Draft ESC Report of June 2009 on an Access Regime for Water and Sewerage Infrastructure Services:





Introduction

Central Highlands Water (CHW) thanks the Essential Services Commission (ESC) for the opportunity to comment on the ESC's June 2009 Draft Report in relation to its Inquiry into an Access Regime for Water and Sewage Infrastructure Services.

A representative of CHW also attended the ESC's public Hearing on 15 July 2009 in relation to this matter. The public Hearing allowed stakeholders the opportunity to clarify some elements of the proposed regime and CHW's comments will have regard to the useful discussions that occurred during this Hearing.

CHW understands that the Victorian Government has decided to implement the access regime and appreciates that the ESC is endeavouring to develop a regime that does not impose excessive costs on infrastructure operators by balancing the potential benefits of access against the likelihood of an access request.

The ESC has identified the Goldfields Superpipe (GFSP) as a suitable asset for declaration under the proposed regime, and this position has been supported by CHW. The GFSP was jointly constructed by CHW and Coliban Water and the two water authorities have entered into a Joint Venture (JV) agreement covering the ownership and maintenance of the Superpipe, and access to the water it provides.

Since the JV will be providing a separate submission in respect of the GFSP, the remainder of this submission focuses on CHW's other assets.

Some general observations about pricing

CHW notes the ESC's recommendations about when to adopt either the cost of service or the retail minus pricing approaches. In particular, CHW notes the ESC's recommendation that the access commitments developed during the implementation period should identify which access pricing approach will be used to calculate access prices for the services provided by each particular infrastructure facility.

CHW notes the ESC has recommended that the cost of service approach should be applied to the GFSP and this is discussed further in the JV's submission. CHW believes that the retail minus approach can be applied because the final retail price is regulated for these services and CHW provides services in the regulated retail market. However, CHW believes that there remains a lack of clarity with respect to the application of the retail minus approach.

CHW understands that competition may result in a loss of revenues for incumbent water businesses. However, CHW notes that two alternative discounting methodologies were referred to in the ESC's earlier Issues Paper. One method represents the costs avoided by the infrastructure service operator in not having to provide certain service components to the access seeker and the other reflects the costs incurred by a potential new entrant in providing the services avoided by the infrastructure service operator in providing access, that is, long run marginal cost (LRMC).

CHW notes that the ESC has not recommended one or other of these methodologies at this stage. This is despite the fact that they can produce quite different outcomes.

Under the first methodology, the water businesses would be able to service their remaining customers without further adjustment. If LRMC pricing were adopted, however, then water businesses may need to be able to rebalance the prices they charge to their remaining customer groups. Consequently, an early and widespread adoption of LRMC might mean that water businesses would seek to reopen

their price determinations. It might also result in higher prices for some customers.

The strict application of LRMC pricing does not provide for the recovery of any portion of fixed costs from an access seeker. Section 35C (b) (i) of the *Essential Services Commission Act 2001* provides for access prices to allow for multi-part tariff pricing. Under a two-part tariff, for example, the variable part of the charge recovers LRMC while the fixed component of the charge recovers some portion of the fixed costs. The amount of fixed charges that are recovered could be subject to negotiation between the access seeker and the infrastructure provider.

In addition, it is not clear that the retail minus approach can be used when an access seeker's request necessarily involves significant augmentation to the existing network. Such a request may require a reassessment of the existing retail prices. Therefore again, it might be grounds for reopening a price determination. CHW notes the ESC's preference, as expressed at the Hearing on 15 July, for this matter to be addressed on a case-by-case basis. Such a situation is discussed in more detail below under the section headed, "Water and sewage transport services".

CHW notes that the ESC intends to develop pricing principles and other guidance to assist the water businesses in applying the pricing approaches. CHW would welcome the opportunity to take part in this process, and/or otherwise discuss the pricing principles more fully with the ESC.

CHW would welcome some further clarification from the ESC on how the opening regulatory asset value that has been assigned to each water authority will be applied to assets in the calculation of any access pricing. CHW would be willing to take part in discussions directly with the ESC in relation to this issue.

Types of infrastructure services covered by the regime

CHW notes that the proposed regime covers urban and rural water and sewage transport services, including services that are subsidiary but inseparable to providing transport services, e.g., storage and metering services. The regime does not include the filtering, treating or processing of water or sewage, the use of a production process (recycling water), the use of intellectual property or the supply of goods, including the supply of water or sewage, except to the extent that these services are an inseparable part of providing transport services. In particular, it does not include resources such as water, wastewater and recycled water.

Metering services

CHW notes that the ESC is recommending that headworks and in-system meters are integral to the water transport services and the sewage transport services and should be provided by the infrastructure operator.

However, the ESC asks whether retail meters should also be included in the regime or whether they should be provided by the retail water service operator.

CHW understands the reasoning behind excluding retail meters from the regime and requiring them to be provided by the retailer. However, CHW notes that this could result in significant cost impost to customers and notes that the benefits of regulation should outweigh the costs, as provided for in the *Water Industry Act* 1994.

Water storage services

Unlike the NSW access regime, the ESC is proposing that the water storage facilities of large dams be included in the regime.

Melbourne Water and VicWater opposed the proposition that large dams should be included in the regime, arguing that the primary role of these water storages is to produce water. VicWater in particular argued that spare capacity in dams and other large storages may not be as abundant as the



ESC believes because some part of it at least should be kept as a buffer against drought in order to provide security of supply against future years' shortages.

The ESC has rejected this view noting that there may be scope to use the dams for short-term water storage. It was confirmed at the Hearing of 15 July 2009 that the ESC envisages an arrangement whereby access seekers pump water that they have sourced themselves into the dam for use later. An alternative scenario involves the access seekers purchasing water that is currently in the dam and replacing it later with water that they source from elsewhere.

Where the access seeker brings in additional water to start with, there may be an increased risk that the dam will overflow during a period of unexpectedly high inflows. Where the access seeker uses water already in the dam with a view to replacing it later, there is a risk that the access seeker will fail to provide replacement water of sufficient quality at the time that it is needed.

There are several ways of mitigating these risks. In the first case, for example, access seekers could agree to forfeit their right to part or all of their entitlement depending on the amount of the overflow or they may be prepared to pay for the dam wall to be raised.

Alternatively, a pricing solution may be adopted. In the second case, for example, the access seekers could be charged a price premium reflecting the additional commercial risks that accrue to the dam owner. For example, they may be unable to meet their obligations to other users of the dam and the premium could reflect the additional costs that might be incurred by the dam owner as a result (having consideration to potential compensation payments and/or higher insurance premiums).

Such a pricing approach is consistent with Section 35C (a) (i) of the *Essential Services Commission Act 2001* which states that regulated access prices should include a return on investment commensurate with the regulatory and commercial risks involved and Clause 6 of the Competition Principles Agreement.

The situation where an access seeker replaces water is similar to an issue that might arise in relation to waste water in which an access seeker extracts the waste from one part of the system (e.g., consumer waste) and replaces it with different quality effluent in another part of the system (e.g., industrial waste). A downstream treatment plant may not be able to handle this change in influent quality.

Tradable water entitlements and environmental/social obligations

The Draft Report acknowledged Southern Rural Water's comments that storage capacity in large dams such as the Thompson Dam is already fully allocated through the entitlements system. In particular, the ESC recognised that these entitlements might create a barrier to entry to new participants in the water sector. Therefore, the ESC has recommended that tradable water entitlements be implemented along the lines of a scheme proposed by the Productivity Commission. The approach was further discussed during the Hearing on 15 July 2009.

Under the proposed arrangements, new participants in the water market would be able to purchase entitlements to a share of water storage capacity. The ESC acknowledged that this would obviate the need for an access arrangement but still argued for implementing an access regime in case there are unforeseen issues with tradable water entitlements. However, this argument appears to be circular.

Melbourne Water made a comment, similar to Southern Rural Water's, about storage capacity in large dams already fully allocated through the entitlements system. However, Melbourne Water added that the entitlements are complemented by a set of operating rules which are designed to ensure that both the interests of consumptive and environmental entitlement holders are met and that the efficient, safe and reliable operation of the Melbourne water supply continues.

A key implication of Melbourne Water's comments is that at least some of these entitlements may be committed to meeting the social and environmental obligations of the entitlement holders. One of the



ESC's objectives under the *Water Industry Act 1994* is to ensure that its regulatory decision-making in respect of water must have regard to the health, safety, environmental sustainability (including water conservation), and social obligations of regulated entities. While the health and safety obligations of regulated entities under a third party access regime can be addressed through licensing arrangements (this is discussed briefly again below), it is less clear how the environmental and social obligations might be met.

These obligations require a proportion of dam capacity to be set aside for specific purposes, for example, to guarantee security of supply in relation to environmental flows or town drinking water. At issue is whether a system of tradable entitlements and/or an access regime increases the risk that these social obligations will not be met.

The usual economic response to increased risk is to include a risk premium in the price of entitlements and/or the price charged for access. This risk premium is designed to compensate for any losses that might be incurred as a result of any failure to meet the social obligations. However, this pricing approach presupposes that a specific monetary value can actually be placed on the amount of compensation that would be required. Those opposing a price based solution would argue that no amount of money can compensate for some losses and that a system of quotas should be introduced instead.

Of course, quotas can be introduced in conjunction with a price based approach. In this case, all capacity in excess of some minimum amount or quota would be tradable.

CHW notes that a representative from the Department of Sustainability and Environment (DSE) attended the Hearing on 15 July and welcomes her statement that the Government will provide guidance in relation to these matters. CHW would be willing to take part in any discussions or contribute to any debate on this issue. However, CHW shares the concern expressed by a number of participants in the Hearing that it might not be possible to provide an access price in some circumstances until this matter is resolved.

CHW notes that the access regime does not prevent a new entrant from seeking to fulfil the social obligations in place of an incumbent water business. However, the new entrant would have to be willing and able to commit to meeting the social obligations on terms and conditions that are acceptable to the person who has established, and in some cases funded, those obligations (most likely the relevant Minister).

Water and sewerage transport services

It is worth briefly considering pricing for access to water and sewerage transport services (for example, pipes, canals and waterways), especially in cases where the infrastructure is being operated near to its intended capacity based on design specifications and intended asset lives.

Setting aside this consideration, access prices which at least recover LRMC should be used as the basis for determining the access prices for these facilities. The determination of LRMC will have been based on estimates of future demand and since there will be no net increase in demand for access seekers who compete for business against an incumbent water business' retail arm, the determination of an access price in these cases will generally revolve around allocating costs to the access seeker based on the existing regulatory asset base.

As with dams, CHW would welcome clarification from the DSE in relation to the treatment of the water business' social obligations. For example, to provide potable water to town residents consistent with some predetermined maximum level of water restrictions. We note that infrastructure capacity to meet this social obligation will vary from season to season and over time. Otherwise, the pricing policy in relation to this scenario has been well discussed above in the section entitled, "General observations about pricing".



Where, however, an access seeker wishes to sell additional services, the regime expects that the access seeker's requests will need to be met provided it is technologically feasible to do so. Section 35C (a) (i) of the *Essential Services Commission Act* 2001 requires that regulated access prices should be set so as to generate expected revenue for a regulated service that is sufficient to meet the efficient costs of access to the regulated service or services. This is consistent with Clause 6 of the Competition Principles Agreement made by COAG on 11 April 1995, and amended on 13 April 2007, which contains principles for determining efficient access prices.

Clause 6 states that in the event of dispute about access, the dispute resolution body (which for the proposed regime could be the ESC), in deciding on the terms and conditions for access, may require the owner to extend, or permit to be extended, a facility that it covered by the access regime provided that the extension is technically and economically feasible and consistent with the safe and reliable operation of that facility (Clause 6 (4) (j) (i)). However, the dispute resolution body must always have regard to the costs to the access provider of providing access, including any costs of extending the facility except the costs associated with losses arising from increased competition in upstream or downstream markets (Clause 6 (4) (i) (ii)).

The principle here seems to be that spare capacity should be provided if the access seeker is willing and able to pay for it, and it is technologically feasible and safe to do so.

Capacity can be expanded in several ways. Pumps can be worked harder and the asset stressed more than was originally planned for. However, this can significantly shorten the lives of existing infrastructure and substantially impair asset values unless the business undertakes increased major periodic maintenance (MPM). This additional MPM ought to be capitalised into the regulatory asset base. Alternatively, larger pipes may need to be installed to cope with the expanded capacity. Additional compensation may need to be paid if this means that the system needs to be shut down earlier than was originally planned for.

These additional costs correspond to a higher level of forecast demand than was planned for when the regulatory asset base was determined. This may require a new estimate of LRMC in which case the regulatory asset base would need to be adjusted.

This situation is not really depicted in figures 6.1, 6.2 & 6.3 of the Draft Report. In particular, the retail minus approach to pricing would not be directly applicable. However, it is noted on page 78, in respect of the cost of service approach, that the regulatory asset base which was determined as of 1 July 2004 is adjusted for all subsequent net capital expenditure and regulatory depreciation. As noted briefly in the section on, "General observations about pricing", CHW welcomes the ESC's acknowledgement during the Hearing of 15 July 2009 that this matter requires further consideration, and noted the ESC's initial preference for it to be addressed on a case-by-case basis.

Greenfields infrastructure investments

Non-coverage periods or risk premiums have been proposed to address the additional risks associated with Greenfield investments.

The ESC asks if greenfields infrastructure investments should be exempt from the application of an access regime for a certain period? If so, what would be an appropriate period? Are there any other, or alternative, measures that should be considered to ensure an access regime does not reduce incentives for efficient investment?

The ESC also asks if there are higher risks associated with investing in infrastructure facilities caused by an access regime? If so, how might these additional risks arise?

CHW acknowledges that the 'investment risks' from access should not include risks related to potential loss of market share in related markets (pursuant to Clause 6(4)(j)(ii) of the Competition Principles Agreement).



The key risk to new investments is hold-up risk. For a new investment, the infrastructure operator can either develop its own water retail business (vertically integrate) or partner with a separate water retail business. Partnering can potentially provide significant benefits to both parties. However, the decision to enter into a new business is problematic for the infrastructure operator because it will have to make a significant investment that is not matched by the retail water business. This provides the retailer with significant market power during negotiations over access prices. In particular, it could use this market power to drive the access price down close to, if not exactly equal to, LRMC by threatening to walk away from the deal thereby leaving the infrastructure operator with an asset that it is not earning any money on.

A price around LRMC would mean that the infrastructure operator would not make any return on the fixed costs associated with their investment, thereby making the whole deal less attractive.

In contrast, these costs are sunk for an incumbent water business with an existing asset and integrated retail water business and do not properly feature in any decision to exit the industry.

In addition, some investors may wish to participate in a project in order to guarantee security of supply. These investors are entitled to know that a third party access regime is capable of delivering a secure supply of suitable quality water and this raises the same kinds of issues that were considered above in the section, *Tradable water entitlements and environmental/social obligations*.

The GFSP is a case in point. Both the Commonwealth and Victorian governments contributed funding towards sections of the GFSP in order to guarantee the security of water supplies to Ballarat and, while parts of the GFSP are operational, other sections are still to be completed. The GFSP would constitute a greenfields infrastructure investment.

Negotiation framework and dispute resolution

Another one of the ESC's objectives under the *Water Industry Act 1994* is to ensure in respect of water that, wherever possible, the costs of regulation do not exceed the benefits.

Clearly this is a major issue for a regime for which many industry players believe that there may not be many access seekers and where there is little evidence of these benefits from previous access regimes. The ESC has acknowledged this by seeking to minimise the costs of the regime in a number of ways.

For example, the ESC has advocated the retail minus approach to pricing wherever possible because it only needs to be applied when an access application is received. This is because the approach only works when the retail price for the incumbent business is already regulated and has been determined using a building block approach.

In addition, the ESC is recommending that a negotiate/arbitrate model be implemented. These models are meant to minimise costs by only requiring the infrastructure owner to respond to specific access requests.

Under this particular model the infrastructure owner must within 14 days of receiving an access request provide an access seeker with an information pack containing sufficient information for them to decide whether to proceed with a request for access. If the access seeker then formally applies for access, the access provider then has 28 days from the date of the application to provide a preliminary assessment of the application including a statement about the availability of the infrastructure, full details of the infrastructure service requested, access terms and conditions, the proposed price or pricing methodology, details of the infrastructure operator's operating protocols, and relevant system operations and planning information.

The ESC has agreed that appropriate fees and charges should be determined during the implementation period to cover the costs of assessing applications. While this seems to be a



generous concession, there are potentially some issues with it.

It is not clear how the fees and charges can be set until the number of access seekers for a particular type of infrastructure is known with any reasonable certainty unless it is assumed that each access request will be virtually unique. This assumption could inadvertently result in the over-recovery of costs in the event that a number of requests are received for a similar infrastructure service.

Also, these fees and charges do not appear to cover the preliminary information that must be provided within 14 days.

CHW considers that the 28 day timeframe could be quite challenging for many types of access requests. Therefore, CHW welcomes the clarification provided by the ESC during the Hearing of 15 July 2009 that the infrastructure provider as well as the access seeker can seek to have this period extended, and that the time period itself can be subject to arbitration if agreement between the two parties cannot be reached.

Ring fencing

Introduction

CHW notes the ESC's observation that ring fencing is typically adopted in access regimes to ensure that there is clarity and transparency around the cost in order to facilitate access pricing, particularly where the infrastructure provider is vertically integrated. CHW is pleased that the ESC has acknowledged that the costs of ring fencing can prove quite onerous and welcomes the recommendation to adopt accounting separation only for those businesses that are less likely to receive access requests.

CHW believes that this formulation achieves the right balance between coverage in a regime where specific infrastructure services are declared from the outset and the likelihood of receiving an access request. CHW notes that it will need to commence the process of implementing accounting separation within 3 months of the regime coming into effect.

However, CHW is a partner in the GFSP Joint Venture (JV) with Coliban Water. The ESC has already identified as a likely candidate for functional separation, CHW believes that its assets fall into this category. CHW notes that functional separation must begin within 6 months of the regime commencing.

CHW welcomes the ESC's request issued during the Public Hearing which the ESC conducted on 15 July 2009 for information about the cost and likely timeframes required to achieve functional separation, and offers the following observations in this regard. For the purposes of this discussion an embedded access point is one that is within an existing distribution system, whereas a non-embedded access point is one that does not rely on an existing distribution system, or if it does, it only relies on a few assets.

Access to a single easily identifiable non-embedded asset

Both Coliban Water and CHW have initiated third party access trials using the GFSP for existing customers to enable customers (including Councils and Sporting Groups) to gain some relief from water restrictions through purchasing their own water entitlements and using the existing distribution infrastructure to access this water. Under this arrangement both CHW and Coliban Water take the risk of managing the water asset once purchased (placing water transfer orders and storage).

The current JV is an operating JV with the assets being owned individually by CHW and Coliban Water. To facilitate third party access the following issues need to be resolved or better understood:

 Accounting ring fencing of the GFSP asset (currently managed individually across two authorities) would need to be developed.



- Review and modify the JV Governance Structure to manage the allocation of capacity in accordance with investor user utility expectations (over time), provide a consistent pricing methodology and shareholder return.
- Development of access protocols and access pricing.
- Develop processes and systems including dispatching and the efficient operation of the asset (i.e. smoothing peak flows will provide all users with efficiencies in reducing power costs), risk allocation (leakage, evaporation losses, missed dispatches, maintenance regime etc).
- Implementation of a single operating contract the Joint Venture is currently developing a single operating contract for the GFSP which is expected to be completed in early 2010.

It is estimated that this work will take at least 12 months to complete and cost \$0.5M.

Third party access to a non-embedded asset and no retail competition to existing customer base

This would be for access seekers who are not wishing to have access within the current distribution system and are not seeking to supply to existing retail customers.

An example of this could be irrigators down stream of the Lal Lal reservoir who wish to swap water they have purchased in the Goulburn System for Water in Lal Lal. Subject to differential costs, urban utility and water quality considerations Central Highland Water's existing systems and data could be used to price this type of access with little augmentation. We estimate for this type of access we would require 6 months to consolidate the data requirements and total cost around \$100K. The initial pricing would be on the basis of broad cost assumptions from our currently available data which should be adequate to reach an agreement with an access seeker.

Third party access to an embedded asset – no retail competition

This could be to a customer outside of a water district but seeking to access infrastructure capacity, an example of this could be Bacchus Marsh Irrigators wanting to access water from the Goulburn systems via the Ballan Urban distribution network.

To provide access pricing of this type would require a more sophisticated understanding of system LRMC and impairment value from this type of access, for instance in the above example this type of access may trigger the augmentation of the Lal Lal to Ballan Water pipe which has been sized for future urban growth.

This would require a higher level of data than is currently available; it may also require ring fencing of business functions to meet governance requirements.

Third party access for this type of customer would take at least 12 months to assess and implement necessary changes. Costs would be in excess of \$1.0M and heavily dependent on the systems and data requirements.

Third party access - retail competition for existing and new customers (even with a staged approach)

This would entail a complete restructure of Central Highlands Waters' business structures in separating the wholesale, transmission, retail and distribution to enable the market to have confidence in the equity and governance aspects of the access regime.

Through this process CHW would need to create ring fenced systems and data which have been separated and refined. Key issues to be considered include:

- Community engagement on the changes and impacts to avoid customer confusion and anxiety.
- Organisational restructure to separate into functional areas.



- Establishment of risk and systems management processes to ensure that duplication of systems are kept as efficient as possible whilst still satisfying the market requirements for transparency and separation.
- Economic costs and again the preservation of urban utility.

The costs for this type of change are in the order of \$10m-\$15m and would take 2-3 years to complete.

The key consideration from this assessment is the staging and review of the requirements of the community, access providers and various stages of market competition. It is essential that issues of competition be assessed against the community's investment in asset and their expectation into the future utility of that asset from their investment.

It is understood that the costs in setting up the access regime will be partially recovered from access seekers and that therefore by inference the remaining costs will be recovered from the existing rate base. It is therefore essential that the ESC consult customers on the explicit costs and benefits prior to implementation of the regime (as expected through the pricing determination).

CHW has little financial capacity to absorb any additional costs during the current Water Plan period, especially as the current billable demand forecast remains significantly below the Water Plan forecast. Therefore any significant additional costs during the currently Water Plan may provide the catalyst for both businesses to seek to reopen the pricing determination.

Based on the level of interest in other access regimes for water and wastewater services and from the current trials in various authorities there is a considerable risk of high levels of investment in restructuring, systems, community engagement and the development of new processes with a low level of interest. In which case, customers who are already experiencing high price increases would be asked to fund these new costs for little or no benefit.

On the basis of the above CHW proposes a staged approach to an access regime to enable the learnings from each stage to be transferred to future stages and the level of interest (and community benefit) to be established whilst minimising unfunded costs. Another issue the ESC may wish to consider is that an aggressive program for implementing an access regime without consideration of market demand, funding of the required systems and structural changes will result in a reallocation of resources by the water authorities away from the current Water Plan commitments to implementing the access regime. This could affect the delivery of Water Plan commitments to customers as agreed with the ESC and our community.

Conclusion in relation to ring fencing

The above estimates of cost and work involved in achieving full functional separation are based on the CHW's experiences to date with its own third-party access trials. CHW trusts that the above discussion provides the ESC with useful information and would welcome the opportunity to discuss the matter further with the ESC.

Legislation, licensing and retailer of last resort issues

CHW notes that any new retail businesses would be subject to the *Environmental Protection Act* 1970, the *Safe Drinking Water Act* 2003, and the *Occupational Health and Safety Act* 2004. This is very important because the access regime cannot be seen to jeopardize urban utility and public health.

CHW also notes that a new retailer would be required to obtain a licence issued by the ESC. The license would require the retailer to comply with existing standards of consumer protection, to be able to satisfy certain operational and technical requirements, and to fulfil all necessary information collection, reporting and auditing requirements underpinning the regulatory arrangements for water.



In order to obtain a licence, a retail business would also have to be able to demonstrate that they have sufficient financial capacity to carry out the activity that they will be licensed to perform.

However, some more consideration is required in relation to retailer of last resort issues. CHW would like to see some clarification about what happens under the access regime when an existing asset is augmented for a new retail water business, or a new asset is created for them, in order to service new customers, and that retailer goes into bankruptcy as, for example, happened in relation to Creswick resort

This has particular ramifications if the retailer has committed to meeting particular social obligations but has failed to maintain the necessary supplies of water to do so. While the infrastructure operator could step in and take over the retailer's business in the event that it ceased =to be financially viable, there is also a risk that the necessary reserves of water would no longer be available for distribution. It would not be economic for infrastructure businesses to maintain their own reserves of water in the event that they were ever called upon to do this.

