PUBLIC

Australian
Gas Networks

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Contents

Executive summary

This Unit Rates Report provides an overview of unit rates we expect to incur during the next access arrangement (AA) period (1 July 2026 to 30 June 2031) for high volume or repeatable, ongoing works including:

- Installation of new mains, services and meters for domestic and industrial and commercial (I&C) customers
- Domestic and I&C meter replacement
- Mains and services replacements, and associated activities

The unit rates in this report are a key input into the Distribution Mains and Services Integrity Plan (DMSIP) and the Meter Replacement Plan (refer Attachments 9.4 and 9.5). Costs and unit rates for larger, bespoke capital projects and other network or non-network activities are presented in project-specific business cases. TableExecSumm 1 summarises changes in the unit rates covered by this report.

TableExecSumm 1: Summary of forecast unit rate changes from benchmark

Category		Unit Rate Next AA period	Current AA Benchmark (2)	Movement in Unit Rate (%)
Growth Capex				
New Mains	New Estate	[redacted]	[redacted]	[redacted]
	Existing Home	[redacted]	[redacted]	[redacted]
	I&C	[redacted]	[redacted]	[redacted]
New Service	New Home	[redacted]	[redacted]	[redacted]
	Multi-User	[redacted]	[redacted]	[redacted]
	Existing Home	[redacted]	[redacted]	[redacted]
	I&C	[redacted]	[redacted]	[redacted]
New Meter	Domestic	[redacted]	[redacted]	[redacted]
	I&C	[redacted]	[redacted]	[redacted]
Meter Replacement				
Meters < $10m^3$ (Domestic)		[redacted]	[redacted]	[redacted]
Meters > $10m^3$ (Commercial)		[redacted]	[redacted]	[redacted]
Meters < $10m^3$ (Domestic) - Digital		[redacted]	New Rate	New Rate
Mains Replacement				
Planned/Unplanned (1)		[redacted]	New Rate	New Rate
Inline Camera Inspection		[redacted]	[redacted]	[redacted]

Multi-user services	[redacted]	[redacted]	[redacted]
Unplanned Service Replacements	[redacted]	[redacted]	[redacted]

In summary, all forecast unit rates for the next AA period are expected to the higher than in the current AA period, with the exception of new domestic meters, which are expected to come down by around [redacted]

The rising costs are the result of market pressures and resource constraints, which continue to impact all utility and infrastructure businesses in South Australia. Actual unit costs and delivery rates during the current AA period are higher than originally forecast right across the board. This is a result of elevated inflations and intense competition for construction resources due to major infrastructure costs like SA Water's $3.3 billion capital plan[1], and the $14 billion North-South corridor project[2].

According to Oxford Economics Australia's report[3], utilities investment since FY23 has surged, with FY24 levels 57% above FY21. Construction wage growth has also accelerated, with FY24 marking the strongest growth since FY12. Material input prices peaked in FY22 and FY23 due to global supply disruptions (including COVID and the conflict in Ukraine) and a depreciating Australian dollar, which raised the cost of US dollar-denominated imports by 20%.

These factors have driven our revealed costs above benchmarks and are reflected in ongoing forecasts.

1.1. Contract renewals, rate adjustments, and traffic management

We have taken steps to manage the rising costs of constructing and maintaining gas infrastructure. Recognising that many external factors such as inflation, global supply chain disruptions and labour shortages are beyond our control, we have focused on leveraging what we can influence, which is strategic procurement and operational efficiency.

An important step has been use of a hybrid model that balances in-house capabilities with outsourced services. For instance, we have shifted the balance between internal and external labour depending on cost trends, such as insourcing more of the meter replacement program, ensuring we remain agile in the face of fluctuating construction and maintenance expenses.

Our procurement strategy includes rigorous supplier evaluation, risk management, and the integration of digital tools to enhance forecasting and project planning. This allows us to maintain service reliability and safety standards without passing excessive costs onto consumers.

The contracts for laying mains and services expired on 31 December 2024. Prices in the initial tender response (held during 2024 prior to the contracts expiring) were up to [redacted] higher,

[1] Construction partners locked in to deliver critical water and sewer infrastructure
[2] Delivering North-South Corridor right the first time for the long term
[3] Input Cost Escalation: Forecasts to 2030/31. Prepared by Oxford Economics Australia for Australian Gas Networks (South Australia)

therefore we extended current arrangements for a further six months to 30 June 2025. Working with our contractor workforce, we negotiated a [redacted] interim rate increase during this period. A competitive tender process has since been completed, with new contracts effective from 1 July 2025 for three years (plus a two-year option).

As a result of the competitive tender, we forecast that service laying rates will increase by [redacted] for new homes and [redacted] for existing homes, while mains laying rates will rise by [redacted] in new estates and [redacted] in existing areas, with mains and services rates increasing on average by [redacted], [redacted]. This increase reflects contractor cost pressures, including limitations in previous contracts, enterprise agreement costs, training, and skilled labour shortages.

A significant impact on our forward cost projections is the National Training Framework for Temporary Traffic Management (TTM), introduced in SA on 1 February 2024[4]. The framework marks a shift to nationally harmonised standards for traffic management roles, including controllers and managers. There is a transition period until February 2027, after which only traffic controllers certified under the new TTM framework will be authorised for use. This is having a significant impact on traffic management costs. Not only are third party traffic controllers having to uplift their staff (and pass on the costs to their clients), it means we would no longer be able to use internal traffic control as an affordable alternative. These factors, combined with the scarcity of traffic management resources caused by the competing SA Water and North-South link projects, means some unit costs are increasing by more than [redacted]

1.2. Mains and residential services

For our key network growth related activities, new home services and existing home services are forecast to increase by [redacted] and [redacted] respectively, while rates for mains in new estates and those in existing areas are forecast to rise by [redacted] and [redacted] respectively. These increases include the impact of the new tender outcomes discussed above, though their full impact will be realised post-submission.

For our mains and services replacement, the scale of projects will be significantly diminished at the end of the current AA period, as all high-risk cast iron and unprotected steel mains will be removed. The program will therefore shift to a smaller, targeted replacement strategy, including inline camera inspections.

Over the next 5-year period 12.6 km of high-risk protected steel mains are planned for replacement, with an additional 5 km for unplanned mains replacement due to asset failure. These replacements are more expensive due to direct burial and material costs, with a forecast rate of [redacted]/m.

Inline camera inspection rates are forecast to rise by [redacted]% due to the switch from DN50 to DN40 pipes, requiring new equipment, shorter inspection length and therefore more frequent excavation. The shorter reels will reduce productivity and together with new traffic

[4] National Training Framework for Temporary Traffic Management

management requires the inclusion of an additional [redacted]/m.

Unplanned service replacements are forecast to increase by [redacted] reflective of actuals.

1.3. Multi-user, industrial, and commercial services

New multi-user services are forecast to be [redacted] higher than current benchmarks, with revealed rates consistently higher than the allowed benchmark. This reflects the trend towards developing larger multi-unit developments consistent with the State Government rezoning of multi-story high density housing, giving rise to smaller lot sizes increasing complexity and cost. These forecasts also incorporate the [redacted] increase in service laying rates. Replacement of multi-user services will continue using our now extensive experience and current actuals, with rates [redacted] above benchmark.

I&C mains and services are forecast to be [redacted] and [redacted] higher than benchmarks, respectively, due to higher-than-expected actual costs in developments such as [redacted]. These increases align with broader cost pressures in the construction and infrastructure sectors.

1.4. Metering costs

The contract for new meters expires on 1 June 2026, with prices expected to rise above CPI due to market testing [redacted]. The discontinuation of refurbished meters since 2023/24 adds further cost pressure.

A [redacted] increase in meter prices has been included in forecasts. Despite this, domestic meter installations are forecast to be [redacted] below benchmark due to cost-saving measures such as insourcing and procedural changes. I&C meters are forecast to be [redacted] higher.

Domestic meter replacements are expected to be [redacted] higher and I&C meter replacements are forecast to rise by [redacted], reflecting current revealed costs.

1.5. Forecasting methodology and cost justification

The forecast unit rates have been developed in accordance with National Gas Rules (NGR) 74, ensuring they are based on reasonable assumptions and recent cost data. These rates are either market-tested (as in the case of mains and services) or derived from actual revealed costs. These increases reflect the actual costs of performing the work and are considered conservative estimates that account for ongoing cost pressures in the construction and infrastructure sectors.

The report concludes that while the forecast rates are higher than current benchmarks, they are justified by market conditions, regulatory changes, and actual cost data. Further details on individual unit rates and their variances from benchmarks are provided in the following sections.

2. Introduction

2.1. Overview

This report explains the derivation of the unit rate forecasts that underpin the capital expenditure (capex) forecasts for the AA period 1 July 2026 to 30 June 2031.

We use unit rates to develop our capex forecasts for repeatable or high volume works such as mains and meter replacement and new customer connections, which together form more than half of our ongoing capital works program for the SA natural gas distribution networks. To forecast our capex requirements, we multiply the unit rate for replacing (or refurbishing) each type of asset by the volume of those assets we propose to replace/refurbish.

The capex categories and subcategories derived using this unit rate x volume forecast approach are:

- Growth capex:
  - Mains – new estates, existing homes and I&C customers
  - Services – new homes, multi-user sites, existing homes and I&C customers
  - Meters – new domestic and I&C customers meter connections
- Meter replacement: periodic meter change (PMC) (domestic, domestic digital and I&C meters)
- Mains replacement: Planned steel mains replacement, camera inspections, unplanned mains replacement and service replacement (multi-user services and unplanned services).

This document explains how we have derived the unit rates for each of the above capex categories.

2.2. Consistency of forecasts with AER's approved approach

When developing the unit rate forecasts, we have adopted a consistent forecasting approach accepted by the Australian Energy Regulator (AER) in the current South Australian AA (for the five-year period beginning 1 July 2021). To estimate each unit rate, we use one of three methods:

1. **Current actuals** – we use the current actual unit rate being achieved to forecast unit rates where:
   - The expenditure category involves high volumes of work; and
     - The work is subject to regular and ongoing changes in industry practices (e.g. from a safety or technical perspective);
     - The work can be subject to increasing requirements and administrative standards specified by third parties (other infrastructure owners); or
     - The work is affected by other factors that are expected to place upward pressure on unit rates over the next AA period

   Examples of works where the current actual provides the best forecast are domestic mains and services laying and domestic meter replacement. Current actual unit rates in this Unit Rates Report are based on the actual year-to-date unit rates for the first nine months of FY25.

   A temporary increase in contractor rates for growth capex mains and services was applied in January 2025 while contract negotiations continued, so this data has been removed from the calculations for rates impacted by the mains and services retender, in these cases the year-to-date unit rates for the first six months of FY25 are applied where appropriate. To maintain consistency, the same methodology has been applied to other growth rates for domestic meters.

2. **Weighted average of historical actuals** – we use a three-year weighted average of historical actuals (by volume) to forecast unit rates where:
   - the expenditure category involved lower volumes of work; and
   - the scope and complexity of the work is subject to a high degree of variability, making it difficult to derive meaningful assumptions on the forecast mix of work to be carried out.

   Examples of work where the weighted average historical actuals provide the best forecast are new mains and new meters for industrial and commercial (I&C) customers. This is because the technical requirements of one I&C customer can vary significantly from the next.

   The three-year weighted average of historical actuals in the Unit Rates Report is based on the full 2022/23 and 2023/24 financial years, and the first nine months of 2024/25.[5]

   I&C mains, I&C services and I&C meter rates have been calculated to December 2024 for the purpose of calculating the three-year weighted average to remove the impact of the temporary increase in rates as discussed above.

3. **Comparable quotes** – we use comparable quotes where current or historical actuals are not available. For example, if this is a new type of work where no tender submissions have been made or no historical data recorded, but there is data for similar scopes of work. We gather rates from similar scopes of work, using costs or quotations from contractors or vendors. We then adjust these rates to account for any differences in scope.

All three methods provide a reasonable basis for the forecast unit rates and represent the best forecast or estimate possible in the circumstances. We therefore consider all forecast unit rates in this report meet the requirements of Rule 74 of the National Gas Rules (NGR 74).

Note that we also apply these same estimation methods when developing cost estimates and unit rates for larger, more bespoke pieces of work such as installation or replacement of valves or district regulator stations and other network or non-network activities such as telemetry and IT. The unit rates for discreet capex projects are provided in the individual business cases associated with each project and are outside the scope of this Unit Rates Report.

2.3. Basis of costs

All costs presented in this report are un-escalated costs expressed in January 2025 dollars unless otherwise stated.

[5] If, however, a sufficient time series is not available it may be necessary to use a shorter measurement period.

2.4. Summary of unit rates

Table 1.1 presents the unit rates for our South Australian networks over the next AA period.

Table 1.1: Summary of forecast unit rates for July 2026 to 30 June 2031 ($ January 2025)

Category		Unit rate	Forecasting approach
Growth capex			
New mains	New estate	[redacted]/metre	Current actuals
	Existing home	[redacted]/metre	Current actuals
	I&C	[redacted]/metre	Weighted average of historical actuals
New service	New home	[redacted]/service	Current actuals
	Multi-user	[redacted]/service	Current actuals
	Existing home	[redacted]/service	Current actuals
	I&C	[redacted]/service	Weighted average of historical actuals
New meter	Domestic	[redacted]/meter	Current actuals
	I&C	[redacted]/meter	Weighted average of historical actuals
Meter replacement			
	< 10m3 (Domestic)	[redacted]/meter	Current actuals
	> 10m3 (Commercial)	[redacted]/meter	Weighted average of historical actuals
	< 10m3 (Domestic) Digital	[redacted]/meter	Indicative pricing
Mains replacement			
Planned/Unplanned Mains	Protected Steel/Unplanned Mains	[redacted]/metre	Recent comparable quotes
Inline Camera Inspection	HDPE 575 - camera inspection and reinforcement	[redacted]/metre	Current actuals
Multi-user sites		[redacted]/multi-user site	Weighted average of historical actuals
Unplanned service replacement		[redacted]/service	Weighted average of historical actuals

The remaining sections in this report provide further detail on how these unit rates have been derived.

2.5. Relevant contracts

We conduct growth capex, meter replacement and mains replacements work using a range of contractors. Contracts are awarded following a formal tendering process, which helps promote competition and ensure the contractor unit rates are driven by the market. The tendering and contract awarding is also scrutinized via our internal procurement processes. This includes consideration of how the new contractor rates compare with historical and present-day data, and whether market conditions are conducive to achieving a rate that reflects sustainable and efficient forward-looking costs.

Contractor rates can vary depending on the scope of works being conducted and the complexity of asset installations/replacements. We continually review and monitor contractor rates and performance to help ensure our costs are reasonable and our customers receive a quality service.

A summary of the status of relevant contracts that apply to the growth capex, meter replacement and mains replacement and associated works is provided below.

2.5.1. Growth capex and meter replacement contracts

The previous contract for installing new mains and services commenced in January 2020 and expired 30 December 2024. These contracts were extended to 30 June 2025 by agreement to allow additional time for the complex tender process and included a temporary price adjustment.

Tenders for the new mains and services contracts (incorporating new estates, existing homes, multi-user sites and I&C customers) for a three plus two (five year) term were issued to market in May 2024. Initial tenders were received in August 2024 and the new contracts are set to commence on 1 July 2025. Copies of the new mains and services laying contracts are available on request.

For new meter installations and meter replacement, we are soon to enter the final year of the Meter Supply Contract for:

- **the acquisition of new domestic meters** – this national contract was entered into with meter suppliers, [redacted], in June 2021 and has a five-year term expiring 1 June 2026. The strategy for the next contracting period is under development in order to mitigate price increases as far as possible. However, escalations are expected due to economic climate and market conditions, the removal of refurbished meters option [redacted]
- **domestic meter fitting and replacement in Adelaide northern & southern metropolitan areas** – we insourced domestic meter fitting and replacement in 2024 during the final year of the external labour contracts, and this service is now managed internally by the Networks Operations team

I&C meter changes and installation is carried out by a mixture of internal staff and contractors, depending on the scale of the job, with I&C meters acquired through a competitive tender process.

2.5.2. Mains replacement contracts

The current panel for mains replacement contracts commenced on 1 July 2023 for a five-year term, which is due to end in 2028. The majority of mains replacement will be completed by June 2026 with a small steel mains replacement program and renewal of multi user sites proposed for the next period.

Table 1.2 provides a summary of the status of all relevant contracts.

Table 1.2: Summary of the status of all relevant contracts

Contract	Description	Term	Commencement	Expiry	Comments
Gas meter fitting and replacement services – Adelaide North	Contract to install meters, changeover meters and attend first response activities	3 + 1 + 1 years	1 June 2019	30 June 2023	Now insourced.
Gas meter fitting and replacement services – Adelaide South	Contract to install meters, changeover meters and attend first response activities	5 years	1 May 2019	30 April 2024	Now insourced (with any overflow done at an hourly rate by external contractor)
Acquisition of meters, (domestic, I&C, rotary, turbine)	National contract to purchase new and refurbished meters	4 years	1 June 2020	1 June 2026	Tender will commence mid-late 2025.

New mains and services –	Contract to lay mains and services, split by Northern and Southern Regions	3+2 years	1 July 2025	30 June 2030	Three-year contract with optional two-year extension
National mains replacement panel of prequalified contractors	Mains Replacement Panel of prequalified contractors - Tendered annually based on an approved program of work.	5 years	1 July 2023	30 June 2028	All mains replacement packages for the current AA have been awarded

3. Growth capex

3.1. Summary

Installing new domestic mains, services and meters to connect new domestic customers to our network is high volume work, with over 7,000 new domestic customers connected each year. It is also subject to ongoing upward cost pressures. We therefore adopt the current actuals approach to forecast unit rates for these works.

Installing I&C mains, services and meters to accommodate growth in I&C customers is lower volume work, with around 160 new I&C customers connected each year. It is also subject to variability and is driven by each I&C customer's individual requirements. This makes it more challenging to derive assumptions on the work mix. We therefore use the weighted average of historical unit rates to forecast the unit rates for these works over the next AA period.

There are nine forecast unit rates under the growth capex program. With the exception of new domestic meter rates, all of the growth capex unit rates are forecast to be higher in the next AA period than the current AA benchmark. (see Table 2.1).

Table 2.1: Summary of growth capex unit rate changes from benchmark

Category	Subcategory	Unit rate next AA period	Current AA benchmark	Movement in unit rate (%)	Forecast approach
Growth capex					
New Mains	New Estate	[redacted]	[redacted]	[redacted]	Current actuals
	Existing Home	[redacted]	[redacted]	[redacted]	Current actuals
	I&C	[redacted]	[redacted]	[redacted]	Weighted average of historical actuals
New Service	New Home	[redacted]	[redacted]	[redacted]	Current actuals
	Multi-User	[redacted]	[redacted]	[redacted]	Current actuals
	Existing Home	[redacted]	[redacted]	[redacted]	Current actuals
	I&C	[redacted]	[redacted]	[redacted]	Weighted average of historical actuals
New Meter	Domestic	[redacted]	[redacted]	[redacted]	Current actuals
	I&C	[redacted]	[redacted]	[redacted]	Weighted average of historical actuals

3.1.1. Factors impacting growth capex unit rates

Consistent with NGR 74, the forecast unit rates for the growth capex activities have been arrived at on a reasonable basis. They are informed by recent revealed costs of the work that will be undertaken over the next AA period and reflect the best estimate possible in the circumstances.

While we have made every effort to derive accurate forecast unit rates, several factors are expected to place upward pressure on unit rates for growth capex activities over the next AA period. These are:

- The current contracts for the laying of mains and services expired on 31 December 2024 with an agreed extension to 30 June 2025. A competitive tender process has been undertaken, with new contracts awarded and in place effective from 1 July 2025 for a 3-year period with a 2-year option. As a result of the tender we estimate that service laying rates will increase by [redacted] for new homes and [redacted] for existing homes, while mains laying rates will rise by [redacted] in new estates and [redacted] in existing areas, with mains and services rates therefore increasing, on average, by [redacted]. The increase

reflects the cost pressures being felt by contractors with the new rates seeking to recover an efficiency clause in the previous contracts limiting annual CPI increases to [redacted] of CPI, higher costs of enterprise agreements, training costs and competition for skilled resources and staff turnover affecting productivity.

- The implementation of the National Training Framework for Temporary Traffic Management will take full effect from 1 February 2026, and contractors will have to move away from using their own internal traffic management resources to using 3rd party providers. It is anticipated that this will add [redacted] to some contractor costs when it comes into full effect with contractors continuing to use internal traffic management resources until current certification expires.
- The estimated impact of the new contract rates have been applied to rates up to December 2024. This is to exclude the impact of the temporary [redacted] increase in contractor rates applied in January 2025 while contract negotiations continued. March year-to-date rates are still shown in the tables and rates below.

- We are anticipating proportionately more work in higher density suburbs and the Adelaide CBD compared to what we have been delivering over the current AA period. This trend is being driven by the State Government 30 year Plan for Greater Adelaide – 2017 Update[6], which targets 85% of new housing in metropolitan Adelaide to be built in established urban areas by 2045.

  Working in the CBD and densely populated/developed suburbs is more complex and typically more expensive than other areas. This is because we incur additional costs to manage traffic congestion and other working restrictions. We are often required to reinstate roads and other sealed areas each day/night, as well as upgrade or relocate complex meter assemblies or meter rooms. We also engage and coordinate with businesses and residents to help reduce disruption to our customers. All of these additional activities result in greater overall costs compared with undertaking works in less densely populated areas.

- The current contract to supply new meters will expire on 1 June 2026 and it is expected that meter prices will increase by more than CPI in line with increases the business is seeing as a result of market testing current contracts. As a result a [redacted] increase in the current cost of a domestic meter has been included in the forecast to reflect the average outcome of recent mains and services tenders.

Given the expected ongoing upward pressure on growth capex unit rates, the unit rates forecast for installing new domestic mains, services and meters in this Unit Rates Report are conservative.

3.2. New mains

The costs we incur when laying mains differs depending on whether the mains are used to supply:

- New greenfield residential areas (new estates)
- Existing brownfield residential areas (existing home)
- Industrial and commercial customers (I&C)

Typically, the cost of laying mains in greenfield sites is considerably lower than installing mains in brownfield (established) sites. This is because with greenfield sites excavation and reinstatement costs tend to be lower (as we are often excavating unsealed ground), plus there is usually less need for traffic management and mitigating customer disruption. Greenfield developments can also offer the opportunity

[6] https://livingadelaide.sa.gov.au/

to use common trenches or install mains at the same time as other utility infrastructure.

The cost of I&C customer mains is typically greater than laying domestic mains, as these developments often require higher pressure and larger diameter pipes.

3.2.1. New estate mains

Forecasting approach:	Current actuals

3.2.1.1. Nature of works and costs

This work involves installation of reticulation mains (usually installed within common trenches) within new residential greenfield estate developments. It does not include installation of high-pressure steel trunk mains, larger diameter trunk polyethylene mains or pressure regulating equipment installed within the estates to step down from higher pressures to the supply pressures.[7]

The volume of new estate mains installation activity is driven by house and land development market conditions. An average of approximately 45 kilometers per annum of new estate mains is installed each year. The work is quite consistent, which means the unit rate is relatively stable.

3.2.1.2. Historical and forecast unit rates

Table 2.2 sets out the actual unit rates incurred in laying mains in new housing estates over the current AA period and the forecast for the next AA period.

Table 2.2: New estate mains forecast unit rates ($ January 2025)

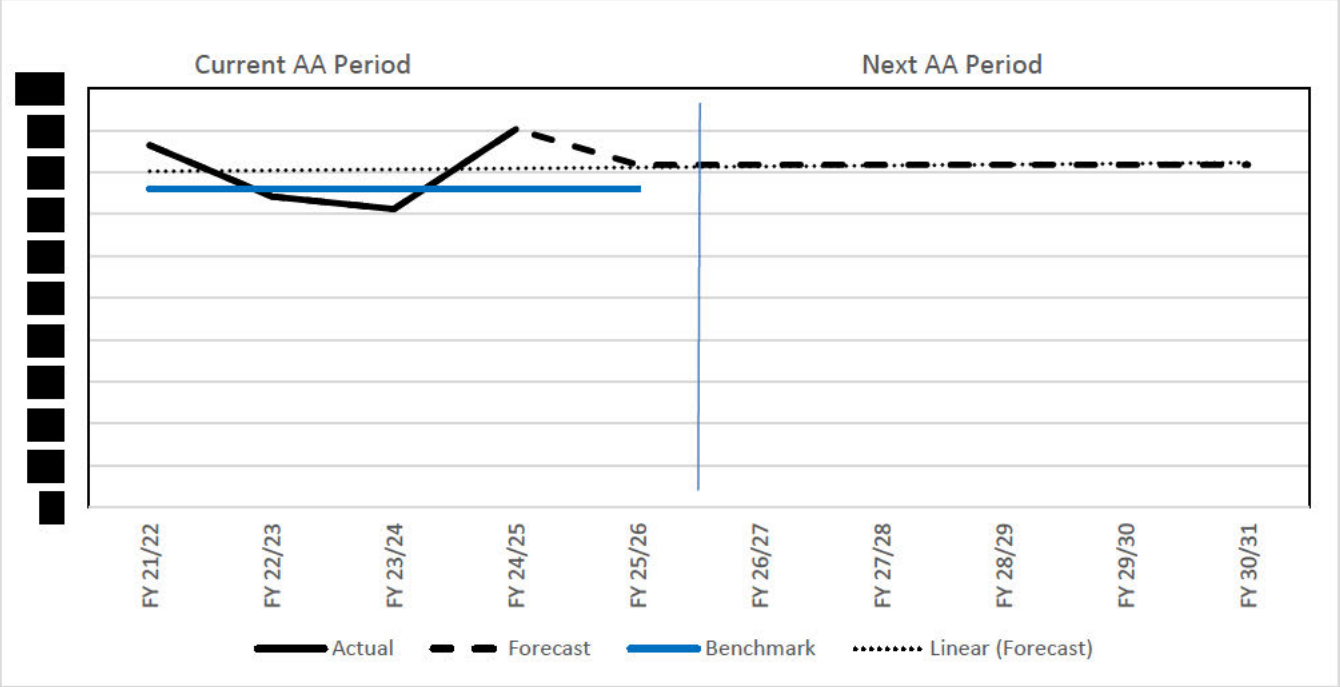
NEW MAIN - ESTATE	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted Average	Forecast for next AA period
Contractor Rates						
Material/Other Rates						
Actual $/Unit						
Actual volume (metres)	40,398	51,158	54,845	26,505		
AER volume (metres)	26,124	25,884	24,842	26,043		
Benchmark AER $/Unit						

3.2.1.3. Comparison of historical rates with AER approved rates

Figure 2.1 shows that the actual unit rates incurred in 2021/22 rates were above the benchmark unit rates approved by the AER in the current AA period.

[7] The cost of trunk mains and district regulator stations are costed individually as part of project-specific business cases and therefore do no form part of this Unit Rates Report.

Figure 2.1: New estate mains unit rates ($January 2025)



The higher rates observed in 2021/22 were due to Buckland Park and Roseworthy expansions using larger diameter 160-180mm with costs trending down to be around benchmark due to smaller developments using smaller diameter 63 mm pipe.

The higher rates in 2024/25 reflect the impact of the temporary increase in rates agreed with contractors from 1 January 2025.

3.2.1.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

3.2.1.5. Forecast unit rates

The forecast unit rate for new estate mains during the next AA period is $[redacted]/metre. The forecast in this case is based on the current year-to-date actual unit rate to December 2024 for both contractor and materials/other costs. The current actuals approach is appropriate for new estate mains because the volume and type of work we expect to carry out in the next AA period is high and similar in nature to what has recently been delivered.

As discussed above, new mains and service laying contracts have been executed and come into effect from July 2025. At the time of preparing our forecast our analysis of the new contract schedule of rates indicates that a [redacted] increase on current rates could be expected and this has been included in our forecast of contractor and material rates for laying mains in new estates for the next AA period.

3.2.2. Existing home new mains

Forecasting approach:	Current actuals

3.2.2.1. Nature of works and costs

This work involves laying mains in brownfield areas. Typically, this will comprise of small network extensions typically using 63 mm polyethylene mains. The volume of work averages around 5 kilometres per annum. It is subject to a degree of inter-year variability because the scope and complexity of work can differ depending on the location (e.g. within roadway or verge), diameter of the mains and other site specific factors.

3.2.2.2. Historical and forecast unit rates

Table 2.3 sets out actual unit rates incurred in laying mains for existing homes over the current AA period and the forecast for the next AA period.

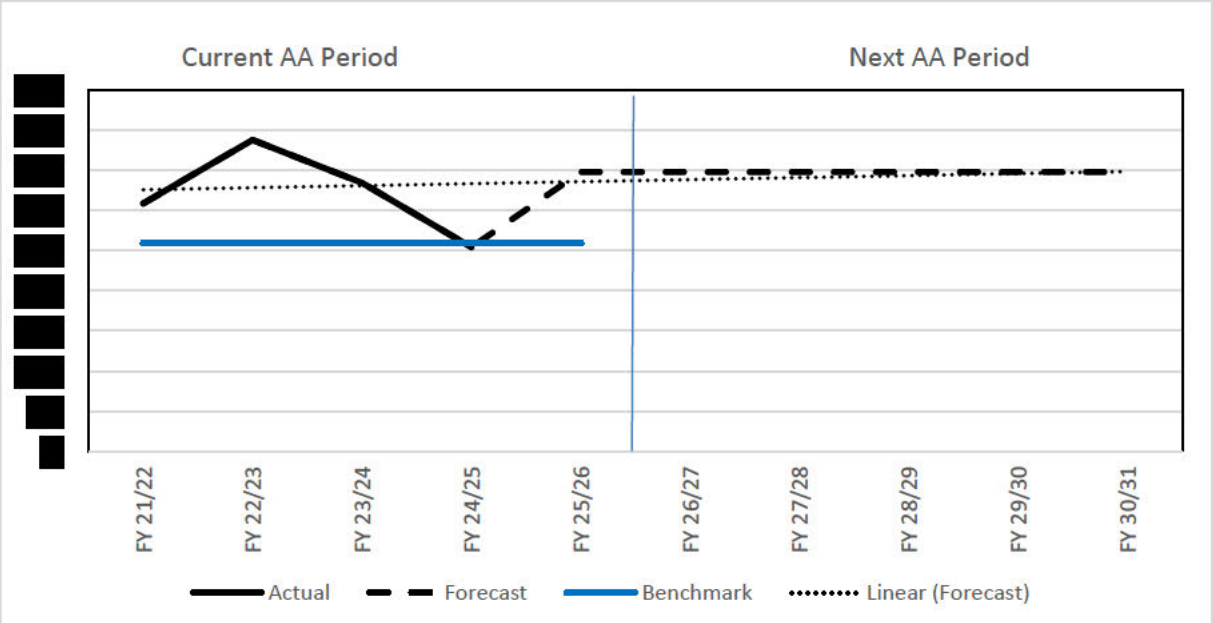
Table 2.3: Existing home new mains forecast unit rates ($ January 2025)

NEW MAIN - EXISTING DOMESTIC	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Material/Other rates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Actual $/Unit	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Actual volume (metres)	5,464	4,561	4,993	5,271		
AER volume (metres)	9,877	9,787	9,393	9,847		
Benchmark AER $/Unit	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

3.2.2.3. Comparison of historical rates with AER approved rates

Figure 2.2 shows the actual unit rates incurred for laying mains to existing homes in the current AA period have exhibited a high degree of variability (i.e. because the scope of work can differ in each year) and on average have been approximately [redacted] above the approved benchmark.

Figure 2.2: Existing homes new mains unit rates ($ January 2025)



The spike in rates in 2022/23 was driven by a higher proportion of work done in southern areas including Hackham which are rockier and more expensive to operate in.

3.2.2.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are

efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

3.2.2.5. Forecast unit rates

The forecast unit rate for existing home mains during the next AA period is $[redacted]/metre.

The forecast is based on the current year-to-date actual unit rate to December 2024 for both contractor and materials/other costs. The current actuals approach is appropriate because the volume and type of work we expect to be carry out in the next AA period is high and similar in nature to what has recently been delivered.

As discussed above, new mains and service laying contracts have been executed to come into effect from July 2025. At the time of preparing our forecast our analysis of the new contract schedule of rates indicates that a [redacted] increase on current rates could be expected and this has been included in our forecast of contractor and material rates for laying mains to existing domestic properties for the next AA period.

In addition, the implementation of the National Training Framework for Temporary Traffic Management will take full effect from 1 February 2026, with contractors moving away from using their own internal traffic management resources to using 3rd party providers. It is anticipated that this will add [redacted] to contractor costs when it comes into full effect in the next AA period, with contractors continuing to use internal traffic management resources until current certification expires.

3.2.3. New I&C mains

Forecasting approach:	Weighted average of historical actuals

3.2.3.1. Nature of works and costs

This work involves the laying of new mains to the boundaries of I&C premises consuming less than 10 TJ of gas per annum. It typically comprises up to 110 mm polyethylene and up to 80 mm steel mains. The work is lower volume and subject to a high degree of inter-year variability because the scope and complexity of work can vary from small diameter extensions in low density urban areas to high volume large distribution network extensions within the Adelaide CBD.

3.2.3.2. Historical and forecast unit rates

Table 2.4sets out actual unit rates incurred in laying new mains for I&C customers over the current AA period and the forecast for the next AA period. Rates in the current AA period have exhibited a high degree of variability (i.e. because the scope of work can differ in each year).

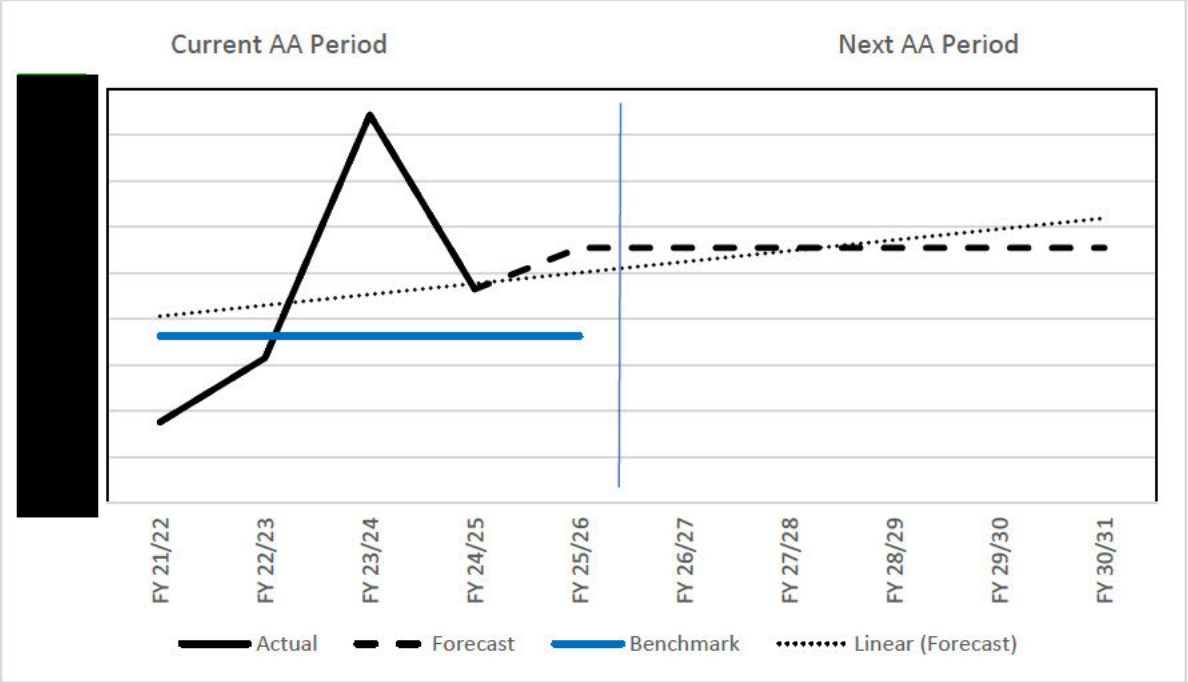
Table 2.4: I&C new mains forecast unit rates ($ January 2025)

NEW MAIN - I&C < 10 TJ	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (metres)	1,835	610	279	909		
AER volume (metres)	655	1,523	1,519	-		
Benchmark AER $/Unit	[redacted]					

3.2.3.3. Comparison of historical rates with AER approved rates

Figure 2.3 shows the actual unit rates for I&C new mains have been higher on average than the approved benchmark by [redacted] but have exhibited a significant degree of inter-year variability.

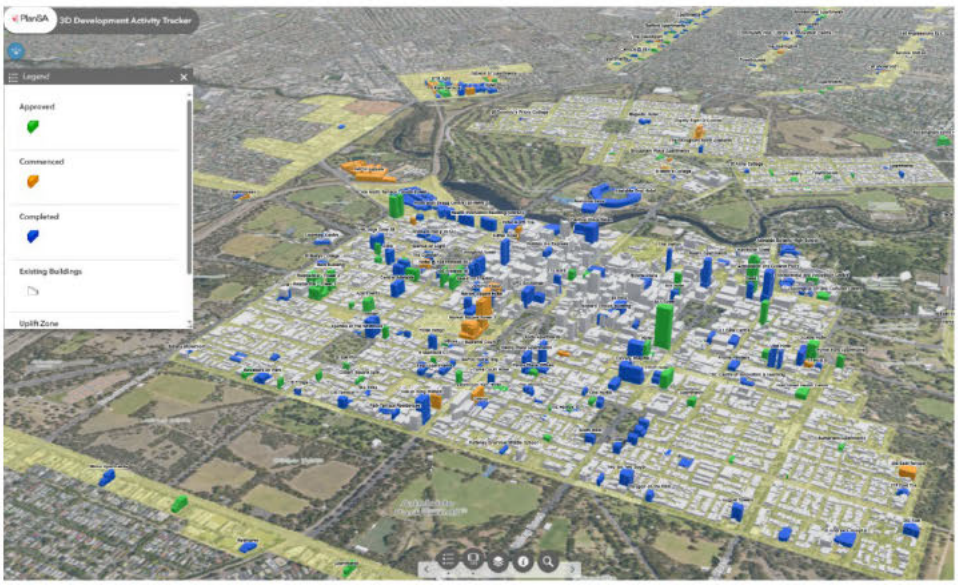
Figure 2.3: I&C new mains unit rates ($ January 2025)



The increase in rates in 2023/24 reflects that there were a number of short length jobs in that year. For example, there were 2 jobs of less than 10 metres on major roads (Port Road and Magill Road), which carry a large mainly fixed costs associated with associated traffic and traffic management costs but spread over a short length of main installed. This highlights the variability of I&C mains rates.

Figure 2.4 is a screenshot from the development activity tracker web portal managed by the SA Department of Planning, Transport and Infrastructure. It shows the volume of approved developments (green) and commenced developments (orange) is similar to the volume of completed developments (blue) over the last few years.

Figure 2.4: Adelaide CBD development activity May 2025



We expect developments in the Adelaide CBD will continue to occur over the next AA period and the forecast unit rate will behave similarly to the historical unit rates incurred over the last two years.

3.2.3.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

3.2.3.5. Forecast unit rates

The forecast unit rate for new I&C mains during the next AA period is $[redacted]/metre.

The forecast for contractor and material/other costs has been based on the weighted average of historical actuals. This approach is appropriate for forecasting the cost of laying new I&C mains as this activity involves lower volumes of work that are subject to a high degree of variability and customer/site-specific requirements.

In addition, in line with cost increases seen in the recent mains and services contract renewals a, we estimate that increased costs of [redacted] in contractor and material costs over the next AA period. I&C mains laying work will also be impacted by the changes to traffic management rules, as such we have allowed a [redacted] increase on top of contractor costs for traffic management.

3.3. New services

The unit rates we incur when installing services differ depending on whether the services are used to supply:

- New homes
- Existing homes
- Multi-user premises
- I&C premises

The costs of installing a gas service differ across these connection types depending on whether services can be installed as part of a greenfield development. Greenfield developments cost less to supply, as brownfield/established developments require additional road and footpath excavation and reinstatement costs to be incurred.

There is also a high degree of variability between high density multi-user dwellings and I&C jobs. This is because they tend to be site and customer specific, meaning the cost of these jobs can vary depending on the complexity of the work involved.

3.3.1. New home services

Forecasting approach: Current actuals

3.3.1.1. Nature of works and costs

This work involves the laying of services to new homes, either in greenfield or brownfield conditions. Approximately 6,500 new services are installed each year in new residential dwellings under construction, with the location of new home services varying from urban infill and regeneration projects (which require reinstatement and traffic management services) to dwellings built in new greenfield estates.

The unit rates for this type of work tend to be relatively stable, but can be influenced on a year to year basis by:

- The proportion of work carried out in greenfield versus brownfield developments
- The volume of road crossings driven by the mix of same side versus opposite side connections
- The location of service positions on a customer's property

3.3.1.2. Historical and forecast unit rates

Table 2.5 sets out actual unit rates incurred laying services to new homes over the current AA period and the forecast for the next AA period.

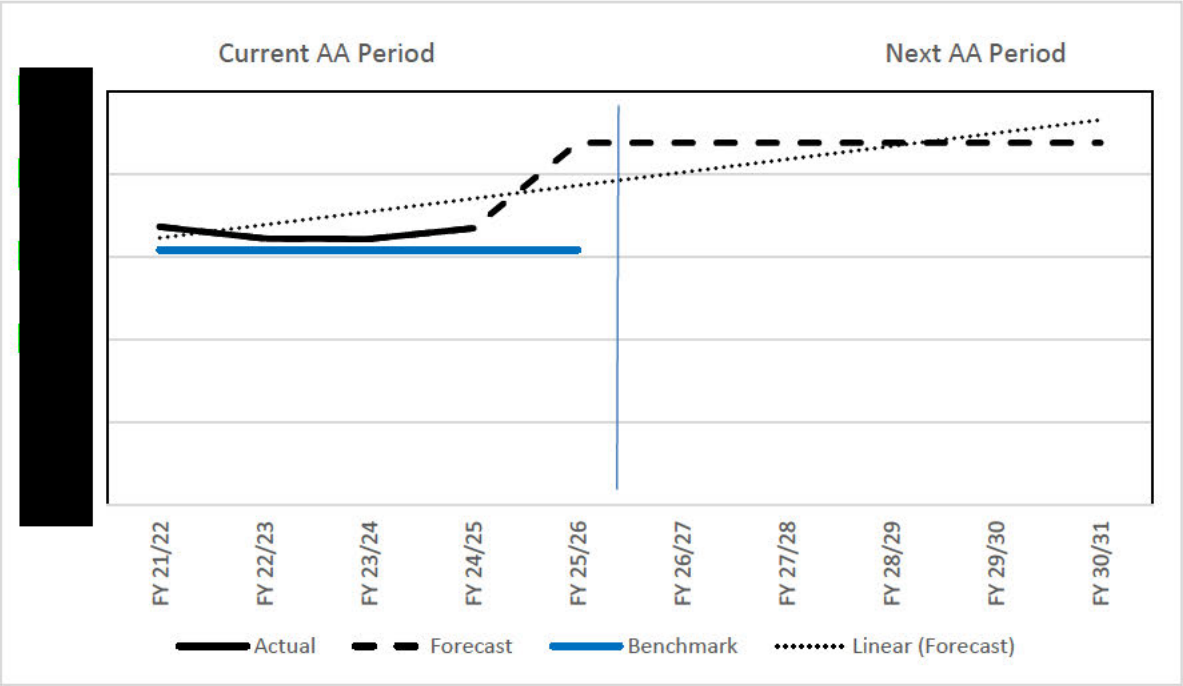
Table 2.5: New home services forecast unit rates ($ January 2025)

NEW SERVICE - NEW HOME	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates	[redacted]					
Actual $/Unit	[redacted]					
Actual volume (service)	5,720	6,430	7,319	5,682		
AER volume (service)	5,304	5,255	5,044	5,288		
Benchmark AER $/Unit	[redacted]					

3.3.1.3. Comparison of historical rates with AER approved rates

Figure 2.5 shows the actual unit rates for new home services have been higher than the benchmark across the period by approximately [redacted] on average.

Figure 2.5: New home services unit rates ($ January 2025)



The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates experienced in other jurisdictions where the work is similar.

3.3.1.4. Forecast unit rates

The forecast unit rate for new home services in the next AA period is [redacted]/unit.

The rate is based on the current year-to-date actual unit rate to December 2024 for both contractor and material/other costs. This approach is appropriate because the volume and type of work we expect to be carry out in the next AA period is high and similar in nature to what has recently been delivered.

As discussed above, new mains and service laying contracts have been executed to come into effect from July 2025. At the time of preparing our forecast our analysis of the new contract schedule of rates indicates that a [redacted] increase on current rates could be expected and this has been included in our forecast of contractor and material rates for laying mains in new estates for the next AA period.

In addition, with a change in traffic management rules, contractors will have to move away from using their own internal traffic management resources to using 3rd party providers. It is calculated that this will add [redacted] to contractor costs when it comes into full effect in the next AA period, with contractors continuing to use internal traffic management resources until current certification expires.

3.3.2. Existing home services

Forecasting approach:	Current actuals

3.3.2.1. Nature of works and costs

This work involves laying services to existing homes (brownfield conditions). The volume of work is relatively stable, however, there is some variation depending on the mix of same side and opposite side connections, the location of gas meters on the customer property (e.g. front boundary, garden, wall box) and the complexity of remaining properties available for connection.

3.3.2.2. Historical and forecast unit rates

Table 2.6 sets out actual unit rates incurred in laying services in existing homes over the current AA period and the forecast for the next AA period.

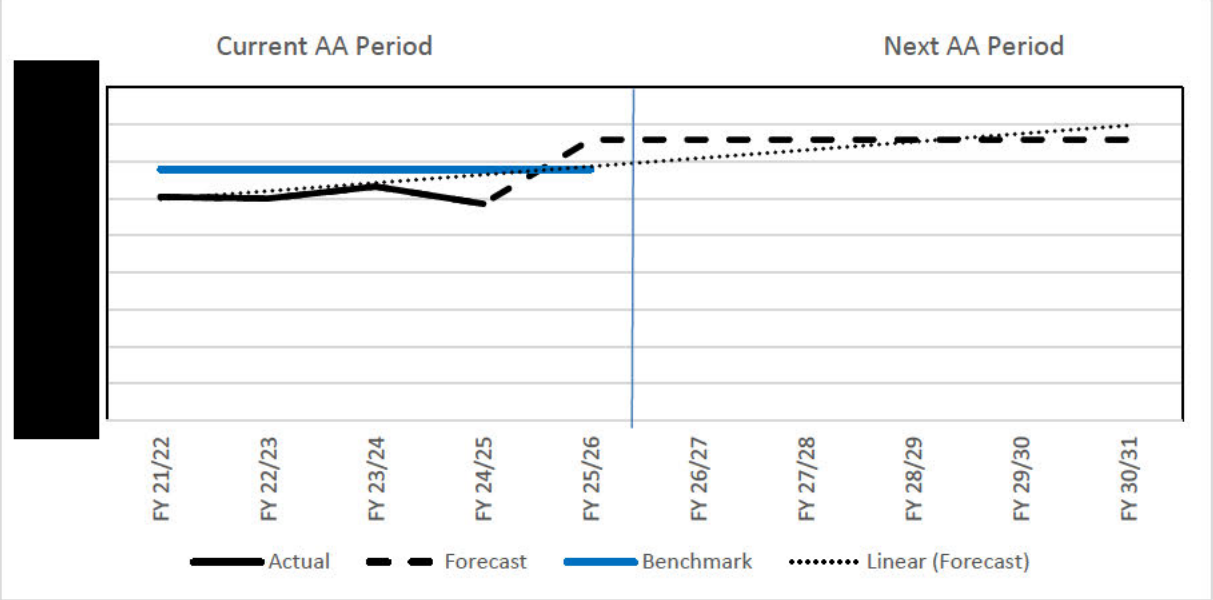
Table 2.6: Existing home new services forecast unit rates ($ January 2025)

NEW SERVICE - EXIST HOME	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates						
Material/Other rates						
Actual $/Unit						
Actual volume (service)	528	359	267	171		
AER volume (service)	1,000	991	951	997		
Benchmark AER $/Unit						

3.3.2.3. Comparison of historical rates with AER approved rates

Figure 2.6 shows the actual unit rate has been consistently lower than the benchmark unit rate over the current AA period by approximately

Figure 2.6: Existing home services unit rates ($January 2025)



We have not seen the expected volumes of existing homes connecting to gas. There has been an increase in costs from the previous AA but not as much as anticipated due to the complexity of installations.

3.3.2.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

3.3.2.5. Forecast unit rates

The forecast unit rate for installing new services at existing homes during the next AA period is $[redacted]/unit.

The forecast is based on the year-to-date actual unit rate to December 2024 for both contractor and materials/other costs. The current actual approach is appropriate because the volume and type of work we expect to carry out in the next AA period is similar in nature to what has recently been delivered.

As discussed above, new mains and service laying contracts have been executed to come into effect from July 2025. At the time of preparing our forecast our analysis of the new contract schedule of rates indicates that an [redacted] increase on current rates could be expected and this has been included in our forecast of contractor and material rates for laying mains in new estates for the next AA period.

In addition, with a change in traffic management rules, contractors will have to move away from using their own internal traffic management resources to using 3rd party providers. It is expected that this will add [redacted] to contractor costs when it comes into full effect in the next AA period, with contractors continuing to use internal traffic management resources until current certification expires.

3.3.3. New multi-user services

Forecasting Approach:	Current actuals

3.3.3.1. Nature of works and costs

This work encompasses the laying of services to premises that have more than one customer, such as units and apartment buildings. These projects usually arise due to site redevelopment and are therefore rarely greenfield projects. The volume of multi-user services completed each year is relatively stable, however, this work is subject to a degree of inter-year variability because the scope of work can vary from small unit sites containing three or four dwellings to large multiple dwelling developments. The scale of a multi-user site directly affects both contractor and material costs.

3.3.3.2. Historical and forecast unit rates

Table 2.7 sets out actual unit rates incurred in laying multi-user services over the current AA period and the forecast for the next AA period.

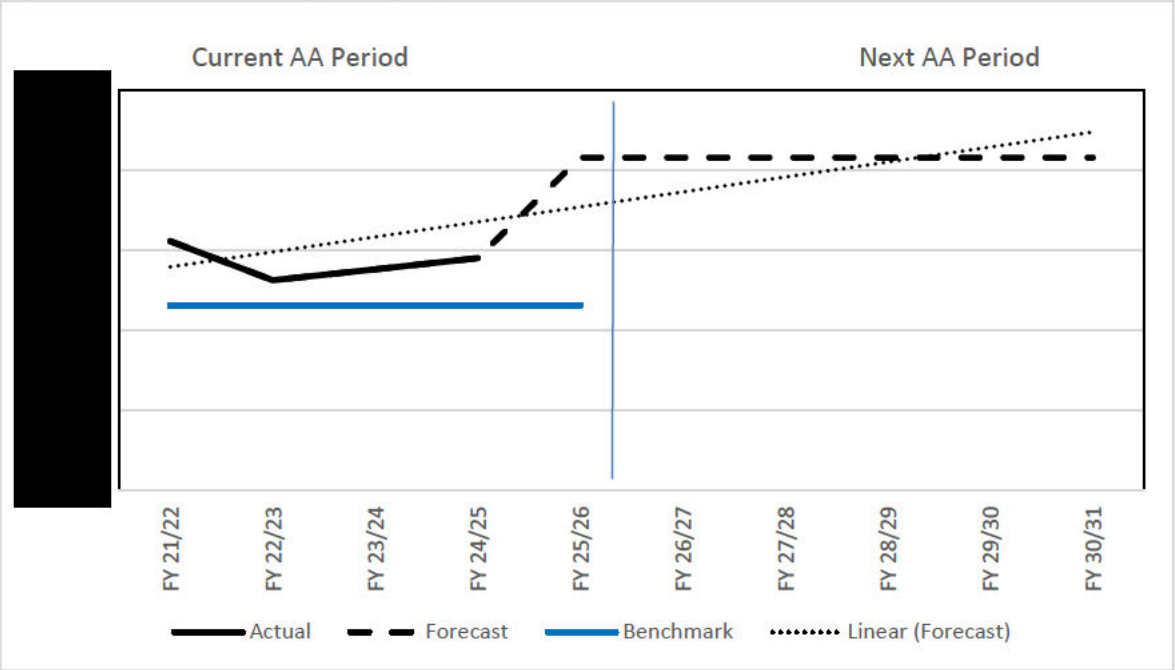
Table 2.7: New multi-user services forecast unit rates ($ January 2025)

NEW SERVICE - MULTI USER	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (service)	113	111	132	96		
AER volume (service)	356	352	338	354		
Benchmark AER $/Unit	[redacted]					

3.3.3.3. Comparison of historical rates with AER approved rates

Figure 2.7 shows the actual unit rates for new home services have been higher than the benchmark across the period by approximately [redacted] on average.

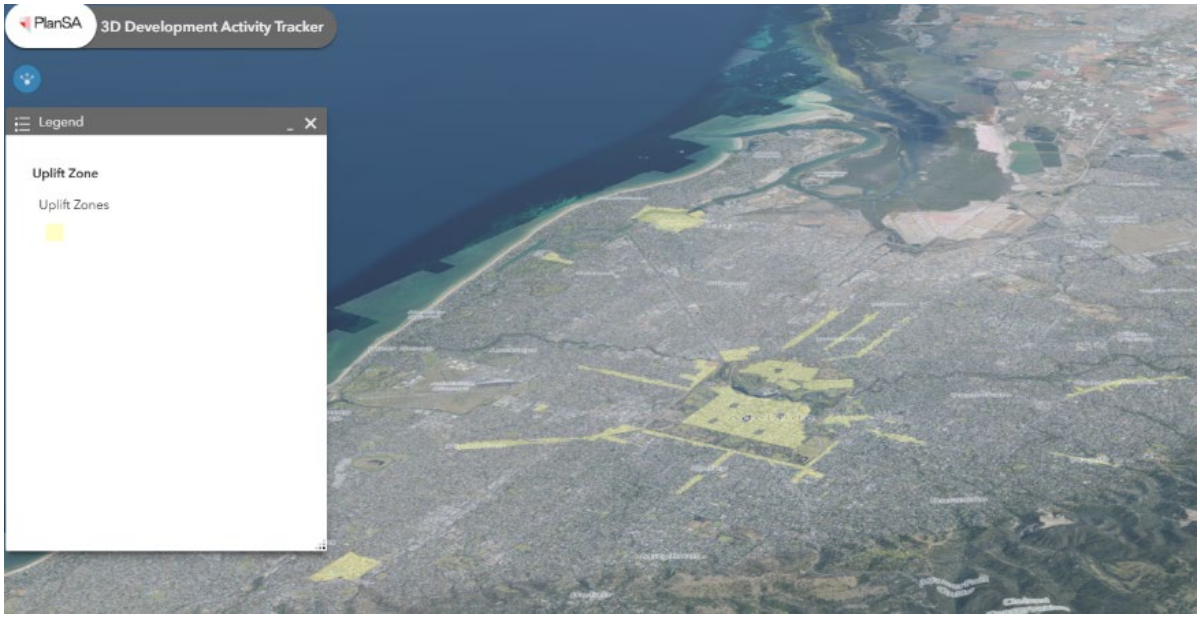
Figure 2.7: New MUS Unit Rates ($ January 25)



The actual unit rates incurred during the current AA period are showing a gradual trend upwards, and we expect to achieve a similar rate over the next AA period. There is a move towards larger multi-unit developments in line with higher density housing, consistent with the State Government re zoning of multi-story high density housing.

As part of the 30-Year Plan for Greater Adelaide, uplift zones have been designated for increased development potential. These zones are identified in planning strategies to encourage higher density development, such as multi-story residential buildings or mixed-use developments. The goal is to make better use of existing infrastructure and services, reduce urban sprawl, and support sustainable growth. We expect there will be higher cost of connections on these sites as often it involves the complexities of the installation next to a main road. Uplift zones often include areas near public transport hubs, major roads, and existing urban centres and include all the areas highlighted in yellow in the development tracker extract below.

Figure 2.8: Extract from Plan SA development activity tracker



3.3.3.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

3.3.3.5. Forecast unit rates

The forecast unit rate for installing new multi-user services during the next AA period is [redacted]/unit.

The forecast is based on the current year to date actual unit rate for 2024/25 for both contractor and materials/other costs. The current actual rate is appropriate because the volume and type of work we expect to carry out in the next AA period is similar in nature to what has recently been delivered.

In addition, in line with cost increases seen in the recent mains and services contract renewals we estimate that increased costs of [redacted] in contractor and material costs over the next AA period in line with the forecast increase in existing services rates due to the new mains and services contracts.

As discussed above the increased cost reflects the complexities of installation next to major roads and near public transport hubs. The work will also be impacted by the changes to traffic management rules, as such we have allowed a [redacted] increase in costs for increased traffic management on top of contractor costs.

3.3.4. New I&C services (<10TJ per year)

Forecasting approach: Weighted average of historical actuals

3.3.4.1. Nature of works and costs

This work involves the laying of services for I&C premises that consume less than 10 TJ of gas per year. It is low volume work and subject to a high degree of variation because the scope and complexity of work is site and customer specific. Projects can vary from small diameter basic commercial connections in suburban streets to complex industrial connections along roads or within the Adelaide CBD.

3.3.4.2. Historical and forecast unit rates

Table 2.8sets out actual unit rates incurred laying services at I&C premises over the last three years and the forecast for the next AA period.

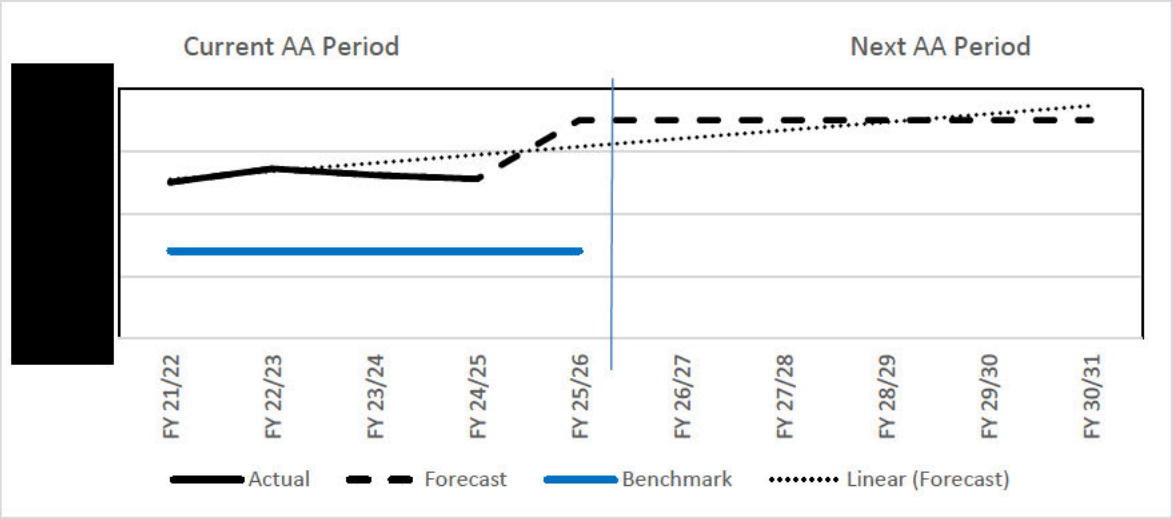
Table 2.8: New I&C services forecast unit rates ($ January 2025)

NEW SERVICE - I&C < 10TJ	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates						
Material/Other rates						
Actual $/Unit						
Actual volume (service)	180	175	139	94		
AER volume (service)	117	272	271	259		
Benchmark AER $/Unit						

3.3.4.3. Comparison of historical rates with AER approved rates

Figure 2.9 shows actual unit rates have been well above the benchmark unit rate approved by the AER by approximately [redacted] on average.

Figure 2.9: New I&C services (<10TJ) unit rates ($ January 2025)



The rate has been consistently above benchmark due to CBD developments as forecast in the previous AA submission, but at higher cost than previously forecast. There can be a high degree of volatility exhibited by the components of the actual unit rates reflects the impact of site and customer specific requirements on costs.

As discussed at Figure 2.4 above, the volume of approved developments (green) and commenced developments (orange) is similar to the completed developments (blue) over the last few years, and we expect the level of activity to continue.

3.3.4.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

3.3.4.5. Forecast unit rates

The forecast unit rate for installed new I&C services during the next AA period is [redacted]/unit.

The forecast for contractor and material/other costs is based on the weighted average of historical actuals. This is consistent with the approved approach in the previous SA AA.

This approach is appropriate for new I&C services as the work involves lower volumes which are subject to a high degree of variability. The complexity of each project is site/customer specific, making it difficult to derive meaningful assumptions on the work mix over the next AA period.

In addition, in line with cost increases seen in the recent mains and services contract renewals we estimate [redacted] rises in contractor and material costs over the next AA period, in line with the forecast increase in existing services rates resulting from the new mains and services contracts.

The increased cost reflects the complexities of installation in commercial areas next to major roads and near public transport hubs. The work will also be impacted by the changes to traffic management rules, as such we have allowed a [redacted] increase in costs for increased traffic management on top of contractor costs.

3.4. New meters

The unit rates we incur when installing a new meter differs depending on the type of meter installed (i.e. whether it is a domestic or an I&C meter). The new meter unit rates include both the cost of the meter and costs associated with the installation of the meter.

3.4.1. New domestic meters

Forecasting approach: Current actuals

3.4.1.1. Nature of works and costs

Installing domestic gas meters for new connections involves:

- Procuring new meters, including quality control
- Planning and scheduling of meter installations
- Organising resources (combination of direct and contractor) to carry out the meter installation
- Installing the new meter

This work is high volume and associated unit rates are relatively stable.

3.4.1.2. Historical and forecast unit rates

Table 2.9 sets out the actual unit rates incurred installing domestic gas meters for new connections over the current AA period and the forecast for the next AA period.

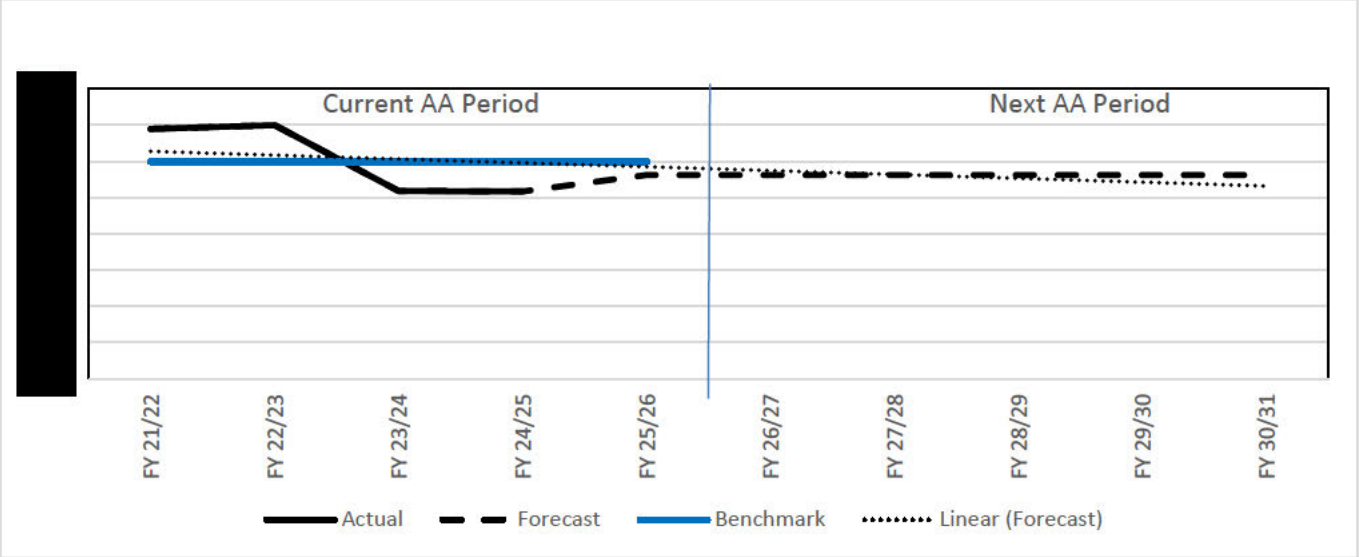
Table 2.9: New domestic meters forecast unit rates ($ January 2025)

METER GROWTH DOMESTIC	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (meters)	7,022	6,905	7,845	6,262		
AER volume (meters)	7,726	7,655	7,347	7,702		
Benchmark AER $/Unit	[redacted]					

3.4.1.3. Comparison of historical rates with AER approved rates

Figure 2.10 shows actual unit rates for new domestic meters have been lower than the approved benchmarks and are expected to remain that way over the remainder of the current AA period.

Figure 2.10: New domestic meters forecast unit rates ($ January 2025)



The domestic meter rate has trended lower than benchmark as a result of:

- Insourcing of meter installation in 2023/24 which has driven savings
- The new procedure of "hang & wad" of new meters over the past 12 months has introduced efficiency and savings. This procedure enables the fitter to install meter and regulator without having to test outlet and appliances and the need to coordinate with builder meaning a reduction in return trips to sites and productivity savings.

3.4.1.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

3.4.1.5. Forecast unit rates

In the next AA period, the unit rate for domestic meter connections is forecast to be $[redacted] meter.

The forecast is based on the current year to date actual unit rate for 2024/25 for both contractor and materials/other costs. The current actuals approach is appropriate because the volume and type of work that is expected to be carried out in the next AA period is similar in nature to what has recently been delivered and the incorporates savings because of changes to meter installation procedures discussed above.

The current contract to supply new meters will expire on 1 June 2026 and it is expected that meter prices will increase by more than CPI in line with increases the business is seeing as a result of market testing current contracts. [redacted]

In addition, from 2023/24 refurbished meters have no longer been available from the supplier. Although refurbished meters are used only in domestic meter replacement and not used in new domestic installations, we expect this will add additional cost pressure to new meters now that there is no supply of cheaper refurbished meters to compete

As a result of the uncertainty surrounding the outcome of the meter tenders, a [redacted] increase on current meter prices has been included in our forecast based on the outcome of the recent mains and services

tender.

Despite this, domestic meter installations are forecast to be [redacted] lower than benchmark over the next AA period, due to the insourcing of meter fitting from 2023/24 and new "hang and wad" procedures over the last 12 months.

3.4.2. New I&C meters

Forecasting Approach:	Weighted average of historical actuals

3.4.2.1. Nature of works and costs

Installing gas meters for new I&C meters (<10TJ p.a.), involves:

- Procuring new meters, including quality control
- Fabrication of meter and regulator sets
- Planning and scheduling of meter installations
- Organising resources (combination of direct and contractor) to carry out the meter installation
- Installing the new meter and carrying out any relevant safety checks

The work is lower volume and subject to a significant degree of volatility because the scope of work can differ from year to year depending on the number and size of I&C meters that need to be connected. The nature and complexity of work poses a challenge, particularly with the limited access and high installation cost around the Adelaide CBD.

3.4.2.2. Historical and forecast unit rates

Table 2.10 sets out the actual unit rates incurred when connecting I&C meters over the current AA period and the forecast for the next AA period.

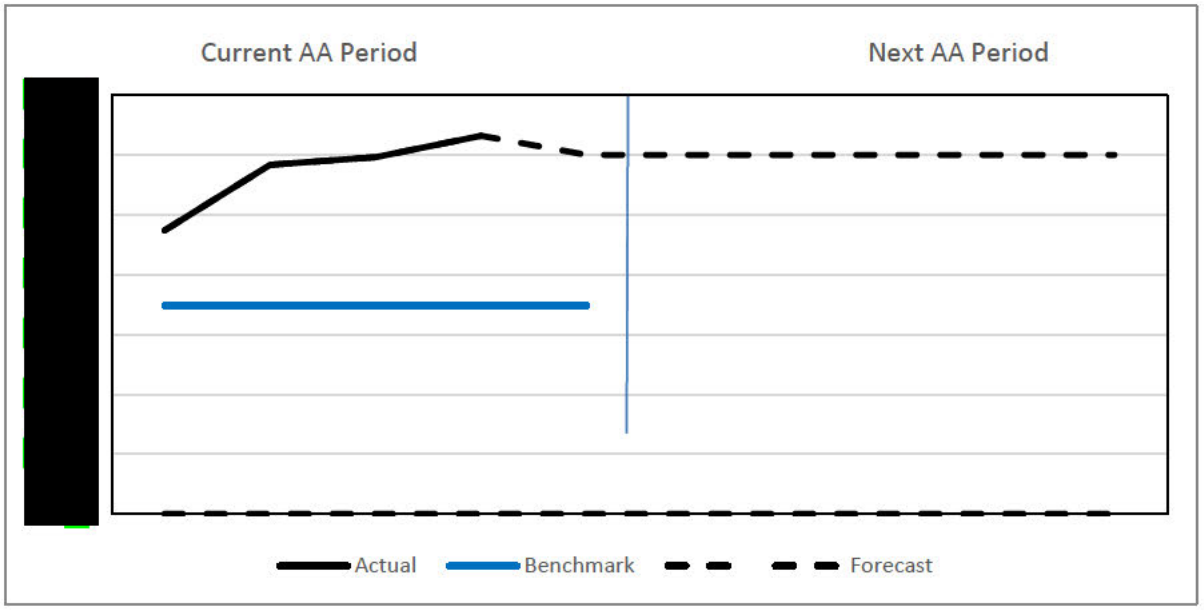
Table 2.10: New I&C meters forecast unit rates ($ January 2025)

METER GROWTH I&C < 10TJ	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (meters)	187	147	147	92		
AER volume (meters)	117	272	271	259		
Benchmark AER $/Unit	[redacted]					

3.4.2.3. Comparison of historical rates with AER approved rates

Figure 2.11 shows actual unit rates have been materially higher than the approved benchmarks by [redacted] on average and are expected to remain that way over the remainder of the current AA period.

Figure 2.11: New I&C meter sets forecast unit rates ($ January 2025)



As with I&C services, it is difficult to compare unit rates for I&C meters over time and with a benchmark because they can vary substantially from year to year depending on the number and size of I&C meters that need to be installed as well as the location (i.e. meter room, ventilation requirements, sleeved services) the load, the number of meters installed and the type of end user.

3.4.2.4. Are current costs efficient?

Large I&C meter connections are predominantly carried out by a mixture of internal staff and contractors depending on the scale of the job. While the work is not subject to a competitive tender, it can still be viewed as efficient given:

- There are incentives to minimise connections costs under the outsourcing arrangement with our operations and management service provider, APA
- Materials are procured through a competitive procurement process

3.4.2.5. Forecast unit rates

The forecast unit rate for I&C meter connections in the next AA period is $[redacted] meter. The forecast for contractor and material/other costs is based on the weighted average of historical actuals.

This approach is appropriate as installing new I&C meters involves lower volumes of work that are subject to a high degree of variability. This makes it difficult to derive meaningful assumptions on the work mix over the next AA period.

4. Meter replacement

4.1. Summary

The unit rates we incur when replacing meters differs depending on the type of meter being replaced (industrial and commercial or domestic application) and the use of new or refurbished meters. There are three forecast unit rates under the meter replacement capex program;

- Meters < $10m^3$ (Domestic)
- Meters > $10m^3$ (I&C)
- Meters < $10m^3$ (Digital)

4.1.1. Factors impacting meter replacement unit rates

Consistent with NGR 74, the forecast unit rates for meter replacement capex activities have been arrived at on a reasonable basis. They are informed by recent revealed costs of the work that will be undertaken over the next AA period and reflect the best estimate possible in the circumstances.

While we have made every effort to derive accurate forecast unit rates, several factors are expected to place upward pressure on unit rates for meter replacement activities over the next AA period. These are:

- From 2023/24 refurbished meters have no longer been available from the supplier with more expensive new meters having to be used
- The current contract to supply new meters will expire on 1 June 2026 and it is expected that meter prices will increase by more than CPI. We expect increases to be in line with those seen in recent service tender processes. To accommodate this assumption, we have included a [redacted] increase in the current cost of domestic meter installation in the forecast for domestic meter replacement.

As a result domestic meter replacement is forecast to be [redacted] higher than the current benchmark.

I&C meter replacement is forecast to be [redacted] higher than the current benchmark reflecting higher revealed costs in the current AA period.

We are forecasting a new rate for the current AA for the installation of digital meters.

During the next 5 years we propose to address the issue of inaccessible meters by installing digital meters at sites identified as inaccessible or difficult/dangerous to access. The meters can be installed at a customer's premises and read remotely. The technology can use existing cellular 4G/5G networks, and the digital meter data can be integrated into AGN's metering and billing data system (refer Attachment 9.5 Meter replacement Plan).

This digital solution will allow remote reads to be conducted each year and ensure we can provide actual meter data to retailers to allow accurate customer billing. This will enable us to meet our compliance requirements and eliminate costs associated with special meter reads.

We have used the current actual unit rate as the basis for forecasting the domestic meter unit rate. Based on current information we expect to maintain this unit rate over the next AA period. The unit rate for replacing commercial meters is calculated by using a weighted average of historical actuals. The commercial meter unit rate is forecast to be consistent with that achieved over the current AA period. The forecast rate for digital meters is based on current indicative pricing.

Table 3.1: Summary of meter replacement unit rate changes from benchmark

Category	Unit rate next AA period	Current AA benchmark	Movement in unit rate (%)	Forecast approach
Meter replacement				
Meters < 10m³ (Domestic)	[redacted]			Current actuals
Meters > 10m³ (Commercial)				Weighted average of historical actuals
Meters < 10m³ (Domestic) - Digital	[redacted]	New Rate	New Rate	Recent comparable quotes

4.2. Meter replacement – Meters < 10m³ (Domestic)

Forecasting approach: Current actuals

4.2.1. Nature of works and costs

Replacing domestic gas meters involves:

- Procuring any new meters required, including quality control
- Planning and scheduling of meters to be changed over
- Organising resources (combination of direct and contractor) to carry out the meter change, which includes testing of outlet service and relighting appliances, and if required, re-attending premises after hours if the customer requires assistance
- Inspections of assets around the meter for integrity or compliance issues
- Testing meters brought in from the field
- Life extension
- Refurbishing meters as required (I&C meters only)

The replacement of domestic meters over the next AA period is required to ensure meters are calibrated and fit for purpose in accurately measuring gas usage within +/– 2%, as required by Australian Standard AS4944 and the South Australian Gas Metering Code.

4.2.2. Historical and forecast unit rates

Table 3.1 sets out actual unit rates incurred in replacing domestic gas meters over the current

AA period and the forecast for the next AA period.

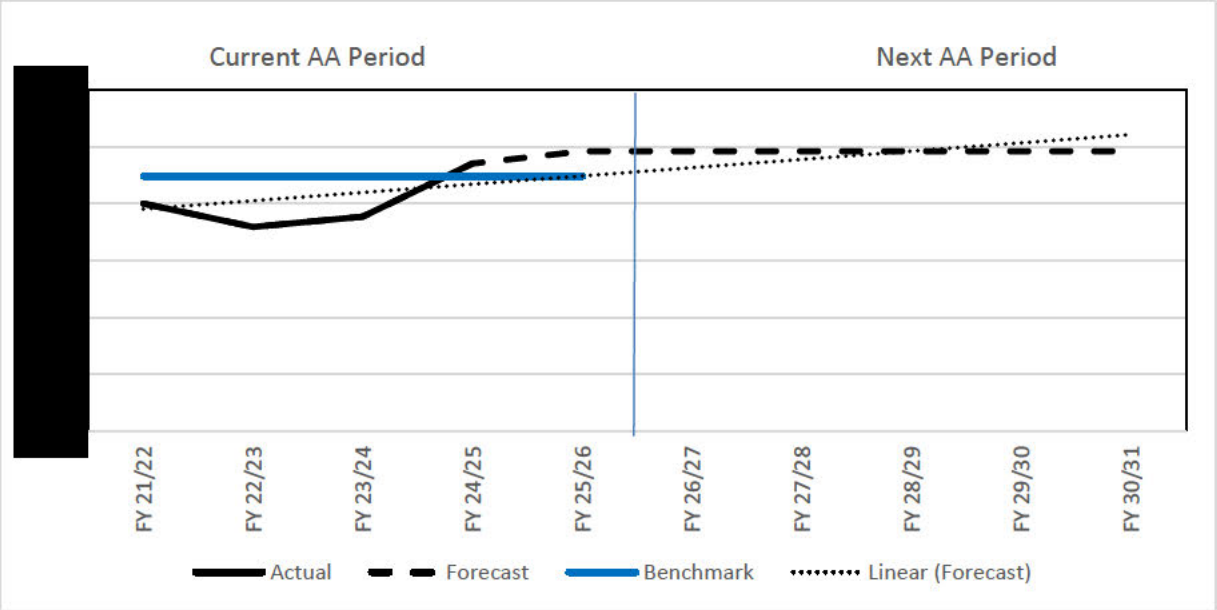
Table 3.1: Meters < 10m³ (Domestic) meter replacement forecast unit rates ($ January 2025)

METER CHANGE DOMESTIC	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (meters)	17,551	15,210	10,673	8,852		
AER volume (meters)	15,365	14,582	21,985	17,444		
Benchmark AER $/Unit	[redacted]					

4.2.3. Comparison of historical rates with AER approved rates

Figure 3.1 shows the actual unit rates for domestic meter replacement have been lower than the benchmark in recent years but are trending above benchmark going forward.

Figure 3.1: Meters <10m³ (Domestic) meter replacement unit rates ($2024/25)



The lower than benchmark domestic PMC rate has begun to trend up to benchmark from 2023/24 with refurbished meters no longer available from the supplier and more expensive new meters having to be used. This has been offset to some extent by savings achieved from the insourcing of meter fitting from 2023/24.

4.2.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

4.2.5. Forecast unit rates

The forecast unit rate for changing domestic gas meters during the next AA period is [redacted]/meter.

As discussed above, from 2023/24 refurbished meters have no longer been available from the supplier with more expensive new meters having to be used for domestic meter changes. We have also included a [redacted] increase in the cost of a new meter in line with the outcome of recent tender outcomes for mains and services contracts.

4.3. Meter replacement – Meters > 10m³ (I&C)

Forecasting approach:	Weighted average of historical actuals

4.3.1. Nature of works and costs

Replacing commercial gas meters involves:

- Procuring any new or refurbished meters required, including quality control
- Fabrication of site-specific fittings and pipework
- Planning and scheduling of meters to be changed over
- Organising resources to carry out the meter change in conjunction with customer requirements/restrictions
- Testing meters brought in from the field
- Refurbishing meters, as required

The replacement of commercial gas meters does not include the various pipes, values and ancillary components referred to as the 'meter set'. These items typically have a longer useful life than the meter itself and are outside the scope of this paper.

This work is lower volume but subject to a significant degree of volatility because the scope of work can differ depending on the mix of sizes of the non-domestic meters that need to be replaced.

4.3.2. Historical and forecast unit rates

Table 3.2 sets out actual unit rates incurred in changing non-domestic gas meters over the current AA period and the forecast for the next AA period.

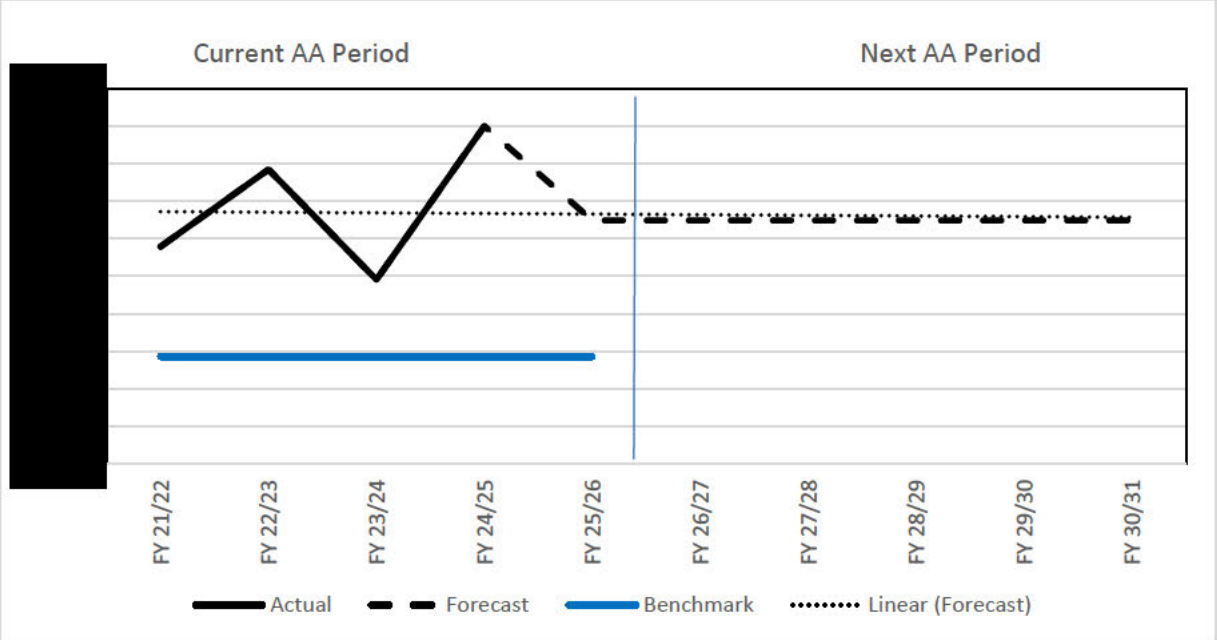
Table 3.2: Meters > 10m³ (I&C) meter replacement forecast unit rates ($ January 2025)

METER CHANGE I&C < 10TJ	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (meters)	601	312	727	290		
AER volume (meters)	501	617	516	741		
Benchmark AER $/Unit	[redacted]					

4.3.3. Comparison of historical rates with AER approved rates

Figure 3.2 shows the actual unit rates incurred over the current AA period have been subject to a degree of inter-year variability but have been consistently materially higher than the benchmark unit rate approved by the AER.

Figure 3.2: Meters >10m³ (I&C) meter replacement unit rates ($ January 2025)



The variability in observed unit rates reflects the differences in the number and size of the I&C meters that need to be changed each year (i.e. in some years there may be a greater number of larger models that need to be replaced than in previous years). This will affect the replacement/refurbishment cost, with costs varying greatly when comparing replacement of a small I&C meter to a large industrial turbine meter.

4.3.4. Are current costs efficient?

Large I&C meter changes are carried out by a mixture of internal staff and contractors

depending on the scale of the job. While the work is not subject to a competitive tender, it can still be viewed as efficient given:

- There are incentives to minimise connections costs under the outsourcing arrangement with our operations and management service provider, APA
- Materials are procured through a competitive procurement process

4.3.5. Forecast unit rates

The forecast unit rate for changing commercial gas meters during the next AA period is [redacted] meter. The forecast for contractor and materials/other costs is based on the weighted average of historical actuals. This approach is appropriate for I&C meter replacements as it involves lower volumes of work which are subject to a high degree of variability. The site and customer-specific requirements of each job make it difficult to derive meaningful assumptions on the work mix over the next AA period and therefore we have used the weighted average of historical actuals.

4.4. Meter replacement – Meters < 10m^3 (Digital)

Forecasting Approach:	Indicative pricing of digital meters

4.4.1. Nature of works and costs

We are forecasting a new rate for the current AA for the installation of digital meters.

As discussed above, during the next 5 years we propose to address the issue of inaccessible meters by installing digital meters at sites identified as inaccessible or difficult/dangerous to access. The meters can be installed at a customer's premises and read remotely. The technology can use existing cellular 4G/5G networks, and the digital meter data can be integrated into AGN's metering and billing data system (refer Attachment 9.5 Meter replacement Plan).

This solution will allow remote reads to be conducted each year and ensure we can provide actual meter data to retailers to allow accurate customer billing. This solution will enable us to meet our compliance requirements and eliminate costs associated with special meter reads.

4.4.2. Historical and forecast unit rates

The cost of replacing a meter with a digital meter is based on the cost of replacing a normal diaphragm meter with an increased allowance of [redacted] for the cost of a digital meter over a normal meter. This additional cost is based on indicative pricing advised by the supplier [redacted].

4.4.3. Forecast unit rates

The forecast unit rate for Digital Meters is $[redacted]/meter.

5. Mains replacement

5.1. Summary

The unit rate we incur when carrying out mains replacement and related activities varies depending on the category of mains and location. Categories and location of mains are detailed in the DMSIP. There are 4 unit rate categories for mains replacement activities.

Table 4.1 shows how the unit rate categories relate to the mains categories in the DMSIP, the work activity associated with that unit rate and the forecasting approach.

Table 4.1: Mains replacement unit rate and DMSIP categories

Unit rate category	DMSIP categories	Work activity	Forecasting approach
Planned/Unplanned mains Replacement.	Protected steel/ Unplanned mains replacement	Replacement by direct burial	Comparable quotes
Inline camera inspection	HDPE mains inspection	Inline Camera Inspection	Weighted average
Multi-user services (MUS)	MUS replacement	Replacement by insertion of services or direct burial	Weighted average
Unplanned service replacement	Unplanned service replacement	Reactive replacement by insertion or direct burial	Weighted average

Of the four unit rate categories for mains replacement and related activities in the next AA period, all are materially higher reflecting revealed actual costs over the current AA period and there is one new rate for steel replacement for the current period (Table 4.2).

Table 4.2: Summary of mains replacement unit rate changes from benchmark

Category	Unit rate next AA period	Current AA benchmark	Movement in unit rate (%)	Forecast approach
Mains replacement				
Planned/Unplanned[1]	[redacted]	New rate	New rate	Recent comparable quotes
Inline camera inspection		[redacted]		Weighted average of historical actuals
Multi-user services				Weighted average of historical actuals
Unplanned service replacements				Weighted average of historical actuals

(1) No benchmark was set for the current AA period.

Further detail on the unit rates associated with the mains replacement categories is provided in the following sections.

5.2. Planned/Unplanned mains replacement

Forecasting Approach:	Comparable quotes

5.2.1. Nature of works and costs

Once we have removed all low pressure cast iron mains from the network (expected to be done by end June 2026), our mains replacement program over the next AA period is targeted on the next highest risk families of mains; protected steel and HDPE. Both these materials are prevalent throughout our network, however, we are not looking at a high volume replacement program. Instead we are taking a proactive approach to managing these assets, replacing only a small volume of the poorest condition mains and applying more sampling and inspection techniques. Note our unplanned (reactive) replacement program will continue as usual.

Protected steel mains are typically either PE coated (yellow jacket) or coated with cold tar enamel (CTA) and are predominantly used for the high pressure networks. These mains are not susceptible to the type of cracking and integrity issues that affect HDPE, CI or UPS pipes, however they are made of a ferrous material and are ultimately susceptible to corrosion. These mains are therefore cathodically protected to help prevent corrosion and maximise their asset life. Cathodic protection does not extend asset life indefinitely.

The overall risk of this asset class is escalating with time due to the pipeline age and increasing leak rates. The original protected steel mains are approaching 60 years old. These steel mains are still cathodically protected, however, cathodic protection becomes less effective as the pipeline integrity deteriorates with age. Following an assessment of leaks, condition and location factors, we have identified 12.6 km of the oldest and highest risk protected steel mains that should be replaced during the next AA Period, as set out in the DMSIP.

Some mains replacements are performed on an unplanned basis as a means of addressing urgent integrity issues, such as water ingress or shallow mains. The HDPE piecemeal mains replacement is also a result of the inline camera inspection program, which can identify deteriorated sections of pipe that need to be replaced rather than reinforced.

We sometimes find conventional repairs are either not possible or not economically feasible due to multiple leaks or defects in a localised area. In these cases, unplanned mains replacement is undertaken via direct burial. This work is lower volume and subject to a high degree of variation. This is because the scope of work can vary from small diameter basic pipe replacement in a suburban area, to complex pipe replacement that could be located on major roads, under major intersections and/or in highly congested areas. We estimate that approximately 1 km per annum of this type of work will be undertaken over the next access period.

5.2.2. Historical and forecast unit rates

There are no historical rates that relate directly to this type of work.

5.2.3. Forecast unit rates

The forecast unit rate for Protected Steel is [redacted] metre. The forecast is based on the comparable quotes for mains alteration work recently quoted for 3rd party mains alterations (see Table 4.3).

Table 4.3: Comparable projects

Project	Date	Length (m)	Cost ($ January 2025)	Unit rate ($ January 2025)	Description of works
NSC Stage 1	2022-2023	[redacted]	[redacted]	[redacted]	Direct lay 150 steel main in back road and tie into existing steel main. Short section laid in poly with anodes installed. No services. Existing steel main abandoned.
Curtis Road	Mid 2023				Offset three section of 100 steel main and tie back into existing 100S7. Install control valves on new main. No services.
Peacock Road	Late 2024				Offset 180P8 main to replace existing steel and tie into steel. Maintain cathodic protection. No services.
University Drive	Early 2024				Relocate 80m – replaced with poly tied into steel. One customer off poly main.

This approach is appropriate because the type of work that is expected to be carried out in the next AA period is of a similar nature to what has recently been quoted on.

5.3. HDPE 575 – DN40 camera inspection and reinforcement

Forecasting approach: Current actuals

5.3.1. Nature of works and costs

This work involves using camera inspection technology to find, excavate and reinforce 'squeeze off' points where brittle slow crack growth can occur on HDPE class 575 DN40 pipe. In the current inspection program, camera insertion could only occur on pipe with nominal diameter DN50 and above. We have successfully tested a new camera to allow inspection of DN40 HDPE 575 mains.

The works involve camera inspection and includes the cost of monitor & repair (dig up, reinforcement with steel clamps). We consider this camera inspection and reinforcement approach is a cost-effective alternative to mains replacement.

5.3.2. Historical and forecast unit rates

Table 4.4 sets out actual unit rates incurred for HDPE 575 – DN50 HP and MP inline camera inspection and reinforcement work over the current AA period and the forecast for the next AA period relating to inspection of DN40 pipe. The current benchmark cost was derived using a bottom-up approach as these camera inspection activities were new in the current AA period.

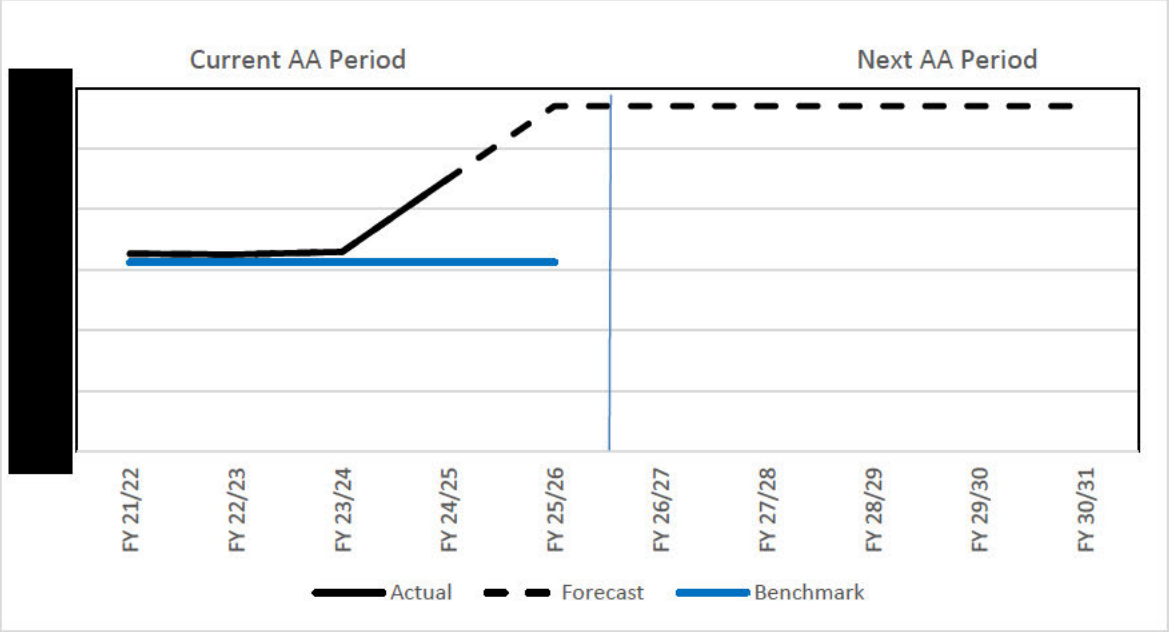
Table 4.4: HDPE 575 – DN40 forecast unit rates ($ January 2025)

CAMERA INSPECTION	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (metres)	61,000	17,000	67,000	72,000		
AER volume (metres)	80,000	80,000	80,000	-		
Benchmark AER $/Unit	[redacted]					

5.3.3. Comparison of historical rates with AER approved rates

Figure 4.1 shows actual unit rates are higher than the approved benchmark in the current AA period.

Figure 4.1: HDPE 575 – DN50 HP and MP camera inspection and reinforcement unit rates ($ January 2025)



Inline camera inspection and reinforcement was a new activity proposed for the current AA period. The actual rates have proven to be broadly consistent with benchmark, albeit slightly higher as volumes have trended up.

5.3.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

5.3.5. Forecast unit rates

The forecast unit rate for inline camera inspection and reinforcement of HDPE 575 – DN40 HP and MP in the next AA period is [redacted]/metre.

The forecast is based on the weighted average of historical actuals for DN50 inline camera inspection and reinforcement. This approach is appropriate so as to reduce the impact of the 2024/25 rate increase largely due to regional work being undertaken which is not representative of the future area of work in the next AA period.

As discussed, the next AA will involve DN40 pipe instead of DN50 which is reflected in the rates above. New cameras and reels have been developed for this and the length of the reel for DN40 is shorter than the DN50 camera, so this will mean that we need to dig more holes and install more inspection tees to inspect the same length of main.

In addition, camera inspection is typically done with a small 3-person crew and the new traffic management rules discussed elsewhere in this document will require an additional person for traffic management.

We have included a [redacted]/metre allowance to account for these two changes.

5.4. Multi-user sites

Forecasting approach:	**Weighted average of historical costs**

5.4.1. Nature of works and costs

This work is associated with replacing multi-user services (MUS) that are operating at low pressure and were not replaced as part of the mains replacement program prior to 2012.

Prior to 2012, replacement of internal services within multi-user sites was not included in the scope of the mains replacement program. During installation of new/replacement high pressure mains, MUS were fitted with a boundary regulator and the existing MUS for each site remained operating at low pressure. From 2012, replacement of MUS have been packaged with the broader mains replacement program.

A boundary regulator is typically located at the front of a property. It reduces pressure from high or medium to low pressure. A sub-main is connected to the boundary regulator and runs through the multi-user property. Individual inlets branch off the sub-main to reach inlet risers and gas meters for each unit. Most of the multi-user sub-mains and inlets are ageing unprotected steel and galvanized pipe.

The MUS work involves:

- Replacement of the sub-main and inlets by insertion/direct burial of new polyethylene pipe
- Replacement of inlet risers and meter set assemblies
- Relocation of meters that are in non-compliant locations
- Removal of the boundary regulator

For the next AA period, we aim to replace all the priority 2 MUS and 150 of the priority 3 MUS. The proposed volumes are in line with our current delivery of MUS when including sites currently renewed as part of the mains replacement program; therefore we anticipate no additional resources will be required to deliver the volume of MUS.

5.4.2. Historical and forecast unit rates

Table 4.5 sets out actual unit rates for MUS and the forecast for the next AA period. A program to replace MUS commenced during the current AA period. The costs of replacing assets at each multi-user site varies depending on the number of customers and complexity of the site.

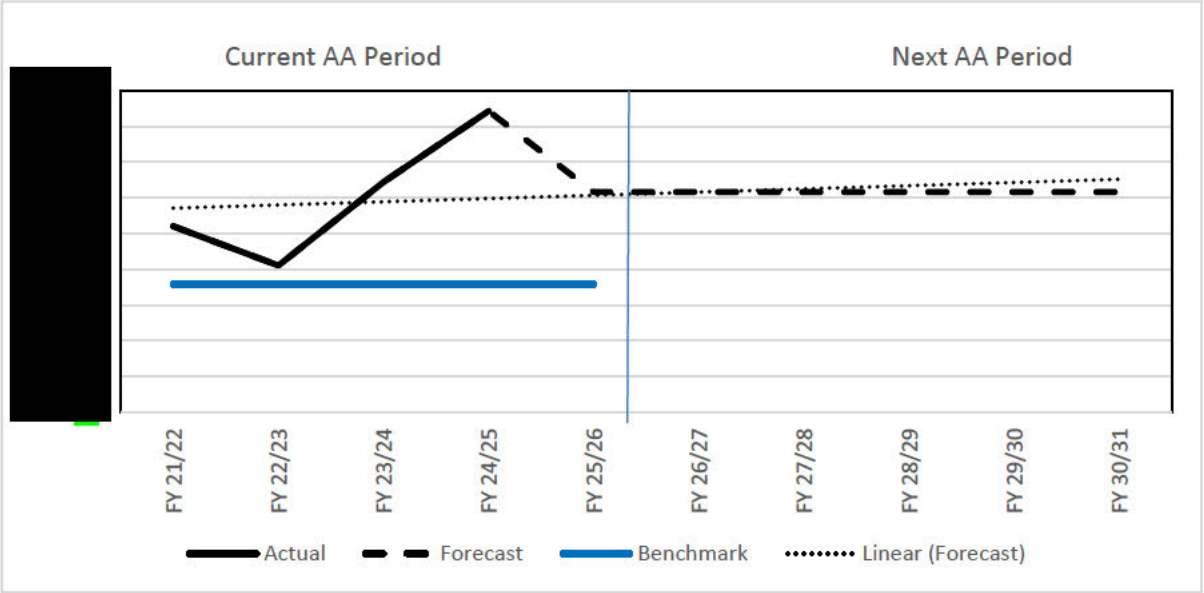
Table 4.5: Mains renewal MUS replacement forecast unit rates ($ January 2025)

MAINS RENEWAL - MUS	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (service)	25	35	64	24		
AER volume (service)	92	92	91	-		
Benchmark AER $/Unit	[redacted]					

5.4.3. Comparison of historical rates with AER approved rates

Figure 4.2 shows that the actual unit rate for MUS has been consistently above the approved benchmark rates for the current AA period by an average of [redacted]

Figure 4.2: Multi Service unit rates ($2024/25)



The weighted average of historical actual costs per site has been materially higher than the approved benchmark. The increase is driven by our approach to prioritise high risk multi-user sites during the current period. High risk multi-user sites incur increased costs due to the associated complexity and relocation requirements of non-compliant meters, and typically have a larger number of customers per site.

5.4.4. Forecast unit rates

The forecast unit rate for replacing services and associated assets at multi-user sites during the next AA period is $[redacted]site.

The forecast for contractor and materials/other costs is based on the weighted average of historical actuals for varying sizes (and number of users) of high risk sites. The weighted average historical cost approach is appropriate because the type of work we expect to carry out in the next AA period is similar in nature to what has recently been delivered. The activity is relatively low volume and subject to a high degree of variability based on the different sizes of sites addressed in any one year.

The weighted average historical cost approach therefore produces a reasonable and prudent forecast for MUS in the next AA period.

5.5. Unplanned service replacement

Forecasting approach:	**Current actuals**

5.5.1. Nature of works and costs

Sometimes services need to be renewed on a standalone basis. This arises when leaks or damage occur on the service and inspection reveals the service is heavily corroded or in such

poor condition that repairs are not viable, or that the service is at a non-compliant depth. These works are referred to as non AMRP (annual mains replacement program) service replacements.

5.5.2. Historical and forecast unit rates

Table 4.6 sets out the actual unit rates incurred for non AMRP service replacement over the current AA period and the forecast for the next AA period.

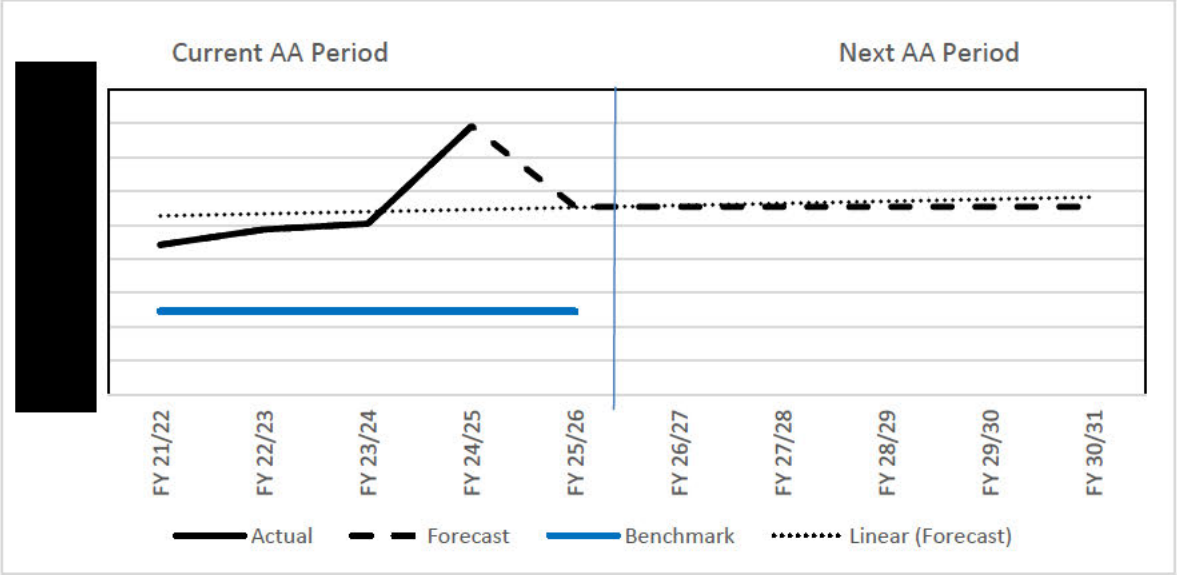
Table 4.6: Non AMRP service replacement forecast unit rates ($ January 2025)

Unplanned Service Replacement	2021/22	2022/23	2023/24	YTD Mar 2025	Weighted average	Forecast for next AA period
Contractor rates	[redacted]					
Material/Other rates						
Actual $/Unit						
Actual volume (service)	538	419	383	198		
AER volume (service)	490	490	490	-		
Benchmark AER $/Unit	[redacted]					

5.5.3. Comparison of historical rates with AER approved rates

Figure 4.3 shows the actual unit rates incurred over the current AA period have exhibited a significant degree of inter-year variability and that they have consistently been above the current benchmark by an average of [redacted]

Figure 4.3: Non AMRP service replacement unit rates ($2024/25)



The inter-year variability reflects the fact this work is largely reactive. Work is only undertaken when a failure occurs or when severe corrosion is identified. We look at historical volumes of these replacements to determine a forecast volume of works for the next AA period.

5.5.4. Are current costs efficient?

The current costs incurred reflect competitively tendered contractor and material costs. These rates are efficient as they have been determined through competitive market processes in line with our procurement processes. As we operate networks across Australia, we will compare to rates in other jurisdictions where the work is similar.

5.5.5. Forecast unit rates

The forecast unit rates for non AMRP service replacement during the next AA period is [redacted] unit. The forecast is based on the weighted average of historical actuals for both contractor and materials/other costs. This approach is appropriate as it reflects the inter-year variability and that this work is largely reactive.