

By email

3 September 2019

Bilateral markets call for information
Ofwat
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Dear Ofwat

BILATERAL MARKETS CALL FOR INFORMATION

Thank you for the opportunity to respond to the Bilateral markets call for information. In our view, this is a very important topic for the regulation of the water sector and one that is long overdue for reform. It is of great frustration to those who have been encouraging the more efficient use of resources, going all the way back to the Water Act in 2003, that effective arrangements of bilateral trades for water have not developed, and there is little understanding of incumbents or new entrants that there is a practical regime within the current framework that works. We welcome the effort Ofwat is putting into this topic, including through this call for information.

We are optimistic that bilateral trades can emerge from this effort, and better use of the existing water resources, water treatment and treated water facilities that are available will emerge as a result. It will require co-operation and some co-ordination to make this work, to make the best use of the competitive forces that arise. We see no contradiction here – ultimately competitive forces and pressure is needed for resource allocation, but with bilateral trades it is important, as in any market that both parties benefit if they deliver what has been agreed. That is important, to drive ultimately drive value for customers and the market.

In our view, the single most important thing we need to do is to pilot bilateral trades and learn from the experience, alongside the other changes to water resource planning and funding approaches that are currently developing in water economic regulation. Bristol Water is actively engaged in exploring with other participants about what commercial and pilot opportunities may be possible, and we will be happy to consider using this experience to explore how the barriers to bilateral markets can be overcome. Although there will be technical barriers, there is an over-riding economic regulation barrier that will need to be addressed first so that operational arrangements and other challenges can be overcome. We focus our response on the pricing and economic issues, and do not address all of the potential policy and regulatory issues that others are likely to raise..



We provide detailed evidence and response to the specific questions raised in an appendix to this letter.

Yours faithfully,



Iain McGuffog
Director of Strategy & Regulation

Background

In summary we see the situation set out in the call for information (CFI) as:

- The Water Act 2014 (WA14) contains provisions requiring entry access to wholesale supply licensees. This allows bilateral market between wholesalers and retailers, without having to be specific about which end-user customer they will be supplying, as is the situation before these provisions are commenced.
- The CFI will allow Ofwat to provide DEFRA with good quality information on which to consider commencing the WA14 provisions
- Bilateral markets are where third party water resource providers contracting directly with retailers, rather than just to water companies.
- Wholesale licences (>5ml customers only, section 66D agreement) currently allow a third party to introduce its own water source and to ask a water company to supply the water to non-household customers (but there have only been a handful of past examples where this has been attempted), or
- WSSL licence acquires water from one water company to supply to another.
- This request to supply can be refused by the incumbent where it impairs the incumbents ability to meet obligations or the costs are excessive.
- The WA14 commencement proposal is to get rid of the large user criteria and to change to those customers eligible in the business retail market.

Primary water company (ie incumbent undertaker)	Secondary water company (eg another undertaker)	Wholesale licensee (WSSL licence)	Retail licensee (WSSL licence)
<ul style="list-style-type: none"> Has to provide entry access on request to a wholesale supply licensee or a secondary water company for water to be supplied by a retailer to-large (>5ML) users-only to business customers. This must be in accordance with a section 66D agreement. Out of area supply duty imposes duty to accept water for it to be supplied by a retailer to business customers from secondary company and provide a connection if needed. Request can be refused where costs are excessive or it impairs its ability to meet own obligations. 	<ul style="list-style-type: none"> Can request entry access for water to be supplied by a retailer to-large (>5ML) users-only to business customers. Out of area supply duty imposes duty to supply water on request to a retailer to supply its business customers (subject to being able to meet its own obligations). This must be in accordance with a section 66D agreement. Retailer's request can be refused where costs are excessive or it impairs its ability to meet own obligations. 	<ul style="list-style-type: none"> Can request entry access for water to be supplied by a retailer to-large (>5ML) users-only to business customers. This must be in accordance with a section 66D agreement. 	<ul style="list-style-type: none"> Can acquire water from a wholesaler to be supplied to-large (>5ML) users-only to business customers. Otherwise water must be acquired from primary water company or a secondary water company.

Key:
Remains
Replaced
New

We see three barriers to making this proposed market work effectively:

1. It is important to consider water network plus activities (water treatment and treated water distribution) as well as water resources and raw water distribution. The water resources market is raw water, and the bilateral market is likely to be (largely) treated water, although this will depend on the local and spare capacity of incumbent treatment works.
2. What is considered “excessive costs” can include treated water distribution. To make the market work effectively all parties will need to be clear what the bulk supply pricing framework will be. The previous Ofwat guidance under 66E was withdrawn in 2014, but indicative prices are still produced annually on this framework.
3. The link to potential abstraction trading reform. Abstraction licences currently includes a range of terms including the potential for other abstractors to object to changes in use linked to the impact on downstream, for instance because different types of abstraction vary in terms of how much returns to the environment.

We think there are therefore two key topics to consider:

- Being clear about how bilateral pricing of different uses of the value chain will work.
- Avoiding multiple barriers to entry – such as barriers from abstraction trading rights of others (including incumbents) alongside how “excessive cost” rules could apply. For instance, Ofwat may need to be clear on whether excessive costs includes impact on existing abstraction licences of the incumbent, not the third party, or whether potential costs arising from other parts of its network not related to the customers being supplied (“ability to meet own obligations”) can be stretched to current or future assumptions on water supply.

Experience suggests that these regulatory and future planning impacts, together with the environmental and water quality issues that they (according to incumbents) relate to, could make the potential gains from bilateral markets had to realise in practice. The hurdles for a new entrant could prevent sufficient

certainty that it is worth their while exploring this market. We think this is something that the RAPID alliance could consider as a priority. Although this will expand the focus beyond large national trades, we think this will be necessary in any case. It may be necessary to produce a standard set of rules, which avoid every individual case being intensively scrutinised, to avoid the complexity and uncertainty of these trades precluding entry. The cost of considering whether to enter this market has to be low enough for the new entrant and the incumbent in assessing the opportunity to allow for innovation to emerge.

Unfortunately, it feels as if we have been at this point numerous times since incumbents first had to publish Long Run Marginal Costs in 1999 following the principles of network access necessary under the Competition Act 1998, and then the Water Act 2003 “common carriage” concept. The Water Act removal on commencement of the >5Ml threshold may be too marginal a change in isolation given this experience, without considering how we provide greater support for these market developments.

Bristol Water has an interest in this market, both for selling water resources and supporting others buying and selling water resources. We address questions 2 and 3 in the consultation together by providing views and evidence, and conclude with a worked example of the key pricing issues faced with bilateral markets, assuming the other barriers of regulatory instruments and the bilateral market framework can be overcome. We highlight in bold where the points we raise as specific to the consultation questions, to aid Ofwat’s evidence gathering process.

Resilience

Ofwat question whether resilience is pursued by regulation (through planning process of WRMP and drought plans), and that there may be concerns about how long-term planning required by regulation would take into account bilateral market trades. We are of the view that diversity is part of resilience rather than a single point of failure, and we are not convinced that the planning process changes will necessarily improve resilience effectively. Planning processes will only improve resilience if they produce better use of water resources. The regional plans being used to support improved national water resource resilience should require greater bilateral and cross-border trades which should be boosted by the information revealed by an effective bilateral market. Major schemes (we use the historic example of Clywedog reservoir which is the last major national water resource scheme that predates the current industry structure and regulatory framework) require national top-down scrutiny in any case, using whatever policy and regulatory framework is in place at the time. **[Q2b]**

We provided evidence on this point to the National Infrastructure Commission in their call for evidence on resilience and regulation. This illustrated the point that a mixture of major water resources in diverse areas with different rainfall risks, together with treatment work and supply duplication to match, and with a network of local interconnectors is needed). The measurement of benefits from bilateral trades therefore should recognise the benefit/disbenefit that arises at peak times, rather than being valued at an average output unit cost. Where bilateral trades utilise spare capacity and, also allow for network

improvements (such as reversible flows in interconnectors), there is potentially a wider benefit to resilience of bilateral supplies that should be considered against what may be considered a cost in average supply conditions. We would caution against an excessively risk-averse approach being taken to water resource planning, or the introduction of bilateral trades, particularly should incumbents claim “excessive cost” based on the average operating cost of operating their networks. If the networks are resilient enough, this should reduce the cost of accepting more bilateral trades in many circumstances. [Q2a]

In any case, the distinction between peak and average is evident from the example Ofwat given in section 4.2 of the call for information of customers choosing interruptible supplies. However, this may be a niche example compared to retailers working with others to bring in new sources of water to a range of customers, as for a major consumer that would be interested in interruptible supplies, options such as this already exist. [Q2a]

It is not clear that WRMP modelling is sophisticated enough to consider this potential, when a simpler set of guidelines may be more likely to signal potential opportunities. It would appear to us that pilots in order to learn, with sufficient protection to avoid the sense that incumbents are “at risk” should new entry result in sunk costs from their previous plans, will be important, if better evidence is to be produced. We do not believe that the current incentives are aligned, as they focus on water resource marginal new entry (correctly) for that market, without considering that treated water with bilateral trades could potentially be foreclosed because of this regulatory incentive. We believe there is a case for allowing market development (as Ofwat did with cross-company bulk supply incentives) to reveal information as to whether this barrier exist, and how it may be overcome. The regional WRMP process and additional scrutiny on water resource options and the change to leakage reduction that does not just focus on an economic level of leakage, would seem to be significant changes in situation, without the complication of using market incentives that penalise incumbents for subsequent new entry, at an initial stage of developing this market. [Q2c]

The environmental question raised in section 4.3 should be dealt with through abstraction licensing / abstraction trading rather than through bilateral market design specifically. In any event, the advantage of a bilateral market that focuses on treated water and compliments the market for new water resources helps to reduce this challenge - if pipes are used rather than river transfers then there is usually some form of treatment before transport. Canals also regularly shift some water between different water bodies, the control over how water is transferred and utilised, allowing environmental risks to be managed. [Q3a]

With bilateral entry the net amount of abstraction should not increase, as incentives for water efficiency will not reduce – this is a strong argument for introducing the potential for Water Supply Licences that do not require a specific end customer to be identified, as this avoids retailers incentivising customers to use more because of any margin on transportation costs. One barrier to retailers for this is wholesale

tariff complexity, e.g. regional, reservation or stand-by tariffs where the bilateral entry point may be in a different area to the region. [Q3b]

In terms of public health in section 4.4 – the accountability of drinking water applies to both retailers and wholesalers. This principle will also apply to other licensed providers within the value chain, and this can be dealt with through normal commercial arrangements. Wholesalers have drinking water safety plans that can update for different sources of raw or treated water, and manage and monitor risks as they currently do. There should therefore be no new or real risk to public health, assuming the abstraction trading process and bilateral contractual process has the same level of regulatory scrutiny as already exists. There will be specific challenges to overcome where the water company does not control treatment, or the water source, but these are risks that exist and are successfully managed by the water sector already. Some types of sampling can be in-line and monitoring data shared, but other water quality criteria mostly require remote lab testing, and for some tests there is a significant laboratory time.

Bilateral participants are likely to be partnerships using experts in the field, including by existing water companies helping to develop commercial opportunities. This is little different from bulk supplies and therefore the regulatory approach should not need to change significantly. A phased approach explicitly is unlikely to be required, as we would not expect based on experience a “big bang” approach – supported pilots would be our suggestion that learning from example is needed, rather than theoretical speculation. The concerns should not arise if there is commitment to making pilots work (and we would refer to the example of the business retail market opening that should provide stakeholders with confidence that the water sector is, with its regulators, used to delivering change successfully). [Q3c]

We agree with Ofwat (section 4.5) that System Operators are outside of the scope of bilateral markets (by its nature a bilateral market does not have one, as it arguably ceases to be bilateral?). Bilateral relationships may develop better and quicker though if there is a facilitator who can standardise and reduce transaction costs. It may be that the scale of bilateral trades and interconnections develops to the point that a Systems Operator model emerges, for instance the parties prefer this as it reduces risk of individual case by case operation. [Q2b]

We do not understand the comment relating to discriminating against third parties under current market mechanisms in section 4.5. Water wholesale undertakers are not able to discriminate currently, and whether they do with the existing bilateral market or proposed bilateral market is unlikely to change. There is more risk with a greater market than any discrimination (deliberate or inadvertent), but the presence of trades highlights issues to be resolved. The challenge we have with the consultation is the focus on water resources, when bilateral trade issues of discrimination are far more likely with access to treatment and distribution networks, as these are the core network monopoly activities. Water resources can largely be dealt with contractually, and the water resource pricing and “bidding-in” framework provides options for how these arrangements are made – it is network access and pricing

that carries a greater risk (assuming abstraction trading market reforms are in place). The examples Ofwat include in the consultation were very helpful at illustrating the opportunities, and they identify in each case that water treatment and distribution are the key bilateral market barriers in terms of the process. [Q2c]

We do not feel section 5 of the consultation address this point sufficiently. The PR19 methodology describes how water resources access price mechanisms will work, but this does not set any indication of how water treatment or distribution charges will operate. The existing section 66E guidance and the indicative tariff prices rely on a discount from the total wholesale cost, based on an Efficient Component Pricing Rule (ECPR) approach, effectively retail minus to only allow efficient entry based on a marginal change in wholesaler costs, and is based on the timing difference of schemes avoided based on water resource management plans (but not just water resource components, treated water and water distribution as well). There is some evidence in the past of this resulting in retail plus as a result. This approach does not separate readily into value chain elements, and it is difficult to see how this would operate alongside the water resource equalisation payments, which operate as an adjustment to network plus charges. This is something that we think Ofwat need to consider further. We set out an illustration at the end of our comments on the issues that arise. [Q2c]

One issue we have identified for new entrants based on the current approach to equalisation payments and the water resource market information is how readily they are able to unpick water resource average prices from the incremental costs shown in WRMPs. This arises because the EA guidance discounts volumes as well as incremental costs over the 25 years to show a consistent option cost whatever the project starting point. However the water resources market information guidance uses these volumes – we think it would be better to show the incremental cost against the undiscounted end volume at the end of the scheme, to get a more useful comparison for new entrants (or both should be shown).

Illustration of potential for bilateral trade pricing, alongside water resource equalisation payments.

We explore below an example to illustrate how water resources equalisation payments, and the issues around bilateral trade pricing, may sit together. We use a real example, but anonymised sufficiently due to uncertainty around the data. A number of assumptions are made to illustrate this. We conclude with a solution, which is not new but is appropriate for this new context, and was developed by Ofwat with industry input in 2015.

A bilateral trade will include two components. In theory bidding into a water resource plan (with an equalisation payment) is a separate regime to the pricing for treated water supply into the distribution network.

- a) The equalisation payment, very simply, this allows a retailer to supply raw water resource and bid into a water resource plan
- b) A bilateral trade covers supply of water resource (as a) above) to either a retailer or a water supply licensee. It could though include treatment of water and supply into a distribution network as part of this. This should see a further reduction in the network access price (effectively a distribution cost).

Equalisation payments only apply to the water resource elements, although there may be cases where a water resource entry displaces an existing scheme that is partly water resources and partly water network plus business units. It is the water resources element based on accounting treatment that appears to apply to the equalisation payment. Incumbents may interpret the “excessive cost” criteria as related to marginal avoided costs, or water resource plan incremental costs. A simpler pricing is a charge for the bulk treated water distribution (assuming the wholesale price for a large user excludes the local distribution cost – evidence for this is apparent from NAV charge pricing assumptions which are, in line with Ofwat guidance, on a wholesale cost plus basis).

There is a range of ways an incumbent may calculate a) the water resource incremental charge and b) the equalisation payment. The greatest area of uncertainties are zonal, and the timeframe over which increments should be considered. Reviewing water resource plans, in many cases we observed that investments in five year period often had little or no additional water resource. This provides a range of uncertainty as to what the equalisation payment may be. In the example below, we use a calculated average water resource price of 12p/m³, comparing this to the apparent average incremental new water resource cost, depending on the timeframe (PR19 2020-25 – A) or (PR19 2025+ - B), over which you can consider whether it should be used for the equalisation payment. A is probably implied because of a five year price control, but we show this may not support bilateral market entry. This time variation challenge can also be seen from the indicative 66D access prices, which can vary from year to year due to the same timeframe issue – an access price is only generated if the trade displaces

investment over the period of the bilateral trade (and may therefore see wild swings in access price over the life of a trade, potentially from zero to 100% discount on the relevant wholesale charge).

There is an additional challenge where companies had multiple water resource zones, but there may be interconnections or displacement that could allow different phasing of schemes across a wider area in response to new entry. A basket over all company water resource requirements, which might reflect where treatment capacity constraints were (C) could also be appropriate. There is also the potential for the longest term scheme (which is often the most expensive) to be used, as ultimately that is what may at some point be displaced (D). Capacity matters as well, and we assume as equalisation payments may do that the average of incremental schemes is used, irrespective of the bidding in capacity being provided. We assume a substantial source of 20MI/d for this illustration. We assume a total wholesale charge of 80p/m³, which is fairly typical for the largest large user tariffs as the best indication of network plus charges. Table shows the equalisation payments that arise on this basis, and the network access price (although whether a negative access price is legally permissible is uncertain).

Table 1

p/m ³	A. PR19 apparent equalisation payment	B. PR19 2025+	C. Multi zone basket	D. End / most expensive scheme.
Average water resource cost	12	12	12	12
Incremental water resource cost of additional investment	9	23	45	106
Equalisation payment	0	11	33	94
Water resource access price into a bilateral trade	80	69	47	-14

We then consider (b) – what happens if this is treated water that is being provided, rather than just a raw water supply. The same price as the equalisation payment is unlikely to be consistent with competition law, so there has to be some methodology that works equalisation payments, or is consistent and able to work with its principles and application (we assume the distinction between the regimes is not real, where there is a licensed supplier who wishes to trade with a retailer / as a retailer. There are a range of approaches that could be taken to calculate what the water treatment discounts.

At one end there could be a large discount, if there is a significant incremental water treatment cost planned in the Water Resource Management Plan (e.g. 45p – 85p m³ based on a review of one plan for illustration). However the incumbent could argue that a long run marginal treatment cost, perhaps 8p to 20p per m³ depending on how long run is defined, was the appropriate access pricing, particularly if the WRMP (in particular for a zone where the new entrant may have water resources to treat) did not on its own avoid any specific treatment schemes. We assume at the upper end, for the volume we use to illustrate above, the high end of an incremental water treatment cost reflects an asset replacement cost (i.e. the cost saved permanently if a new entrant brings their own treatment capacity avoids an asset being built and operated, or the need to replace it if the incumbent was deprived of it). This is an important area of assumptions, because the potential for modular package treatment plants with innovative new technology may allow other currently unused sources of raw water to be utilised.

A more likely approach to bilateral trade pricing that would avoid the difficulty in assessing these issues would be not to consider actual treatment costs, but instead to create a distribution access charge – this is the type of pricing that companies developed following the Competition Act 1998. A range of approaches is possible, but we assume an average bulk distribution network charge may be appropriate (wholesale cost plus, rather than retail minus). This is consistent with bulk supply or NAV pricing, although the latter has differences due to what elements of distribution are avoided, compared to bilateral market entry. The challenge with this is that an average charge is not location dependent - at a more expensive location the incumbent will argue that the costs are higher, perhaps “excessively” so, although this may not be the correct interpretation of that element of the Water Act. Debate on these areas of uncertainty is why we think it is worth considering bilateral market pricing principles now.

It may be argued that in the long run incumbents can control how the distribution network is used with new entry (as they must do with developments, and all developers, SLPs and NAVs now pay for offsite network reinforcement as customers connect (through infrastructure charges), but only to the degree the balance of charges between developers and other customers (including we would assume bilateral market entrants) is maintained.

We show in Table 2 below how the range of potential water treatment cost allowances would produce a range of discounts, together with the range of scenarios we show in table 1 for the equalisation payment. This shows the difference between marginal, average and the range of incremental costs from WRMPs. With equalisation payments combined with a water treatment discount, we show a very wide range of potential network access charges for the bilateral market trade, depending on timescale and view on what costs are avoided. It will be very difficult for any new entrant to understand, from the available information, which of those should apply. It is also not clear whether a negative network access charge is legally allowed (the indicative access prices under s.66E capped the discount at 100% of the incremental schemes). The incumbent equally may be faced with a difficulty due to the uncertainty as to, with entry, what is avoided – in practice this will be optimised after entry. But the

uncertainty is such that goodwill by trading parties will be required to reach a point that a pilot could be undertaken, to learn and reveal such information.

Table 2

p/m3	Low	Medium	High	Very High
Water treatment cost plus allowance	8 (marginal)	20 (average)	45 (incremental)	85 (replacement)
Water resources average cost discount for bilateral trade	12	12	12	12
Equalisation payment discount	0 (A)	11 (B)	33 (C)	94 (D)
Treatment discount	8	20	45	85
Total discount from wholesale charge	20	43	90	191
Incumbent wholesale charge (total)	80	80	80	80
Network access charge (ie for distribution)	60	37	-10	-111

The alternative is to take an average distribution network access charge, to create a margin (cost plus) for water treatment.

If you take an average distribution network access charge (say 35p/m3) to create the margin for water treatment, and then apply it to the water resource equalisation payment, you get the following scenarios should in table 3. This assumes break even for an incumbent costs, based on the incremental water resource cost of 45p/m3 and similar for treatment water costs – these are the capacity costs from the same incumbent WRMP used in this illustration.

Table 3

p/m3	Low	Medium	High	Very High
Wholesale charge	80	80	80	80
Less distribution access cost	-35	-35	-35	-35
Water resources payment (average plus equalisation)	12 (A)	23 (B)	45 (C)	106 (D)
Available margin	57	68	90	151
Incremental water resource cost for new entrant	-45	-45	-45	-45
Incremental water treatment cost for new entrant	-45	-45	-45	-45
Net margin for supply treated water under bilateral trade	-33	-22	0	41

Table 3 shows that a high incremental water resource treatment allowance scenario with the equalisation payment is not on its own sufficient to allow for bilateral entry, with an average cost treated water distribution access charge even if the new entrants incremental costs align with the incumbents. Only in the scenario with a very high, long-term incremental water resource cost from the most expensive scheme at the end of a WRMP process, and a high replacement cost linked to this do you gain an effective net margin on providing treated water. It is likely that for many bilateral trades, you need to provide water treatment in order to make the new entry useful to supply the end customer, but an average distribution access charge is unlikely to make this economic, unless assuming a long run incremental cost for large capacity water resource and treatment improvements, wider than looking at individual water resource zones is taken. This may make market entry by smaller bilateral entry impractical. The new entrant also does not have the advantage of strategic water resource scheme development funding, which we have not taken into account in these scenarios, as its not clear how this approach could be priced into the access price / discount. This approach to developing water resource transfers has emerged after the water resource bidding in approach was developed, and it is not clear that the potential for new entrants to contribute to this (or how bidding into regional water resource plan development) will operate. **[Q2b]**

The alternative approach to that set out above would need to be case by case as would be considered for a bulk supplies. In increasing size, the distribution access charge to enable efficient bilateral market entry should in theory sit somewhere in between the Long Run Marginal Cost (LRMC), Long Run Average Cost (LRAC) and Long Run Incremental Cost (LRIC). The LRAC is probably the most appropriate price where the specific location of an individual access point of a bilateral trade (and the local of the end customer) is not material in the long run. This could be because network interconnectivity and displacement of water across a wide geographic area is assumed. The Long Run Incremental Cost of the largest incremental scheme as we show above is c190p/m³ covering both water and treated water supply options (D). However from an incumbent perspective and for marginal entry, this is too large a discount before this future increment is needed, and results in no contribution to the long run costs of the distribution network. Such a LRIC is likely to have only been justified from a national, strategic scheme perspective.

A potential approach is to project forward the LRAC after the future incremental schemes have been completed, and include a benefit (additional discount), for any option value of timing from the additional water provided. This was an approach proposed by OXERA in an Agenda paper in September 2015. (approach proposed by Oxera with Severn Trent “The Future of Water Upstream” – Agenda September 2015 based on work in partnership with Ofwat <https://www.oxera.com/agenda/the-future-of-water-upstream/>)

We have illustrated this using the examples in this case study – in table 4 we estimated a projected LRAC after all new schemes have been completed

Table 4

p/m³	LRMC	LRAC	LRIC
Water resources	12	23(B)	106
Water treatment	20	30	85
Bulk distribution	35	35	35
Local distribution (not included in total as assumed not in wholesale charge for large volumes)	45	45	45
Total	67	88	226

This suggests that a large discount for water resources and water treatment cost from wholesale charges as an access price for a bilateral market trade could apply if you look at the incremental cost of a unit. But this unit of incremental water does not have this cost in water resources or water treatment plans until a long time in the future, potentially even if the bilateral trade was for this length of time it is not clear why a discount should apply today. If we are to avoid calculating this in the same way as the ECPR “retail minus” approach, which we show does not appear to support efficient bilateral market entry with the water resource bidding in /equalisation market, the LRIC still appears to provide an excessive discount for new entry. Using the LRAC approach for treated water access would appear to be the equivalent of the approach to an equalisation payment). At least for a pilot phase, this could be applied to all bilateral entry in a particular company, or water resource zone, depending on interconnectivity.

In the case illustrated in table 4, as well as the equalisation payment on incremental water resource schemes which may be appropriate on an LRIC basis (C if applied over multiple periods) of 33p/m³ plus the 12p/m³ average water resource discount, and a 30p/m³ discount for water treatment based on LRAC, this implies a distribution access charge of $(80 - 45 - 30) = 5\text{p/m}^3$. From an incumbent perspective this may not cover marginal distribution costs, but still reflects an efficient long term access price. The amount at risk for incumbents may need to be mitigated if the benefits of both water resource trading and bilateral markets are to be realised, rather than considered as separate regimes.

This assumes that the incremental costs can be identified sufficiently to allow an average cost to be calculated, one that could be weighted differently to above depending on how specific the location of entry avoided future water resource and treatment WRMP schemes.