the NAV will operate the local distribution system.
3	Avoided on-site maintenance of assets	these costs are implicit in the current wholesale tariff and will not be incurred by Portsmouth Water as the NAV will maintain the local distribution system.
4	Avoided WACC on on-site assets	these costs are implicit in the current wholesale tariff and will not be incurred by Portsmouth Water as the NAV will own the local distribution system. Further, Ofwat have been prescriptive on the relevant cost of capital.
Equals	Bulk Supply Tariff	The relevant NAV tariff is determined therefore by subtracting steps 2, 3 and 4 from step 1.

4. Detail to determine the tariff

The proposed tariffs are purely illustrative. Further detail is given in the attached appendix.

As previously noted, to determine a site specific NAV tariff (as required in the Ofwat guidance) we would need to understand the detail of the site to be served by the NAV including number, usage volumes and length of mains. We therefore explain below the detail of how we will approach the quantification of the any NAV tariff. We have inflated our 2018/19 outturn costs by the November 2018 RPI to ensure consistency with current tariff setting methodology.

Step 1 – The Relevant Wholesale Tariff – we have already published our 2019/20 wholesale tariffs. Specifically we have household and non-household wholesale standing charges and wholesale volumetric charges. These are applied to illustrative numbers of customers on the site.

In scenario A we assume a mixed site with 300 households and 50 non-households with 120 and 400 m³ per annum.

1. This allows us to quantify the wholesale revenue of £47,082 or a unit rate of £0.841 / m³

Step 2 – On-site ongoing – as part of our annual Accounting Separation exercise we quantify the total operating costs for the local network for 2018/19 as £4,584k. Given we have a local distribution network of 2,858km we establish an operating cost per metre length of network to be £1.60.

For this example we assume 7.5 metres main for each household and 10m for a non-household. We quantify the length of mains on the new site to be 2.75 km.

2. We quantify the onsite operating costs would be £4,411

Step 3 – Maintenance Costs – as part of our annual Accounting Separation exercise we quantify the renewals costs for the local network for 2018/19 as £1,004k. Given we have a local distribution network of 2,858km we establish a renewals cost per metre length of network to be £0.35.

Again, we assume the length of mains on the new site to be 2.75 km.

3. We quantify the onsite maintenance costs would be £965

Step 4 – Return – we have applied a Cost of Capital of 4.74% (as recommended by Ofwat) to the above ground assets which will be owned by the NAV. We have assumed this is only the meter and chamber at this stage. We have assumed a unit cost of £251 per meter, implying a return per meter of £11.90.

4. We quantify the return on 350 meters to be £4,165

Step 5 – NAV Tariff – we deduct the costs “foregone” from the wholesale charge to determine the NAV tariff.

5. The NAV charge is therefore £37,540, or a unit rate of £0.670 / m³ a reduction of 20% on the standard wholesale tariff.

5. Scenarios

The table below shows how the percentage varies depending on the mix of properties on the site as suggested in the Ofwat publication.

Four scenarios are provided varying the mix of properties on the site. Scenario A is the one described thus far; Scenario B has no non-households, Scenario C has twice as many households and Scenario D is non-household only.

The discounts relative to the wholesale charge varies by scenario.

Scenario		A	B	C	D
Household	No.	300	300	600	0
Non-households	No.	50	0	0	50
Wholesale charge	£	47,082	31,491	62,982	15,591
	£/m ³	0.841	0.875	0.875	0.780
Costs "forgone"		9,542	7,970	15,939	1,573
NAV Charge	£	37,540	23,521	47,043	14,018
	£/m ³	0.670	0.653	0.653	0.701
"Discount"		20%	25%	25%	10%

Appendix A shows the detail of our calculation.

NAV tariff		A		B		C		D		
	Units									
1	Number of households	#	300		300		600		0	
2	Number of non-houesholds	#	50		0		0		50	
3	Length of mains	km	2.75		2.25		4.5		0.5	
4	Implied density rate	m/#	7.86		7.50		7.50		10.00	
5										
6	Annual water demand per household	m3	120		120		120		120	
7	Annual water demand per non-household	m3	400		400		400		400	
8										
9	Wholesale Tariffs (from 1 July 2019)									
10	Household standing charge	£	15.57		15.57		15.57		15.57	
11	Non-household standing charge	£	11.82		11.82		11.82		11.82	
12										
13	Household volume charge	£/m3	0.745		0.745		0.745		0.745	
14	Non-houeshold volume charge	£/m3	0.750		0.750		0.750		0.750	
15										
16										
17	Operating Costs (2018/19 inflated)									
18	Local distribution operating costs (excl o'heads)	£ 000s	4584		4584		4584		4584	
19	Length of local distribution	km	2858.4		2858.4		2858.4		2858.4	
20	Implied opex per metre (length)	£/m	1.604		1.604		1.604		1.604	
21	Maintenance Costs									
22	Local distribution renewals charge	£ 000s	1004		1004		1004		1004	
23	Length of local distribution	m	2858.4		2858.4		2858.4		2858.4	
24	Renewals charge per metre (length)	£/m	0.351		0.351		0.351		0.351	
25	Return on investment									
26	No. of meters on site	#	350		300		600		50	
27	Unit cost (£/meter)	£	251		251		251		251	
28	Cost of capital		4.74%		4.74%		4.74%		4.74%	
29	Return per meter (asset)	£	11.90		11.90		11.90		11.90	
30										
31	Total Cost forgone	£	9542		7970		15939		1573	
32										
33			Cost	Unit Rate	Cost	Unit Rate	Cost	Unit Rate	Cost	Unit Rate
34			£	£/m3	£	£/m3	£	£/m3	£	£/m3
35										
36	Wholesale Charge	£	47082	0.841	31491	0.875	62982	0.875	15591	0.780
37										
38	Costs forgone		9542		7970		15939		1573	
39										
40	NAV charge		37540	0.670	23521	0.653	47043	0.653	14018	0.701
41										
42	Reduction on standard charges		-20%	-20%	-25%	-25%	-25%	-25%	-10%	-10%