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Water

# 2024 Review of the water third party access regime

DRAFT Report

February 2024

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## Request for submissions

The Essential Services Commission (**Commission**) invites written submissions on this paper by **22 March 2024**.

It is the Commission's policy to make all submissions publicly available via its website ([www.escosa.sa.gov.au](http://www.escosa.sa.gov.au)), except where a submission either wholly or partly contains confidential or commercially sensitive information provided on a confidential basis and appropriate prior notice has been given.

The Commission may also exercise its discretion not to publish any submission based on length or content (for example containing material that is defamatory, offensive or in breach of any law).

Responses to this paper should be directed to: **Review of the water third party access regime**

It is preferred that submissions are sent electronically to: [reviews@escosa.sa.gov.au](mailto:reviews@escosa.sa.gov.au)

Alternatively, submissions can be sent to:  
Essential Services Commission  
GPO Box 2605  
ADELAIDE SA 5001

Telephone: (08) 8463 4444  
Freecall: 1800 633 592 (SA and mobiles only)  
E-mail: [escosa@escosa.sa.gov.au](mailto:escosa@escosa.sa.gov.au)  
Website: [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au)

**Contact Officer: Mark Caputo, Senior Manager, Economics**

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## Glossary of terms

BIL	Barossa Infrastructure Limited
CCA	<i>Competition and Consumer Act 2010 (Cth)</i>
Commission	Essential Services Commission, established under the <i>Essential Services Commission Act 2002</i>
CPA	Competition Principles Agreement
CVWGA	Clare Valley Wine & Grape Association
ESC Act	<i>Essential Services Commission Act 2002</i>
GL	Giga litre
Minister	Minister for Climate, Environment and Water
Ministerial Direction	The direction issued on 24 June 2016 by the then Minister for Water and the River Murray that directed SA Water under the Public Corporations Act 1993 (SA) to use a state-wide retail-minus avoidable cost pricing methodology to determine access prices for all infrastructure services unless directed otherwise by the Minister
ML	Mega litre
NCC	National Competition Council
Proclamation	Water Industry (Third Party Access) Proclamation 2016 (SA) made under sections 5A and 86B of the <i>Water Industry Act 2012</i>
PC Act	<i>Public Corporations Act 1993</i>
Sapere	Sapere Research Group, an economic consulting firm engaged to undertake a research paper on behalf of the Commission
SAWIA	South Australian Wine Industry Association
Vertically integrated	Where the owner of the water and sewerage infrastructure is also a provider of water retail services
WI Act	<i>Water Industry Act 2012</i>

# 1 Executive summary

The Essential Services Commission (**Commission**) has conducted a review of the water and sewerage infrastructure subject to Part 9A of the *Water Industry Act 2012* (**WI Act**) and has formed a draft conclusion as to whether the access regime should continue to apply from 1 July 2024. The regime commenced on 1 July 2016 and applies to declared infrastructure services. The draft recommendation is that the access regime should remain in effect and be extended by regulation for a further five-year period.

Under section 86ZR of the WI Act, the Commission must review and determine whether or not the regime should continue to apply. It must provide a report and conclusions to the Minister for Climate, Environment and Water (**Minister**), recommending whether the access regime should continue to apply, or not, for a further prescribed period.

The access regime was established to promote effective competition in upstream and downstream markets, to encourage efficiency, competition and innovation in the water industry, and to maintain protections for the security of the state's water supply and the health and safety of South Australians. The access regime provides a regulatory backstop to support commercial negotiations and protect against the potential use of market power for improper purposes by the regulated operator of declared infrastructure services (transportation services).<sup>1</sup> The framework supports commercial negotiations, and, if negotiations fail, provides a process for commercial arbitration.

In August 2023, the Commission released an issues paper, outlining the purpose, operation and coverage of the access regime, and the Commission's planned approach to its upcoming review.<sup>2</sup> The paper called for information and views from stakeholders about the access regime's effectiveness and whether or not the regime should continue in operation, and the paper sought information and views from stakeholders on access pricing. Four submissions were received in response to the issues paper.

## Draft recommendation

Overall, it is difficult to prove conclusively whether the access regime is operating effectively. Nonetheless, indicators appear to suggest that the regime has supported the statutory objectives of the WI Act. This includes promoting economically efficient use and operation of and investment in declared infrastructure so as to promote competition in upstream markets, and promoting efficiency, competition and innovation in the water industry.

In particular, the number and volume of commercially negotiated transportation agreements has increased strongly over the past decade. This has supported trade and activity in upstream water markets. It has enabled an increase in water use and supported agricultural production in the Barossa Valley and Clare Valley and has allowed diversification of water supply in these regions away from local rainfall-dependent sources. The increase in the use of water transportation services has resulted in greater utilisation in three of SA Water's eight declared water pipelines.

In assessing the benefits and costs of the regime, several issues stand out. Because there are high barriers to entry (reflecting the natural monopoly characteristics of the infrastructure) and limited competitive substitutes (reflecting, in part, declining local water supplies), SA Water is likely to hold market power in the provision of transportation services. The current regime provides benefits to

<sup>1</sup> Access to infrastructure services in this circumstance is referred to as transportation services.

<sup>2</sup> Essential Services Commission of South Australia, *Issues paper – Review of the access regime that applies to the South Australian water industry*, August 2023, pp. 1-16, available at <https://www.escosa.sa.gov.au/ArticleDocuments/21968/20230807-Water-ReviewAccessRegimeAppliesToSouthAustralianWaterIndustry-IssuesPaper.pdf.aspx?Embed=Y>.

stakeholders by imposing a degree of regulatory protection against the potential misuse of market power. At the same time, the operation of the regime has low direct and indirect costs.

The Commission has not found evidence indicating that market power has been used for improper purposes, and operational and financial indicators of SA Water's transportation services have been consistent with commercially negotiated outcomes, with transportation agreements negotiated on a cost-plus basis. This suggests that, for current water transportation services where substitutes are limited, the current regime appears to be operating as intended.

Therefore, while there is uncertainty about the exact magnitude of the benefits of the access regime, the Commission's assessment is that the expected benefits exceed the costs. Consistent with this, stakeholders have either supported the continuation of the access regime or noted the imbalance in bargaining power between those seeking access and SA Water.

The draft recommendation is therefore that the access regime should remain in effect and be extended by regulation by the South Australian Government for a further five-year period.

### Possible improvements

Submissions from stakeholders as well as results from the Commission's research suggests the access regime could be improved in at least three respects. Specifically, there could be:

- ▶ changes to Part 9A of the WI Act that introduce a consultative review mechanism by which a proponent seeking access, or any other party, could seek to have water or sewerage infrastructure included in, or excluded from, the access regime
- ▶ increased transparency and clarification regarding the methodology to be adopted when calculating transportation prices. For instance, there could be clarification on how the 'retail minus' methodology is intended to be calculated, and
- ▶ changes to Part 9A of the WI Act that introduce a legislative requirement for SA Water to publish information on its website regarding current and forward projections of the capacity and capacity utilisation of declared infrastructure.

The Commission sees the suggested improvements above as worthy of consideration by the South Australian Government. Any such assessment should consider both the costs and benefits of those changes.

In addition, the Commission will be asking SA Water on an annual basis to provide to the Commission specified information including a summary of how it is meeting requirements under Part 9A of the WI Act and also current indicators relating to transportation services. The specified information will support the Commission in undertaking its statutory function of monitoring and enforcing compliance with Part 9A of the WI Act.

### Next steps

The Commission is seeking feedback on the draft report by 22 March 2024. Submissions can be submitted electronically to [reviews@escosa.sa.gov.au](mailto:reviews@escosa.sa.gov.au). The Commission will consider information provided by stakeholders in preparing a final report.

The Commission would be pleased to meet with stakeholders, either individually or with representative organisations, to discuss the draft conclusions. If you or your organisation wish to meet with Commission staff, please use the contact details on the inside cover of this draft report.

## 2 The review

### 2.1 Purpose of review

The third party access regime that applies to the South Australian water industry is established under Part 9A of the *Water Industry Act 2012* (**WI Act**) and commenced on 1 July 2016.<sup>3</sup> The Water Industry (Third Party Access) Proclamation 2016 (**Proclamation**) declares SA Water to be a 'regulated operator' for the purposes of the access regime and prescribes the particular water and sewerage infrastructure services that are covered by the access regime.<sup>4</sup>

The Essential Services Commission (**Commission**) is the designated regulator under the access regime.<sup>5</sup> Its role is established under the WI Act and the *Essential Services Commission Act 2002* (**ESC Act**).<sup>6</sup>

The purpose of the review is to assess the water and sewerage infrastructure subject to Part 9A and form a conclusion as to whether or not the access regime should continue from 1 July 2024 for a period of five years.<sup>7</sup> The Commission's final report setting out the review's conclusions and recommendations must be provided to the Minister for Climate, Environment and Water (**Minister**).<sup>8</sup> For the regime to continue in operation, in addition to the Commission determining that it should continue, a regulation must be made by the South Australian Government.<sup>9</sup>

The Commission previously reviewed the access regime in 2019, recommending that it continue for five years from 1 July 2019 to 30 June 2024.<sup>10</sup> The recommendation was accepted and the South Australian Government extended the operation of the access regime for a further five years.<sup>11</sup>

### 2.2 Objectives of WI Act and purpose of regime

Part 9A of the WI Act sets out the framework for the operation of, and access to, declared water and sewerage infrastructure and infrastructure services. The full set of objects of the WI Act are:<sup>12</sup>

- ▶ to promote planning associated with the availability of water within the State to respond to demand within the community
- ▶ to promote efficiency, competition and innovation in the water industry

<sup>3</sup> The WI Act may be accessed at:  
<https://www.legislation.sa.gov.au/lz?path=%2FCA%2FWater%20Industry%20Act%202012>.

<sup>4</sup> A copy of the Proclamation may be accessed from the Commission's website at:  
<https://www.escosa.sa.gov.au/ArticleDocuments/604/20160701-Water-ThirdPartyAccess-Proclamation-1July2016.pdf.aspx?Embed=Y>.

<sup>5</sup> Section 86C of WI Act.

<sup>6</sup> The ESC Act can be accessed at:  
[https://www.legislation.sa.gov.au/\\_/legislation/lz/c/a/essential%20services%20commission%20act%202002/current/2002.14.auth.pdf](https://www.legislation.sa.gov.au/_/legislation/lz/c/a/essential%20services%20commission%20act%202002/current/2002.14.auth.pdf).

<sup>7</sup> Section 86ZR of WI Act.

<sup>8</sup> Section 86ZR(6) of WI Act.

<sup>9</sup> Ibid.

<sup>10</sup> Essential Services Commission of South Australia, *2019 Review of Water Third Party Access Regime*, May 2019, pp. 1-14, available at <https://www.escosa.sa.gov.au/projects-and-publications/projects/water/sa-water-third-party-access-regime-review-2019>.

<sup>11</sup> Government Gazette, *Water Industry Variation Regulations 2019*, 27 June 2019, p. 2363.

<sup>12</sup> Section 3 of WI Act.

- ▶ to provide mechanisms for the transparent setting of prices within the water industry and to facilitate pricing structures that reflect the true value of services provided by participants in that industry
- ▶ to provide for and enforce proper standards of reliability and quality in connection with the water industry, including in relation to technical standards for water and sewerage infrastructure and installations and plumbing
- ▶ to protect the interests of consumers of water and sewerage services
- ▶ to promote measures to ensure that water is managed wisely, and
- ▶ to promote the economically efficient use and operation of, and investment in, significant infrastructure so as to promote effective competition in upstream and downstream markets.

In the development of the access regime, the WI Act was amended to incorporate the final object in respect of promoting competition in related markets. Accordingly, a key aim of the access regime is to facilitate economic efficiency and investment in (monopoly) transportation services operated by SA Water, thereby encouraging competition in upstream markets and, over time, also in downstream markets. It is noted that vertical separation and full retail contestability was not intended at the introduction of Part 9A of the WI Act, given the stage of development of the water industry.<sup>13</sup>

At the same time, the access regime aims to promote innovation in the water industry, and to maintain protections for the security of the state's water supply and the health and safety of South Australians.

The access regime finds its origins in *Water for Good*, a 2010 South Australian Government plan outlining proposed water industry reforms.<sup>14</sup> The proposal for an access regime was seen as a complement to other water industry reforms.<sup>15</sup>

In practice, if a proponent seeking access transports water through SA Water's declared infrastructure, the access regime's purpose can be represented diagrammatically in Figure 1.

SA Water outlines the operation of the regime as follows:<sup>16</sup>

*'Conceptually, third-party access involves an entity accessing SA Water's regulated infrastructure to transport biologically and chemically compatible water or sewage. For example, an SA Water trunk main that transports untreated River Murray water could similarly be used to transport a third party's River Murray entitlements, or water from another compatible source...'*

<sup>13</sup> For example, Department of Treasury and Finance, *Access to Water and Sewerage Infrastructure*, Explanatory Memorandum, September 2013, p. 7, available at: [https://www.treasury.sa.gov.au/\\_data/assets/pdf\\_file/0005/515174/access-to-water-and-sewerage-infrastructure.pdf](https://www.treasury.sa.gov.au/_data/assets/pdf_file/0005/515174/access-to-water-and-sewerage-infrastructure.pdf).

<sup>14</sup> Hon. I.K. Hunter, Government Gazette, 16 June 2015: '*...this bill [Water Industry (Third Party Access) Amendment Bill] is an important step in the water industry reforms that this government has progressed since the release of the state's water security plan, Water for Good, in 2009*'.

<sup>15</sup> South Australian Government, *Water for Good*, June 2010, pp. 148-149.

<sup>16</sup> SA Water, *Response to the 2023 review of the water third party access regime*, September 2023, p. 2, available at: <https://www.escosa.sa.gov.au/projects-and-publications/projects/water/2023-review-of-the-water-third-party-access-regime>.



Figure 1: Purpose of access regulation for water transportation services

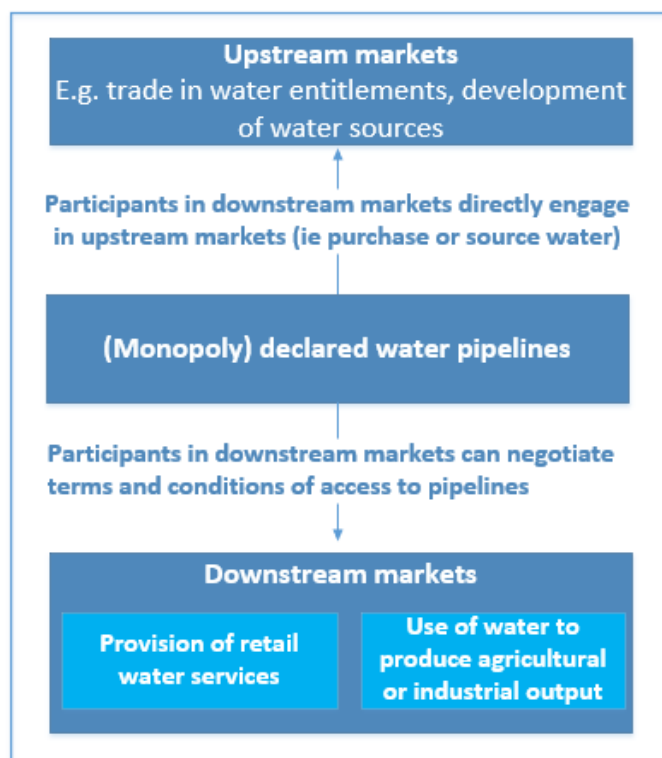


Figure 1 illustrates that downstream markets can involve new entrants in the retail segment of the water industry as well as those looking to purchase water and transport it for use as an input to agricultural and/or industrial production. Upstream markets refer to trade in water markets<sup>17</sup> and the development of new and innovative water sources (for example, improved utilisation of ground water as well as greater use of re-purposed water or desalination plants).

## 2.3 Operation of regime

This section briefly outlines key legislative and operational features of Part 9A of the WI Act. For further details, please see Appendix A.

### 2.3.1 Negotiate-arbitrate framework

Part 9A of the WI Act sets out the current access regime. The regime has three key elements:

1. It establishes the right to negotiate access to declared infrastructure (which, as mentioned earlier, can be achieved through commercial agreement or, in the event of dispute, through conciliation or arbitration).
2. A regulated operator is required to negotiate in good faith with those seeking access, as are any interested third parties involved in, or affected by, access negotiations. The regulated operator must provide certain information to assist those seeking access.

<sup>17</sup> This includes trade in water allocations and water entitlements. Water access entitlements and water allocations are the two main tradeable water rights in the River Murray. A water access entitlement is an ongoing right to an exclusive share of water resource, specified on a water license. A water allocation is the percentage of a licensed water user's entitlement of volume that is available to them in a given year.

3. If terms of access have not been agreed within two months after a formal access proposal is made, the negotiation will be considered a dispute and any party can refer it to the Commission. The regime establishes a role for the Commission to seek to resolve the dispute between the parties by conciliation. If a dispute is not resolved by conciliation, the Commission may refer the dispute to arbitration.

Importantly, the availability of a regulatory backstop to commercial negotiations – as provided by the regime – can reduce SA Water’s capacity to dictate terms and conditions and allow parties to negotiate on a more equal footing. This can support voluntary commercial transportation agreements that are mutually beneficial.

### 2.3.2 Pricing principles and Ministerial Directions

The access regime does not set out regulated prices for transportation services. Rather, the regime sets out a range of pricing principles that an arbitrator must consider. The pricing principles outline that transportation prices should:

- ▶ be set to recover efficient costs and allow for a risk-adjusted return
- ▶ allow multi-part pricing and price discrimination when it aids efficiency
- ▶ provide incentives to lower costs and improve productivity over time, and
- ▶ not allow a vertically integrated operator to discriminate in favour of its downstream operations.

The arbitrator must take into account any direction given to the regulated operator (in the case of a regulated operator that is a public corporation) by its Minister under the *Public Corporations Act 1993* (PC Act) that is relevant to the arbitration.

Of note, there has been a Ministerial Direction issued which requires SA Water to use a state-wide retail-minus avoidable cost pricing methodology to calculate transportation prices unless otherwise approved by the Minister.<sup>18</sup> This particular price-setting method involves setting a transportation price based on SA Water’s prices for retail services plus any facilitation costs minus an amount that SA Water could avoid (over the long term) in providing access. SA Water stated in its submission to this review that it obtained approval from the Minister in 2017 to:<sup>19</sup>

*‘determine the pricing methodology and prices applicable to commercial access agreements negotiated in a way consistent with 86ZN of the Water Industry Act 2012, where: these commercial access agreements do not relate to or affect retail customer arrangements; and these commercial customers remain able to negotiate access under Part 9A of the Water Industry Act 2012 to enable the use of ‘retail minus’ methodology in calculating access costs if they so choose.’*

### 2.3.3 Roles of parties under the regime

The broad roles of the regulator under the access regime include to monitor and enforce compliance with the WI Act, resolve disputes by conciliation and determine whether a dispute should be referred to arbitration, and prepare and deliver reports to the Minister.

SA Water’s broad roles – as a regulated operator under the access regime – include to negotiate in good faith with those seeking access, provide certain information and documents to the regulator and those seeking access, keep separate accounts and records, and comply with requirements of the arbitrator.

<sup>18</sup> Hon. I.K. Hunter, *Direction to the SA Water Corporation pursuant to section 6 of the Public Corporations Act 1993*, 24 June 2016.

<sup>19</sup> SA Water, pp. 4-5.

### 2.3.4 Full coverage of regime

The access regime has been in operation since 1 July 2016. The South Australian Government and the Minister decide the extent to which the regime applies to water and sewerage infrastructure and/or applies to operators (noting that the Governor makes proclamations to give this effect).

As outlined by Proclamation in 2016,<sup>20</sup> the access regime *applies in full* only to services provided by, or through, declared SA Water infrastructure (Table 1). While there has not been an arbitrated outcome under the current regime, of the eight proclaimed water pipelines, four are currently utilised for the commercial transportation of either treated or untreated water.<sup>21</sup>

Table 1: Declared water pipelines and commercial transportation (access) agreements, as of 2021-2022

Declared pipelines covered under access regime	Currently used for transportation services under voluntary commercial transportation agreements	No. of commercial transportation agreements
Murray Bridge to Onkaparinga (untreated water)	Yes	1
Mannum to Adelaide (untreated water)	Yes	10
Swan Reach to Paskeville (treated water)	Yes	62
Myponga to Adelaide (treated water)	No	0
Morgan to Whyalla (treated water)	Yes	94
Tailem Bend to Keith (treated water)	No	0
Eyre Peninsula (treated water)	No	0
Glenelg to Adelaide (recycled water)	No	0

### 2.3.5 Partial coverage of regime

The access regime applies *only in part* to SA Water's bulk sewerage and local sewerage networks, the water distribution networks to which SA Water's license relates, and infrastructure and infrastructure services (such as treatment plant, pumping stations, storage tanks and surge protection units and valves), the use of which is necessary for the transport of water or sewerage in water/sewerage infrastructure that is declared by Proclamation.<sup>22</sup>

Under the access regime, SA Water is required to:

- ▶ provide an information brochure to prospective access seekers<sup>23</sup>
- ▶ provide information to those seeking access on a non-discriminatory basis<sup>24</sup>
- ▶ provide all copies of access contracts to the Commission,<sup>25</sup> and
- ▶ provide specified access information to the Commission.<sup>26</sup>

<sup>20</sup> Government Gazette, *Water Industry (Third Party Access) Proclamation 2016*, 16 June 2016, p. 2109.

<sup>21</sup> Note that the pipelines listed in Table 1 as 'not currently used for transportation services' are still actually being used by SA Water, just not by third parties.

<sup>22</sup> Government Gazette, *Water Industry (Third Party Access) Proclamation 2016*, 16 June 2016, p. 2109.

<sup>23</sup> Section 86F of the WI Act.

<sup>24</sup> Section 86H of the WI Act.

<sup>25</sup> Section 86ZO of the WI Act.

<sup>26</sup> Section 86ZP of the WI Act.

## 2.4 Participants and current users of transportation services

Current and potential participants under the regime can be broadly categorised into three groups.

► **Regulated operator**

The vertically integrated regulated operator is SA Water.

► **Proponents seeking access (non-retail use as an input into production)**

Those seeking transportation services for end-purposes unrelated to retail services.

► **Proponents seeking access (retail segment)**

Those seeking transportation services to deliver retail services.

## 2.5 Submissions to review

In August 2023, the Commission released an issues paper, calling for information and views from stakeholders about the access regime's effectiveness and whether or not the regime should continue for a further prescribed period. The issues paper also called for information and views from stakeholders on current transportation pricing.<sup>27</sup>

Submissions were received from:<sup>28</sup>

- SA Water
- the South Australian Wine Industry Association (**SAWIA**) (an industry association standing for the interests of wine grape growers and wine producers in South Australia)
- Henry Angas (Henry Angas is Chair of the Coorong District Location Action Plan Committee, section 41 Committee of the Coorong District Council), and
- the Clare Valley Wine & Grape Association (**CVWGA**) (an industry association standing for the interests of wine producers and grape growers in the Clare Valley region).

## 2.6 Approach to review

As mentioned earlier, the Commission must assess whether or not the access regime should continue from 1 July 2024 for a further prescribed period. In undertaking this assessment, a framework is adopted that weighs the benefits and costs of having the regime in operation.<sup>29</sup>

In particular, the analysis of the benefits and costs involves asking several questions:

<sup>27</sup> Essential Services Commission of South Australia, *Issues paper – Review of the access regime that applies to the South Australian water industry*, August 2023, pp. 9-15.

<sup>28</sup> Submissions (where not confidential) are available on the Commission's website, available at <https://www.escosa.sa.gov.au/projects-and-publications/projects/water/2023-review-of-the-water-third-party-access-regime>.

<sup>29</sup> In its Better Regulation Handbook, the South Australian Government states that '[p]olicy makers should note that market failure [which includes imperfect competition and market power], by itself, does not indicate that government intervention is warranted, as the costs of this may outweigh the benefits. Government intervention can only be justified if it leads to an overall improvement in community welfare'. See South Australian Government, *Better Regulation Handbook: How to design and review regulation, and prepare a Regulatory Impact Statement*, January 2022, p. 20, available at <https://www.dpc.sa.gov.au/resources-and-publications/Better-Regulation-Handbook.pdf>.

- ▶ To what extent does SA Water have the potential to use market power for an improper purpose and what constraints on that power exist outside of the regime?
- ▶ To what extent is the regime achieving the objectives of the WI Act? In particular, is it promoting efficiency, competition and innovation in the water industry, and promoting the economically efficient use and operation of, and investment in, significant infrastructure so as to promote effective competition in upstream and downstream markets?
- ▶ What are the direct and indirect costs of having the regime in operation?
- ▶ What regulatory protections would be available should the regime expire?

Ultimately, the access regime should continue to apply if the benefits it delivers (such as the protection against the potential misuse of market power) outweigh the costs of maintaining it (such as administrative costs), considering the costs and benefits of alternatives. Alternatives to the current regime, if it were to expire, include the potential for regulatory protections under Part IIIA of the *Competition and Consumer Act 2010 (Cth)* (CCA)<sup>30</sup> (national access regime) to apply to some or all relevant water and sewerage infrastructure and infrastructure services, or for no formal access regulation to apply.

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<sup>30</sup> The CCA is available at <https://www.legislation.gov.au/Details/C2020C00079>.

### 3 Economic context for review

Where there is capacity in SA Water's regulated water and sewerage infrastructure, SA Water's transportation services allow water and/or sewerage to be transported for third parties. Consequently, transportation services can promote greater utilisation of infrastructure, support local industries that are dependent on water, facilitate more trade in water markets, and allow opportunities for innovation and entry into the retail segment of the water industry. In 2023, the value of winegrape production in regions that use transported water was estimated at more than \$150 million.<sup>31</sup>

#### 3.1 Transportation services

While there are currently no access agreements in place for sewerage infrastructure services, and no access agreements in place where access is used to produce a water retail service, there are water transportation agreements in place in which customers pay for the transportation of imported water for use in agricultural and industrial production. This chapter focuses on water transportation rather than bulk or local sewerage transportation and outlines the nature of the demand for SA Water's water transportation services.

##### 3.1.1 Nature of service

The demand for water transportation services is, in effect, a form of derived demand. This flows from the demand for water from industrial and/or agricultural producers. It can also reflect demand from potential or actual entrants into the downstream retail segment of the water industry.

The demand for water transportation services is determined by a range of factors. This includes:

- ▶ the number and amount of available substitute water supplies
- ▶ infrastructure capacity (for example, capacity of treatment plants, pipeline size and diameter, maintenance and unplanned outages, integration of pipelines, and timing of transportation services), and
- ▶ end-user requirements (for example, the expected supply and demand of agricultural commodities and goods, final customer demand for retail services, and the destination and timing of transportation services).

In South Australia, the demand for water transportation services has mainly come from customers involved in wine grape production in the Barossa Valley, Clare Valley and, to a lesser extent, Eden Valley. These customers require the transportation of water from the River Murray and certain reservoirs (such as Warren Reservoir) for use on producers' vineyards.<sup>32</sup>

<sup>31</sup> Wine Australia, *Overview: Vintage survey dashboard*, available at [Vintage Survey \(wineaustralia.com\)](https://www.wineaustralia.com/vintage-survey).

<sup>32</sup> Note that there are some transportation agreements in place for industrial users, and there have been industrial users that have considered third party access. Furthermore, there have been cases in which producers in other parts of the agricultural sector, such as those producing livestock, and in regions outside of the Barossa Valley and Clare Valley, such as in the Coorong District Council Local Government Area, have considered the potential for third party access. Sapere, *Review of third-party access pricing to SA Water's water infrastructure services*, Research report for the Essential Services Commission of South Australia – Final report, 2 August 2023, p. 5, available at <https://www.escosa.sa.gov.au/ArticleDocuments/21968/20230802-Water-ReviewThirdPartyAccessSAWaterServices-BackgroundResearchPaper-SapereResearchGroup.pdf.aspx?Embed=Y>, Coorong Water Security Advisory Group and Coorong District Council, *2019 SA Water Third Party Access Regime Review Submission*, pp. 1-5, available at <https://www.escosa.sa.gov.au/ArticleDocuments/11341/20190117-Water-ThirdPartyAccessRegimeReview2019Submission-Coorong.pdf.aspx?Embed=Y>, and Henry Angas, *Submission to Essential Services Commission's review of the water third party access regime in South Australia*, September

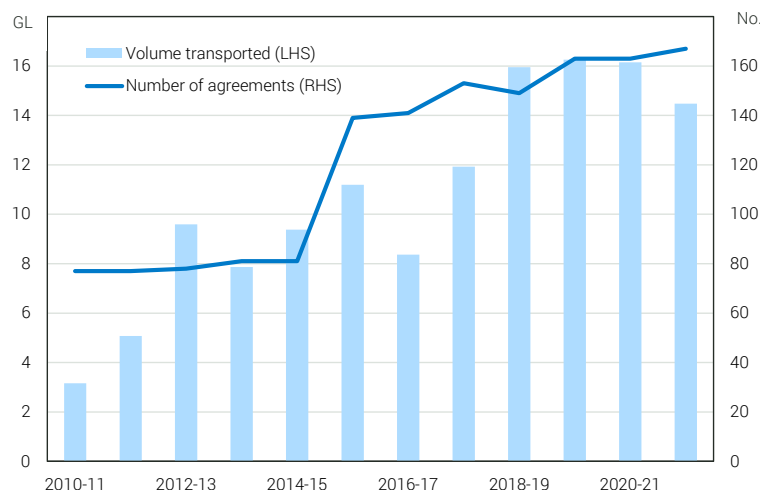
Currently, water transportation services offered by SA Water to winegrape producers include Clare Valley peak and off-peak water transportation, Barossa Infrastructure Limited (BIL) water transportation, and Barossa Valley, Eden Valley water transportation. SA Water uses peak and off-peak access and pricing to manage demand variations and the capacity of the existing infrastructure.<sup>33</sup> SA Water reports that it continues to receive requests from prospective new transportation customers primarily from those within the viticulture industry.<sup>34</sup>

When scaled against estimates of winegrape producers' costs, on some estimates the price of water transportation services can be considered a relatively modest proportion.<sup>35</sup> This suggests that, in the short-term, the demand for water transportation services is likely to be somewhat unresponsive to changes in price. However, over the longer-term, high transportation prices or low service quality could lead producers to consider competitive substitutes. This could particularly be the case if producers' profit margins are thin and/or the cost of sourcing water on the River Murray is high.

### 3.1.2 Commercial agreements

Over the past decade, the volume of water transportation services has grown strongly (Figure 2). The annual average volume of transportation volumes was around 14 GL between 2016-17 and 2021-22. This was up from an annual average of approximately 8 GL in the six years prior.

Figure 2: Number and volume of water transportation in South Australia



Sources: Commission, SA Water

2023, p. 1, available at: <https://www.escosa.sa.gov.au/projects-and-publications/projects/water/2023-review-of-the-water-third-party-access-regime>.

<sup>33</sup> Customers with transportation agreements can and do, if needed, pay for water retail services. See Clare Valley Wine & Grape Association, *Submission in response to issues paper: Review of the access regime that applies to the South Australian water industry*, November 2023, p. 3, available at: <https://www.escosa.sa.gov.au/projects-and-publications/projects/water/2023-review-of-the-water-third-party-access-regime>.

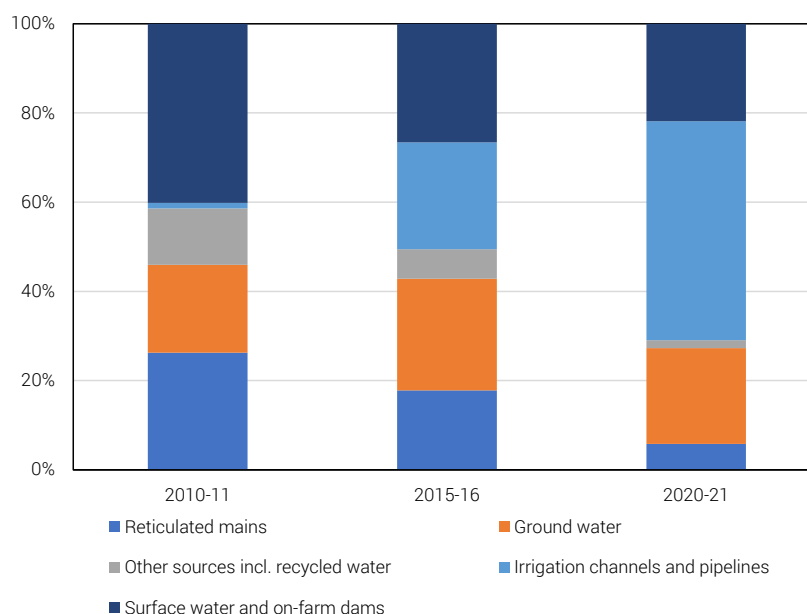
<sup>34</sup> SA Water, p. 6.

<sup>35</sup> Estimates suggest that transportation costs for the Barossa Valley and/or Clare Valley could potentially range between 5 to 10 percent of winegrape production costs, although the cost can differ according to each particular customer. (By way of comparison, and acknowledging it is a differing region, estimates of total water costs in the Riverland have ranged between 10 and 20 percent of total grape production costs.) Sources include Wine Australia, *Overview: Vintage survey dashboard*, SA Water transportation volumes and revenues, Winemakers Federation of Australia, *Vintage Report – July 2015*, p. 13, available at <https://www.agw.org.au/assets/vintage-reports/Vintage-Report-and-Production-Profitability-2015.pdf>, and Wheeler S et al, *The economics and financial benchmarking of Riverland Grape production, and potential benefits of Vitivisor technology*, June 2022, p. 37, 41, 47, available at [https://www.wineaustralia.com/getmedia/1bfda471-0ff9-4721-a560-8ae3f087187d/Vitivisor\\_economicsReport\\_FINAL.pdf](https://www.wineaustralia.com/getmedia/1bfda471-0ff9-4721-a560-8ae3f087187d/Vitivisor_economicsReport_FINAL.pdf).

The number of individual transportation agreements has increased strongly over the past decade to currently sit at close to 170. The current number of agreements corresponds to approximately half of all agricultural businesses irrigating in the Barossa, Clare and Eden Valleys.<sup>36</sup> Many individual transportation agreements are part of negotiated schemes.

Increased demand for water transportation services (and hence demand for imported water) appears to have come as a result of declining local water supplies and a need to increase the irrigation rate (volume per hectare) to support winegrape production.<sup>37</sup> The increased transportation has led to a reduction in the relative use of local surface water and ground water (Figure 3). It has also allowed producers flexibility to manage demand and storage requirements.<sup>38</sup> Consequently, winegrape producers have had greater access to water in the face of changing climatic conditions<sup>39</sup> and strong competition in winegrape production and wine markets.<sup>40</sup>

Figure 3: Water use in Barossa Valley, Eden Valley and Clare Valley, percentage of total



Sources: Commission, Australian Bureau of Statistics

<sup>36</sup> In 2020-21, the number of agricultural businesses irrigating in the Local Government Areas of the Barossa Valley, Clare Valley, Gilbert Valley and Light was approximately 365; see Australian Bureau of Statistics, *Water Use on Australian Farms 2020-21*, 26 July 2022, available at <https://www.abs.gov.au/statistics/industry/agriculture/water-use-australian-farms/2020-21>.

<sup>37</sup> South Australian Wine Industry Association, *Submission in response to the Issues paper: Review of the access regime that applies to the South Australian water industry*, September 2023, p. 3, available at <https://www.escosa.sa.gov.au/projects-and-publications/projects/water/2023-review-of-the-water-third-party-access-regime>, Clare Valley Wine & Grape Association, pp. 1-2, SA Water, pp. 2-3, 6, and Department of Water and Environment, *Water Security Statement 2022 – Water for Sustainable Growth*, 2022, pp. 42-43, available at [https://cdn.environment.sa.gov.au/environment/docs/Final-Water-Security-Statement\\_150222-PDF\\_2022-02-18-054712\\_ithg.pdf](https://cdn.environment.sa.gov.au/environment/docs/Final-Water-Security-Statement_150222-PDF_2022-02-18-054712_ithg.pdf), and Department of Water and Environment, *Barossa Water Security Strategy 2050*, pp. 12-13, available at <https://cdn.environment.sa.gov.au/environment/docs/865572-Barossa-Water-Security-Strategy-summary-FIN-WEB-v2-081122.pdf>.

<sup>38</sup> SA Water, p. 6.

<sup>39</sup> South Australian Wine Industry Association, p.3, Clare Valley Wine & Grape Association, pp. 1-2, SA Water, pp. 2-3, 6, Department of Water and Environment, *Water Security Statement 2022 – Water for Sustainable Growth*, pp. 42-43, and Department of Water and Environment, *Barossa Water Security Strategy 2050*, pp. 12-13.

<sup>40</sup> Australian Bureau of Agricultural and Resource Economics and Sciences, *Agricultural Commodities Report – September 2023*, volume 13, issue 13, September 2023, pp. 52-57, available at [https://daff.ent.sirsidynix.net.au/client/en\\_AU/search/asset/1035021/0](https://daff.ent.sirsidynix.net.au/client/en_AU/search/asset/1035021/0).



### 3.2 Capacity

In submissions to the issues paper, stakeholders, such as SA Water and the CVWGA, highlighted the importance of infrastructure capacity in facilitating transportation services.<sup>41</sup> Capacity of declared water infrastructure has accommodated increased transportation services over the past decade, with negotiated transportation arrangements often for capacity during off-peak periods (winter) or 'time of day' peak periods (summer).<sup>42</sup> However, SA Water acknowledges that transportation agreements that have not proceeded have generally been due to capacity limitations.<sup>43</sup>

Going forward, capacity may potentially limit growth in transportation on certain pipelines.<sup>44</sup> As stated by SA Water:<sup>45</sup>

*'...currently many primary production users of the third-party access will seek supplies during summer months, which coincide with times when regulated customer demands are highest. Accordingly, while a network resource may have capacity on average through a year, it may not have capacity when required.'*

*Furthermore, in the medium term, climate change is likely to exacerbate this issue, with demands from primary producers accelerating as local water sources become less reliable (both quality and quantity being impacted) over time.*

*As the impacts of climate change become more pronounced it will become necessary to more frequently review available capacity within infrastructure. Just because a pipeline is available for third party access does not mean there is capacity, nor that current available capacity will be available in the future.'*

In line with this, CVWGA reports that capacity is constraining uptake of new transportation agreements.<sup>46</sup> Reports from BIL and Kellog Brown & Root suggest that customers in the Barossa Valley have interest in obtaining an additional 2 GL of transportation in addition to the current transportation agreement in place;<sup>47</sup> however, Kellog Brown & Root state that it is not known whether this volume will, or can, be supported by SA Water due to infrastructure and other constraints.<sup>48</sup>

Certainly, there is a complex set of factors that determine capacity availability at any given time, and the Commission recognises that infrastructure capacity may be a particular area of interest in future.

Indicators appear to suggest capacity currently exists in certain pipelines (as measured on an annual basis by capacity available for transportation and the contracted volume for transportation), although pipelines may, at peak times and/or subject to constraints (for example, maintenance outages), have

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<sup>41</sup> Clare Valley Wine & Grape Association, pp. 1-2, and SA Water, pp. 2-3, 6.

<sup>42</sup> SA Water, p. 6.

<sup>43</sup> Ibid, pp. 6-7.

<sup>44</sup> Clare Valley Wine & Grape Association, pp. 1-2, and SA Water, pp. 2-3, 6.

<sup>45</sup> SA Water, p. 3.

<sup>46</sup> Clare Valley Wine & Grape Association, pp. 2-3.

<sup>47</sup> Kellog Brown & Root, *Barossa New Water – Detailed Business Case*, prepared for Department of Primary Industries and Resources South Australia, 9 November 2022, p. 29, available at <https://cdn.environment.sa.gov.au/environment/images/BNW-DBC-Main-report.pdf>. BIL has stated in its 2023 annual report that it requested from SA Water a price to transport an additional 2GL under its transportation agreement. See Barossa Infrastructure Limited, *Annual Report – 2023*, p. 4, available at [Financial Reports • Barossa Infrastructure](#).

<sup>48</sup> Kellog Brown & Root, p. 29.

limited capacity.<sup>49</sup> Where capacity constraints arise, pricing approaches and methods for allocating capacity may become increasingly relevant.<sup>50</sup>

As discussed further in Chapter 5, there may therefore be community benefits from information being published regarding current and projected capacity and capacity utilisation of declared infrastructure.

### 3.3 Substitutes

Where credible alternative water supplies are possible, this can affect the level of demand for water transportation services. This, in turn, can place competitive pressure on SA Water. Key substitutes for imported water are ground water, surface water and recycled water.<sup>51</sup> Those substitutes are relevant to industrial or agricultural producers as well as potential entrants into the retail segment of the water industry.

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<sup>49</sup> SA Water, pp. 2-3, 5-7.

<sup>50</sup> Sapere, p. 16, and Essential Services Commission of Victoria, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Final Report*, Volume II: Analysis and discussion of issues, September 2009, pp. 87-88, available at <https://www.esc.vic.gov.au/sites/default/files/documents/fbdf2253-b3b9-4d51-8e23-cd3fa2985b92.pdf>.

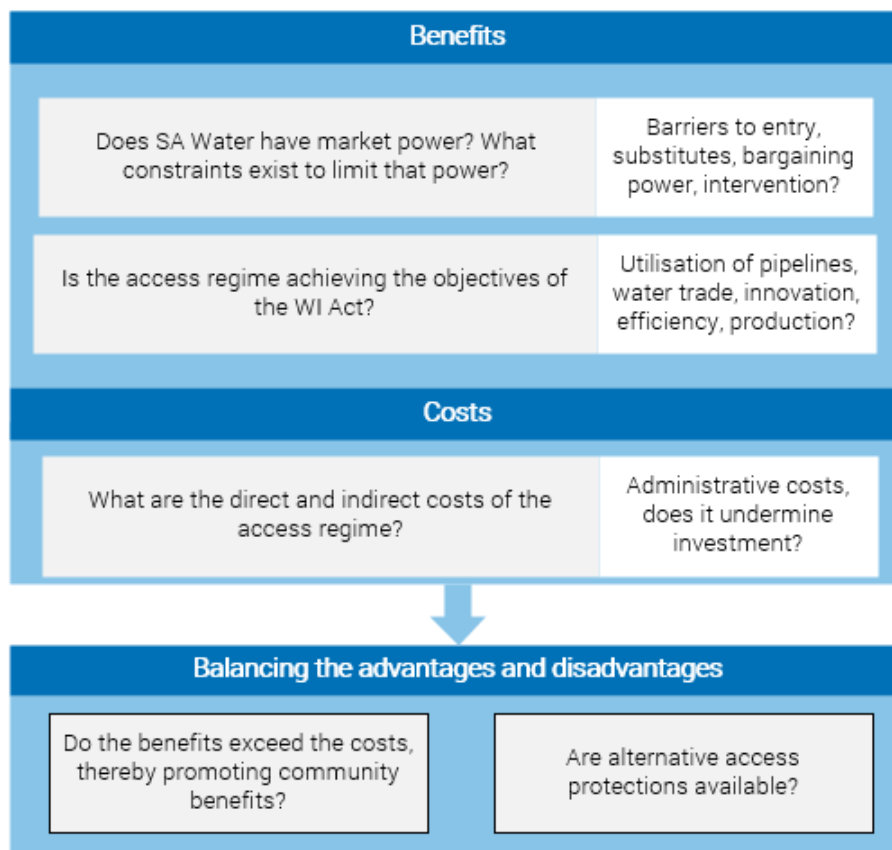
<sup>51</sup> There are reportedly a number of small desalination plants being used for stock water supply or irrigation at the farm scale. Such desalination plants are another form of potential substitute. See Department of Water and Environment, *Water Security Statement 2022 – Water for Sustainable Growth*, p. 9, and Essential Services Commission of South Australia, *2019 Review of Water Third Party Access Regime*, p. 4.

## 4 The access regime should continue in operation

**Draft recommendation:** The draft recommendation is that the access regime should remain in effect and be extended by regulation for a further five-year period. The regime provides benefits to stakeholders, by imposing a degree of regulatory protection against the potential misuse of market power, and the operation of the regime has low direct and indirect costs. Stakeholders have either supported the continuation of the access regime or noted imbalance in bargaining power between those seeking access and SA Water.

The Commission's assessment of the access regime is organised into four parts (Figure 4). First, it considers if a regime is necessary, by assessing whether SA Water has the potential to use market power for an improper purpose and what exists to constrain that power. Second, it discusses available empirical and qualitative indicators of whether the access regime is achieving the objectives of the WI Act. Third, it considers the direct and indirect costs of having the current regime in operation. Fourth, it asks whether regulatory protections would be available to those seeking access under the national access regime (for instance, in the circumstance that the current state-based regime were to expire). The chapter finishes with the Commission's draft recommendation.

Figure 4: Assessment of Part 9A of the WI Act

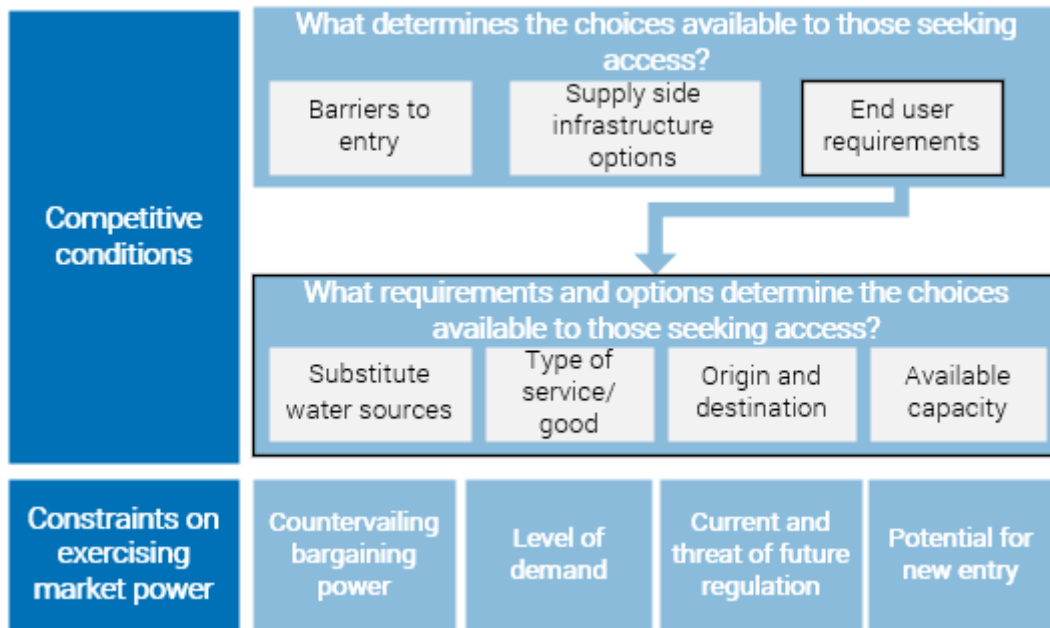


### 4.1 Assessing the potential for market power to be used for improper purposes

A lack of effective competition can give rise to market power. Market power may allow a regulated operator to set access prices above the efficient cost of supplying access and/or provide service levels that do not meet customers' requirements. In this situation some degree of protection against the use of market power for improper purposes may be required. The Commission has assessed this situation by considering:

- ▶ the determinants of the choices available to those seeking transportation services (barriers to entry and increased supply from new or expanded infrastructure) and the requirements and options of those seeking transportation services (substitute water sources, the nature and type of service or good to be produced or delivered, origin and destination of intended transportation, and available pipeline capacity), and
- ▶ the constraints on SA Water exercising market power that may exist in addition to, or apart from, competitive conditions (for example, countervailing bargaining power, the level of demand, the current access regime and the potential for stricter regulation in future) (Figure 5).

Figure 5: Analytical framework for assessing the potential for market power in transportation services



#### 4.1.1 Barriers to entry and supply-side infrastructure solutions

Transportation services have high fixed costs and relatively low operating costs: characteristics of a natural monopoly.<sup>52</sup> This can suggest economies of scale which means that one provider of transportation services can meet existing demand at a lower cost than when there are multiple providers. This is generally considered to be the case for activities associated with water distribution and wastewater transportation.<sup>53</sup> SA Water's declared pipeline assets are principally capital in nature, largely sunk and immobile, and have somewhat limited salvage value.

In theory, if expected demand on declared infrastructure is insufficient to support construction of alternative supply options (for example, the provision of recycled water via new or expanded infrastructure or the duplication of current pipelines),<sup>54</sup> then given the significant investment required,

<sup>52</sup> A previous assessment by the National Competition Council indicated that the infrastructure services covered by the access regime are natural monopoly services, as it would not be profitable to duplicate the infrastructure assets in question. See National Competition Council, *South Australian Water Access Regime*, Final recommendation, 22 March 2017, p. 17, available at [https://ncc.gov.au/images/uploads/NCC\\_Final\\_recommendation\\_-\\_certification\\_of\\_SA\\_water\\_access\\_regime\\_-\\_22\\_....pdf](https://ncc.gov.au/images/uploads/NCC_Final_recommendation_-_certification_of_SA_water_access_regime_-_22_....pdf).

<sup>53</sup> Decker C, *Modern Economic Regulation – An Introduction to Theory and Practice*, Cambridge University Press, 2015, p. 377.

<sup>54</sup> For example, via direct route from Bolivar, or from Bolivar via existing Northern Adelaide Irrigation Services infrastructure, as discussed by the Department of Environment and Water and Kellogg Brown & Root. See Kellogg

supply-side solutions may not necessarily act as a substitute for current imported water. This situation can create the potential for the misuse of market power.

The commercial reality over the past decade suggests that there are high barriers to entry for the construction of new or expanded infrastructure.

For instance, growth in demand for water retail services in South Australia has historically grown at approximately 1 percent per year in terms of connections<sup>55</sup> and it is unlikely to underpin the economic duplication of SA Water's major pipeline infrastructure by a competitor. This is because an investor would be unlikely to obtain a sufficient return on capital. This suggests that, subject to demand, a new duplicated pipeline is unlikely to be available for third parties to utilise for transportation services in future.

In terms of supply-side infrastructure solutions, a 2022 business case by Kellog Brown & Root, prepared for the South Australian Government, highlighted the substantial capital required for the provision of recycled wastewater to the Barossa Valley.<sup>56</sup> The business case included assumptions of upfront total capital contributions from Government in excess of \$400 million, and this was in addition to assumptions of large private sector contributions.<sup>57</sup> This highlights the significant capital required for supply-side substitutes.

The possibility of micro-desalination plants was noted as a potential substitute in the Commission's 2019 review of the regime.<sup>58</sup> While this can, in principle, act as a form of supply-side substitute, there has been no evidence presented as part of the review process that suggests that this is sufficiently widespread to provide a credible option.<sup>59</sup>

Ultimately, it is reasonable to consider that the presence of high barriers to entry suggests that SA Water may have a degree of market power. This can have an effect on the choices available to those seeking access. The nature and extent of market power is considered in the following sections.

#### 4.1.2 Demand-side substitution possibilities

The availability of alternative water sources can, in principle, provide a degree of competitive constraint on SA Water. For instance, instead of using imported water via transportation through declared infrastructure, producers could use ground or surface water.

In many instances, however, substitution may be unlikely to provide an effective constraint. Table 2 documents the current level of water use in the Barossa, Clare and Eden Valleys. The volume of water that would need to be substituted from local resources is significant and may be beyond the capacity of those resources.

Given that local sources of water supply have reportedly been deteriorating in the face of changing climatic conditions,<sup>60</sup> and there has been a longer-term trend in diversification in supply and toward the

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Brown & Root, pp. 1-244, and Department of Water and Environment, *Barossa Water Security Strategy 2050*, p. 21.

<sup>55</sup> Essential Services Commission of South Australia, *SA Water Regulatory Determination – 2024 Statement of Reasons*, Draft decision, January 2024, p. 145, available at <https://www.escosa.sa.gov.au/ArticleDocuments/22038/20240124-Water-SAWRD24-DraftRegulatoryDetermination2024-28-StatementOfReasons.pdf.aspx?Embed=Y>.

<sup>56</sup> Kellog Brown & Root, pp. 1-16.

<sup>57</sup> Ibid, p. 4.

<sup>58</sup> Essential Services Commission of South Australia, *2019 Review of Water Third Party Access Regime*, p. 4.

<sup>59</sup> While desalination plants enable the supply of water that is climate independent, it is typically recognised as one of the more expensive sources of water available.

<sup>60</sup> South Australian Wine Industry Association, p. 3, Clare Valley Wine & Grape Association, pp. 2-3, Department of Water and Environment, *Barossa Water Security Strategy 2050*, p. 10, and Department of Environment and Water, *Clare Valley Prescribed Water Resource Area*, 2019-20 surface water and groundwater status overview, pp. 1-2,

sourcing of imported water, then the potential for existing customers to meaningfully switch to surface or ground water is likely to be limited.<sup>61</sup> Barriers to switching may be re-enforced to the extent that winegrape producers have on-farm asset-specific investments that relate to the importation of water. Furthermore, switching water sources may be costly in terms of the need for new capital investment.<sup>62</sup>

Table 2: Water usage in the Barossa Valley, Clare Valley and Eden Valley, 2020-21<sup>63</sup>

Current sources	Usage (GL)	Share of total (%)
Reticulated mains	1.5	6
Ground water	5.7	21
Surface water	5.8	22
Irrigation channels and pipelines	13.0	49
Other water inc. recycled	0.5	2

Taken together, this situation can indicate that an unrestrained regulated operator may have an incentive and ability to exercise market power in the provision of transportation services due to the limited available substitutes and high customer switching costs.

It should be noted that high and variable costs of sourcing water from the River Murray, when layered on top of the transportation cost, can also lead producers to consider competitive substitutes, regardless of the behaviour of the regulated operator. More generally, it is noted that for many the overall cost of water at the right price is the priority (for example, whether from the River Murray, ground water or surface water). For instance, Henry Angas' submission noted the importance of consistent, all-year round water supply to the livestock industry.<sup>64</sup> Nevertheless, the regime review covers matters related to transportation services, not water security or industry development issues. The latter are policy matters for the South Australia Government.

#### 4.1.3 Constraints on the potential misuse of market power

While a regulated operator is typically known to be able to exert pressure on prices and service quality, in other situations there can be countervailing bargaining power held by large customers or groups of customers.<sup>65</sup> The degree to which customers have countervailing bargaining power typically depends on which party stands to lose most from any failure to reach agreement.<sup>66</sup>

available at

[https://www.waterconnect.sa.gov.au/Content/Publications/DEW/Clare\\_2019\\_20\\_WRA\\_Factsheet.pdf](https://www.waterconnect.sa.gov.au/Content/Publications/DEW/Clare_2019_20_WRA_Factsheet.pdf). For example, the deteriorating local water resource in Clare Valley can be seen in measures of below-average recovered water levels of monitoring wells, and the below-average (and declining trend) in the stream flows in the Wakefield River. For the Barossa Valley, it can be seen in below-average levels recorded for all aquifers.

<sup>61</sup> The credibility of potential substitutes depends not on theory, but on actual and perceived conditions, including the physical and commercial realities, that affect the ability of a customer from switching to alternative supplies. If what appear to be profitable substitution possibilities have not been pursued over the longer term, then it is reasonable to conclude that these possibilities are not real. For discussion of the importance of commercially possible substitutes when analysing markets, see King S, *Market power and airports*, Report for the ACCC, 25 January 2001, pp. 2-3, available at <https://www.accc.gov.au/system/files/Airports%20Report%20by%20Professor%20King%20-%20Market%20Power%20and%20Airports.pdf>.

<sup>62</sup> For example, it may involve the need to invest in on-farm dams, lined catchments, new piping systems and new leak detection equipment.

<sup>63</sup> Australian Bureau of Statistics, *Water Use on Australian Farms 2020-21*.

<sup>64</sup> Henry Angas, p. 1.

<sup>65</sup> Productivity Commission, p. 76.

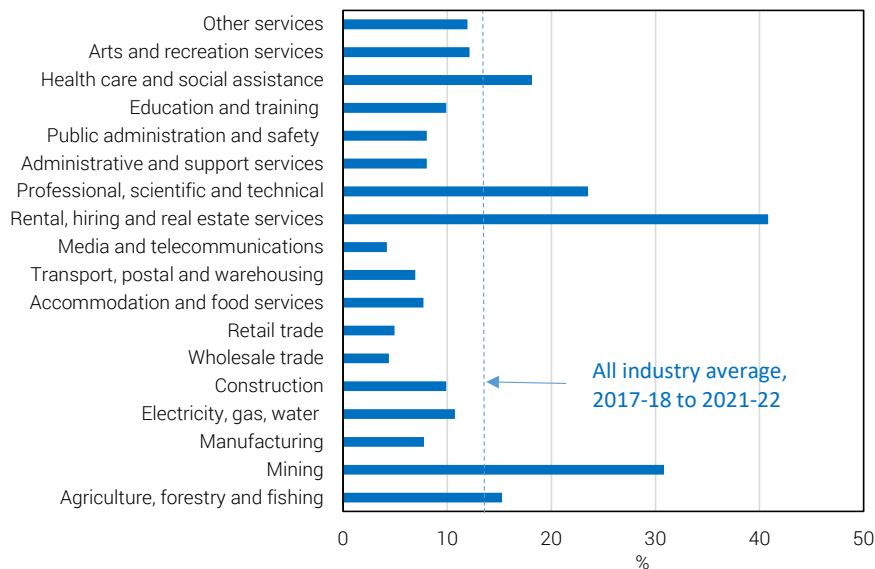
<sup>66</sup> King S, *Market power and airports*, pp. 12-13, and Productivity Commission, p. 8, 72, 76.

There are limited actual or potential substitutes for existing and new transportation customers in the Barossa, Clare and Eden Valleys. This suggests these customers are unlikely to have sufficient countervailing bargaining power to constrain the potential misuse of market power.<sup>67</sup>

One constraint on the potential misuse of market power is the threat of further regulatory intervention. For instance, if the Commission determined that SA Water was misusing market power, it could make recommendations to the South Australian Government for stricter regulations and increased monitoring activities.

To date, the Commission has not found evidence that market power has been used for an improper purpose. Commercial negotiations can potentially be time- and resource-intensive and challenging. However, this does not necessarily indicate that market power has been misused. When viewing information about the process and outcomes of commercial negotiations, it is noted that no arbitrations or conciliations have taken place under the regime and there have been no reports from stakeholders suggesting that SA Water has made take-it-or-leave-it offers or misused market power. Commercial agreements have grown strongly over the past decade, with transportation agreements negotiated on a cost-plus basis.<sup>68</sup> Furthermore, financial indicators have not been suggestive of monopoly profit margins being earned on transportation services. Between 2017-18 and 2022-23, SA Water earned an annual average net operating margin of approximately 15 percent for transportation services.<sup>69</sup> By way of comparison, according to data from the Australian Bureau of Statistics, the operating profit before tax of all industries in Australia (as a share of total income) has averaged approximately 13 percent over a similar period (Figure 6).

Figure 6: Operating profit before tax, share of income, across all Australian industries, average 2017-18 to 2021-22



Sources: Commission, Australian Bureau of Statistics

#### 4.1.4 Summary of findings

Evidence indicates that high barriers to entry (reflecting the natural monopoly characteristics of the infrastructure) and limited competitive substitutes (reflecting, in part, declining local water supplies)

<sup>67</sup> In line with this, SAWIA and CVWGA state that they have limited bargaining power in negotiations with SA Water. South Australian Wine Industry Association, p. 3, and Clare Valley Wine & Grape Association, p. 2.

<sup>68</sup> SA Water reports that since the commencement of the access regime there have been no negotiations that have resulted in the use of the 'retail-minus' pricing methodology. SA Water, p. 5.

<sup>69</sup> While SA Water's regulatory accounts previously indicated an average annual net operating margin of approximately 40 percent, and this margin was reported in the research paper produced by Sapere (p. 6), revised data submitted by SA Water indicates a net operating margin of approximately 15 percent.



mean that SA Water is likely to hold market power in the provision of transportation services. Nonetheless, the Commission has not found, or been presented with, evidence indicating that market power has been used for improper purposes. While it is difficult to quantify the benefits of the operation of the current access regime, the available operational and financial data have been consistent with commercially negotiated outcomes. For current water transportation services where competitive substitutes are limited, the current regime appears to be working as intended.

## 4.2 The access regime and the objectives of the WI Act

While it is difficult to prove conclusively whether the regime is operating effectively, indicators appear to suggest that the regime is supporting outcomes consistent with the statutory objectives of the WI Act (Table 3). In particular, growth in the volume of voluntary transportation agreements over the past decade has supported trade in water allocations and entitlements, supported agricultural production in the Barossa Valley and Clare Valley and changed the composition of water use away from local rain-dependent sources, and has encouraged greater utilisation of declared pipelines.

Table 3: Selected objectives of the WI Act and available indicators

Objectives	Indicators
...promote efficiency, competition and innovation in the water industry	<p>The Commission has not found or been presented with evidence indicating that market power has been used for improper purposes. The increase in transportation has facilitated increased water use in high-value agricultural production and in certain regions allowed a move away from local rainfall-dependent sources.</p> <p>The regime has allowed for innovative pricing and transportation arrangements, including the introduction of peak transportation arrangements at night in 2015, allowing transportation customers access at a time of lower power costs while still meeting the demands for water retail customers.</p>
...promote the economically efficient use and operation of, and investment in, significant infrastructure so as to promote effective competition in upstream and downstream markets.	<p>Utilisation of three of the eight declared pipelines has increased as a result of transportation agreements, thereby allowing transportation customers to make contributions to the fixed costs of regulated infrastructure. This, in turn, reduces the need for retail customers to contribute to fixed costs of these particular assets; retail customers therefore will ultimately pay less or their payments can be redirected to other regulated infrastructure.</p> <p>The number and volume of water trades has increased, indicating greater (at the least at the margin) competition in upstream markets.</p>
... promote measures to ensure that water is managed wisely	<p>The increase in transportation has facilitated increased water use in high-value agricultural production and has reduced inefficient investment and expenditure in certain regions on alternative water sources and measures (for example, on water savings devices).</p>

Given the fixed capacity of SA Water's pipeline infrastructure, increased demand can result in more recovery of SA Water's fixed costs. Greater utilisation is in line with the objective of the access regime to promote the economically efficient use and operation of, and investment in, significant infrastructure so as to promote effective competition in upstream and downstream markets.

One simple, albeit limited, estimate of the efficiency benefits of greater utilisation of infrastructure is to consider the decrease in the real price of transportation since the introduction of the access regime (Table 4).<sup>70</sup> Estimates suggest potential *annual* consumer welfare gains of approximately \$400,000

<sup>70</sup> CVWGA report a nominal price of transportation of \$1.12 per kL 'a decade ago' (interpreted by the Commission as of approximately 2013). See Clare Valley Wine Grape & Grape Association, p. 2. By comparison, the nominal



from improved utilisation.<sup>71</sup> If broader flow-on economic benefits to the Barossa, Clare and Eden Valleys are included, such as greater utilisation of regional land, infrastructure and employment as well as financial returns and values of production, this benefit would be larger.

Looking ahead, while efficiency benefits from increased pipeline utilisation may be smaller than in the past, as remaining capacity on certain pipelines is diminishing, efficiency benefits may arise in future from further utilisation of infrastructure that still has cyclical excess capacity.

Table 4: Revenue, nominal prices and real prices, SA Water's transportation services

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Annual total revenue (\$m)	6.5	8.4	11.4	11.8	11.7	10.7
Annual total volumes (ML)	8,368	11,923	15,948	16,255	16,153	14,478
Annual average nominal transportation price (\$ per ML)	781	704	718	724	722	742
Annual average real transportation price (\$21-22 prices) (\$ per ML)	870	770	772	769	754	742

### 4.3 Costs of the regime

The direct administrative costs of the access regime – on SA Water, proponents seeking access and the Commission – appear to be relatively low. Customers note the administration costs of negotiation,<sup>72</sup> while SA Water did not specify that the access regime was imposing significant regulatory costs.<sup>73</sup> The Commission's administrative and monitoring costs for the regime are low.

While, in theory, there can be indirect costs – for example, compulsory access can undermine incentives to resolve commercial disputes and weaken incentives for the regulated operator to invest in infrastructure<sup>74</sup> – the Commission has generally found limited evidence to suggest that third party

price in 2021-22 was \$1.19 per kL. Notwithstanding any connection and reservation fees, converted into real 2021-22 prices, this indicates the price of transportation decreased from \$1.33 per kL to \$1.19 per kL.

<sup>71</sup> For instance, the consumer benefit from additional sales of third-party access can be estimated as the reduction in the access price due to the greater utilisation. A common approximation of consumer surplus from a reduction in the access price is to assume simply half the price reduction. This assumption is commonly used in transport analysis and is known as the 'rule of half'. It reflects an assumption of a linear demand curve. Accordingly, assuming additional volumes of water transportation are 6 GL higher in the presence of the regime, and the real access price was \$127.8 per ML lower, then this suggests (by multiplying the two together) an annual consumer surplus gain of approximately \$0.38 million. Notwithstanding connection and reservation fees, if real transportation prices were assumed to fall from \$1.33 per KL (in real 2021-22 prices) to \$1.19 per KL, then this suggests an annual consumer surplus gain of approximately \$0.42 million. (The rule of half is covered in publications from Infrastructure Australia; see Infrastructure Australia, *Guide to Economic Appraisal*, Technical Guide of the Assessment Framework, July 2021, pp. 41-42, 45, 96, available at <https://www.infrastructureaustralia.gov.au/sites/default/files/2021-07/Assessment%20Framework%202021%20Guide%20to%20economic%20appraisal.pdf>.)

<sup>72</sup> Clare Valley Wine & Grape Association, p. 3, and South Australian Wine Industry Association, p. 4,

<sup>73</sup> SA Water, pp. 1-7.

<sup>74</sup> This can result from, for example, regulatory error in relation to prices and terms and conditions and the potential crowding out of alternative dispute resolution processes outside of the access regime, and/or regulatory settings that leave the regulated operator to bear a disproportionate share of downside demand risk (that is, if regulation is expected to expropriate above-normal returns when demand from customers is high, but not compensate for below-normal returns when demand is low). See discussions in Productivity Commission, pp. 211, 228, King S, *Part IIIB – Why there is no economic case for additional access regulation*, Productivity Commission Conference Paper July 2021, available at <https://www.pc.gov.au/research/supporting/access-regulation/partIIIB-access-regulation.pdf>, and Fels A, *Submission to the Productivity Commission inquiry into the*

access regimes have had the effect of stifling the investment of regulated operators.<sup>75</sup> Importantly, this particular access regime aims to utilise cyclical spare capacity of declared infrastructure. There is therefore less reason to consider that SA Water would have reduced incentives to invest in declared infrastructure.<sup>76</sup>

#### 4.4 Alternative pathways for regulatory protections

The availability of regulatory protections if the current access regime were to expire is an important consideration when weighing up the benefits and costs of continuing its operation. For instance, if the current regime were to expire, regulatory protections may, in principle, be available under Part IIIA of the CCA (that is, under the national access regime). The four pathways to gaining access under the national access regime are declaration, voluntary access undertaking, competitive tendering for public infrastructure, and a certified state-based access regime.

A key issue is that for any infrastructure service to be declared under the national access regime, the declaration criteria in section 44CA(1) of the CCA would all need to be met (see Box 1).

If the current regime were to expire, a proponent seeking access could pursue declaration of SA Water's water and sewerage infrastructure services. However, it is uncertain whether the declaration criteria would be satisfied.

SA Water has suggested that, given the size and customer base of current transportation services, it would be unlikely that individual pipelines would meet the criteria including the national significance test.<sup>77</sup> Other submissions to the issues paper did not specify additional benefits that the national access regime could deliver over and above the current state-based access regime.<sup>78</sup>

A reported benefit of operating a state-based regime, rather than relying on the national access regime, is that it can allow coverage and scope to be adjusted to suit local economic circumstances<sup>79</sup> and by using local expertise may allow for timelier, and within-state consistency of, regulatory decisions.<sup>80</sup>

On balance, while the Commission does not rule out the possibility that certain water or sewerage infrastructure could be declared under the national access regime, it has assessed that were the current access regime to expire, then for those seeking access it is uncertain whether any access protections under the national access regime would be available.

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*National Access Regime*, May 2013, pp. 16-30, available at <https://www.pc.gov.au/inquiries/completed/access-regime/submissions/submissions-test/submission-counter/sub040-access-regime.pdf>.

<sup>75</sup> Daniels, *Regulation of Natural Monopoly Infrastructure in Australia – An Empirical Analysis of The Effectiveness Of Part IIIA of the Competition and Consumer Act 2010 (Cth)*, PhD Thesis submitted to Melbourne Law School, 2016, p. 254, available at: <http://hdl.handle.net/11343/192644>. The Productivity Commission has suggested that access regimes in general have the potential to stifle investment but found insufficient evidence to suggest that the national access regime was having that effect in practice; see Productivity Commission, pp. 211, 228.

<sup>76</sup> Moreover, stakeholders have not raised concerns about any lack of incentive for SA Water to invest in infrastructure without the presence of access regulation.

<sup>77</sup> SA Water, p. 7.

<sup>78</sup> Clare Valley Wine & Grape Association, pp. 2-3, and South Australian Wine Industry Association, p. 4.

<sup>79</sup> South Australian Department of Treasury and Finance, pp. 2-3.

<sup>80</sup> In 2013, the Commission argued that experience nationally and overseas had shown that access issues can be highly complex in nature, involving detailed examination of costs throughout complex networks, in which local knowledge can be highly important. See Essential Services Commission of South Australia, *Submission by ESCOSA on The Report Prepared by the South Australian Department of Treasury and Finance Entitled "Access to Water and Sewerage Infrastructure"*, 2013, pp. 9-10, available at [https://www.treasury.sa.gov.au/\\_data/assets/pdf\\_file/0003/36192/130315-0-submission-to-access-report\\_final.pdf](https://www.treasury.sa.gov.au/_data/assets/pdf_file/0003/36192/130315-0-submission-to-access-report_final.pdf).

**Box 1. Access pathways under the national access regime**

The declaration criteria for access under the national access regime are outlined below. The criteria in the CCA are:

- (a) that access (or increased access) to the service, on reasonable terms and conditions, as a result of a declaration of the service would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service; and*
- (b) that the facility that is used (or will be used) to provide the service could meet the total foreseeable demand in the market:*
  - (i) over the period for which the service would be declared; and*
  - (ii) at the least cost compared to any 2 or more facilities (which could include the first-mentioned facility); and*
- (c) that the facility is of national significance, having regard to:*
  - (i) the size of the facility; or*
  - (ii) the importance of the facility to constitutional trade or commerce; or*
  - (iii) the importance of the facility to the national economy;*
- (d) that access (or increased access) to the service, on reasonable terms and conditions, as a result of a declaration of the service would promote the public interest.*

Whether these criteria would be met or not is a legal question for the National Competition Council (NCC) and the relevant Minister, and not a question for the Commission's review. Nevertheless, it is worth noting that some applications to declare infrastructure services have failed and some declaration decisions have been reversed on appeal or have expired.<sup>81</sup> Furthermore, it is known that declaration of a service under the national access regime can be a lengthy process with the possibility of legal appeals from an initial decision (which can take further time).<sup>82</sup> The longer the declaration process, the higher the legal costs and the commercial costs of delay and uncertainty.

The Productivity Commission has stated that the national significance test ‘...is a subjective test, with no clear threshold for a facility to be judged as nationally significant.’<sup>83</sup> This uncertainty is illustrated in Carpentaria Transport's attempt to declare services provided by Queensland Rail in 1997: the NCC found that above and below-rail services covered by the application were not nationally significant, but the Queensland Premier (as designated Minister) determined that the services were nationally significant.<sup>84</sup>

<sup>81</sup> Productivity Commission, p. 174.

<sup>82</sup> The Fortescue Metals cases, which were about the declaration of four railways in the Pilbara, took over eight years to reach a final determination and, even excluding those cases, as measured as at 2020, the average time from application to conclusion over the last two decades (11 cases) was approximately twenty months. See National Competition Council website, ‘Past applications’, available at: [http://ncc.gov.au/applications-past/past\\_applications](http://ncc.gov.au/applications-past/past_applications), and Essential Services Commission of South Australia, *2020 South Australian Rail Access Regime Review*, Final report, August 2020, p. 24, available at <https://www.escosa.sa.gov.au/ArticleDocuments/21535/20200828-Rail-AccessRegimeReview-FinalReport.pdf.aspx?Embed=Y>.

<sup>83</sup> Productivity Commission, p. 174.

<sup>84</sup> Ibid, p. 174.

## 4.5 Summary of stakeholder views on operation of the regime

In submissions to the issues paper, several stakeholders supported (either directly or indirectly) the need for regulatory protections.<sup>85</sup>

- ▶ SAWIA reported that the access regime can provide a degree of certainty regarding the availability of water for irrigation and that certainty was critical in medium-term planning, given winegrape growers have planning and investment cycles that stretch over several years.<sup>86</sup> It reported that those seeking access perceive that they have limited bargaining power when negotiating with SA Water. It noted concerns, however, about transportation pricing and transparency, and it suggested that *'access pricing is not optimally transparent and should be improved'*.<sup>87</sup>
- ▶ CVWGA reported that water transportation customers in the Clare Valley have limited bargaining power when dealing with SA Water and that infrastructure capacity is limiting uptake from new customers.<sup>88</sup> It highlighted that increased price transparency would increase the confidence of customers and would aid in business planning and decision-making.<sup>89</sup>
- ▶ Henry Angas made a submission from a livestock perspective and outlined that obtaining third party access during the off-peak period was the largest barrier to the uptake of transportation services. The regime's design is reportedly most suitable for irrigators, but less so for livestock producers, which require a consistent all-year round supply of water. Higher prices for retail water services are expected to rekindle interest in third party access,<sup>90</sup> particularly given a number of livestock producers in the region supplied by the Taillem Bend to Keith pipeline reportedly use SA Water's retail water services.<sup>91</sup> Henry Angas noted the importance of water security to livestock production and suggested that measures to improve the regime to increase water security for this sector should be considered.<sup>92</sup>
- ▶ SA Water reported that the current access regime is light touch, practical, and operating consistently with the WI Act (including the absence of arbitrations).<sup>93</sup> It stated that the regime incentivises commercial negotiations that are mutually beneficial for those seeking access and SA Water.<sup>94</sup> It noted that, while improvements could be made to the regime, such as establishing alternative pricing, it is unclear whether the incremental benefit of any changes would justify the potential cost.<sup>95</sup>

## 4.6 Conclusion and recommendation

Overall, it is difficult to prove conclusively whether the access regime is operating effectively. Nonetheless, indicators appear to suggest that the regime has supported the statutory objectives of the WI Act. This includes promoting economically efficient use and operation of and investment in declared

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<sup>85</sup> South Australian Wine Industry Association, p. 4.

<sup>86</sup> Ibid, p. 3.

<sup>87</sup> Ibid, p. 4.

<sup>88</sup> Clare Valley Wine & Grape Association, pp. 2-3.

<sup>89</sup> Ibid, pp. 2-3.

<sup>90</sup> Henry Angas, p. 1.

<sup>91</sup> The Coorong Water Security Advisory Group and Coorong District Council has previously reported that in 2016-17 there were 148 landholders who were interested in a potential water transportation scheme. Further, it reported that in 2015-16, those surveyed consumed approximately 730 ML of water from SA Water's mains via retail water services. See Coorong Water Security Advisory Group and Coorong District Council, pp. 3-5.

<sup>92</sup> Henry Angas, p. 1.

<sup>93</sup> SA Water, pp. 5-7.

<sup>94</sup> Ibid, pp. 1-2, 6-7.

<sup>95</sup> Ibid, p. 5.

infrastructure so as to promote competition in upstream markets, and promoting efficiency, competition and innovation in the water industry.

In assessing the benefits and costs of the regime, several issues stand out. Because there are high barriers to entry (reflecting the natural monopoly characteristics of the infrastructure) and limited competitive substitutes (reflecting, in part, declining local water supplies), SA Water is likely to hold market power in the provision of transportation services. The current regime provides benefits to stakeholders by imposing a degree of regulatory protection against the potential misuse of market power. At the same time, the operation of the regime has low direct and indirect costs.

Therefore, while there is uncertainty about the exact magnitude of the benefits of the access regime, the Commission's assessment is that the expected benefits exceed the costs. Consistent with this, stakeholders have either supported the continuation of the access regime or noted the imbalance in bargaining power between those seeking access and SA Water.

The draft recommendation is that the access regime should remain in effect and be extended by regulation by the South Australian Government for a further five years.

## 5 Possible improvements to the regime

**Draft finding:** The Commission sees the following three possible improvements to the access regime as worthy of consideration by the South Australian Government:

- ▶ introduction of a consultative review mechanism by which a proponent seeking access, or any other party, could seek to have water or sewerage infrastructure included in, or excluded from, the regime
- ▶ increased transparency and clarification regarding how the 'retail minus' methodology is intended to be calculated, and
- ▶ introduction of a legislative requirement for SA Water to publish information regarding current and forward projections of capacity and utilisation of declared infrastructure.

In addition, the Commission will be asking SA Water on an annual basis to provide to the Commission specified information including a summary of how it is meeting requirements under Part 9A of the WI Act and also current indicators relating to transportation services. The specified information will support the Commission in undertaking its statutory function of monitoring and enforcing compliance with Part 9A of the WI Act.

Submissions from stakeholders as well as results from the Commission's research suggests that the ability of the access regime to meet its statutory objectives could be improved in several respects.

### 5.1 Mechanism for seeking declaration or revocation of infrastructure services

There is currently no legislative or regulatory mechanism for stakeholders to request excluded infrastructure to be included in the scheme. This means that over time coverage of declared infrastructure may not respond, or at best may respond slowly, to demands within the community.

For third party access regimes in South Australia, the Governor makes a proclamation regarding infrastructure services on the advice of the Executive Council. The Executive Council has access to the criteria set out in the Competition Principles Agreement (CPA) and in agreements between Australian Governments relating to third party access regimes.<sup>96</sup> It can also obtain advice and reporting from the Commission and government agencies.

Nonetheless, Part 9A of the WI Act could be enhanced through the introduction of a consultative mechanism and process for amending coverage including or excluding certain infrastructure services. The mechanism would need a specified periodic review timeframe. Such a timeframe should balance providing regulatory certainty with the potential for changes in demands within the community.<sup>97</sup> The administrative timing and costs of undertaking such a review should also be considered. As the water industry develops and the cyclical capacity of existing declared infrastructure becomes utilised, a transparent process and criteria for having infrastructure declared (or revoked) would provide benefits to stakeholders.

In submissions to the issues paper, stakeholders expressed mixed views regarding the introduction of a mechanism and process for amending coverage to include or exclude transportation services.

SA Water expressed the view that there was limited benefit from the introduction of such a mechanism as the process to commercially negotiate has proven effective. It noted that it would require sufficient

<sup>96</sup> Council of Australian Governments, *Competition Principles Agreement*, 1995, available at <https://federation.gov.au/about/agreements/competition-principles-agreement>.

<sup>97</sup> National Competition Council, *South Australian Rail Access Regime*, 26 May 2011, p. 52, available at <https://ncc.gov.au/images/uploads/CERaSAFR-001.pdf>.

notice to update materials and inform stakeholders.<sup>98</sup> In contrast, SAWIA considered that a mechanism could be introduced so long as it improved outcomes and the expected benefits exceeded the costs.<sup>99</sup>

It is noted that SA Water has previously (in its submission in 2019) stated that a review of the declaration of infrastructure would allow the opportunity to consider if the access regime could be extended to incorporate other water utilities' infrastructure. At that time SA Water expressed the view that a review of declared infrastructure could support competition in the water industry.<sup>100</sup>

The lack of a mechanism for seeking declaration or revocation is a limitation of the access regime previously noted in 2019 by the Commission.<sup>101</sup> It is a limitation previously highlighted by the NCC.<sup>102</sup> The South Australian Government's *Review of the Water Industry Act 2012*, which was published in 2020, has recognised the issue and has recommended the development of supporting policy to provide clarity on the issue.<sup>103</sup>

## 5.2 Transparency and clarification regarding transportation pricing methodologies

There are typically two key approaches for calculating access prices, commonly described as:

- cost-based, also known as a 'cost of service' or 'cost plus' approach, in which the access price is based on an estimate of the cost to the regulated operator of providing the infrastructure service, and
- retail minus, in which the access price is based on the retail price less a component equal to the incumbent's costs that are avoidable (or just avoided) due to the access seeker providing the retail service.

Box 2 provides a background summary of access pricing approaches.

On the one hand, submissions from SAWIA and CVWGA have expressed a view that there is a need for more transparency in respect of transportation pricing in South Australia.<sup>104</sup>

On the other hand, SA Water has noted that transportation pricing is currently already published on its website in accordance with Water Charge Rules 2010.<sup>105</sup> Furthermore, SA Water reports that no commercial agreements have been adopted using the 'retail-minus' pricing methodology. It notes that the Minister has approved commercial pricing for transportation agreements that do not relate to or affect water retail services (as outlined in Chapter 2).<sup>106</sup>

<sup>98</sup> SA Water, p. 7.

<sup>99</sup> South Australian Wine Industry Association, p. 4.

<sup>100</sup> SA Water, *Third party access regime review – Draft Report*, 17 April 2019, pp. 1-2, available at <https://www.escosa.sa.gov.au/ArticleDocuments/11363/Third%20party%20access%20regime%20review%20SA%20Water%20Submission%20to%20draft%20report.pdf.aspx?Embed=Y>.

<sup>101</sup> Essential Services Commission of South Australia, *Issues paper – Review of the access regime that applies to the South Australian water industry*, p. 10.

<sup>102</sup> National Competition Council, *South Australian Water Access Regime*, pp. 15-16.

<sup>103</sup> Department for Environment and Water, *Review of the Water Industry Act 2012*, September 2020, p. 3, available at <https://cdn.environment.sa.gov.au/environment/docs/water-industry-act-review-final.pdf>.

<sup>104</sup> South Australian Wine Industry Association, pp. 3-4, and Clare Valley Wine & Grape Association, pp. 2-3.

<sup>105</sup> SA Water, p. 7. Water Charge Rules can be found here: <https://www.accc.gov.au/by-industry/water/water-charge-rules#:~:text=The%20Water%20Charge%20Rules%202010,unless%20they%20have%20an%20exemption>.

<sup>106</sup> SA Water, pp. 4-5.



**Box 2. Access pricing approaches**

Under either 'cost-based' or 'retail minus' pricing methodologies, the regulated operator would charge the access seeker the costs it incurs in facilitating access. In addition, an access seeker, like the incumbent, will incur their own costs. In the case of the SA Water pipelines, the proponent seeking access incurs the costs of sourcing the underlying water, the costs of reticulation and retailing the service to customers.<sup>107</sup>

In situations where the regulated operator's retail prices are themselves cost-based (that is, determined by a build-up of costs), the two approaches may deliver the same result.<sup>108</sup>

For example:

- ▶ Retail price = Bulk water cost + Transportation costs + Incumbent's distribution/retailing cost
- ▶ Cost-based access price = Transportation costs + Facilitation costs
- ▶ Retail-minus access price =  

$$\begin{aligned} & \text{Retail price} + \text{Facilitation costs} (= \text{Bulk water cost} + \text{Transportation costs} + \text{Incumbent's} \\ & \text{distribution/retailing cost} + \text{Facilitation costs}) \\ & \text{/less Avoided costs} (= \text{Incumbent's distribution/retailing cost} + \text{Bulk water cost}) \\ & = \text{Transportation costs} + \text{Facilitation costs} \\ & = \text{Cost-based access price.} \end{aligned}$$

A difference in the values from the two approaches can arise when the retail price is not itself cost-based. This is commonly the case because of the application of a uniform (in this case state-wide) pricing approach whereby the same price is charged regardless of locational cost differences. Differences in the cost-plus and retail-minus approaches may also arise due to how costs are calculated. That is, the costs assumed in calculating a cost-based access price may differ to those used in calculating the retail price and retail-minus formula.<sup>109</sup>

### 5.2.1 When should a 'retail minus' pricing methodology be adopted

The price of infrastructure services is an important factor in the success or otherwise of any third party access regime. Should the price be set too high, this may not promote competition in upstream and downstream markets, as proponents seeking access may opt not to take up access opportunities.

Given stakeholder interest in the area and recognising that the effectiveness of Part 9A of the WI Act can be linked to how transportation prices are currently set or are expected to be set, the Commission undertook research on the issue<sup>110</sup> and sought the views of stakeholders.<sup>111</sup>

Overall, the Commission has found that a 'retail minus' pricing methodology has advantages (it is commonly accepted, may be less complex than alternatives, and can prevent inefficient competition), but it also has disadvantages (its use where retail prices are set on a state-wide basis and are not regulated can potentially lead to inefficient pricing).

<sup>107</sup> Sapere, pp. 14-15.

<sup>108</sup> Ibid, p. 15.

<sup>109</sup> Ibid, pp. 15-16.

<sup>110</sup> Ibid, pp. 1-47.

<sup>111</sup> Essential Services Commission of South Australia, *Issues paper – Review of the access regime that applies to the South Australian water industry*, pp. 14-15.



On balance, given that to date there has been limited evidence on the impact of competition in the provision of urban water retail services,<sup>112</sup> and there has been no transportation agreements for the purposes of retail services in competition with SA Water, the Commission considers that a 'retail minus' pricing methodology is currently appropriate for the water industry where transportation is sought for the purposes of retail services. While alternative pricing approaches could potentially be applied, including cost-based approaches that address the risk of inefficient competition, those methodologies can be more complex while at the same time adding limited benefit.<sup>113</sup>

A key issue regarding transportation pricing is to differentiate when a 'retail minus' pricing methodology should be applied and to make this transparent to all stakeholders. This would provide more pricing transparency, as was suggested by stakeholders in submissions to the issues paper.<sup>114</sup>

SA Water's submission to the review noted that that the Minister approved commercial pricing for transportation agreements that do not relate to or affect water retail services.<sup>115</sup>

The Commission acknowledges that commercial negotiations on price and terms and conditions have been taking place and this is consistent with the regime operating effectively. However, the Commission's research as well as feedback from stakeholders has suggested that there could be community benefits from SA Water removing some of the ambiguity in the public domain, including on SA Water's website and SA Water's information brochure, about when the Ministerial Direction on access pricing is to be applied.<sup>116</sup>

<sup>112</sup> For instance, in the United Kingdom context, Deller and Hviid (in 2016) found that there is limited potential for efficiency gains in the delivery of retail services or in the pressure on upstream elements, and there is a low likelihood of retail competition generating pricing pressure; Mukherjee and Jense (in 2020) conducted a survey and found that while there has been some competition and efficiency in the retail segment, for many non-household customers retail competition has not led to any significant change in bills, service quality or the range of services on offer; Decker (in 2022) examined water industry reforms and considered the transition to competition in the non-household sector and concluded that the transition to competition in utility markets has not always resulted in lower retail prices. See Deller D and Hviid M, *Consultation response from the Centre for Competition Policy to Ofwat: Review of retail household markets in the water and wastewater sector – Call for evidence*, Consultation response from the Centre for Competition Policy, 16 February 2016, pp. 1-16, available at <https://www.ofwat.gov.uk/wp-content/uploads/2016/01/CCP-Response-Call-for-Evidence.pdf>, Mukherjee M and Jensen O, *Open Water: Impacts of Retail Competition on Services and Water Use Efficiency in the England*, pp. 1-28, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4104455](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4104455), and Decker C, *Accelerating the transition to competition in the English retail non-household water sector*, August 2022, pp. 1-38, available at <https://www.ofwat.gov.uk/wp-content/uploads/2022/09/Accelerating-the-transition-to-competition-in-the-NHH-water-market-report-by-Chris-Decker.pdf>.

<sup>113</sup> For example, using a cost-based approach to prevent cherry picking (that is, where new entrants 'cherry pick' the lowest cost locations, leaving existing customers bearing the higher cost parts of the network) may require more complex estimates. This would involve estimating the avoidable costs for the location of interest as well as the average avoidable costs. Sapere, pp. 23-24.

<sup>114</sup> South Australian Wine Industry Association, pp. 3-4, and Clare Valley Wine & Grape Association, pp. 2-3.

<sup>115</sup> SA Water, pp. 4-5.

<sup>116</sup> Sapere, pp. ii-iv, 27-28, 31-32, and Essential Services Commission of South Australia, *Issues paper – Review of the access regime that applies to the South Australian water industry*, p. 14.

### 5.2.2 How is the 'retail minus' methodology intended to be calculated

The Commission has undertaken research and found there could be greater clarity regarding how the 'retail minus' pricing methodology is intended to be calculated. For example, the Ministerial Direction is not definitive about what parameters and assumptions would be used if implementing the methodology. In calculating the 'minus' component there are many decisions that need to be made, and there are also uncertainties regarding the treatment of the 'retail price' component given that SA Water applies an increasing block tariff structure.<sup>117,118</sup> Clarifying these cost and pricing issues may reduce information barriers and therefore lower the barriers to potential entrants in downstream markets. The Commission considers this issue worthy of consideration by the South Australian Government.

## 5.3 Information on capacity and utilisation of declared infrastructure

There is limited information in the public domain regarding the current performance of the access regime. In particular, information regarding the current and expected utilisation of declared pipelines can, in some cases, be unclear or unavailable. A lack of transparency can increase the costs of access negotiations and act as a barrier for potential proponents seeking access.

The Commission considers the introduction to Part 9A of the WI Act of a requirement for SA Water to publish on an annual basis information on its website regarding current and forward projections of declared infrastructure capacity and capacity utilisation is worthy of consideration by the South Australian Government.

While information is required to be provided by SA Water to assist those seeking access in formulating an access proposal,<sup>119</sup> there may be wider benefits from making indicators of current and projected capacity and utilisation available. Moreover, as highlighted by SA Water, issues regarding capacity utilisation have been a factor impacting negotiations in the past<sup>120</sup> and it is an issue likely to become more relevant in future.<sup>121</sup> Publication of such information would have a low administrative cost but may assist the investment planning of existing holders of access as well as those potentially seeking access.

## 5.4 Monitoring and enforcing compliance with Part 9A of WI Act

In accordance with clause 86ZP of the WI Act, the Commission's draft finding is that, provided that the access regime continues in operation, it intends to ask SA Water for periodic (annual) reports that outline specified information. This would include a summary of how SA Water has met requirements under Part 9A of the WI Act and also current indicators relating to transportation services.

This information will support the Commission in undertaking its statutory function of monitoring and enforcing compliance with Part 9A of the WI Act. As there is limited current reporting requirements

<sup>117</sup> As outlined in Sapere's research, assumptions on the 'minus' component could relate to the approach to valuing assets, the scale of reticulation, the return on assets and depreciation. There would also need to be clarification regarding the treatment of facilitation costs. Sapere, pp. 26-27.

<sup>118</sup> It is noted that a key design choice in applying the 'retail minus' methodology is determining how the minus is calculated. The current Ministerial Direction is consistent with the avoidable cost definition. However, instead of adopting avoidable cost, some regulators, such as the Independent Pricing and Regulatory Tribunal, have adopted an approach of calculating 'reasonable efficient competitor costs' instead of the avoidable cost. These are the costs that a reasonably efficient business would incur, excluding the access price, in providing the service. This approach recognises that it may be unrealistic for a new entrant to immediately achieve the scale economies of the incumbent utility. While the approach can promote more potential retail competition, it can lead to some inefficient entry, particularly if the entrant does not become more efficient over time. Sapere, pp. 25-26.

<sup>119</sup> For example, clause 86G of WI Act.

<sup>120</sup> SA Water, pp. 2-3, 6-7.

<sup>121</sup> Ibid, p. 3.

relating to the regime, and the information to be sought is expected to be readily available to SA Water, the Commission considers that asking for this specified information will not add materially to SA Water's administrative costs. Box 3 below provides an example of the information to be sought.

**Box 3. Example of specified information to be provided to the Commission at annual intervals**

The Commission will ask SA Water to report annually on how it has met requirements under Part 9A of the WI Act. For example, this would include:

- ▶ specifying how SA Water has negotiated in good faith with those seeking access
- ▶ reporting on whether SA Water has supplied copies of access agreements to the Commission within the required timeframe
- ▶ reporting on whether SA Water has supplied copies of its confidentiality policy to the Commission and to any other person who requests a copy, and
- ▶ specifying the details of those persons who have been provided information brochures.

Also, the Commission will ask SA Water to provide current indicators on transportation services including:

- ▶ the number, volume of usage, and contracted volume of transportation services, in total and according to each declared pipeline, and
- ▶ estimates of the capacity and capacity utilisation of each declared pipeline (peak and off-peak times).

The specified information will support the Commission in undertaking its statutory function of monitoring and enforcing compliance with Part 9A of the WI Act. It will inform the Commission's annual report to the Minister, in accordance with clause 86D of the WI Act, on the of the work carried out by the regulator. Information included in the annual report will be aggregated and/or anonymised.

## 6 Next steps

The Commission seeks stakeholder views on this draft report by 22 March 2024. Submissions can be submitted electronically to [reviews@escosa.sa.gov.au](mailto:reviews@escosa.sa.gov.au). The Commission will consider information provided by stakeholders in preparing a final report.

The Commission would be pleased to meet with stakeholders, either individually or with representative organisations, to discuss the draft conclusions. If you or your organisation wish to meet with Commission staff, please use the contact details on the inside cover of this draft report.

## 7 Appendix A: Further background on the access regime

### Certification and the current state-based access regime

Australia's national competition policy includes guiding principles for states and territories to create regulatory access regimes for competitive access to significant infrastructure facilities.<sup>122</sup> Under Part IIIA of the CCA (known as the national access regime), regulatory protections may be available for those seeking access to significant infrastructure services. There are four pathways for third parties to gain access under the national access regime: declaration, voluntary access undertaking, competitive tendering for public infrastructure, or through a certified state-based access regime.<sup>123</sup>

In South Australia, a certified state-based access regime is in place that applies to declared water and sewerage infrastructure that are of significance to the South Australian economy. The state-based regime was certified for a period of ten years from 22 May 2017.<sup>124</sup> Certification provides a formal link between the national access regime under Part IIIA of the CCA and the state-based access regime. Certification precludes third parties obtaining access through the national access regime (for instance, via a declaration or a voluntary access undertaking) during the period in which the access regime is certified.<sup>125</sup>

The state-based access regime meets the CPA, as agreed to by the South Australian Government in 1995 and amended in 2007.<sup>126</sup> It promotes consistency in access regulation with other jurisdictions, and satisfies clause 6(3)(a) of the CPA, which states that:<sup>127</sup>

*For a State or Territory access regime to conform to the principles set out in this clause, it should:*

*(a) apply to services provided by means of significant infrastructure facilities where:*

*(i) it would not be economically feasible to duplicate the facility;*

*(ii) access to the service is necessary in order to permit effective competition in a downstream or upstream market; and*

*(iii) the safe use of the facility by the person seeking access can be ensured at an economically feasible cost and, if there is a safety requirement, appropriate regulatory arrangements exist.*

The CPA states that Commonwealth legislation is not intended to cover state-based facilities that are covered under a state-based regime, to the extent the regime is determined to be effective.

### The negotiate-arbitrate regime

Part 9A of the WI Act sets out the current access regime. The access regime establishes a negotiate-arbitrate framework for third parties (for example, agricultural or industrial producers or potential new retail entrants) to negotiate with SA Water for access to declared infrastructure. Third parties seek access so as to transport water or sewerage through SA Water's infrastructure.

The access regime has three key elements.

<sup>122</sup> Council of Australian Governments, *Competition Principles Agreement*.

<sup>123</sup> Productivity Commission, pp. 4-5.

<sup>124</sup> Hon. S Morrison, *Decision on effectiveness of access regime under section 44N of the Competition and Consumer Act 2010 (Cth)*, *Australian Water Access Regime*, Final recommendation, March 2017, pp. 4-52.

<sup>125</sup> National Competition Council, *South Australian Water Access Regime*, pp. 4-52.

<sup>126</sup> Section 6(2) of the CPA.

<sup>127</sup> Section 6(3) of the CPA.

1. It establishes the right to negotiate access to declared infrastructure (which, as mentioned earlier, can be achieved through commercial agreement or, in the event of dispute, through conciliation or arbitration).
2. A regulated operator is required to negotiate in good faith with those seeking access, as are any interested third parties involved in, or affected by, access negotiations.<sup>128</sup> The regulated operator must provide certain information to assist those seeking access (including an information brochure)<sup>129</sup> and must provide specific information to assist the access seeker in formulating an access proposal,<sup>130</sup> but may make a reasonable charge for providing this information.<sup>131</sup> The information to assist the formulation of a proposal includes information regarding current utilisation of the declared infrastructure, technical and feasibility details including if there is a need to alter or add to the regulated operator's infrastructure so that it could meet requirements stated in any access application, and includes general terms and conditions for access including the likely price for access.<sup>132</sup> If access cannot be provided, the regulated operator must provide the reasons for this to those seeking access.<sup>133</sup> The regulated operator must provide copies of access proposals and every access contract (including voluntary access agreements) to the Commission.<sup>134</sup>
3. If terms of access have not been agreed within two months after a formal access proposal is made, the negotiation will be considered a dispute and any party (the regulated operator, those seeking access or an interested third party affected) can refer it to the Commission.<sup>135</sup> The access regime establishes a role for the Commission to, in the first instance, seek to resolve the dispute between the parties by conciliation.<sup>136</sup> If a dispute is not resolved by conciliation, the Commission may refer the dispute to arbitration.<sup>137</sup> An arbitration flow chart is available on the Commission's website.<sup>138</sup> In making an award, an arbitrator is bound by certain requirements, including various operational, contractual and economic principles, and some specific pricing principles.<sup>139</sup>

Negotiate-arbitrate access frameworks are a feature of natural monopoly industries in South Australia and Australia more generally (Box A1).

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<sup>128</sup> Section 86J of WI Act.

<sup>129</sup> The access regime requires SA Water to provide information to assist those seeking access (see section 86F and 86 of the WI Act). For example, if requested in writing, SA Water must provide an information brochure (which should contain, among other things, terms and conditions of access, procedures to determine access, information about relevant prices and costs (general in nature), and a standard access agreement).

<sup>130</sup> Section 86G of WI Act.

<sup>131</sup> Ibid.

<sup>132</sup> Ibid.

<sup>133</sup> Section 86G (1(c)(ii)) of WI Act.

<sup>134</sup> Section 86ZO of WI Act.

<sup>135</sup> Section 86K of WI Act.

<sup>136</sup> Section 86L of WI Act.

<sup>137</sup> Section 86N of WI Act.

<sup>138</sup> The arbitration flowchart is available at <https://www.escosa.sa.gov.au/ArticleDocuments/604/20160324-Water-ThirdPartyAccessAmendmentAct2015-ArbitrationFlowChart.pdf.aspx?Embed=Y>.

<sup>139</sup> The Commission has prepared background material on the operation of the access regime under the WI Act. This includes a set of presentation slides in March 2016, available at <https://www.escosa.sa.gov.au/ArticleDocuments/604/20160324-Water-ThirdPartyAccessInformationSession-PresentationSlides.pdf.aspx?Embed=Y>.

**Box A1. Negotiate-arbitrate frameworks**

Negotiate-arbitrate access frameworks in South Australia include the rail, ports and water industries.<sup>140</sup>

Provision for arbitration underpins third party access regulation nationally (under the CCA) and in many state-based, industry-specific access regimes (though legislative requirements and objectives can differ by jurisdiction).<sup>141</sup>

Ultimately, the credibility of the potential for arbitration is key. The prospect for arbitration shapes the environment in which parties negotiate and the effectiveness of negotiate-arbitrate frameworks. Firms must form expectations of the prices and service quality that will be applied in arbitration. Accordingly, any relevant principles set out under arbitration or in relevant guidelines will influence commercially negotiated outcomes.<sup>142</sup>

It is important to note that an access regime does not seek to guarantee that every commercial access negotiation will lead to an agreement. For example, the negotiating parties may have sharply different expectations of future demand, costs and prices.

Negotiate-arbitrate frameworks are not unique to third party access regulation for natural monopoly industries. For example, employees (and their representatives) negotiate pay and conditions with employers and, if talks break down, parties may progress to arbitration. The expectation is that parties will generally regard it as in their interests to privately negotiate an agreement rather than have a determination imposed through arbitration.<sup>143</sup>

**Roles of the parties under the regime****Regulator**

The Commission's role includes the following functions:

- ▶ it is the body to which disputes are referred to and must, in the first instance, seek to resolve the dispute by conciliation. If a dispute is not resolved by conciliation, the Commission may refer the dispute to arbitration<sup>144</sup>
- ▶ it can require a regulated operator to give the Commission specified information or documents related to the regulated operator's water/sewerage service business<sup>145</sup>

<sup>140</sup> The *Railway (Operations and Access) Act 1997*, *AustralAsia Railway (Third Party Access) Act 1999 (SA)* and the *AustralAsia Railway (Third Party Access) Act 1999 (NT)*, Part 9A of the WI Act, and section 43 of the *Maritime Services (Access) Act 2001*.

<sup>141</sup> Examples include New South Wales water infrastructure access, Western Australia railway access, and Queensland railway access (through undertakings). See National Competition Council, *Certification of NSW Water Infrastructure Access Regime*, January 2020, p. 14, available at: [http://ncc.gov.au/images/uploads/NCC\\_Final\\_Recommendation\\_-\\_certification\\_of\\_NSW\\_Water\\_Infrastructure.pdf](http://ncc.gov.au/images/uploads/NCC_Final_Recommendation_-_certification_of_NSW_Water_Infrastructure.pdf); and Government of Western Australia, *Review of the Western Australian Rail Access Regime*, 2019, pp. 1-2, available at: <https://www.wa.gov.au/sites/default/files/2020-02/wa-rail-access-final-decision-paper.pdf>. A report by PricewaterhouseCoopers prepared for the Australian Department of Infrastructure, Regional Development and Cities states that all rail access regimes in Australia have an arbitration process: PricewaterhouseCoopers, *Review of rail access regimes*, May 2018, p. 23, available at: <https://www.infrastructure.gov.au/rail/publications/files/Review-of-Rail-Access-Regimes.pdf>.

<sup>142</sup> Productivity Commission, pp. 118-119.

<sup>143</sup> Ibid, pp. 118-119.

<sup>144</sup> Sections 86L and 86N of WI Act.

<sup>145</sup> Sections 86O and 86ZP of WI Act.

- ▶ it must prepare and deliver to the Minister a report of the work carried out by the Commission relevant to the regime, each financial year,<sup>146</sup> and
- ▶ it must review the regime and recommend to the Minister whether the access regime should continue for a period of five years.<sup>147</sup>

### Regulated operator

The regulated operator's role includes the following responsibilities:

- ▶ it must negotiate in good faith with access seekers<sup>148</sup>
- ▶ supply certain information and documents to access seekers and the regulator<sup>149</sup>
- ▶ must follow requirements of the arbitrator<sup>150</sup>
- ▶ must develop and keep a policy relating to confidential information and provide a copy of the policy to the regulator and to any other person on request,<sup>151</sup> and
- ▶ supply information to those interested in seeking access on a discriminatory basis.<sup>152</sup>

If a regulated operator is vertically integrated (that is, operates water or sewerage businesses including supplying access to declared infrastructure to third parties), section 86E of the WI Act requires that the regulated operator maintain separate accounts for transportation services and other water and sewerage business activities. The potential for regulatory review of these separate accounts can incentivise the vertically integrated operator to follow the WI Act. This can discourage costs being shifted from water and sewerage business activities into transportation services. This form of protection is, in effect, a form of ring-fencing arrangement that can help in facilitating new retail entrants to the water industry.<sup>153</sup>

### Proponent seeking access

Those seeking access must, if a regulated operator reasonable requires it, provide further information about the access proposal and must follow requirements of the arbitrator.<sup>154</sup> Those seeking access can terminate arbitration before an award is made or choose to withdraw from an award.<sup>155</sup>

### Exclusions from coverage of the regime

There are services and infrastructure that are excluded from the access regime's scope, as outlined by Proclamation.<sup>156</sup> These include:

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<sup>146</sup> Section 86D of WI Act.

<sup>147</sup> Section 86ZR of WI Act.

<sup>148</sup> Section 86J of WI Act.

<sup>149</sup> Sections 86I and 86G of WI Act.

<sup>150</sup> For example, sections 86O, 86Q, 86W, 86X, 86Y and 86ZD of WI Act.

<sup>151</sup> Section 86ZM of WI Act.

<sup>152</sup> Section 86H of WI Act.

<sup>153</sup> Such reporting arrangements are included in the access regimes applying to rail and port industries in South Australia; for instance, see section 22 of the *Railway (Operations and Access) Act 1997*, section 46 of the AustralAsia Railway ('Third Party Access') Code, section 42 of the *Maritime Services (Access) Act 2001*.

<sup>154</sup> Section 86ZI of WI Act.

<sup>155</sup> Section 86ZF of WI Act.

<sup>156</sup> Government Gazette, p. 2109.



- ▶ infrastructure run by an irrigation infrastructure operator, if that water service infrastructure is operated for the purposes of delivering water for the primary purpose of being used for irrigation,<sup>157</sup> and
- ▶ infrastructure run by entities other than SA Water.

It is noted that SA Water offers wholesale water services to customers. This includes the transportation and purchase of water. An example of this could be the purchase of wholesale water arrangements for the purposes of use by a new residential development. For many access seekers obtaining water at the right price is the priority. However, the third party access regime covers access to infrastructure services *only*, not the sale of wholesale water services.

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<sup>157</sup> For example, irrigation trusts.



The Essential Services Commission  
Level 1, 151 Pirie Street Adelaide SA 5000  
GPO Box 2605 Adelaide SA 5001  
T 08 8463 4444

E [escosa@escosa.sa.gov.au](mailto:escosa@escosa.sa.gov.au) | W [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au)