

# Connection contributions frameworks in other regulatory regimes

15 August 2024



## Acknowledgement

We acknowledge the Traditional Owners of the lands and waterways on which we work and live.

We acknowledge all Aboriginal and Torres Strait Islander communities, and pay our respects to Elders past and present.

As the First Peoples of this land, belonging to the world's oldest living cultures, we recognise and value their knowledge, and ongoing role in shaping and enriching the story of Victoria.

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# Connection contributions frameworks in other regulatory regimes

This report summarises the regulatory arrangements that apply for other Australian utilities. It considers:

- various state and territory regimes for water businesses
- the national electricity regime for electricity distribution businesses
- the national gas regime for gas distribution businesses.

## Water – New South Wales

### A. Overview and key comparative insights

- In NSW, developer charges apply to new connections and augmentations.
- **The framework.** Water supply authorities develop Developer Servicing Plans (DSPs) for water and sewerage for their different areas. The DSPs contain the maximum developer charges that apply to the relevant DSP. The content of the DSP, the maximum developer charges and the consultation with connection applicants must be compliant with the requirements under the IPART's 2018 determination. The DSPs are reviewed and registered by IPART. The DSPs generally apply for five years.
- **The method.** IPART does not set the maximum developer charges, instead it determined the methodology, that is net incremental cost approach, for fixing maximum developer charges which is as shown in the formula below.

Developer charge = Net present value [capital costs + operating costs - revenue]  
Net present value [equivalent tenements]

- The NPV method applies to:
  - (a) connecting new services to a new development and
  - (b) to connecting new services to an existing property. For upgrading an existing service to an existing property (a new charge designed to address upgrades to water flow and pressure for firefighting), the developer charge only relates to the costs of the upgrade.<sup>1</sup>

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<sup>1</sup> IPART, *Maximum prices to connect, extend or upgrade a service for metropolitan water agencies: Sydney Water Corporation, Hunter Water Corporation, Central Coast Council – final determination*, October 2018, Schedule 3.

### A. Overview and key comparative insights (continued)

- Together with the IPART-determined methodology, there are procedural and consultation requirements determined by IPART which water supply authorities must follow. See details in the next table below. IPART sets out all these requirements in a price determination, the latest of which was made in 2018 for water, sewerage or drainage system. Sydney Water and Hunter Water also develop additional guidelines for connection applicants.
- **Allows negotiated developer charges.** NSW's framework allows water supply authorities and connection applicants to opt out of the determination and enter into bilateral unregulated negotiated agreements, subject to ring-fencing of unregulated costs.<sup>2</sup> The charges raised under these agreements would also be subject to ex-post review during periodic price reviews or at other times, as directed by IPART. To prevent anti-competitive levels of unregulated charges and any cross-subsidy, the water supply authorities are also required to ensure that the unregulated developer charges reflect the full efficient cost of providing the service, based on Modern Engineering Equivalent Replacement Asset (MEERA) valuations and an incremental (as opposed to marginal) cost approach.<sup>3</sup>
- **Allows instalment payment.** The 2018 determination also allows the payment of developer charges on instalment basis of up to 20 years for (a) connecting new services to an existing property and (b) upgrading an existing service to an existing property.<sup>4</sup>

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<sup>2</sup> IPART, Maximum prices to connect, extend or upgrade a service for metropolitan water agencies: Sydney Water Corporation, Hunter Water Corporation, Central Coast Council – Final report, October 2018, pp. 50-52.

<sup>3</sup> IPART, Maximum prices to connect, extend or upgrade a service for metropolitan water agencies: Sydney Water Corporation, Hunter Water Corporation, Central Coast Council – Final report, October 2018, pp. 51-52.

<sup>4</sup> IPART, Maximum prices for connecting, or upgrading a connection, to a water supply, sewerage, or drainage system: Sydney Water, Hunter Water and Central Coast Council – Final determination, October 2018, Schedule 2, section 2; Schedule 3, section 2.

## Water – New South Wales (continued)

### A. Overview and key comparative insights (continued)

- **Location based.** Developer charges are location-specific because water supply authorities set the maximum developer charges for each DSP area. Sydney Water has four drinking water DSPs and 14 wastewater DSPs while Hunter Water has nine water DSPs and 20 wastewater DSPs.
- **Pioneer development scheme and out-of-sequence issues.** The framework allows for funding of out-of-sequence development. A pioneer development scheme is also in place. See details in the next table below.
- **Reticulated assets** built by connection applicants have to be transferred to the water supply authorities. It does not look like gifted assets were taken into account in calculating the developer charges.
- **Sunk costs.** Under the NPV method, capital costs include past (assets commissioned after 1970), present and future assets to be commissioned.

### B. Regulatory requirements

Industry & services	Water, waste sewer and storm water
Regulated business(s)	Sydney Water, Hunter Water, Central Coast Council <sup>5</sup>
Regulatory instrument(s) governing contribution charging	Water Management Act 2000, Chapter 6, Division 5 <sup>6</sup> Hunter Water Act 1991, Division 7 <sup>7</sup> Sydney Water Act 1994, Division 9 <sup>8</sup> Independent Pricing and Regulatory Tribunal Act 1992, Part 3 <sup>9</sup>

<sup>5</sup> This research only covers Sydney Water and Hunter Water. Charges that apply to regional NSW are determined using a methodology set out by NSW Department of Primary Industries.

<sup>6</sup> [Water Management Act 2000 No.92](#), accessed 18 March 2024.

<sup>7</sup> [Hunter Water Act 1991 No. 53](#), accessed 18 March 2024.

<sup>8</sup> [Sydney Water Act 1994 No. 88](#), accessed 18 March 2024.

<sup>9</sup> [Independent Pricing and Regulatory Tribunal Act 1992 No 39](#), accessed 18 March 2024.

## Water – New South Wales (continued)

### B. Regulatory requirements (continued)

Summary of regulatory requirements

#### **Water Management Act 2000**

The Water Management Act enables connection applicants to apply to a water supply authority for certificate of compliance. The Act sets out the requirements a water supply authority may require before granting certificate of compliance. This includes requiring the applicant:

- to pay a specified amount of developer contributions towards the cost of water management works, being existing or projected works
- to construct water management works to serve the development.

#### **Sydney Water Act 1994 and Hunter Water Act 1991**

In granting an application for a certificate of compliance, the Sydney Water Act 1994 and Hunter Water Act 1991 allow water supply authorities to recover their investment of infrastructure needed to provide service to new properties.

The Sydney Water Act 1994 requires the developer:

- (a) to pay an amount to Sydney Water to cover the whole or an appropriate portion of relevant costs<sup>10</sup> and
- (b) to enter into one or more agreements providing the payment of such as an amount to Sydney Water, the construction or the manner of construction of the works specified and the transfer of any such works to Sydney Water.

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<sup>10</sup> Relevant costs include (a) the full cost of any or all of the following— works and systems already constructed or to be constructed by or on behalf of, or at the request of, or under an agreement with, the Corporation or its predecessor, that benefit or are available to the land concerned, based on net present value, historical cost or any other appropriate basis, and having regard (if the Corporation thinks it appropriate) to its expected operating costs and revenues; (b) the full cost of amplification of the Corporation's works and systems in consequence of the proposed development, and (c) the investment costs incurred by the Corporation or its predecessor and by connection applicants in relation to the existing and proposed works and systems referred to in paragraphs (a) and (b) and (d) costs of such kinds as are prescribed by the regulations as additional to or in substitution for any or all of the costs referred to in paragraphs (a) and (b).

### B. Regulatory requirements (continued)

Summary of regulatory requirements (continued)

#### **Sydney Water Act 1994 and Hunter Water Act 1991 (continued)**

The Sydney Water Act 1994 also requires a consent authority to notify the Corporation of development and building applications that would (a) increase the demand for water supplied by the Corporation, or (b) increase the amount of wastewater that is to be removed by the Corporation, or (c) damage or interfere with the Corporation's works, or (d) adversely affect the Corporation's operations.<sup>11</sup>

In general, the Hunter Water Act contains the above key provisions except that it does not provide details about relevant costs.

#### **Independent Pricing and Regulatory Tribunal Act 1992**

IPART regulates the pricing of declared government monopoly services.<sup>12</sup> IPART sets a methodology that must be used by the water supply authorities to determine the maximum price for a new development connecting to a water, wastewater or stormwater system.<sup>13</sup> IPART also prescribes procedural requirements that water supply authorities must follow. IPART's methodology and procedural requirements are set out in an IPART determination, the latest of which was made and published in 2018.<sup>14</sup>

The 2018 determination does not apply to services provided pursuant to a negotiated services agreement or in respect of connections to a recycled water system.<sup>15</sup>

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<sup>11</sup> Consent authority has the meaning given in the Environmental Planning and Assessment Act 1979, and includes a council to which an application for approval for the erection of a building under Part 1 of Chapter 7 of the Local Government Act 1993 may be made.

<sup>12</sup> IPART Act, clause 11(1) and Schedule 1.

<sup>13</sup> IPART, Maximum prices for connecting, or upgrading a connection, to a water supply, sewerage, or drainage system: Sydney Water, Hunter Water and Central Coast Council – Final determination, October 2018, clause 5.4 and Schedule 1.

<sup>14</sup> IPART, Maximum prices for connecting, or upgrading a connection, to a water supply, sewerage, or drainage system: Sydney Water, Hunter Water and Central Coast Council – Final determination, October 2018.

<sup>15</sup> IPART, Maximum prices for connecting, or upgrading a connection, to a water supply, sewerage, or drainage system: Sydney Water, Hunter Water and Central Coast Council – Final determination, October 2018, clause 1.4, p.1.

### B. Regulatory requirements (continued)

Summary of regulatory requirements (continued)

#### The NPV method – net incremental cost<sup>16</sup>

$$\text{Developer charge} = \frac{\text{Net present value [capital costs + operating costs – revenue]}}{\text{Net present value [equivalent tenements<sup>17</sup>]}}$$

The components are:

- Capital cost attributable to the Development Servicing Plan (DSP) area include past (assets commissioned after 1970), present and future (there is no limit to the period of inclusion of assets yet to be commissioned).
- Capital cost includes headworks assets regardless of their ownership and or funding arrangements.
- MEERA approach is used to value existing assets and estimated efficient costs basis for assets yet to be commissioned.
- Shared assets are apportioned between DSP areas using expected utilisation based on equivalent tenements.
- Revenue to be received from new customers in the relevant DSP area and the water supply authority's operating, maintenance and administrations costs of serving new customers in the DSP area are to be based on a 30-year projection.
- Discount rate prescribed by IPART during periodic price determination. Discount rate does not change in between reviews.
- A lower discount rate applies to assets constructed prior to 1996 (pre-tax rate of 3% for SW and HW and 0% for CCC) given different operating conditions for water utilities prior to 1996.
- Charging is per equivalent tenement.
- If prices are negative, they will be set to zero.

IPART sets out the detailed requirements regarding the NPV method in Schedule 5: Parameters and calculations of its 2018 determination.

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<sup>16</sup> The NPV method applies to (a) connecting new services to a new development and (b) to connecting new services to an existing property. For upgrading an existing service to an existing property (a new charge designed to address upgrades to water flow and pressure for firefighting), the developer charge only relates to the costs of the upgrade.

<sup>17</sup> Connecting customers based on equivalent tenement. Equivalent tenement is the measure of demand a new development will place on the water and wastewater infrastructure compared to a single average residential dwelling. (p.15)



### B. Regulatory requirements (continued)

Summary of regulatory requirements (continued)

#### **The procedural and consultation requirements**

- A water supply authority must have in place a sufficient number of development servicing plans that cover a sufficient aggregate area, to meet present demand and expected medium-term growth in demand for Determination Services.
- IPART sets out the requirements for DSPs in Schedule 4 of its 2018 determination.
- IPART prescribes the content of each DSP, which includes:
  - summary of the contents of the DSP
  - information identifying the water or wastewater system(s) it relates to
  - a description of size and boundaries of the DSP area
  - information on current and projected population and Equivalent Tenements (ETs)
  - completed and future capital works
  - service standards for that DSP area
  - the calculated maximum price in accordance with IPART's methodology
  - detailed information on pre-1996 and post-1996 assets and the number of ETs served by the DSPs.
- IPART also prescribes the consultation requirements as follows:
  - publish, advertise and consult on the draft DSPs (including all of the critical data behind the draft DSPs) 30 days before the adoption of those DSPs
  - advise industry bodies and known affected connection applicants 10 days prior to the start of the exhibition period
  - Ten days prior to publication, a water authority is also required to consider all submission in finalising its DSPs and inform IPART of the water supply authority's response.

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### B. Regulatory requirements (continued)

Summary of regulatory requirements (continued)	<p><b>The procedural and consultation requirements (continued)</b></p> <ul style="list-style-type: none"><li>• Once the DSP has been finalised and adopted, the water supply authority must submit the DSPs to IPART for registration.</li><li>• IPART reviews the DSPs. IPART’s analysis was limited to assessing whether the DSPs proposed by water supply authorities met the requirements of its 2018 Determination.<sup>18</sup></li><li>• A DSP comes into effect upon registration by IPART.</li><li>• DSPs are to be reviewed every five years, but IPART or a water supply authority may initiate a review within the 5-year period.</li></ul>
Contribution pricing principles	<p>IPART provided some capital charge principles for water supply authorities in calculating the capital charge for pre-1996 assets, for post-1996 assets commissioned on or after 1 January 1996 and capital charge for post-1996 assets yet to be commissioned.</p> <p>IPART sets out the details in Schedule 5, section 2.4: capital charge principles of its 2018 determination. Some of these principles include:</p> <ul style="list-style-type: none"><li>• All assets must be included for the purposes of calculation.</li><li>• When estimating the efficient costs of assets yet to be commissioned, a water supply authority must examine all available options and choose the option that is the most efficient.</li></ul>
Cost allocation requirements	<p>IPART’s 2018 determination provides some guidance on costs allocation and assets valuation such as:</p> <ul style="list-style-type: none"><li>• Modern Engineering Equivalent Replacement Asset (MEERA) approach is used to value existing assets and estimated efficient costs basis for assets yet to be commissioned.</li><li>• Shared assets are apportioned between DSP areas using expected utilisation based on equivalent tenements.</li></ul> <p>IPART sets out the details in Schedule 5, section 2: recovery of capital expenditure of its 2018 determination.</p>

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<sup>18</sup> IPART, Registration of Development Service Plans for Hunter Water: Final report, December 2023, p.2.

## Water – New South Wales (continued)

### B. Regulatory requirements (continued)

Revenue attribution requirements	<p>IPART provided some principles for water supply authorities in estimating future period revenues such as:</p> <ul style="list-style-type: none"><li>• Revenue to be based on a 30-year projection.</li><li>• Revenue to be based on the efficient operation of the relevant assets used to provide the service in the DSP area and must be formulated to best meet the needs of its users.</li><li>• Revenue to be based on charges under the prevailing determination applied to the consumption of an average customer in the relevant customer class.</li></ul> <p>IPART sets out the details in Schedule 5, section 4: operating revenues of its 2018 determination.</p>
Operating costs requirements	<p>IPART provided some principles for water supply authorities in estimating operating, maintenance and administration costs such as:</p> <ul style="list-style-type: none"><li>• Costs should be based on the most efficient and lowest cost means of providing the service, assume the continuation of the service standards set out in the DSP and reflect costs associated with the service provided.</li><li>• A water supply authority should use system-wide averages for operating, maintenance and administration costs only where it is infeasible or inappropriate to apply the first principle above.</li><li>• Operating, maintenance and administration costs must be projected over a 30-year period.</li></ul> <p>IPART sets out the details in Schedule 5, section 5: operating costs of its 2018 determination.</p>
Other regulatory requirements	<p>IPART also provided guidance under Schedules 5 and 6 of its 2018 determination on the following:</p> <ul style="list-style-type: none"><li>• demand assumptions</li><li>• inflation, rounding and zero prices (that is there is no negative prices)</li><li>• discount rates.</li></ul>

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## Water – New South Wales (continued)

### B. Regulatory requirements (continued)

Other regulatory requirements (continued)

The 2018 determination also allows the payment of developer charges on instalment basis of up to 20 years for (a) connecting new services to an existing property and (b) upgrading an existing service to an existing property.<sup>19</sup>

The Water Management Act 2000 requires a water supply authority to grant a certificate of compliance for development with 60 days after an application is made. If it fails to do so, the applicant may appeal to the Land and Environment Court, within 12 months after the expiration of that period, against the failure or refusal.<sup>20</sup>

Is there a pioneer development scheme

For development that occurs earlier than the Sydney Water's Growth Servicing Plan, a commercial agreement may be required where the developer forward funds, builds infrastructure, and transfers it to Sydney Water. Reimbursements may apply.<sup>21</sup>

For accelerated greenfield development or other land release that is to be at 'no cost' to the Government, developer funds, builds infrastructure then transfers it to Sydney Water. Reimbursements apply. If development is not on Government program, developer funds, builds the infrastructure, and transfers it to Sydney Water but it is likely there will be no repayment from Sydney Water.<sup>22</sup>

Sydney Water's [funding infrastructure to service growth](#) provide further details about funding arrangements.

Hunter Water requires connection applicants to fund assets for developments outside its 10-year Growth Plan unless the upsized assets can be used by future or adjoining developments. In these circumstances, Hunter Water will pay the marginal costs for upsizing the connection assets.<sup>23</sup> Hunter Water adopts the same rule for reticulation assets.

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<sup>19</sup> Schedule 2, section 2; Schedule 3, section 2.

<sup>20</sup> Water Management Act 2000 No.92, clause 307.

<sup>21</sup> Sydney Water, Growth Servicing Plan, 2024-2029, p.10.

<sup>22</sup> Sydney Water, Growth Servicing Plan, 2024-2029, p.10.

<sup>23</sup> Hunter Water, Funding and delivery of growth infrastructure guidelines for funding and procuring assets, 2019, p.4.

### A. Overview and key comparative insights

- The standard charges apply to expected developments that are included in growth and capacity plans (GCPs) for each new equivalent tenement (ET). The GCPs detail the long-term infrastructure needs for each of TasWater’s water and sewerage systems and is being used as the basis for determining whether capacity is available for development.
- The Tasmanian Economic Regulator (OTTER) regulates the standard charge. It also approves the GCPs.<sup>24</sup>
- A bulk charge applies to any development that requires an unexpected network capacity augmentation (it does not apply to system extensions). This will include bringing forward the timing of a network capacity augmentation that has been planned for and building a network capacity augmentation that has not been planned for. The bulk charge is a negotiated amount.
- Connection applicants will pay for the cost of extension regardless of whether the water and sewerage systems have sufficient or insufficient capacity. Extension means the lengthening of water infrastructure and/or sewerage infrastructure to enable connection of a property to an existing water system and/or sewerage system.<sup>25</sup>
- **Method.** The standard charge aims to cover the incremental costs associated with expected capacity upgrades driven by new customers, with remaining costs to be recovered through water and sewerage charges.<sup>26</sup>
- TasWater calculates the standard charge based on the net incremental cost method: NPV incremental capex driven by new customers + NPV of forecast opex driven by new customers less NPV of forecast revenue from new customers.<sup>27</sup>
- Existing assets/sunk costs and gifted assets are not included in the NPV method.
- For water only or sewerage only customer connections, 50 per cent of the standard and sewerage charge will apply.<sup>28</sup>
- TasWater calculates the bulk charge based on the same method but specific to the costs and revenue related to the network capacity upgrade.<sup>29</sup>

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<sup>24</sup> Tasmanian Economic Regulator, *2022 Water and Sewerage Price Investigation – Draft Report*, Tasmanian Economic Regulator, 2022, accessed 27 March 2024.

<sup>25</sup> TasWater, *Land Development Policies*, July 2022, pp. 109, 112.

<sup>26</sup> TasWater, *Land Development Policies – 1 July 2022*, accessed March 27 2024.

<sup>27</sup> TasWater, *Land Development Policies – 1 July 2022*, accessed March 27 2024.

<sup>28</sup> TasWater, [Developer Charges](#), TasWater, 2023, accessed March 27 2024.

<sup>29</sup> TasWater, *Land Development Policies – 1 July 2022*, accessed March 27 2024.

## Water – Tasmania (continued)

### A. Overview and key comparative insights (continued)

- **Location based and postage stamp.** The standard charge is a postage stamp charge. The bulk charge is negotiated hence locational.
- **Pioneer development issues.** TasWater does not appear to include a pioneer development scheme. TasWater instead includes a ‘first mover’ scheme where infrastructure costs are evenly divided among connection applicants in new greenfield developments (see WSIR 2021, Part 3 – Pricing Principles). The standard charge will apply where the development requires expected network capacity augmentation. In the case of a system extension, connection applicants must pay the cost of connecting to existing infrastructure in addition to the standard charge, and the bulk charge where applicable. A key issue identified is that fewer first movers must bear high infrastructure costs.<sup>30</sup> Subsequent connection applicants in a new area benefit from effectively being subsidised by the first mover.

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<sup>30</sup> TasWater, [Developer Charges](#), TasWater, 2023, accessed March 27 2024.

## Water – Tasmania (continued)

### B. Regulatory requirements

**Summary of regulatory requirements** Tasmania’s water and sewerage services are broadly regulated under the Water and Sewerage Industry Act 2008 and Water and Sewerage Industry (Pricing and Related Matters) Regulations 2021.

The Water and Sewerage Industry Act 2008 sets out (1) the matters OTTER must consider in making a price determination including for water, sewer and developer charges, (2) some high level pricing principles<sup>31</sup>, (3) that the regulations may prescribe additional pricing principles in relation to the provision of a regulated service<sup>32</sup>, and (4) the price and service plan submitted by TasWater must set out the circumstances in which a developer is permitted to apply for a connection, relocation, or adjustment to the water and/or sewerage infrastructure.<sup>33</sup>

The Water and Sewerage Industry Regulations (WSIR) 2021 provides the pricing principles that apply to developer charges. They are discussed below.

**Contribution pricing principles** **WSIR 2021, Part 2 – Matters in Respect of Price Determinations, r.7. Developer charges policy**

This clause requires the service provider to specify the method by which the amount of a developer charge will be calculated, provide sufficient information regarding the details of each proposed new development to enable a price to be estimated, and provide sufficient access to the policy for the general public.<sup>34</sup>

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<sup>31</sup> Water and Sewerage Industry Act 2008, section 68.

<sup>32</sup> Water and Sewerage Industry Act 2008, section 68(2).

<sup>33</sup> Water and Sewerage Industry Act 2008, section 56U.

<sup>34</sup> Water and Sewerage Industry (Pricing and Related Matters) Regulations 2021, r. 7.

## Water – Tasmania (continued)

### B. Regulatory requirements (continued)

Contribution pricing principles (continued)	<p><b>WSIR 2021, Part 3 – Pricing Principles, r.18. Developer charges</b></p> <p>This clause states that TasWater is permitted to charge connection applicants for the installation, alteration or utilisation of assets to provide the appropriate water and/or sewerage services.<sup>35</sup></p> <p><b>WSIR 2021, Part 3 – Pricing Principles, r.19. Amount of developer charges</b></p> <p>This clause states that the amount charged to connection applicants must be proportionate, in that the charges are reasonable and sufficient to recoup the costs incurred in the provision of services/in respect to the new development. Reasonable costs refer to those directly attributable to installing, altering, or utilising assets to provide the appropriate water and/or sewerage services, with consideration to factors such as location.<sup>36</sup></p>
Cost allocation requirements	<p>In addition to the definition of the reasonable costs discussed above, WSIR 2021 also sets out that reasonable costs (a) may reflect variations in the costs of servicing different location or regions, (b) may include excess capacity cost and (c) are not to include an amount attributable to increased external demand by existing customers.<sup>37</sup></p> <p>It seems that sunk costs may be included in the developer charges as per the definition of excess capacity cost under the WSIR 2021.<sup>38</sup></p>
Revenue attribution requirements	<p>Revenue from developer charges is taken into account in the NPV method of calculating developer charges.</p>
Other regulatory requirements	<p>Tasmania’s Price and Service Plan 4 (PSP4) sets out the prices, policies, services, projects and outcomes that TasWater will deliver over the period 1 July 2022 to 30 June 2026. It covers a period of four years and is subject to review by Tasmania’s economic regulator (OTTER) at the end of this period.<sup>39</sup></p>

<sup>35</sup> Water and Sewerage Industry (Pricing and Related Matters) Regulations 2021, r. 18.

<sup>36</sup> Water and Sewerage Industry (Pricing and Related Matters) Regulations 2021, r. 19.

<sup>37</sup> Water and Sewerage Industry (Pricing and Related Matters) Regulations 2021, r. 19(2)(b)-(d).

<sup>38</sup> Water and Sewerage Industry (Pricing and Related Matters) Regulations 2021, r. 19(3)(a).

<sup>39</sup> TasWater, [Price and Service Plan](#), TasWater, accessed 28 March 2024.



### A. Overview and key comparative insights

- **Framework.** The Essential Services Commission of South Australia (ESCOSA) takes a principles-based approach to regulating developer contributions/charges.
- ESCOSA's current approach of regulating developer contributions/charges involves setting pricing principles (based on National Water Initiative Pricing Principles and additional ESCOSA Pricing Principles) that must be applied when determining prices. These prices are subject to compliance monitoring and reporting by the Commission. This approach imposes limited administrative and compliance costs on regulated entities.
- ESCOSA has applied a principles-based approach of regulation to SA Water<sup>40</sup> as well as small-scale water networks.<sup>41</sup> Some of the key pricing principles in respect of developer contributions/charges include no cross-subsidy from existing customers, charging efficient costs, prices charged should reflect the incremental cost of supply of that service to customers and reflect a reasonable allocation of fixed costs, and that regulated entities' must be able to provide transparent information to customers on how the costs for these services have been calculated, or are to be applied.
- SA Water and small-scale water networks must publish pricing policy statements and a schedule of prices. The pricing policy statement should demonstrate how pricing principles have been applied. The pricing policy statement and schedule of prices should be available to customers via entities' websites and provided to customers (free of charge) on request.
- In general, developer contributions or developer charges in South Australia apply to:
  - extensions, both lengthening or altering existing mains to supply existing or new properties
  - augmentations of water/sewerage networks where multiple developers will benefit, or a number of properties will benefit. Augmentation occurs when mains are upgraded to service whole areas of land development (not a single development).<sup>42</sup>

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<sup>40</sup> SA Water's water and sewerage retail services: 1 July 2020 – 30 June 2024 Price Determination, 4.2 Pricing justification for excluded retail services, p. 21-22, [Microsoft Word - 20200526-water-SAW RD20 Final Price Determination \(post Commission\) \(A1439230\) \(escosa.sa.gov.au\)](https://www.escosa.sa.gov.au/ArticleDocuments/414/20200526-water-SAW_RD20_Final_Price_Determination_(post_Commission)_A1439230_(escosa.sa.gov.au)), accessed 26 March 2024.

<sup>41</sup> The Commission has made a Price Determination requiring small-scale water networks with 50,000 or fewer connections (minor and intermediate water retailers) to apply certain pricing principles when setting their water and sewerage (including Community Wastewater Management Systems) prices including excluded retail services (which include developer/augmentation services). 2013-2017 Price Determination for Minor and Intermediate Retailers (1 July 2013 as varied on 23 July 2015), 2.1 Pricing Principles, pp. 5-6, <https://www.escosa.sa.gov.au/ArticleDocuments/414/20150723-Water-VariationTo2013-2017PriceDeterminina.pdf.aspx?Embed=Y>, accessed 30 May 2024.

<sup>42</sup> SA Water, [Augmentation](#), SA Water website, accessed 30 May 2024.

## Water – South Australia (continued)

### A. Overview and key comparative insights (continued)

- In terms of SA Water, its pricing policy statement on developer contributions is as follows:
  - Developer charges are calculated on a case-by-case basis, reflecting efficient costs and benefits to customers. For extensions, SA Water contributes 50 per cent of material costs if the extension benefits regulated customers. Otherwise, the developer fully funds the extension. If SA Water requires pipework to be upsized to support future growth, it will pay the full materials cost of the difference between developer’s minimum needs and the extra work SA Water requires.<sup>43</sup>
  - Augmentations have locational pricing with SA Water recovering revenue from all beneficiaries (including other developers) over time. SA Water has a schedule of augmentation developer charges for different types of customers and different locations.<sup>44</sup>
- Developer charges for extensions and augmentations are both locational.
- Reticulated assets are fully gifted to SA Water by the developers.<sup>45</sup>
- Developer charges reflect investment in new and existing assets, hence inclusive of sunk costs.
- SA Water may consider contributing to costs for out-of-sequence upsizing of infrastructure where:
  - There are broader benefits for SA Water’s regulated customers.
  - The existing infrastructure is approaching the end of its useful life.
- A land development agreement is negotiated between SA Water and developer. Land Development Agreements are sent to State Commission Assessment Panel.

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<sup>43</sup> SA Water, [Extensions and connections](#), SA Water website, accessed 30 May 2024.

<sup>44</sup> SA Water, 2023-2024 Augmentation charges, [2023-24 Augmentation Fees \(sawater.com.au\)](#), accessed 3 April 2024.

<sup>45</sup> SA Water, 2022-23 Annual report, Note 4(ii) on page 74.

## Water – South Australia (continued)

B. Regulatory requirements	
Industry & services	Water and sewer
Regulated business(s)	SA Water
Regulatory instrument(s) governing contribution charging	Water Industry Act 2012 <sup>46</sup> National Water Initiative Pricing Principles <sup>47</sup> SA Water's water and sewerage retail services: 1 July 2020 – 30 June 2024 Price Determination <sup>48</sup> 2013-2017 Price Determination for Minor and Intermediate Retailers (1 July 2013 as varied on 23 July 2015 and as varied on 1 July 2018) <sup>49</sup>
Summary of regulatory requirements	<b>Water Industry Act 2012</b> Under the Water Industry Act developer contributions/charges are considered excluded retail services. <sup>50</sup> The Act also states that for any capital contributions where the capacity of waterworks or undertaking is increased, SA Water may be liable to make a contribution. <sup>51</sup>

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<sup>46</sup> [Water Industry Act 2012 \(legislation.sa.gov.au\)](https://legislation.sa.gov.au), accessed 26 March 2024.

<sup>47</sup> [National Water Initiative Pricing Principles \(dceew.gov.au\)](https://dceew.gov.au), accessed 26 March 2024.

<sup>48</sup> [Microsoft Word - 20200526-water-SAW RD20 Final Price Determination \(post Commission\) \(A1439230\) \(escosa.sa.gov.au\)](https://escosa.sa.gov.au), accessed 26 March 2024.

<sup>49</sup> 2013-2017 Price Determination for Minor and Intermediate Retailers (1 July 2013 as varied on 23 July 2015), [20150723-Water-VariationTo2013-2017PriceDetermina.pdf.aspx \(escosa.sa.gov.au\)](https://www.escosa.sa.gov.au/projects-and-publications/projects/water/variation-to-2013-2017-price-determination-for-mir-to-extend-its-operation/variation-2013-17-price-determination-for-mir-to-extend-its-operation), and <https://www.escosa.sa.gov.au/projects-and-publications/projects/water/variation-to-2013-2017-price-determination-for-mir-to-extend-its-operation/variation-2013-17-price-determination-for-mir-to-extend-its-operation>, accessed 30 May 2024.

<sup>50</sup> [Water Industry Act 2012 \(legislation.sa.gov.au\)](https://legislation.sa.gov.au), Part 1, 4-Interpretation, p.9, accessed on 26 March 2024. ESCOSA's price determination also defines developer contributions/charges as excluded retail services in SA Water's water and sewerage retail services: 1 July 2020 – 30 June 2024 Price Determination, 1.5 Definitions and interpretation, p.2, [Microsoft Word - 20200526-water-SAW RD20 Final Price Determination \(post Commission\) \(A1439230\) \(escosa.sa.gov.au\)](https://escosa.sa.gov.au), accessed 26 March 2024.

<sup>51</sup> [Water Industry Act 2012 \(legislation.sa.gov.au\)](https://legislation.sa.gov.au), Schedule 2, Part 10, Division 2, 26-Capital contribution where capacity of undertaking is increased, p.96; Schedule 2, Part 10, Division 4, 45-Capital contribution where capacity of waterworks is increased, p.102, accessed 26 March 2024.

## Water – South Australia (continued)

### B. Regulatory requirements (continued)

Summary of regulatory requirements (continued)

SA Water's price determination  
SA Water's water and sewerage retail services price determination contains a section on price regulation of excluded retail services including developer charges. The price determination sets out the pricing principles from the National Water Initiative Pricing Principles and ESCOSA's own pricing principles (see below).

#### **Water Industry Act 2012 (continued)**

SA Water's price determination also sets out the requirements for SA Water to prepare a pricing statement in respect of each regulatory year, containing its pricing policy statement which demonstrates the manner in which the prices that SA Water will charge customers for the sale and supply of excluded retail services for that regulatory year meet the pricing principles, and a pricing schedule, setting out the prices which SA Water will charge customers for sale and supply of excluded retail services.

#### **SA Water's pricing policy statement**

The latest pricing policy statement is for 2023-24-Developer-Charges-Pricing-Policy-Statement.pdf (sawater.com.au). The latest Pricing schedule specific to Augmentation charge is for 2023-2024 Augmentation charges.<sup>52</sup>

#### **Minor and Intermediate Water and Sewer Retailers**

The same pricing principles for the provision of developer/augmentation services apply to minor and intermediate retailers.<sup>53</sup>

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<sup>52</sup> [https://www.sawater.com.au/\\_data/assets/pdf\\_file/0005/496049/2023-24-Augmentation-fees.pdf](https://www.sawater.com.au/_data/assets/pdf_file/0005/496049/2023-24-Augmentation-fees.pdf), accessed 30 May 2024.

<sup>53</sup> See 2.1.1(d) on page 5 in the Water Variation Price Determination available from [20150723-Water-VariationTo2013-2017PriceDetermina.pdf.aspx \(escosa.sa.gov.au\)](https://www.escosa.sa.gov.au/20150723-Water-VariationTo2013-2017PriceDetermina.pdf.aspx), accessed 30 May 2024.

B. Regulatory requirements (continued)	
Contribution pricing principles	<p>Here are the principles that apply to excluded retail services such as developer charges:</p> <ul style="list-style-type: none"><li>• ESCOSA’s pricing principles:<ul style="list-style-type: none"><li>– If a service benefits only one customer, that customer should pay the full efficient cost of the service and other customers should not cross-subsidize them.</li><li>– If a service benefits a distinct group of customers, prices charged to customers should reflect the incremental cost of supplying that excluded service to them and reflect a reasonable allocation of the fixed costs of providing that service.</li><li>– If the costs of implementing differentiated prices outweigh the benefits then undifferentiated prices can be used.</li></ul></li><li>• SA Water must be able to show customers how the costs of excluded services have been calculated and be able to support its position in the event of a dispute.</li><li>• SA Water must comply with any principles, matters specified by ESCOSA in industry codes, rules, guidelines applicable to excluded retail services.<sup>54</sup></li></ul> <p>The ESCOSA principles (above) apply to SA Water and small-scale water networks alongside the National Water Initiative Pricing Principles outlined below.</p>
Contribution pricing principles (continued)	<p><b>National Water Initiative Pricing Principles 2010 applicable to excluded services such as developer charges:</b></p> <p><b>Cost Recovery (Principle 1):</b> Water businesses should be moving to recover efficient costs consistent with the National Water Initiative (NWI) definition of the upper revenue bound: ‘to avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or tax equivalent regimes, provision for the cost of asset consumption and cost of capital, the latter being calculated using a Weighted Average Cost of Capital (WACC)’. Application of this</p>

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<sup>54</sup> Essential Services Commission of South Australia (ESCOSA), *SA Water’s water and sewerage retail services: 1 July 2020 – 30 June 2024 Price Determination*, 4.1.3 Price control for excluded retail services, p. 21, [Microsoft Word - 20200526-water-SAW RD20 Final Price Determination \(post Commission\) \(A1439230\) \(escosa.sa.gov.au\)](https://www.escosa.sa.gov.au/20200526-water-SAW_RD20_Final_Price_Determination_(post_Commission)_A1439230), accessed 26 March 2024.

## B. Regulatory requirements (continued)

	principle relates to commitments for full cost recovery as outlined in paragraph 66 of the NWI.
Contribution pricing principles (continued)	<p>National Water Initiative Pricing Principles 2010 applicable to excluded services such as developer charges (continued):</p> <ul style="list-style-type: none"><li>• Differential Water Charges (Principle 7): Water charges should be differentiated by the cost of servicing different customers (for example, on the basis of location and service standards) where there are benefits in doing so and where it can be shown that these benefits outweigh the costs of identifying differences and the equity advantages of alternatives.</li><li>• Setting Developer Charges (Principle 8): Developer charges should reflect the investment in both new and existing assets required to serve a new development and have regard to the manner in which ongoing water usage and service availability charges are set.</li><li>• Notes: i. Where there are benefits beyond the boundary of the development, the developer charge should have regard to the share of capacity required to serve the development.</li><li>• Capping Developer Charges (Principle 9): Developer charges should not exceed the costs of serving new developments which includes investment in both new and existing assets required to serve a new development.</li><li>• Revenue Offset from Developer Charges (Principle 10): to avoid over-recovery, revenue from developer charges should be offset against the total revenue requirement either by excluding or deducting the contributed assets from the RAB or by offsetting the revenue recovered using other mechanisms.</li></ul>
Cost allocation requirements	No prescribed costs allocation requirements but needs to be guided by the above pricing principles.
Revenue attribution requirements	See Principle 10 above.
Operating costs requirements	See Principle 1 above.

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## Water – South Australia (continued)

### B. Regulatory requirements (continued)

Is there a pioneer development scheme

The development will receive 50% of the cost of materials (i.e. pipe and fittings) from SA Water in cases where an extension is determined to benefit other customers. Augmentation charges will consider the number of future customers expected to benefit from the development. This supports the costs of augmenting the system are distributed fairly across all customers who will benefit from the augmentations. Future customers will receive an explanation of the proportion of the charge they will pay based on the size of their property and the size of their connection.<sup>55</sup> SA Water has a development contribution arrangement that allows for cost sharing to address potential disadvantages to “first mover” developers, with a period of seven years for the recoupment of contributions for the developer (reportedly, that position was informed by the pioneer scheme that SA Power Networks has in place, which also refers to a seven year period).<sup>56</sup>

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<sup>55</sup> SA Water, [Connections Policy](#), accessed 14 May 2024.

<sup>56</sup> For example, see Freedom of Information request April 2020 ([https://www.treasury.sa.gov.au/data/assets/pdf\\_file/0008/518714/TRS20D1812.pdf](https://www.treasury.sa.gov.au/data/assets/pdf_file/0008/518714/TRS20D1812.pdf)) and SA Power Networks Connection Policy 2020-2025, pp. 22-23, <https://www.sapowernetworks.com.au/public/download.jsp?id=9804>, accessed 2 June 2024.

### A. Overview and key comparative insights

- Local government and water distributor-retailers are responsible for setting infrastructure charges in Southeast Queensland.<sup>57</sup> However, their combined infrastructure charges should not exceed the maximum amount that can be levied as set by the Government.
- Local government sets the infrastructure charges for transport, stormwater, and parks and land for community facilities while water distributor-retailers set the water and wastewater infrastructure charges. This research's main focus will be the infrastructure charges set by water distributor-retailers.<sup>58</sup>
- Water and sewerage services in Southeast Queensland are provided by water distributor-retailers such as Queensland Urban Utilities (QUU) and Unitywater, which service eight of Southern Queensland's 11 councils.<sup>59</sup>
- Water distributor-retailers' infrastructure charges can only be used to fund (or to upgrade) trunk infrastructure for new development such as large water mains, treatment plant upgrades and pumping stations and to reimburse (offset) trunk infrastructure delivered by connection applicants.
- Infrastructure charges are calculated by reducing the assessed additional demand generated by the new development by the demand credit.<sup>60</sup> A demand credit is existing demand on the site – e.g. the demand created by an existing dwelling that is connected.
- Infrastructure charges are capped under the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, so they do not reflect the true cost of infrastructure delivery.
- Infrastructure charges are established through a board decision and are outlined in each water distributor-retailer's Water Netserv Plan, a requirement under the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009. The Act prescribes the purpose, form and content of the Netserv Plan including the requirements for connecting new customers (connections policy).
- South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 sets out the pricing principles which reflect how applicable fees and charges are determined.

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<sup>57</sup> Department of Housing, Local Government, Planning and Public Works, [Infrastructure charges](#), 7 June 2024, Queensland Government, accessed 21 March 2024.

<sup>58</sup> Department of Housing, Local Government, Planning and Public Works, [Infrastructure charges](#), 7 June 2024, Queensland Government, accessed 21 March 2024.

<sup>59</sup> Department of Housing, Local Government, Planning and Public Works, [Infrastructure charges](#), 7 June 2024, Queensland Government, accessed 21 March 2024.

<sup>60</sup> UrbanUtilities, Infrastructure Charges and Agreements, accessed 28 March 2024, <https://www.urbanutilities.com.au/development/help-and-advice/fees-and-services/infrastructure-charges-and-agreements>.



## Water – South Queensland (continued)

### A. Overview and key comparative insights (continued)

- The (Total) adopted charges for both local government and distributor-retailer's trunk infrastructure are determined by the maximum adopted charge (MAC) method. (For an example, see below for QUU's total adopted charge formula for Ipswich City Council).<sup>61</sup>

$$\left( \frac{\text{UUNC}}{\text{Total NC}} \right) \times \text{MAC}$$

- 'UUNC' refers to QUU's trunk infrastructure network charge and 'Total NC' refers to QUU's trunk infrastructure network charge plus Ipswich City Council's trunk infrastructure network charge. This is multiplied by the MAC to calculate the total adopted infrastructure charges permitted.
- Regarding the determination of infrastructure charges between local governments and water distributor-retailers, these are prescribed under legislation: Schedule 16 of the Planning Regulation 2017. Therefore, adopted infrastructure charges levied by local governments cannot not exceed the MAC outlined in Schedule 16.<sup>62</sup>
- South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 states that distributor-retailers and other entities (local governments) must act in good faith when entering into a water infrastructure agreement. This legislation does not directly specify if it has regard to how local government and water distributor-retailers negotiate their share of the maximum infrastructure charge set by the state government.
- Infrastructure charges appear to be locational, where charges are broadly underpinned by legislation but are calculated differently depending on the council region.
- Unitywater specifies an average cost approach to determine standard connection costs, outlined in South-East Queensland Water (Distribution and Retail Restructuring) Act 2009.

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<sup>61</sup> UrbanUtilities, [Water Netserv Plan \(Part A\)](#), 26 July 2023, accessed 2 April 2024.

<sup>62</sup> Queensland Legislation, [Planning Regulation 2017](#), Queensland Government; The MAC is also determined by the government under the Planning Regulation 2017.

## Water – South Queensland (continued)

### A. Overview and key comparative insights (continued)

- Other or non-standard connections are determined by a price on application (PoA) basis which reflect charges that are quoted by the water company. It is not specified whether these charges are able to be negotiated by connection applicants, however they are prescribed once a quote is determined. There is also a clear threshold regarding the circumstances when these charges apply. Therefore, Queensland’s developer costs are prescribed and set out in both a standard and per agreement or negotiated framework, and that it is at the discretion of the water business to apply pricing principles in most cases. There is no information regarding the cost approach for other connections and if contributions apply to augmentations.<sup>63</sup> Other than standard charges which are overseen by QCA, it is unclear whether other or non-standard charges are also scrutinised as they are quoted on a PoA basis. There also does not appear to be any guidance from QCA regarding the determination of specific charges, beyond a pricing principles framework which seeks to uphold an appropriate sharing of risk, effective price signals, and recovering efficient costs, among others.<sup>64</sup>
- QCA previously carried out regulatory duties without referral from the state government. The state government currently refers activities to QCA for investigation, where it acts as a consultant on regulatory matters such as determining prudent and efficient costs. QCA’s advice to government on regulatory matters is not binding.<sup>65</sup>

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<sup>63</sup> It is worth noting that connection applicants must also pay a standard connection request fee at the time of lodgement of a standard connection request. This fee is fixed and is not subject to negotiation. These fees are classified as a component of NCC revenue.

<sup>64</sup> Queensland Competition Authority, Final Statement: Statement of regulatory pricing principles for the water sector, April 2021. [Statement of regulatory pricing principles for the water sector \(qca.org.au\)](https://www.qca.org.au).

<sup>65</sup> Queensland Competition Authority Regulation 2018, accessed 28 March 2024.

## Water – South Queensland (continued)

B. Regulatory requirements	
Industry & services	Water industry – Developer charges
Regulated business(s)	Queensland Urban Utilities, Unitywater
Regulatory instrument(s) governing contribution charging	South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 <sup>66</sup> Queensland Competition Authority (QCA) Planning Act 2016 <sup>67</sup> and related Planning Regulation 2017 <sup>68</sup> Queensland Competition Authority Act 1997 <sup>69</sup>
Summary of regulatory requirements	<p>Queensland’s water and sewerage services are broadly regulated under the state’s Queensland Competition Authority Act 1997, South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, Planning Act 2016 and related Planning Regulation 2017, and Queensland Competition Authority Act 1997.</p> <p>The state’s economic regulator, QCA, has been responsible for regulating water businesses the same way the ESC regulates Victorian water businesses, through mechanisms such as price monitoring and establishing incentives to reduce costs. South-East Queensland Water (Distribution and Retail Restructuring) Act 2009 (Chapter 4C Water approvals and infrastructure, s 99BRAC). This legislation states the connections policy for customers, the requirements for obtaining a water approval (for a connection), and the decision process for standard connections.<sup>70</sup></p>

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<sup>66</sup> South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, accessed 28 March 2024.

<sup>67</sup> Planning Act 2016, accessed 28 March 2024.

<sup>68</sup> Planning Act 2017, accessed 28 March 2024.

<sup>69</sup> Queensland Competition Authority Act 1997, accessed 28 March 2024.

<sup>70</sup> South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, accessed 28 March 2024.

## B. Regulatory requirements (continued)

Contribution pricing principles

**Queensland Competition Authority Act 1997 (Division 11, s 168A, Pricing Principles)**

This clause states all distributor-retailers and local governments must consider the efficient costs of providing water and sewerage services with respect to incentives which aim to increase productivity and reduce costs.<sup>71</sup>

**South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, (s 99BRAN)**

This clause states that connection charges for water and sewerage networks must be determined by preparing a quotation for each individual network connection. It also makes consideration towards the property service infrastructure (equipment, materials) required, and how these costs are reflected in calculation of the quotation.<sup>72</sup>

**South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, (s 99BRAV)**

This clause specifies the cost approach utilized to set the charge for the installation of standard water and sewerage connections. It specifies the growth size and permits the varying of costs depending on the location and specific requirements for each installation.<sup>73</sup>

**South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, (s 99BRAC and s 99BRCF)**

These clauses state that adopted infrastructure charges are set by the Queensland government. Water businesses must agree on the apportionment of these charges in accordance with the requirements of the State Planning and Regulatory Provision.<sup>74</sup>

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<sup>71</sup> Queensland Competition Authority Act 1997, accessed 28 March 2024.

<sup>72</sup> South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, accessed 28 March 2024.

<sup>73</sup> South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, accessed 28 March 2024.

<sup>74</sup> South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, accessed 28 March 2024.

## B. Regulatory requirements (continued)

Contribution pricing principles (continued)

### **Planning Act 2016**

This act enables the state government to make a regulation prescribing a maximum amount for infrastructure charges levied by local governments.<sup>75</sup>

### **Planning Regulation 2017**

This policy prescribes the matters relevant to the various entities tasked with roles and responsibilities under the Act. These matters include state interests such as land use planning and development.<sup>76</sup> It also outlines the MAC to be applied by water businesses.

Cost allocation requirements

There appears to be indirect guidance on permitted cost attribution for other developer charges as water businesses contain a per agreement framework. This enables the business to consider inputs such as labour in its quotes, based on individual needs or service requirements.

Revenue attribution requirements

Revenue for distributor-retailers appears to be based on a five-year projection, although this is not explicitly stated.<sup>77</sup>

Revenue is based on the building block approach and considers operation of assets used to deliver services. Developer charges make up roughly one third of Unitywater's revenue in the year 2023.<sup>78</sup>

Further details are outlined in Chapter 9 of Unitywater's 2022–23 annual report and Chapter 4 of QUU's 2021–22 annual report.

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<sup>75</sup> Queensland Parliament, [Planning and Other Legislation \(Make Developers Pay\) Amendment Bill 2023](#), accessed 2 April 2024.

<sup>76</sup> Queensland Parliament, [Planning Regulation 2017](#), accessed 2 April 2024.

<sup>77</sup> Unitywater, [Annual Report 2022-23](#), accessed March 28 2024.

<sup>78</sup> Unitywater, [Annual Report 2022-23](#), accessed March 28 2024.

## Water – South Queensland (continued)

### B. Regulatory requirements (continued)

Other regulatory requirements	The Netserv plan sets out infrastructure, service and connection charges to be delivered over 20 years from 2019. This is a requirement of the South-East Queensland Water (Distribution and Retail Restructuring) Act 2009. <sup>79</sup> This plan is subject to review every five years. However, it is unclear whether each region/council's Netserv plan is overseen by Queensland's economic regulator, QCA.
Is there a pioneer scheme	Not specified.

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<sup>79</sup> South-East Queensland Water (Distribution and Retail Restructuring) Act 2009, accessed 28 March 2024.

## Electricity distribution networks – nationwide except Western Australia

### A. Overview and key comparative insights

- Chapter 5A of the National Electricity Rules (NER) require that Distribution Network Service Providers (DNSPs) provide a model standing offer for basic connections services, they may provide a model standing offer for standard connection services, and offer a Negotiated Connection Service in accordance with the Negotiation Framework.
- The DNSP must publish on its website an application form for a new connection or a connection alteration, and details on the process for a connection application, including the DNSP responding to a preliminary enquiry within 5 business days after receiving the enquiry.
- Basic connection services can include extensions costs but not augmentations, whereas standard and negotiated connections can include augmentations.
- The model standing offer for basic connections services and standard connection services are approved by the AER, and must be published on the DNSP's website.
- The applicant can choose to ask for a Negotiated Connection Service, which the DNSP must oblige. Whilst not approved by the AER, a Negotiated Connection Service must be consistent with the connection charge principles in NER chapter 5A, the AER's connection guideline and the DNSPs connection policy and are subject to the chapter 5A dispute resolution mechanism whereby the AER is the arbitrator.
- There are prescriptive rules and the AER's Connection charge guideline for electricity customers set out how charges are determined (based on incremental revenue and costs—i.e. net incremental cost). There are also rules on what costs can be allocated to the connection services.
- DNSPs must have a pioneer scheme so that subsequent connections can refund some of an initial connecting developer's connection costs if they make use of the same network extension assets.
- There are a lot of similarities of the connection requirements in chapter 5A of the NER to those set out in chapter 12A of the National Gas Rules.

## Electricity standard connection

Regulatory requirements	
Industry & services	Electricity distribution network services, Australia
Regulated business(s)	Vic   CitiPower, Powercor, Jemena, AusNet, Services, United Energy NSW   Ausgrid, Endeavour Energy, Essential Energy ACT   Evoenergy NT   Power and Water QLD   Energex, Ergon Energy SA   SA Power Networks Tas   TasNetworks
Regulatory instrument(s) governing contribution charging	<a href="#">National Electricity Rules</a> , Chapter 5A for retail customers, Chapter 6 (distribution)  Australian Energy Regulator <a href="#">Connection charge guideline for electricity customers</a> , <a href="#">Expenditure forecast guideline</a> (s3.3 assessment techniques)
Summary of regulatory requirements	<p>NER r.5A.B.1 Obligation to have model standing offer to provide basic connection services: (a) Subject to paragraph (b), a DNSP must have a model standing offer to provide basic connection services to retail customers.</p> <p>NER r.5A.B.2(a) A DNSP must submit for the AER's approval a proposed model standing offer to provide basic connection services for each class (or subclass) of basic connection services on specified terms and conditions.</p> <p>Note, NER r.5A.B.4 provides that a DNSP may submit for the AER's approval a proposed model standing offer to provide standard connection services on specified terms and conditions.</p> <p>NER r.5A.D.2 A DNSP must, within 5 business days after receiving an enquiry about a connection service (or some other period agreed between the DNSP and the enquirer), provide the enquirer with the information required to make an informed application. The rule lists the minimum information requirements including the right to negotiate a connection contract.</p> <p>NER prescribes cost allocation principles in clause 6.15.2 summarized below. Cost allocation methodology (CAM) obligation is to seek regulatory approval, disclose and report in accordance with approved CAM, and seek approval if CAM needs to change.</p>

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## Electricity standard connection (continued)

### Regulatory requirements (continued)

#### Contribution pricing principles

NER r.5A.E.1

(a) This clause states the connection charge principles.

(b) A retail customer (other than a non-registered embedded generator, a real estate developer, a Registered Participant or an Intending Participant) who applies for a connection service for which an augmentation is required cannot be required to make a capital contribution towards the cost of the augmentation (insofar as it involves more than an extension) if:

(1) the application is for a basic connection service; or

(2) a relevant threshold set in the DNSP's connection policy is not exceeded.

Note, in general, the intention is to exclude deep system augmentation charges for retail customers.

(b1) Paragraph (a) does not apply to charges for system strength connection works in accordance with clause 5.3.4B(e).

(c) Subject to paragraph (b), in determining connection charges in accordance with its connection policy, a DNSP must apply the following principles:

(1) if an extension to the distribution network is necessary in order to provide a connection service, connection charges for the service may include a reasonable capital contribution towards the cost of the extension necessary to provide the service;

(2) if augmentation of premises connection assets at the retail customer's connection point is necessary in order to provide a connection service, connection charges for the service may include a reasonable capital contribution towards the cost of the augmentation of premises connection assets at the connection point necessary to provide the service;

(3) if augmentation of the distribution system is necessary in order to provide a standard connection service, connection charges for the service may include a reasonable capital contribution towards the cost of the augmentation necessary to provide the service;

(4) if augmentation of the distribution system is necessary in order to provide a connection service under a negotiated connection contract, connection charges for the service may, subject to any agreement to the contrary, include a reasonable capital contribution towards the cost of augmentation of the distribution system to the extent necessary to provide the service and to any further extent that a prudent service provider would consider necessary to provide efficiently for forecast load growth;

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## Electricity standard connection (continued)

### Regulatory requirements (continued)

#### Contribution pricing principles (continued)

(5) despite subparagraphs (1) to (4) if augmentation of the distribution system is necessary in order to provide, on the application of a real estate developer, Registered Participant or Intending Participant, connection services for premises comprised in a real estate development, connection charges for the services may, subject to any agreement to the contrary, include a reasonable capital contribution towards the cost of augmentation of the distribution system to the extent necessary to provide the services and to any further extent that a prudent service provider would consider necessary to provide efficiently for forecast load growth;

(6) however, a capital contribution may only be required in the circumstances described in subparagraphs (1) to (5) if provision for the costs has not already been made through existing distribution use of system charges or a tariff applicable to the connection.

(d) If:

(1) a connection asset ceases, within 7 years after its construction or installation, to be dedicated to the exclusive use of the retail customer occupying particular premises; and

(2) the retail customer is entitled, in accordance with the connection charge guidelines, to a refund of connection charges, the DNSP Provider must make the refund, and may recover the amount of the refund, by way of a connection charge, from the new users of the asset.

#### Cost allocation requirements

NER r.5A.E.2 a connection offer must be accompanied by a schedule containing an itemized statement of connection costs including (so far as relevant) the following:

(a) applicable connection charges

(b) cost of network extension

(c) details of upstream augmentation required to provide the connection service and associated cost

(d) any other incidental costs and the basis of their calculation including, if relevant, costs of minor deviation from the standard specification for a basic connection service or a standard connection service (as the case may require).

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## Electricity standard connection (continued)

### Regulatory requirements (continued)

#### Cost allocation requirements (continued)

NER r. 5A.E.3 require that the AER must develop and publish Connection charge guidelines and what they must contain. NER r. 5A.E.3 (b) states the purpose of the guidelines is to ensure that connection charges:

- (1) are reasonable, taking into account the efficient costs of providing the connection services arising from the new connection or connection alteration and the revenue a prudent operator in the circumstances of the relevant DNSP would require to provide those connection services
- (2) provide, without undue administrative cost, a user-pays signal to reflect the efficient cost of providing the connection services
- (3) limit cross-subsidisation of connection costs between different classes (or subclasses) of retail customer
- (4) if the connection services are contestable – are competitively neutral.

NER r.6.15.2 prescribes allocation principles, summarized as follows:

- the detailed principles and policies used to allocate costs between different categories of services must be described in sufficient detail to enable the AER to replicate reported outcomes through the application of those principles and policies
- costs must be allocated between different categories of distribution services
- must be determined according to the substance of a transaction or event rather than its legal form
- only the directly attributable costs may be allocated and costs which are not directly attributable to the provision of those services but which are incurred in providing those services; and those must be allocated using an appropriate allocator that: (A) be causation based unless unduly costly or onerous and (B) if unduly costly or onerous, must use well accepted cost allocation method
- the reasons for the method and quantity of the chosen allocator must be clearly described

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## Electricity standard connection (continued)

### Regulatory requirements (continued)

#### Cost allocation requirements (continued)

- the same cost must not be allocated more than once
- must be consistent with the Distribution Ring-Fencing Guidelines
- allocated costs cannot be reallocated to another service during the course of a regulatory control period.

CAM obligation is to seek regulatory approval, disclose and report in accordance with approved CAM, and seek approval if CAM needs to change.

Section 5.2.1 of the AER guideline: In determining the incremental cost components of the cost-revenue-test, a DNSP should:

- a) determine the cost of each component in a fair and reasonable manner and ensure that the cost estimate are reflective of the efficient costs of performing the service
- b) calculate the cost of each component based on the least cost technically acceptable standard necessary for the connection service.

#### Revenue attribution requirements

The AER guideline is prescriptive in how revenue is to be determined. Some clauses have been extracted below.

Section 5.3.1 of the AER guideline: The incremental revenue should be the net present value of all of the expected DUoS charges, recoverable from the connection applicant, except:

For connection services which fall below the shared network augmentation threshold, distribution network service providers must remove the portion of DUoS charges attributable to augmentation (insofar as it involves more than an extension) from the incremental revenue.

Where a DNSP removes the operational and maintenance costs from the DUoS charges in accordance with clause 5.1.5 of this guideline.

5.3.2 If the connection applicant is a residential customer, then an assumed connection period of 30 years applies when calculating the expected DUoS charges recoverable from the connection applicant.

5.3.3 If a connection applicant is a business customer, then an assumed connection period of 15 years should be applied when calculating the expected DUoS charges recoverable from the connection applicant.

5.3.4 The revenue stream arising from clause 5.3.1 to 5.3.3 of this guideline will be discounted by the relevant DNSP's real pre-tax weighted average cost of capital, as set out in the relevant distribution determination, to derive the incremental revenue (IR) of a connection applicant.

[Continued next page](#)

## Electricity standard connection (continued)

Regulatory requirements (continued)	
Revenue attribution requirements (continued)	<p>5.3.5 When estimating a connection applicant's incremental revenue, a DNSP must:</p> <ul style="list-style-type: none"><li>a) use the price path set out in the relevant distribution determination that is applicable at the time of the connection offer, until the end of the relevant distribution determination</li><li>b) use a flat real price path after the end of the relevant distribution determination, for the remaining life of the connection. This flat price path is the expected real DUoS charges in the final year of the regulatory control period.</li></ul>
Other regulatory requirements	<p>NER r.5A.B.2(b)(2) sets out the terms and conditions of the model standing offer including the basis of the connection charges including the cost of any necessary extension (not augmentation for basic connection service) to the distribution system (r. NER 5A.B.4(c) for standard connection services which allows for augmentation).</p> <p>NER r. 5A.D.1 a DNSP must publish on its website an application form for a new connection or a connection alteration along with certain information.</p> <p>Part F of Chapter 5A specifies the formation and integration of connection contracts (basic, standard and negotiated).</p> <p>NER r.6.7A deals with the preparation of, requirements for and approval of connection policies.</p> <p>Part G of chapter 5A deals with dispute resolution between DNSPs and customers.</p>
Is there a pioneer scheme	<p>Yes. DNSPs must have a pioneer scheme in their published connection policy. AER guidance specifies elements of the scheme design, and that refunds are only payable is &gt;\$1,000.</p>

## Electricity negotiated connection

Regulatory requirements	
Industry & services	Electricity distribution network services, Australia
Regulated business(s)	<p>NSW / ACT – Distn   Ausgrid, Endeavour Energy, Essential Energy, Evoenergy</p> <p>NT – Distn   Power and Water</p> <p>QLD / SA – Distn   Energex, Ergon Energy, SA Power Networks</p> <p>Tas – Distn   TasNetworks</p> <p>Vic – CitiPower, Powercor, Jemena, AusNet, Services, United Energy</p>
Regulatory instrument(s) governing contribution charging	<p><a href="#">National Electricity Rules</a>, Chapter 5A for retail customers, Chapter 6 (distribution)</p> <p>Australian Energy Regulator <a href="#">Connection charge guideline for electricity customers</a>, <a href="#">Expenditure forecast guideline</a> (s3.3 assessment techniques)</p>
Summary of regulatory requirements	<p>NER r.5A.C.1(a) A connection applicant and a DNSP may negotiate a connection contract.</p> <p>Must be done in accordance with NER r.5A.C.3 Negotiation framework which includes both parties negotiating in good faith, provision of information at the request of the other party within specified times, the DNSP must provide an estimate of the connection charge and the basis of the fee estimate, the DNSP must make reasonable endeavours to make a connection offer that complies with the connection applicant's reasonable requirements.</p>
Contribution pricing principles	NER r.5A.E.1(a) connection charge principles apply – see basic connection services above.
Cost allocation requirements	<p>NER r.5A.E.2 a connection offer must be accompanied by a schedule containing an itemised statement of connection costs including (so far as relevant) the following:</p> <ul style="list-style-type: none"> <li>(a) applicable connection charges</li> <li>(b) cost of network extension</li> <li>(c) details of upstream augmentation required to provide the connection service and associated cost</li> <li>(d) any other incidental costs and the basis of their calculation including, if relevant, costs of minor deviation from the standard specification for a basic connection service or a standard connection service (as the case may require).</li> </ul> <p>See basic connection above for NER r. 6.15.2 allocation principles and CAM obligation.</p>

**Electricity negotiated connection (continued)**

<b>Regulatory requirements (continued)</b>	
Revenue attribution requirements	See basic connection services above.
Other regulatory requirements	<p>NER r.5A.C.4 a DNSP may charge a reasonable fee to cover expenses directly and reasonably incurred by it in assessing the applicant's application and making a connection offer.</p> <p>NER r. 5A.D.1 a DNSP must publish on its website an application form for a new connection or a connection alteration along with certain information.</p> <p>Part F of Chapter 5A specifies the formation and integration of connection contracts (basic, standard and negotiated).</p> <p>NER r.5A.F.4 a DNSP must use its best endeavours to make a negotiated connection offer to the connection applicant within 65 business days after the date of the application for connection ...</p> <p>(d) A negotiated connection offer must not include a connection charge that is inconsistent with the DNSP's connection policy.</p> <p>Part G of chapter 5A deals with dispute resolution between DNSPs and customers.</p>
Is there a pioneer scheme	Yes. DNSPs must have a pioneer scheme in their published connection policy. AER guidance specifies elements of the scheme design, and that refunds are only payable is >\$1,000.

## Gas distribution

### A. Overview and key comparative insights

- Connection means a physical link between a distribution pipeline and a retail customer's premises to allow the flow of natural gas.
- In Victoria, the rules for new gas connections have been recently updated. They are governed by Victoria's [Gas Distribution Code of Practice](#):
  - Connection charges cover the full costs of a new connection and of any augmentation of the distribution pipeline required to accommodate the new connection.

In other eastern states, the rules for new gas connections are in Part 12A of the National Gas Rules:

- A standard basic connection applies for retail customers (under the National Energy Retail Law is a person who is a customer of a retailer) set out under the model standing offer, which is approved by the AER.
- Connection charges must be based on the connection charges criteria in the National Gas Rules (NGR) which allow for the connection charge to be equal to the shortfall in expected revenue to cover the incremental capex incurred (i.e. net incremental cost). The assumptions used must be consistent with assumptions in the Access Arrangement.
- A distributor must publish on its website an application form for a new connection or a connection alteration, and the process for making a connection application including that the distributor must respond to a preliminary enquiry within 5 business days after receiving an enquiry.
- A connection applicant can ask for a Negotiated Connection regardless of their size or that the model standing offer exists, which the distributor must then offer. Whilst not approved by the AER, a Negotiated Connection service must be consistent with the connection charges criteria in chapter 12A are subject to the chapter 12A deals dispute resolution mechanism where the AER is the arbitrator.
- The relevant connection assets are taken to include any augmentation of the distribution pipeline required to accommodate the new connection or connection alteration.
- There are a lot of similarities of the connection requirements in chapter 12A of the NGR to those set out in chapter 5A of the National Electricity Rules.



## Gas standard connection

Regulatory requirements	
Industry & services	Gas distribution network services, Australia
Regulated business(s)	ACT – Evoenergy NSW – Jemena Gas Networks SA – Australian Gas Networks (SA) Vic – Australian Gas Networks (Vic), AusNet Services, Multinet WA – ATCO Gas <sup>80</sup>
Regulatory instrument(s) governing contribution charging	<a href="#">National Gas Rules</a> , Part 12A clause 119, note Part 21 deals with payment of distribution services charges by retailers Australian Energy Regulator <a href="#">Expenditure forecast guideline</a> (s3.3 assessment techniques) Victoria’s <a href="#">Gas Distribution Code of Practice</a> clause 4
Summary of regulatory requirements	In Victoria: <ul style="list-style-type: none"> <li>- A distributor is only required to connect a customer if the connection involves minimal or no extension to, or augmentation of, the distribution pipeline.</li> <li>- From 1 January 2025, connection charges will be the full costs of a new connection and of any augmentation of the distribution pipeline required to accommodate the new connection.</li> </ul> In other eastern states: A distributor must have a model standing offer to provide a basic connection service to <i>retail customers</i> setting out the terms and conditions of connection, and negotiate with them for a connection at their request, within certain timeframes and determine any contribution charge consistent with the connection charges criteria. The AER approves the model standing offer which the distributor must publish.
Contribution pricing principles	In Victoria, clause 4.2 of the Gas Distribution Code of Practice sets out the rules for connection charges from 1 January 2025:  (a) the connection charge to be paid by a customer for a connection service must be the sum of: (i) the cost of purchasing and installing the dedicated facilities to that customer; and (ii) the cost of

<sup>80</sup> Note that with the NGR apply in WA, they are administered by WA’s Economic Regulation Authority not the AER.

## Regulatory requirements

### Contribution pricing principles (*continued*)

augmentation of the shared distribution system which may be required to support the additional load resulting from the connection service

(b) costs must be calculated in a fair and reasonable manner and to the extent practicable using the following assumptions: (i) the cost of purchasing and installing the dedicated facilities are the direct costs forecast to be incurred to purchase and install mains extensions, service pipes and a metering installation; (ii) the cost of augmentation of the shared distribution system are the direct costs forecast to be incurred to purchase and install any upstream facilities

(c) a distributor must calculate standard connection charges to provide basic connection services for residential customers

In other eastern states, NGR r119M sets out the *connection charges criteria*:

(a) if the present value of the expected incremental revenue to be generated as a result of the distributor's capital expenditure for the relevant connection assets exceeds the present value of that capital expenditure, no connection charge may be imposed

(b) if paragraph (a) does not prevent the imposition of a connection charge, the connection charge must not exceed the amount by which the present value of the capital expenditure exceeds the present value of the expected incremental revenue.

Must comply with NGR r.79(4): In determining the present value of expected incremental revenue:

(a) a tariff will be assumed for incremental services based on (or extrapolated from) prevailing reference tariffs or an estimate of the reference tariffs that would have been set for comparable services if those services had been reference services

(b) incremental revenue will be taken to be the gross revenue to be derived from the incremental services less incremental operating expenditure for the incremental services

(c) a discount rate is to be used equal to the rate of return implicit in the reference tariff.

Assumptions used by the distributor in determining the charges must be consistent with relevant provisions of the distributor's applicable access arrangement.

### Cost allocation requirements

NGR r.93 sets out principles for allocation of total revenue and costs – directly attributable costs and other costs are to be allocated between reference and other services on a basis (which must be

Regulatory requirements	
	consistent with the revenue and pricing principles set on in clause 24 of the National Gas Law) determined or approved by the AER.
Revenue attribution requirements	See NGR r.79(4) above
Other regulatory requirements	NGR r. 119M(2)(c) Assumptions used by the distributor in determining the charges must be consistent with relevant provisions of the distributor's applicable access arrangement
Is there a pioneer scheme	No

## Gas negotiated connection

Regulatory requirements	
Industry & services	Gas distribution network services, Australia
Regulated business(s)	ACT – Evoenergy NSW – Jemena Gas Networks SA – Australian Gas Networks (SA) Vic – Australian Gas Networks (Vic), AusNet Services, Multinet WA – ATCO Gas
Regulatory instrument(s) governing contribution charging	<a href="#">National Gas Rules</a> , Part 12A, Division 3, clauses 119I to 119L, and clause 119M, note Part 21 and clause 119O of Part 12A deals with payment of distribution services charges / connection charges by retailers  Australian Energy Regulator <a href="#">Expenditure forecast guideline</a> (s3.3 assessment techniques)  Victoria’s <a href="#">Gas Distribution Code of Practice</a> clause 4
Summary of regulatory requirements	In Victoria:  A distributor is only required to connect a customer if the connection involves minimal or no extension to, or augmentation of, the distribution pipeline.  From 1 January 2025, connection charges will be the full costs of a new connection and of any augmentation of the distribution pipeline required to accommodate the new connection.  In other eastern states:  NGR r.119K - A connection applicant is entitled to negotiate any connection consistent with the negotiation framework which includes both parties negotiating in good faith, the distributor must make reasonable endeavours to make a connection offer that complies with the connection applicant's reasonable requirements, provision of information at the request of the other party, the distributor must provide the basis of fee estimate including assumptions and confirm that the fee estimate is consistent with the connection charges criteria.
Contribution pricing principles	In Victoria, clause 4.2 of the Gas Distribution Code of Practice sets out the rules for connection charges from 1 January 2025:  (a) the connection charge to be paid by a customer for a connection service must be the sum of: (i) the cost of purchasing and installing the dedicated facilities to that customer; and (ii) the cost of augmentation of the shared distribution system which may

## Regulatory requirements

be required to support the additional load resulting from the connection service

(b) costs must be calculated in a fair and reasonable manner and to the extent practicable using the following assumptions: (i) the cost of purchasing and installing the dedicated facilities are the direct costs forecast to be incurred to purchase and install mains extensions, service pipes and a metering installation; (ii) the cost of augmentation of the shared distribution system are the direct costs forecast to be incurred to purchase and install any upstream facilities

(c) negotiated connections must be quoted individually and customers may request quotes to be itemised to include at a minimum: (i) meter type and cost; (ii) mains extension and service pipes cost; (iii) any other incidental costs; and (iv) any upstream augmentation works and associated costs.

In other eastern states:

NGR r119M sets out the connection charges criteria:

(a) if the present value of the expected incremental revenue to be generated as a result of the distributor's capital expenditure for the relevant connection assets exceeds the present value of that capital expenditure, no connection charge may be imposed

(b) if paragraph (a) does not prevent the imposition of a connection charge, the connection charge must not exceed the amount by which the present value of the capital expenditure exceeds the present value of the expected incremental revenue.

Must comply with NGR r.79(4): In determining the present value of expected incremental revenue:

(a) a tariff will be assumed for incremental services based on (or extrapolated from) prevailing reference tariffs or an estimate of the reference tariffs that would have been set for comparable services if those services had been reference services

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## Gas negotiated connection (continued)

### Regulatory requirements

Contribution pricing	(b) incremental revenue will be taken to be the gross revenue to be derived from the incremental services less incremental operating expenditure for the incremental services
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## Regulatory requirements

principles (continued)	<p>(c) a discount rate is to be used equal to the rate of return implicit in the reference tariff.</p> <p>Assumptions used by the distributor in determining the charges must be consistent with relevant provisions of the distributor's applicable access arrangement.</p>
Cost allocation requirements	<p>NGR r.93 sets out principles for allocation of total revenue and costs – directly attributable costs and other costs are to be allocated between reference and other services on a basis (which must be consistent with the revenue and pricing principles set on in clause 24 of the National Gas Law) determined or approved by the AER.</p>
Revenue attribution requirements	<p>See NGR r.79(4) above</p>
Other regulatory requirements	<p>NGR r. 119M(2)(c) Assumptions used by the distributor in determining the charges must be consistent with relevant provisions of the distributor's applicable access arrangement</p> <p>NGR r. 119L The distributor may charge a reasonable fee to cover expenses assessing the connection applicant's application and making a connection offer</p> <p>NGR r.119Y sets out the dispute resolution between distributors and retailer customers which the AER is the arbitrator. Under NGR r.119Z for connection charges, the AER must apply the connection charges criteria</p>
Is there a pioneer scheme	<p>No</p>