Form of Regulation Review: South West Queensland Pipeline

Final decision

December 2024

AUSTRALIAN ENERGY REGULATOR

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Glossary

Term	Definition
ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AGP	Amadeus Gas Pipeline
BCA	Business Council of Australia
C&I	commercial and industrial
CGP	Carpentaria Gas Pipeline
DAA	day-ahead auction
DAC	depreciated actual cost
DBVM	depreciated book value method
DORC	depreciated optimised replacement cost
GJ	gigajoule
GPG	gas-powered generator
HGP	Hunter Gas Pipeline
LNG	liquified natural gas
MAPS	Moomba Adelaide Pipeline System
MAS	multi-asset transport services
MDQ	maximum daily quantity
MSP	Moomba Sydney Pipeline
MWP	Mid West Pipeline
NCC	National Competition Council
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
PJ	petajoule
PPI	producer price index
RAB	regulatory asset base

Term	Definition
RBP	Roma Brisbane Pipeline
RCM	recovered capital method
RIN	regulatory information notice
RSP	reference service proposal
SWQP	South West Queensland Pipeline
TJ	terajoule
VTS	Victorian Transmission System
WACC	weighted average cost of capital

1 Executive summary

The Australian Energy Regulator (AER) has made a final decision not to make a scheme pipeline determination for the South West Queensland Pipeline (SWQP), which is owned and operated by APA Group (APA). This means the SWQP will remain subject to non-scheme regulation.

In making this final decision, we have applied the regulatory determination test set out in section 112 of the National Gas Law (NGL). This test requires us to consider the effect of regulating the pipeline as a scheme or non-scheme pipeline on:

- the promotion of access to pipeline services
- the costs that are likely to be incurred by an efficient service provider, efficient users and prospective users, and the likely costs to end-users.

In doing so, we must have regard to the National Gas Objective (NGO) and the form of regulation factors set out in section 16 the NGL. We may also have regard to any other matter we consider relevant.

At this point in time, we consider that non-scheme regulation is the most appropriate form of regulation for the SWQP. The benefits of scheme regulation currently do not appear to outweigh the potential costs. Further, recently introduced improvements to the non-scheme regulatory regime may improve shippers' ability to negotiate access to the SWQP. Very few stakeholders that participated in our consultation process, including shippers on the SWQP, were in favour of scheme regulation.

For these reasons, we do not propose to make a scheme pipeline determination at this time.

1.1 APA likely has market power in the supply of SWQP services but faces some constraints

We have found APA likely has market power in the supply of services on the SWQP and is able to exercise that market power to some extent. However, we also consider there are currently some constraints on its ability to do so in negotiations with larger shippers, and that the emergence of substitutes could constrain APA further in the future.

The factors that contribute to APA's market power, and its ability to exercise market power, are:

- The barriers to entry into the market for pipeline services in the east coast in competition with the SWQP are high. This is due to large sunk costs, economies of scale, need to obtain regulatory approvals and access to land, and uncertainty surrounding the long -term demand for gas.
- Network externalities (or interdependencies) between the services provided by the SWQP and the other services provided by APA's extensive network of transmission pipelines in the east coast.

- Currently there are limited effective substitutes for the transportation of gas on the SWQP for most SWQP shippers and few effective substitutes for gas more generally. Shippers therefore appear to have limited ability to constrain APA's market power by threatening to bypass the SWQP.

At the same time, we consider the largest pipeline users have a degree of countervailing market power which likely constrains APA to some extent. The majority of pipeline capacity on the SWQP is used by a small number of large shippers. These shippers rely upon the SWQP because it is essential to transport gas from Queensland to the southern states, and from the southern states into Queensland and onto liquified natural gas (LNG) export terminals. However, the volume of capacity these shippers purchase likely means that APA is also reliant, to some extent, on these shippers to maintain its revenue on the SWQP. [redacted]

Further, APA may become more constrained in its dealings with other users in the future if proposed LNG import terminals are developed in southern states and/or the Hunter Gas Pipeline (HGP) is developed. There are also a number of partial substitutes to transport on the SWQP such as the DAA and gas swaps.

1.2 Benefits of scheme regulation are uncertain

It is possible that scheme regulation could lead to better access to the SWQP, but the extent of any benefits is uncertain and may be limited.

Many shippers told us they have been unable to genuinely negotiate on price and non-price terms of access to the SWQP with APA. We also consider it is likely the prices to access the SWQP do not reflect the efficient costs of providing the service. Using publicly available information, we estimate that in 2023, under scheme regulation, a more efficient cost reflective price would have been set at between **$0.69/GJ/day of MDQ and $1/GJ/day of MDQ**. This is between 33% to 59% lower than the SWQP's standing prices at the time.

However, while scheme regulation could help address such pricing issues through the AER setting a more cost reflective price for a reference service, the extent to which it could improve access is uncertain for three reasons.

First, the extent to which the actual prices paid would fall under scheme regulation is not clear. It is difficult to say with certainty what the price for a reference service will be under scheme regulation. This is because the methodology used to set the regulated asset base (RAB) for the SWQP, if it was made a scheme pipeline, would directly affect the price for a reference service, with different methodologies likely to lead to different results.

For example, as noted above, using publicly available information to estimate RAB values, we have found prices for a reference service could have been between approximately 33% and 59% lower under scheme regulation. However, using other methodologies to calculate a RAB, we estimate the price reduction could be smaller. [redacted]

Additionally, while scheme regulation allows shippers to access reference services at the reference price, APA and shippers are also free to agree to terms and conditions that differ

from those set out in an access agreement. For other scheme regulated pipelines only some users adopt the reference price. For the Roma to Brisbane Pipeline (RBP) for example, average prices are around 20% higher than the reference service (or 10% higher when the prices are weighted by usage).

When these factors are considered together, it means the overall extent that prices paid could fall under scheme regulation is uncertain.

Second, it is likely that a reference price would only be used to contract for a portion of the capacity on the pipeline for some years, as the majority of capacity is already reserved under long-term contracts.[1] For the westernhaul service most capacity appears to be contracted until the end of 2027, and for easternhaul services a large volume is contracted until the end of 2030.[2] [redacted] This means that the access for a large percentage of capacity contracted is unlikely to change for some time. As large shippers may have a degree of countervailing power, they may be able to obtain improved terms and conditions of access when they do eventually renegotiate contracts (or as they negotiate variations to their current contracts).

Third, access under non-scheme regulation has the potential to improve in the future. If effective substitutes such as the HGP and potentially LNG import terminals emerge, APA's market power on the SWQP will likely become more constrained, leading to more competitive terms and conditions of access.

In addition, many shippers told us they currently do not consider that the non-scheme measures of information disclosure and arbitration help them in negotiating access to the SWQP. However, improvements to these measures were introduced in 2023. These have not yet been fully implemented or had time to be utilised. Such measures include making pricing and financial information more accessible and useful to shippers and improving shippers' ability to take disputes to arbitration and mediation. These have the potential to lead to improved outcomes under non-scheme regulation.

1.3 There are additional costs to scheme regulation

Scheme regulation will result in increased direct and indirect costs.

The direct costs associated with scheme regulation to APA, users of the SWQP and end-users will be higher than under non-scheme regulation, although the difference is relatively small. These direct costs include the regulatory, transaction, and administrative costs associated with each form of regulation.

The indirect costs associated with delayed or foregone efficient investment, could be more significant under scheme regulation due to the processes associated with the implementation

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1 See APA Group, *SWQP/QSN Link Form of Regulation review: APA Group Submission,* 27 March 2024 (APA submission), p 56.

2 This is based on MDQ and contract end date data published by APA as part of Actual Prices Payable Data. It assumes MDQ will remain relatively unchanged during the term of the contract. See APA, Transmission Part 10 Rule 101E Actual Prices Payable Data, APA website, accessed 17 September 2024.

of scheme regulation. In particular, there will be uncertainty around how the initial RAB value will be determined and how we would treat any major new investment, until the first access arrangement is approved (likely by the end of 2027).

While this is a transitory and relatively short-term effect, it could have broader implications for the east coast gas market at this point in time. The Australian Competition and Consumer Commission (ACCC) and the Australian Energy Market Operator (AEMO) predict possible supply shortfalls in southern states could occur as early as 2027 or 2028 unless additional sources of supply are developed. They identify a potential source is additional capacity being made available on pipelines used to transport gas from Queensland.[3]

1.4 The benefits of scheme regulation are unlikely to outweigh the costs

For the reasons outlined above, our final decision is not to make a scheme regulation determination at this time.

This decision is finely balanced, because our analysis suggests that the prices for the services provided by the SWQP could be lower under scheme regulation. If this occurred, prices for capacity that will become available for contracting from 2028 onwards would be lower, and could enable more efficient use of, and investment in, gas infrastructure. However, as outlined above, the benefits of scheme regulation are not certain, and the costs of scheme regulation are likely be higher. When coupled with the lack of stakeholder support to move to scheme regulation and support among some stakeholder to maintain non-scheme regulation, we are not satisfied that the benefits of scheme regulation outweigh the costs.

The measures available under non-scheme regulation, and the recent improvements to the non-scheme regime, are expected to allow shippers to negotiate with APA more effectively. We therefore encourage shippers to familiarise themselves with, and use, the tools available. The AER currently publishes a range of information that may assist shippers to do this. This includes the:

- Pipeline Access Dispute Guide: this outlines the way that the mediation and arbitration process for pipeline access disputes operates and explains the process to raise and resolve a dispute.
- Pipeline Information Disclosure Guidelines: which specifies the financial and operational information that must be published by a pipeline service provider. This is available on the AER's website, including a guideline and explanatory note.
- Pipeline Regulatory Determinations and Elections Guide: this outlines the operation of the scheme and non-scheme regulatory frameworks and how the level of regulation of a pipeline can change.

We also intend to closely monitor APA's behaviour and the terms and conditions of access to the SWQP through the pipeline information disclosure regime and our monitoring and reporting powers under sections 63A and 63B of the NGL. Given our findings on current

[3] Australian Competition and Consumer Commission (ACCC), *Gas Inquiry 2017-2030 report – Interim update on east coast gas market June 2024*, June 2024 (ACCC 2024 Gas Inquiry Report), pp 34-39; and Australian Energy Market Operator (AEMO), *2024 Gas Statement of Opportunities*, March 2024 (AEMO 2024 GSOO).

terms and conditions, we would like to see greater downward pressure on prices on the pipeline and negotiation on non-price terms and conditions improving, particularly for smaller shippers. We are aware that capacity on the pipeline will begin to become available from early 2028. We will closely monitor the prices, terms and conditions on which the newly available capacity is sold. If we see prices on the SWQP increase without reasonable justification, this could justify further review of the form of regulation in the future.

2 Introduction

The AER has finalised its review into whether to make a scheme pipeline determination for the SWQP (the Review).[4] The SWQP is owned and operated by APA.[5] In this final decision we set out the reasons to not to make a scheme pipeline determination for the SWQP.

2.1 Review process

On 6 March 2024, we published a discussion paper to facilitate consultation on the Review (the Discussion Paper).[6] The Discussion Paper outlined our approach to the Review, key issues for the Review and sought submissions by 27 March 2024.

We received 12 public submissions and 2 confidential submissions in response to the Discussion Paper, including from APA, the SWQP shippers, investors, and industry bodies. Since publishing the Discussion Paper, we have held confidential meetings with, and sent voluntary questionnaires to, many SWQP shippers to understand their experience in negotiating access to the services provided on the SWQP and their views on the Review. We also obtained information from APA relating to the supply of services on the SWQP using our compulsory information gathering powers under section 42 of the NGL.

On 9 October 2024, we published the Draft Decision and invited stakeholders to provide feedback by 8 November 2024. We received submissions to the Draft Decision from APA, Australian Pipelines and Gas Association, Business Council of Australia, Darebin Climate Action Now, Energy Networks Australia, Energy Users Association of Australia and Origin Energy. While most supported the Draft Decision, Darebin Climate Action Now submitted that the SWQP should be subject to scheme regulation.

We have considered these submissions in making our final decision. Further to these submissions, we held meetings with a number of stakeholders. While the specific details of these meetings are confidential, we have considered the views expressed by these stakeholders in making our final decision.

2.2 Structure of the final decision

The final decision is structured as follows:

- **Chapter 3 – Regulatory framework and our approach**: Provides an overview of the regulatory framework and how the AER has approached the assessment of whether to make a scheme pipeline determination for the SWQP.
- **Chapter 4 – Background information on the SWQP**: Provides background information about the SWQP and gas market trends that are relevant to our decision.
- **Chapter 5 – Form of regulation factors**: Outlines our consideration of the form of regulation factors.

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4 NGL, s 92(1).

5 APA (SWQP) Pty Limited is the SWQP service provider, which is wholly owned by APA Group.

6 Australian Energy Regulator (AER), *Form of regulation Review, South West Queensland Pipeline: Discussion Paper*, March 2024 (Discussion Paper).

- **Chapter 6 – Promotion of Access**: Discusses our assessment of the extent to which each form of regulation will promote access to the services provided by the SWQP.
- **Chapter 7 – Costs of regulation**: Outlines our assessment of the direct costs that are likely to be incurred by an efficient service provider, efficient users and prospective users, and the likely costs to end-users, under each form of regulation. It also discusses the potential indirect costs of scheme regulation in terms of its impact on investment incentives.
- **Chapter 8 – Conclusion**: Outlines the reasons why we have reached a decision not to make a scheme pipeline determination for the SWQP.

3 Regulatory framework and approach

This chapter provides an overview of how and why gas pipelines are regulated, the gas pipeline form of regulation framework, and how we have approached this Review. Further detail about the AER's form of regulation role and our approach can be found in our Pipeline Regulatory Determinations and Elections Guide (Regulatory Determinations Guide).[7]

3.1 How gas pipelines are regulated

3.1.1 Forms of regulation

Under the current regulatory framework set out in the NGL and National Gas Rules (NGR), gas pipelines are classified as either:

- **Scheme pipelines**: these pipelines are subject to a stronger form of regulation. Under scheme regulation, the AER approves the price and non-price terms and conditions of access to reference services, which users and potential users can seek access to. Scheme pipelines must also publish information about the pipeline and the services it provides and comply with the negotiation framework set out in the NGR. Shippers and the service provider can also have recourse to a regulatory oriented dispute resolution process if negotiations fail.
- **Non-scheme pipelines**: these pipelines are subject to a lighter form of regulation. Non-scheme pipelines must also publish information about the pipeline and services it provides, and a range of other information to help shippers make more informed decisions about access to the pipeline. They must also comply with the negotiation framework set out in the NGR. If negotiations fail, recourse can be made to a commercially oriented dispute resolution mechanism.

Many of the same regulatory obligations apply to scheme pipelines and non-scheme pipelines, but there are also several differences, as highlighted in Table 3.1 below.

Table 3.1 - Summary of regulatory obligations for scheme and non-scheme pipelines

	Scheme obligations	Non-scheme obligations
Access[8]	Scheme and non-scheme pipelines are required to provide third party access to pipeline services.	
Regulation of prices and non-price terms and conditions[9]	Service providers must submit an access arrangement to the AER for its approval of the price and non-price terms and conditions of access to reference services.	The prices and non-price terms and conditions of access to services are not regulated.

7 AER, *Pipeline Regulatory Determinations and Elections Guide: Final Guide*, September 2023 (Regulatory Determinations Guide).

8 NGL, s 133.

9 NGL, Ch 3, Pt 5.

	Scheme obligations	Non-scheme obligations
Information disclosure[10]	Both scheme and non-scheme pipelines must publish the following information: • service and access information: this includes information about the pipeline (e.g. its nameplate rating and delivery points), a description of services provided and service usage and availability information • standing terms: for scheme pipelines the applicable access arrangement, and for non-scheme pipelines 'standard' price and non-price terms and how standing prices are calculated • historic financial and demand information • actual prices payable information.	
Dispute resolution[11]	Access disputes are resolved by the AER.	Access disputes are resolved through commercially oriented arbitration.
	Small shipper disputes: Small shippers (i.e. a small user or prospective user) can elect to have an access dispute resolved by a mediator rather than an arbitrator.	
Competitive safeguards and prohibitions[12]	Scheme and non-scheme pipelines are subject to the same competitive safeguard prohibitions and safeguards, which include: • prohibitions on preventing or hindering access, and bundling • interconnection and new capacity requirements • ring-fencing and associate contract provisions.	

We note that a number of the above non-scheme obligations and measures were introduced as improvements to the non-scheme framework in early 2023, intended to improve the ability of shippers to negotiate with service providers. These include:

- the improved information disclosure obligations, including a requirement for service providers to publish information on the actual prices paid by all shippers
- an improved negotiation framework that service providers must comply with
- the introduction of a mediation option for small shippers.[13]

10 NGR, Pt 10.

11 NGR, Pt 12.

12 NGL, ss 133, 136 and 136B and NGL, Ch 4 Pt 2.

13 The term 'small shipper' is defined as a user or prospective user for whom the total daily pipeline capacity right provided, or sought to be provided, under one or more contracts with the same service provider is not more than the lower of 5TJ/day or 20% of the pipeline's nameplate rating, but does not include a corporation with a market capitalisation > $500 m, or a related body corporate of that corporation (see, NGL, s 8AB).

There are also some new measures that are yet to be fully implemented, including the AER's pricing template (to be introduced by the end of 2025) which will make it easier for shippers to assess price terms offered by service providers in negotiations.[14]

3.2 Determining the form of regulation for pipelines

To ensure that the level of regulation of pipelines remains appropriate over time, the NGL allows for the form of regulation applied to a pipeline to change. The form of regulation of a pipeline can change if:

- we make either of the following form of regulation determinations:
  - **a scheme pipeline revocation determination**: this is a determination that a scheme pipeline become a non-scheme pipeline, or
  - **a scheme pipeline determination:** this is a determination that a non-scheme pipeline become a scheme pipeline.
- a non-scheme pipeline service provider elects for the pipeline to become a scheme pipeline (a scheme pipeline election).[15]

When deciding whether to make a scheme pipeline revocation determination or a scheme pipeline determination, we must apply the regulatory determination test in section 112 of the NGL.

3.2.1 Regulatory determination test

Regulatory determination test

The regulatory determination test is set out in section 112 of the NGL. It states that, in deciding whether to make a relevant determination, we must consider the effect of regulating the pipeline as either a scheme or non-scheme pipeline on:

- the promotion of access to pipeline services
- the costs that are likely to be incurred by an efficient service provider and efficient users of pipeline services, and
- the likely costs of end-users.

In doing so, we must have regard to:

- the National Gas Objective
- the form of regulation factors, and
- any other matter we consider to be relevant.

In applying the regulatory determination test, we are essentially comparing how effective and costly each form of regulation is, to form a conclusion about the form of regulation that should apply to the pipeline. In making the comparison we will consider the differences

[14] The introduction of the new pricing template may occur earlier for service providers operating on a calendar year basis.

[15] NGL, ss 112 and 95.

between scheme and non-scheme regulation, and the likely impact these will have on promoting access to the pipeline services and the likely costs.

This is a qualitative, and not a quantitative assessment, and we have not attempted to quantify the full value of the benefits and costs under each form of regulation. However, we have considered quantitative data where it is available and relevant to do so.[16]

Promotion of access to pipeline services

The first element of the regulatory determination test requires us to assess the likely effect that scheme and non-scheme regulation will have on the 'promotion of access to pipeline services'. In assessing the extent to which access is likely to be promoted under each form of regulation, we considered:

- the ability of users and potential users to negotiate access to pipeline services
- the price terms that may be offered or negotiated
- the non-price terms and conditions of access that may be offered or negotiated.

Effect on costs

The second element of the regulatory determination test requires us to consider the costs that are likely to be incurred by an efficient service provider and efficient users or prospective users of the pipeline services under each form of regulation. We must also consider the likely costs to end-users (or consumers of gas).

The relevant costs include the regulatory, administrative, and transaction costs that are likely to be incurred as a result of the pipeline being subject to scheme or non-scheme regulation. As discussed further in section 3.4 0below, we have not considered the potential indirect costs associated with regulation, such as the potential cost of delayed or reduced investment, under this limb of the test. We have instead had regard to these issues through our consideration of the NGO. However, we have discussed both direct and indirect costs in Chapter 7.

Form of regulation factors

In applying the regulatory determination test, we must have regard to the form of regulation factors. These factors help us to consider the degree of market power that a service provider may have in providing service on a pipeline, and the potential constraints on its ability to exercise that market power. This helps us guide our assessment of how effective each form of regulation may be in promoting access to the pipeline services.

The form of regulation factors are:

a) the presence and extent of any barriers to entry in a market for pipeline services

b) the presence and extent of any network externalities (i.e. interdependencies) between a covered gas service provided by a service provider and any other covered gas service provided by the service provider

[16] Regulatory Determinations Guide, p 24; Discussion Paper, p 20.

c) the presence and extent of any network externalities (i.e. interdependencies) between a covered gas service provided by a service provider and any other service provided by the service provider in any other market

d) the extent to which any market power possessed by a service provider is, or is likely to be, mitigated by any countervailing market power possessed by a user or prospective user

e) the presence and extent of any substitute, and the elasticity of demand, in a market for a pipeline service in which a service provider provides that service

f) the presence and extent of any substitute for, and the elasticity of demand in a market for, electricity or gas (as the case may be).[17]

National Gas Objective

Having regard to the NGO allows us to consider the overarching objectives of the NGL and how each form of regulation may promote these objectives.

The National Gas Objective is:[18]

to promote efficient investment in, and efficient operation and use of, covered gas services for the long-term interests of consumers of covered gas with respect to:

a) price, quality, safety, reliability and security of supply of covered gas; and

b) the achievement of targets set by a participating jurisdiction—

i. for reducing Australia's greenhouse gas emissions; or

ii. that are likely to contribute to reducing Australia's greenhouse gas emissions.

The focus of our assessment here is the effect that each form of regulation factor will have on the NGO in terms of promoting efficient investment in, and operation and use of, the SWQP and other covered gas services (i.e. other pipeline services, the supply of covered gas, or a service ancillary to the supply of covered gas).

In general, where a service provider can exercise market power, either by restricting access to services, or engaging in monopoly pricing, it will lead to inefficient outcomes. This is often cited as a key reason for regulating natural monopoly infrastructure.[19] The reason for the focus on market power, particularly through monopoly pricing, was outlined by the ACCC in its 2016 Gas Inquiry Report (which formed the basis for the subsequent reforms to the pipeline regulatory framework) as follows:[20]

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17 NGL, s 16.

18 NGL, s 23.

19 Australian Energy Market Commission (AEMC), *Final Report: Review into the scope of economic regulation applied to covered pipelines*, 3 July 2028, p 31; Hansard, SA House of Assembly, 18 October 2022, Second Reading – Statutes Amendment (National Energy Laws) (Gas Pipelines) Bill; and COAG Regulation Impact Statement, *Options to improve gas pipeline regulation – Decision RIS*, 2021.

20 ACCC, *Inquiry into the east coast gas market*, April 2016 (ACCC 2016 Gas Inquiry Report) , pp 111-120.

- Monopoly pricing by a service provider can lead to producers receiving less for gas they supply, and pipeline users paying more for gas. Where retailers, industrial users, and gas-powered generators (GPG) pay more for gas this can lead to higher prices for consumers.
- This can, in turn, lead to:
  - lower than efficient levels of gas use and investment in downstream (e.g. production facilities that use gas, GPG) and upstream (gas production, exploration and development) infrastructure
  - inefficient utilisation of connected pipelines and potential distortions in gas flows across the market.
- Monopoly pricing can also reduce efficient investment in upstream and downstream infrastructure via holdup. That is, where a gas producer or user invests in upstream or downstream facilities, the pipeline owner can appropriate most of the economic surplus from the facility after the investment has been made through monopoly pricing. This can lead to lower output from these facilities than would otherwise be the case in the absence of monopoly pricing.

Therefore, having regard to the NGO in making a form of regulation assessment will involve considering what form of regulation is required to effectively constrain the market power of a service provider in providing services on the relevant pipeline.

Where non-scheme regulation is found to be as effective as scheme regulation in constraining this market power (i.e. because the service provider has limited market power and/or there are effective constraints on its use of this market power), it will likely better promote the NGO. This is because it will constrain the service provider's market power at a lower cost than scheme regulation. However, where non-scheme regulation is unlikely to be sufficient to constrain the service provider's market power, then scheme regulation will, subject to the other factors set out below, likely better promote the NGO.

In addition to constraining market power, there are other matters that may be relevant in considering whether the NGO will be promoted under the two forms of regulation, including:

- the extent to which scheme or non-scheme regulation may disincentivise efficient investment in the pipeline
- whether the scale of any potential efficiency benefits under scheme regulation may be limited by the availability of capacity on a pipeline.

3.3 Our approach to the regulatory determination test

Our proposed approach to applying the regulatory determination test for this Review into whether to make a scheme pipeline determination for the SWQP was set out in the Discussion Paper. We sought stakeholder views on our proposed approach in the Discussion Paper, including how we should consider the various criteria and factors set out in the NGL.

3.3.1 Stakeholder views

APA submitted that when considering the costs of each form of regulation we should have regard to the costs of delayed or abandoned investment.[21] APA also submitted a report from Incenta that contends that a 'qualitative analysis is insufficient to meet the requirements of the NGL and would be a disproportionately simple level of analysis relative to the potential economic value at stake if the SWQP is improperly regulated'.[22]

The Business Council of Australia (BCA) submitted the AER should have regard to three 'key criteria' when making a decision on whether to introduce additional regulation.[23] These are: 1. allowing the market to operate efficiently and effectively; 2. not imposing regulation where a market is already operating efficiently; and 3. energy security and affordability.

In response to the Draft Decision, Darebin Climate Action Now submitted that the AER should consider the emissions element of the NGO, which in its view should be central to the consideration of whether the SWQP should be a scheme pipeline.

3.4 Our views

In assessing the likely costs under scheme and non-scheme regulation, we have considered the regulatory, transaction, and administrative costs associated with each form of regulation. This is because these are the costs that are likely to be 'incurred' by an efficient service provider and efficient users or prospective users, as required by sections 112(2)(b)-(d) of the NGL. This is consistent with the approach taken by the National Competition Council (NCC) when making form of regulation determinations.[24]

While there may be indirect costs associated with regulation, such as delayed or reduced investment, these costs are not 'incurred' by any party. We have not therefore considered these costs under sections 112(2)(b)-(d) of the NGL. We have instead had regard to these indirect costs as part of our broader consideration of the NGO in Chapters 7 and 8.

We also do not consider that we are required to undertake a full quantitative cost benefit analysis under section 112 of the NGL and note that there would be significant challenges and complexities associated with trying to do so, particularly when trying to measure the benefits. We have nevertheless considered quantitative data where it is available and relevant and have sought to quantify the likely magnitude of direct costs and benefits under the two forms of regulation where it has been possible to do so. We have not attempted to quantify the scale of direct costs. This is reflected in this final decision.

We consider that a decision to make a scheme pipeline determination for the SWQP is unlikely to have an impact on the achievement of jurisdictional emissions reductions targets (i.e. neither increase nor decrease emissions) as the form of regulation applying to the

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21 APA submission, pp 9, 30-31.

22 Incenta Economic Consulting, *Economic principles for deciding on the appropriate form of regulation for the South West Queensland Pipeline,* March 2024, p 4.

23 Business Council of Australia (BCA), *Submission on the SWQP form of regulation review discussion paper*, 22 April 2024.

24 National Competition Council, *Gas Guide: A guide to the functions and powers of the National Competition Council under the National Gas Law,* October 2023, p 81.

pipeline is not expected to have a material effect on the use of SWQP services. We therefore do not consider the emissions element of the NGO to be material to this final decision. We note that this assessment relates specifically to the SWQP.

4 SWQP and gas supply background

This chapter provides background information on the SWQP, including the services offered, capacity and usage information, and on broader gas supply and demand trends.

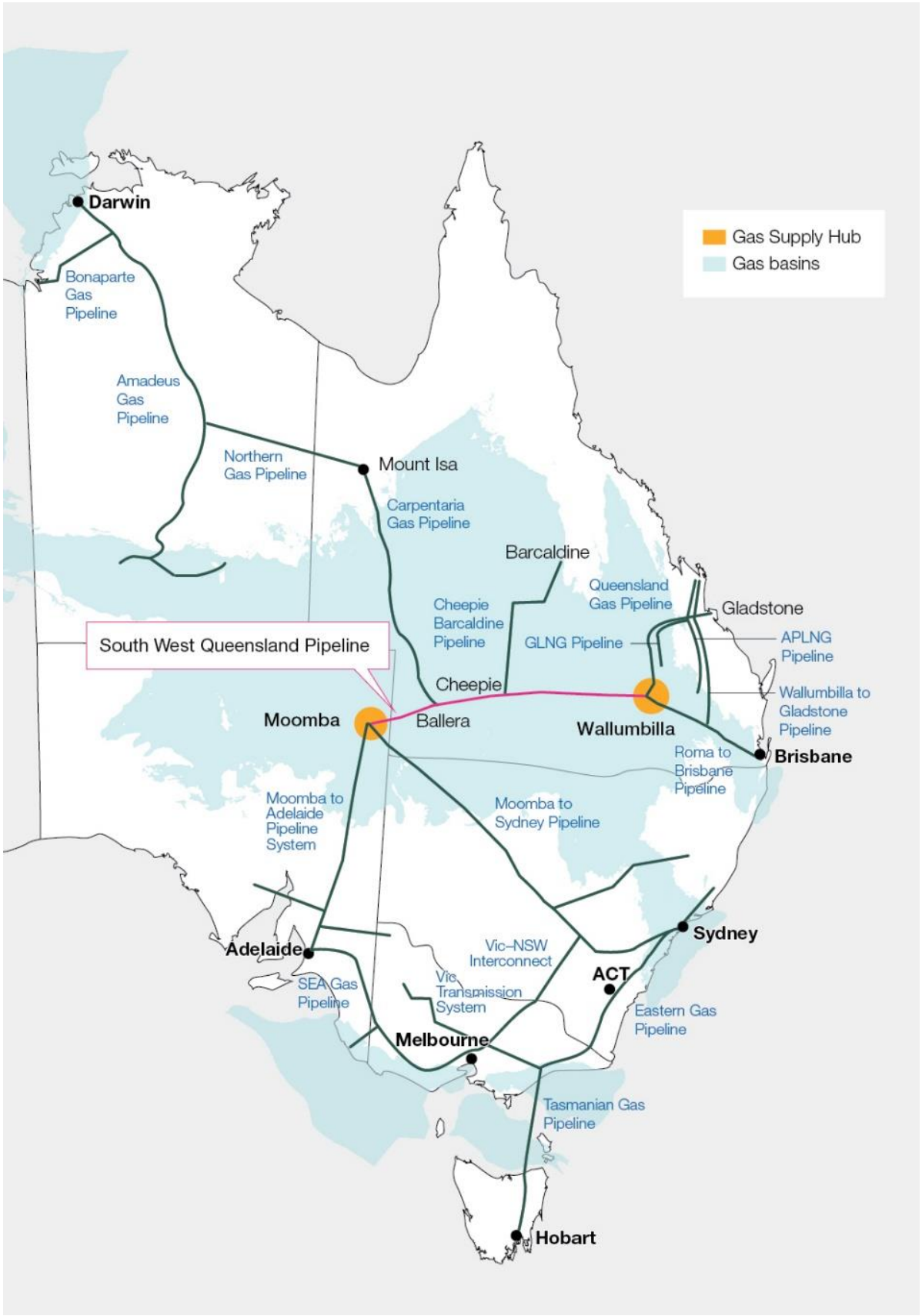
4.1 The SWQP

The SWQP is a 937 km bi-directional transmission pipeline, which has been owned and operated by APA since 2012. It comprises two parallel pipelines linking Wallumbilla in south east Queensland to Moomba in South Australia, which enables gas to be transported in both directions at the same time (i.e. it is bi-directional).

The SWQP plays an important role in the east coast gas market. It is an essential link between Queensland and the southern states, and also enables gas supplied from the Northern Territory to be transported into the east coast market. This is illustrated in Figure 4.1 below, which shows any gas flowing from Queensland and the Northern Territory to the southern states must be transported via the SWQP. The SWQP also enables LNG exporters to transport gas from Moomba or the southern states to Wallumbilla for onward supply to the Gladstone LNG export facilities.

For the purposes of this Review and based on the information provided by APA in response to a notice issued under section 42 of the NGL (the s 42 Notice) and the Discussion Paper, we have treated the compressors that APA owns and operates at Moomba and Wallumbilla as part of the SWQP. These compressors are largely used to provide compression to support transport on the SWQP and, in most cases, transport on the SWQP cannot be purchased without also purchasing compression services. However, as these compressors are also used to provide services for other pipelines, we have only considered them to the extent that they are used to provide services to the SWQP.

Figure 4.1 –The SWQP in the east coast gas market



4.1.1 Construction and expansion of the SWQP

The original SWQP pipeline, from Wallumbilla to Ballera, was constructed in December 1996. At the time, it was used to transport gas in the easterly direction (i.e. from Ballera to Wallumbilla). Since then, the pipeline has been extended or expanded several times. These developments and the commercial arrangements around them are summarised below:

- **1994 to 1996 – original construction:** The original terms and conditions of access, including the proposed prices, for the SWQP were established via a tender that was conducted by the Queensland Government in 1994. [redacted]
- **2009 – QSN Link**: The SWQP was extended from Ballera to Moomba, through the construction of the QSN Link. The direction of gas flow on the pipeline was reversed such that it flowed in a westerly direction from Wallumbilla to Moomba. The development of the QSN Link and reversal of flow of the SWQP was underpinned by a foundation contract with AGL. APA considers that because the SWQP was underutilised at the time, AGL had countervailing power when negotiating the terms and conditions of access under this contract [redacted][26] [redacted]
- **2011 – expansion of the SWQP:** The capacity of the SWQP was expanded in 2011, following a process conducted by Origin to seek proposals for the transport of additional gas from Wallumbilla to the southern states. Origin received three proposals, and Epic Energy's (who owned the SWQP at the time) proposal to expand the SWQP and QSN Link by looping them, and adding compression services at Wallumbilla, was successful.[28] Origin entered into a foundation agreement with Epic Energy in 2009. In developing its proposal, Epic Energy sought commitments from additional shippers to ensure the viability of the looping and reached an arrangement with AGL [redacted]
- **2014 to 15 – conversion to bi-directional pipeline**: The SWQP was converted to a bi-directional pipeline, which enabled gas to be transported in a westerly direction from Wallumbilla to Moomba and an easterly direction from Moomba to Wallumbilla. [redacted]

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25 [redacted]

26 APA submission, p 14.

27 [redacted]

28 APA submission, p 15. [redacted]

29 APA submission, p 55.

- **2023-24 – East Coast Grid expansion**: APA has been expanding the capacity of the SWQP and the Moomba to Sydney Pipeline (MSP) as part of its East Coast Grid Expansion Project. Stage 1, completed in 2023, increased the SWQP's westernhaul capacity (between Wallumbilla to Wilton) by 12%.[30] This expansion involved the installation of an additional compressor on each of the SWQP and the MSP (at Moomba). In 2024, APA completed Stage 2 of the expansion, which added a 13% of gas transportation capacity.[31]

The foundation contracts for the SWQP expansion with Origin and AGL are still in effect today.[32]

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

4.2 SWQP services and users

4.2.1 Services offered by the SWQP

The SWQP is bi-directional, meaning that it can be used to transport gas in two directions:

- **Easternhaul services:** enable gas to be transported in an easterly direction from Moomba towards Wallumbilla.
- **Westernhaul services:** enable gas to be transported in a westerly direction from Wallumbilla towards Moomba.

30 APA, *East coast grid expansion,* APA website, 2024, accessed 6 September 2024.

31 APA submission, p 83.

32 APA submission, p 15.

33 [redacted]

The current capacity of the pipeline in each direction is as follows:[34]

- Easternhaul (Moomba to Wallumbilla): 340 TJ/day
- Westernhaul (Wallumbilla to Moomba):
  - from 1 May to 30 September: 512 TJ/day
  - from 1 October to 30 April: 487 TJ/day.

APA offers a number of different types of services on the SWQP. These services include:[35]

- firm transport services
- firm compression services
- interruptible transport services
- interruptible compression services
- firm and interruptible park services
- interruptible loan services
- in pipe trade services
- Operation Capacity Transfer services.

Users can also purchase multi-asset transport services (MAS), which provide for transport across more than one APA pipeline. In addition, users or prospective users can access the SWQP through the day-ahead auction (DAA).

4.2.2 SWQP Shippers

The number of shippers using the SWQP at any time can vary, but as of 18 September 2024, there were 39 shippers (see Table 4.2).[36]

Table 4.2 – SWQP shippers

Shipper type	Shipper name
Gas retailer	AGL, Agora Retail, Alinta Energy, EnergyAustralia, Origin Energy Retail, Power and Water Corporation, and Shell Energy.
Gas producer	Arrow Energy Trading, Beach Energy, Esso Australia Resources, Origin Energy, Santos, Senex, Tri-Star Petroleum Company, and Westside Corporation.

34 APA, *South West Queensland Pipeline*, APA website, 2024, accessed 15 August 2024.

35 APA, *Gas transmission services*, APA website, 2024, accessed 15 August 2024.

36 AEMO, *GBB Shippers*, AEMO website, 2024, accessed 15 August 2024.

Shipper type	Shipper name
Gas trader	Jinburra Energy Trading, Macquarie Bank, PetroChina, and Strategic Gas Market Trading.
Commercial and industrial (C&I) user	Adelaide Brighton Cement Limited, Ampol Refineries (Qld), Brickworks, Incitec Pivot, Mount Isa Mines, OneSteel Manufacturing, Orica, South32 Cannington, Southern Oil Refining, Qenos, and Visy Pulp & Paper.
Gas powered generator (GPG)	CleanCo Queensland, Diamantina Power Station, Ergon Energy, Pelican Point Power, and Stanwell Corporation.
LNG exporter	APLNG, GLNG, and Walloons Coal Seam Gas Company.
Other	Eastern Energy Supply.[37]

Source: AEMO, *GBB Shippers*, AEMO website, 2024, accessed 3 December 2024.

4.3 Capacity and usage of the SWQP

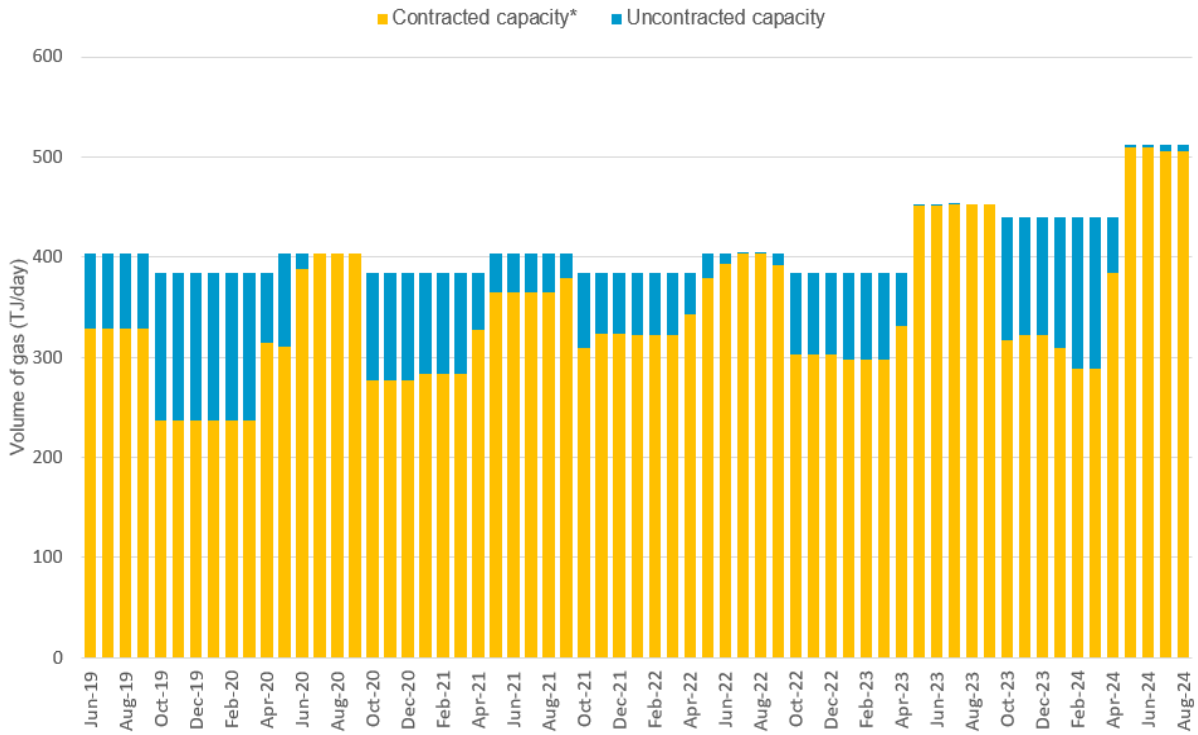
Usage of the SWQP differs for easternhaul and westernhaul services.

4.3.1 Historic capacity and use

Over the last 5 years, the use of westernhaul services has shown a clear seasonal trend, peaking in the winter months, and dropping in summer. This has largely been driven by the increased demand for gas in southern states for heating during the winter months. Further, most of the available westernhaul capacity was contracted (or reserved) over the last 5 years, with contracted capacity ranging between 60% to 100% over the period or 85% on average.

[37] Eastern Energy Supply is an energy buyers' group which purchases gas on behalf of its members.

Figure 4.2 – Contracted capacity of the SWQP's westernhaul services

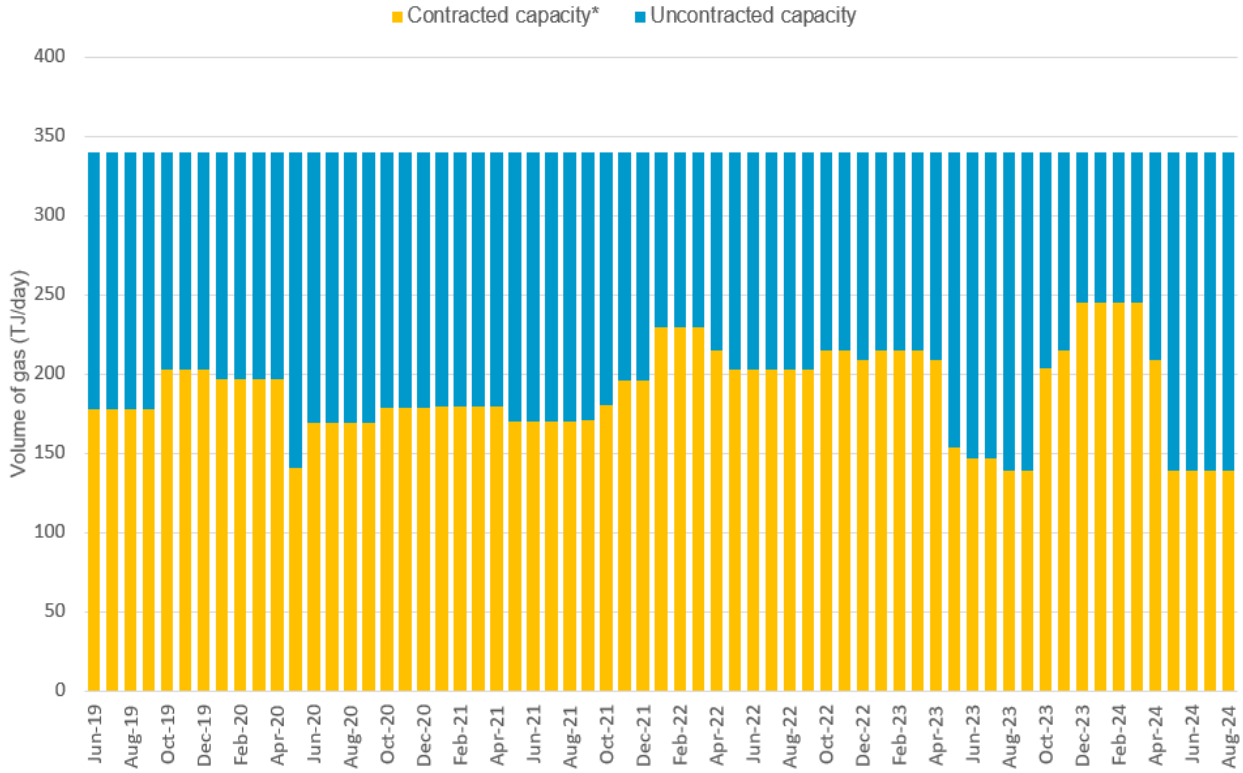


Note: Contracted capacity has been calculated as a difference between the nameplate rating and the uncontracted capacity.

Source: AER analysis of data from AEMO's Gas Bulletin Board (GBB), '*Gas flows and capacity outlooks'* data, as of 19 August 2024.

Easternhaul service follow the opposite trend to westernhaul services, with the use of these services peaking in summer months and dropping off in the winter. This usage pattern reflects the demand for LNG, which peaks during the northern hemisphere winter and leads to more gas being transported east towards the LNG export terminals during our summer months. The use of the easternhaul service is lower than westernhaul, with between 40% to 70% of the available easternhaul capacity contracted (or reserved) by shippers over the last 5 years.

Figure 4.3 – Contracted capacity of the SWQP's easternhaul services



Note: Contracted capacity has been calculated as a difference between the nameplate rating and the uncontracted capacity.

Source: AER analysis of data from AEMO's GBB, *'Gas flows and capacity outlooks'* data, as of 19 August 2024.

4.3.2 Future use of the pipeline

Westernhaul services

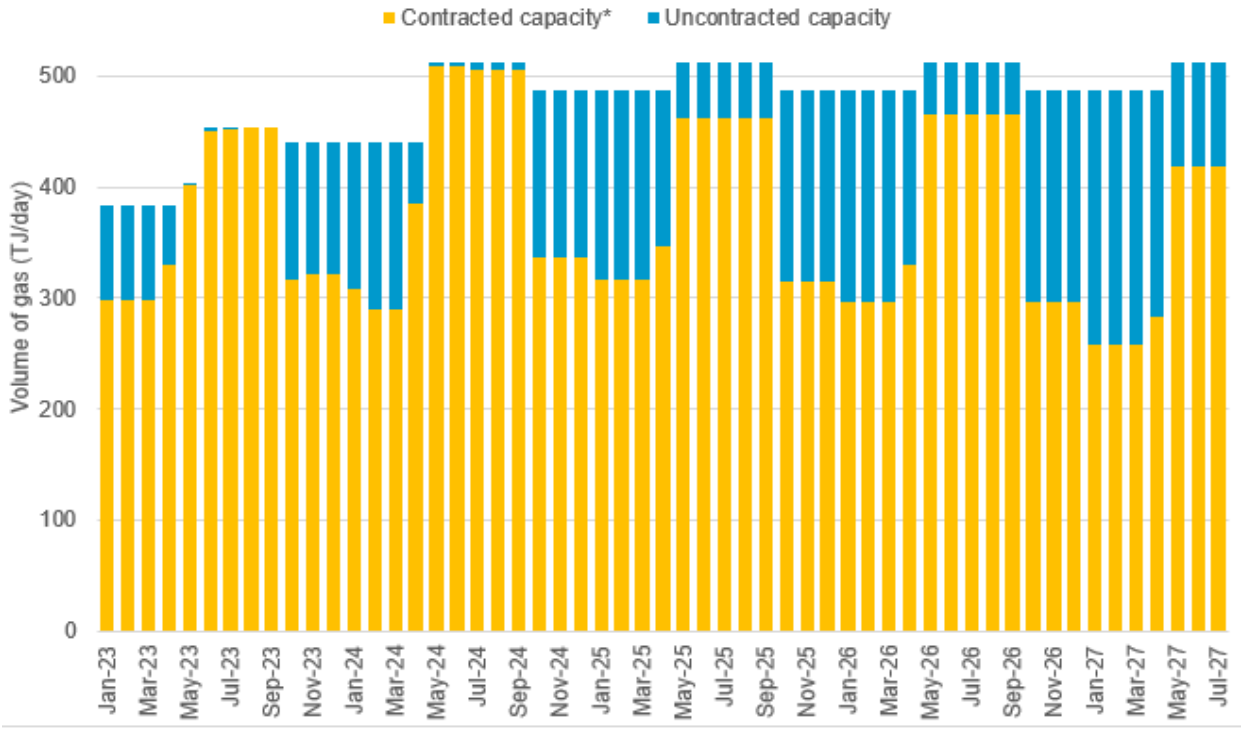
Available data suggests that the westernhaul services will continue to be highly utilised in the future, particularly during winter.

Figure 4.4, which is based on data reported by APA to the Gas Bulletin Board, shows that in winter 2023 and winter 2024 there was limited uncontracted westernhaul capacity available.[38] However, uncontracted capacity is currently available during winter in future years. In winter 2025 and 2026, around 10% (or 50 TJ/day) of the westernhaul capacity is currently forecast to be uncontracted, and in winter 2027 this increases to around 18% (or 93.5 TJ/day).

Greater volumes of uncontracted capacity are also available outside the winter period, which can be used by market participants to place gas into storage in the south ahead of winter.

[38] Pipeline operators are required to report a 36-month uncontracted capacity outlook to AEMO for publication on the Gas Bulletin Board.

Figure 4.4 – SWQP westernhaul contracted capacity forecast



Note: Contracted capacity has been calculated as a difference between the nameplate rating and the uncontracted capacity.

Source: Analysis of data from AEMO's GBB, *Gas flows and capacity outlooks* data, as of 19 August 2024.

Information published by APA under Part 10 of the NGR suggests additional capacity will likely become available from winter 2027 [redacted] Further, from January 2028, it appears there will be a significant amount of uncontracted capacity on the SWQP due to large contracts expiring.[39] [redacted]

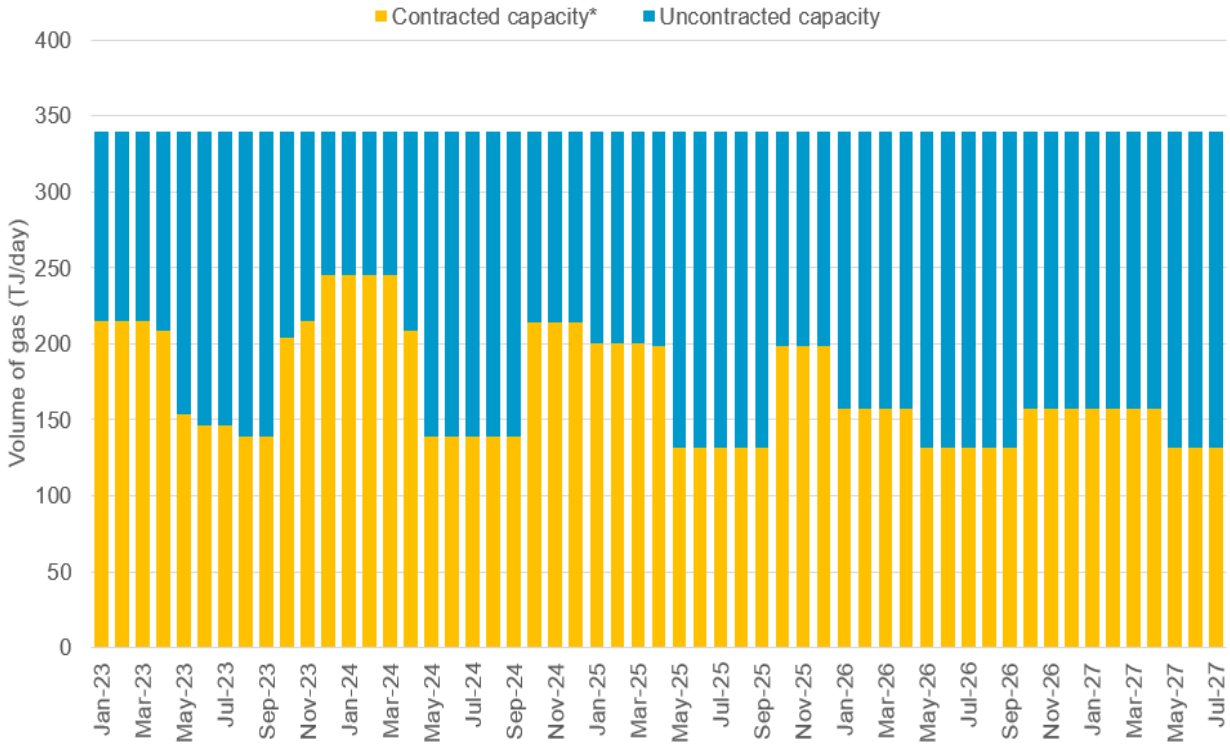
Easternhaul services

Easternhaul services are also likely to follow similar trends to those observed over the past 5 years, as shown in Figure 4.5. APA's Part 10 contract information indicates that additional capacity will become available in 2028, 2030 and winter 2034.[40] [redacted]

[39] These observations are based on MDQ and contract end date data published by APA as part of Actual Prices Payable Data, assuming MDQ under contracts does not vary substantially over time. See APA, Transmission Part 10 Rule 101E Actual Prices Payable Data, APA website, accessed 17 September 2024.

[40] These observations are based on MDQ and contract end date data published by APA as part of Actual Prices Payable Data, assuming MDQ under contracts does not vary substantially over time. See APA, Transmission Part 10 Rule 101E Actual Prices Payable Data, APA website, accessed 1 October 2024.

Figure 4.5 – SWQP easternhaul contracted capacity forecast



Note: Contracted capacity has been calculated as a difference between the nameplate rating and the uncontracted capacity.

Source: Analysis of data from the GBB *Gas flows and capacity outlooks* data as at 19 August 2024.

4.4 Gas supply and demand trends

There are several developments that may affect the need to transport gas, particularly into the southern states, that are relevant to our decision.

4.4.1 Projected supply shortfalls

As noted in the Discussion Paper, there is likely to be an increasing need to transport gas from Queensland to the southern states in the future. The ACCC's June 2024 Gas Inquiry Report noted that while there is likely to be sufficient gas in the southern states in 2025, there is the potential for a shortfall during the winter months, which will need to be addressed through gas transported south from Queensland and/or from storage.[41]

The ACCC also noted the southern states are likely to continue to face shortages from 2026, with the size of the shortfalls expected to widen over time and potentially reach 200 PJ by 2029 and 300 PJ by 2034, unless new sources of supply come online.[42] It notes that falling southern supply will mean southern states will become more reliant on Queensland gas.[43]

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41 ACCC, *Gas Inquiry 2017-2030 report – Interim update on east coast gas market June 2024*, June 2024 (ACCC June 2024 Gas Inquiry Report), p 26.

42 ACCC June 2024 Gas Inquiry Report, p 39.

43 ACCC June 2024 Gas Inquiry Report, p 38.

Further, both the ACCC and AEMO are projecting that an east coast wide supply shortfall could occur, potentially as early as 2027 or 2028, respectively, unless new sources of supply come online.[44]

4.4.2 Gas demand

Residential and small to medium enterprise demand

The demand for gas by residential and small to medium enterprises is expected to fall as part of the energy transition, but there is currently some uncertainty as to how rapidly this will occur. AEMO's latest forecasts assume a relatively small decline in demand by these gas users to 2027, but by 2043 it is assuming this demand will have fallen by around 60%.[45]

The decline in this demand will be affected by government policies or strategies, including those in Victoria and the ACT which aim to phase out domestic gas use.[46]

Gas-powered generation demand

The electricity sector is one of the main sources of gas demand in eastern Australia after LNG exports, commercial and industrial, residential, and small to medium enterprise demand. In 2022, gas-powered generation accounted for around 23% of domestic gas consumption.[47]

AEMO's 2024 Integrated System Plan refers to the important backup role of that GPG is expected to play to support renewable generation through Australia's transition to a net zero economy.[48] It notes that, after coal-fired generators retire, gas will be needed to support energy supply during periods of renewable drought and of extreme peak demand.[49] GPG generators will therefore likely rely on pipeline storage and transportation services in the future, even as the use of renewable generation continues to grow.

LNG export demand

The SWQP is a key pipeline for transporting gas from the Cooper Basin and potentially other sources further south to Wallumbilla, for onward supply to Gladstone LNG export facilities.

Around 70% of Australia's natural gas production is exported to international markets as LNG, making Australia the world's second largest LNG exporter in 2022. Almost all LNG exports in 2022-23 were supplied to Asian markets (primarily to Japan, China, the Republic of Korea, and Taiwan).[50] Demand for Australian LNG exports is expected to remain strong until 2035 to service existing long-term LNG contracts. Australia's trade partners have

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44 ACCC June 2024 Gas Inquiry Report, pp 34-39; and AEMO 2024 GSOO.

45 AEMO 2024 GSOO, p 22.

46 In Victoria there are restrictions on new residential gas connections, see: Victorian Government, *Victoria's Gas Substitution Roadmap Update*, 2023, p 2. The ACT government has also placed restrictions on new gas network connections, see: ACT Government, Environment, Planning and Sustainable Development Directorate, *The Integrated Energy Plan 2024-2030*, 2024.

47 AER, State of the Energy Market 2023, 2023, pp 159-160.

48 AEMO, *2024 Integrated System Plan (ISP)* (AEMO 2024 ISP), p 6.

49 AEMO 2024 ISP, p 11.

50 Australian Government, Geoscience Australia, *Australia's Energy Commodity Resources 2024: Gas*, 15 July 2024, accessed 7 August 2024.

indicated that their demand for LNG will continue beyond 2050, albeit on a smaller scale, as demand for natural gas declines as they progress along their own decarbonisation pathways.[51]

4.4.3 Gas supply

LNG import terminals

LNG import terminals are an alternative to transporting gas to the southern states and may impact the need to transport gas south on the SWQP. These terminals would receive LNG from LNG carriers, which can then be used for storage, regasification (conversion to gas) and supply to local gas markets. Whether an LNG terminal will be built is still uncertain.

Over the past 7 years, 5 LNG terminals have been proposed in NSW, Victoria, and South Australia, but none have yet been developed. This includes the proposed Port Kembla terminal, Venice Energy's Outer Harbour LNG project in Adelaide, Viva Energy's terminal in Geelong, Vopak's Victoria Energy Terminal in Port Phillip Bay, and the Port of Newcastle LNG import terminal project. The Port of Newcastle LNG import terminal project was declared as 'economically unfeasible' by its owner and shelved in September 2022.[52]

The most advanced LNG import terminal proposal is Port Kembla, which Squadron Energy has stated is more than 90% complete and could enable imports to be supplied into the east coast to address the projected 2026-2027 shortfalls.[53] However, it is important to note that the Port Kembla project is still in discussions with potential customers and is yet to secure an offtake agreement.[54]

We note new developments about the Outer Harbour LNG terminal, which was raised by APA in its submission to the Draft Decision. On 24 October 2024, Venice Energy announced that it was being acquired by the Singapore-based AG&P LNG, with the Outer Harbour terminal expected to be commissioned by the first quarter of 2027.[55]

Origin Energy had initially signed an exclusivity agreement with Venice Energy to be the sole user of the terminal for a decade in October 2023.[56] In February 2024, Venice Energy confirmed that its negotiations with Origin (in relation to the 10-year terminal user agreement) had been impacted by uncertainties and proposed government changes to domestic gas supply and that it was negotiating with Origin Energy on potential solutions.[57] Since then, neither party has publicly confirmed whether Origin Energy will proceed with the agreement

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51 Australian Government, Department of Industry, Science and Resources, *Future Gas Strategy In brief*, p 3.

52 ACCC, *Gas Inquiry 2017-2030 report – January 2023 interim report*, p 138.

53 Squadron Energy, *Import terminal to play important role in future energy system*, 9 May 2024, accessed 7 August 2024.

54 G Tauriello, *'Fast track of Squadron Energy's Port Kembla import facility 'would plug the gas supply gap'*, *The Australian*, 2 July 2024, accessed 7 August 2024.

55 Venice Energy, *AGP LNG Agrees to Acquire Venice Energy*, 24 October 2024, accessed 14 November 2024.

56 Venice Energy, *Chairman's Update*, 15 February 2024, accessed 14 November 2024.

57 Venice Energy, *Chairman's Update*, 15 February 2024, accessed 2 December 2024.

for the Outer Harbour terminal. However, we note that some recent media articles appear to indicate that Origin Energy has since decided not to proceed with this agreement.[58]

The remaining LNG import terminal proposals are also yet to sign offtake agreements, and are still awaiting regulatory approvals and are subject to final investment decisions to proceed.

Potential new domestic sources of supply

The Federal Government's 2024 Future Gas Strategy Analytical Report indicates that, based on stated reserves and contingent resources, there are fields within 3 basins that are the most likely to be developed for large-scale gas supply, but their commerciality is yet to be determined.[59] These include fields in the Surat Basin (Queensland), Gunnedah Basin (Narrabri) (NSW), and Beetaloo sub-basin (Northern Territory).[60] The Report notes that supply from these 3 basins is unlikely to provide additional supply before east coast wide supply shortfalls are forecast to occur in 2028.

Hunter Gas Pipeline

The HGP, if constructed, could become an alternative route to the SWQP for transporting gas between northern and southern states. The HGP was first proposed by Hunter Gas Pipeline Pty Ltd in 2004-05. Santos acquired Hunter Gas Pipeline Pty Ltd in August 2022, which owned an approved underground pipeline route from Wallumbilla to Newcastle (NSW).[61] The proposed pipeline route passes close to Santos' Narrabri Gas Project in NSW.

Santos is reportedly working towards finalising the HGP route alignment, as part of the broader Narrabri project, by progressing land access agreements and environmental surveys and has commenced preliminary works on supporting infrastructure.[62]

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58 C Packham, 'Origin baulks at LNG import terminal in SA, as east coast supply pressure increases', *The Australian,* 14 February 2024, accessed 14 November 2024. See also, AFR, 'Choke in gas supply makes imports, once unthinkable, almost inevitable,' 19 August 2024, AFR website, accessed 14 November 2024.

59 Australian Government, Department of Industry, Science and Resources, *Future Gas Strategy Analytical Report,* May 2024, (Future Gas Strategy Analytical Report).

60 Future Gas Strategy Analytical Report, p 88.

61 AER, Discussion Paper, p 17.

62 Santos, *Second Quarter Report for period ending 30 June 2024*, 18 July 2024, accessed 7 August 2024.

5 Consideration of the form of regulation factors

This chapter explains how our consideration of the form of regulation factors fits into our assessment of the regulatory determination test under section 112 of the NGL, and our findings on the application of the form of regulation factors to the SWQP.

In summary, we have found that it is likely that APA currently has market power in the provision of services on the SWQP, and that it currently faces few constraints in exercising that power when dealing with the majority of users. However, we do consider that it may be constrained in exercising its market power when dealing with the largest shippers. We also consider that there is the potential for APA to become more constrained in the future if substitute services, such as LNG import terminals or the HGP, are developed.

5.1 How the form of regulation factors fit into our assessment

The nature of many gas pipelines means that they exhibit some natural monopoly characteristics, giving the pipeline operator a degree of market power in the provision of pipeline services. The degree of market power a service provider has in the supply of pipeline services and its ability to exercise such power, differs across pipelines. The pipeline regulatory framework recognises this by having two different forms of regulation.

In deciding whether to make a determination to change the form of regulation applying to a pipeline, the AER must consider the effect that regulating the SWQP as a scheme pipeline or a non-scheme pipeline will have on access to the services provided by a service provider on the SWQP.

In general, **scheme regulation** is likely to better promote access to pipeline services in those cases where a service provider has a greater degree of market power and faces limited constraints on its ability to exercise that market power, including from the application of non-scheme regulation. **Non-scheme regulation**, on the other hand, is likely to promote access where a service provider has a lower degree of market power and/or is more constrained in its ability to exercise that market power.

The form of regulation factors helps us inform our assessment of the effect that each form of regulation will have on access to pipeline services by requiring us to consider:

- the extent to which a service provider has market power in the provision of pipeline services on the relevant pipeline as a result of barriers to entry and/or network externalities (i.e. interdependencies) between pipeline and other gas and non-gas services provided by the service provider
- the extent of any constraints on the service provider's ability to exercise market power, such as the countervailing market power held by users or prospective users of the pipeline and/or the availability of substitutes for both the pipeline services and the supply of gas.

5.2 Barriers to entry

Form of regulation factor (a)

'the presence and extent of any barriers to entry in a market for pipeline services'

Barriers to entry are any factors or features of a market that prevent, deter, or hinder a prospective entrant entering the relevant market. Barriers to entry may include structural or technological barriers (such as sunk costs and economies of scale or scope), legal or regulatory barriers and strategic barriers that arise as a result of the threat of retaliatory action by incumbents. The higher the barriers to entry, the greater the likelihood that a service provider will have market power because the threat of new entry will not pose a constraint on the service provider's behaviour.

Under this form of regulation factor, we have considered the presence and extent of barriers to entering the market for pipeline services between locations on the east coast that can be served by the SWQP either alone, or in combination with other pipelines (for simplicity, hereinafter referred to as the 'market in which the SWQP competes').[63]

5.2.1 Stakeholder views

Stakeholders did not comment directly in their submissions on the extent of barriers to entry in the market in which the SWQP competes. In responding to the Discussion Paper question on the extent of barriers to entry, APA did submit that there were alternatives to using the SWQP, and that questions of constraints on APA's market power were not limited to 'whether someone can build a duplicate pipeline'.[64] Alternatives to the SWQP are discussed in section 5.6.

5.2.2 Our views

We consider the barriers to entry to the market in which the SWQP competes are high and there is a relatively low threat of new entry. We consider this is likely to provide APA with market power in the provision of services on the SWQP.

The following factors contribute to the high barriers to entry:

- **Large sunk costs**: There are significant sunk costs associated with developing pipelines, such as the SWQP, which can act as a barrier to entry. These costs will be larger where gas must be transported over large distances and where the pipeline can operate in a bi-directional manner. For example, the SWQP is over 900 km long and allows gas to be supplied in a bi-directional manner between 9 separate locations along its length.[65] Some insight into the scale of these costs can be found in APA's SWQP financial reporting,

63 Note here 'east coast' refers to all Australian states except Western Australia.

64 APA submission, p 38.

65 APA, SWQP Vertigan schematics, June 2024, p 3; APA, SWQP website, accessed 13 September 2024.

which indicates that the cost to date of developing, extending, and expanding the SWQP to be around $2.84 billion (real, $June 2024).[66]

- **Significant economies of scale**: Pipelines such as the SWQP can also exhibit significant economies of scale, which can act as a further barrier to entry. This is because the costs of providing services are largely fixed, so the average cost of providing services declines as the volumes of gas transported increase. The existence of these economies of scale may limit the viability of new entry below a minimum efficient scale (i.e. because APA would have a significant cost advantage over the new entrant).
- **Obtaining regulatory approvals:** There are several regulatory approvals (e.g. environmental approval, pipeline licences, infrastructure approval) that a prospective entrant would need to obtain to develop a new pipeline. These approval processes can act as a further barrier to entry, particularly when a pipeline traverses multiple jurisdictions as the SWQP does, by increasing costs, delays, and uncertainty. For example, a pipeline traversing Queensland and South Australia and/or New South Wales would need to obtain separate pipeline licenses for each state, and Commonwealth environmental approval.[67]
- **Access to land and easements:** The processes to negotiate access to the land required for a pipeline easement can also act as a barrier to entry, as these processes can be costly, time consuming, and may not always be successful. They can, for example, require extensive community consultation and negotiations with each landowner along the pipeline route to purchase the land or create an easement.[68]
- **Uncertainty around future of gas:** The uncertainty surrounding the long-term future demand for gas in the east coast may also act as a barrier to entry as it could have the potential to make it more difficult for an operator to contract sufficient volume to underwrite the development of new pipelines.[69] As discussed in Chapter 4, while there is likely to be a need to transport gas to the southern states from Queensland for some time, there is some uncertainty about long-term gas demand.
- **Network externalities**: As discussed further below, APA's operation of the SWQP as part of a network of transmission pipelines (the East Coast Grid) and its sale of multi-asset services across multiple pipelines may also act as a barrier to entry. This is because new entrants would not just be competing with APA for the provision of pipeline services between any points on the SWQP, but for the provision of pipeline services between any points in APA's East Coast Grid, which includes the SWQP.

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66 Based on the recovered capital value reported under Part 23, and adjusted for inflation by escalating with the consumer price index. APA, SWQP Part 23 financial reporting, October 2023, APA, SWQP website, accessed 18 November 2024.

67 *Energy Resources Act 2000 (SA)*; *Pipelines Act 1967 (NSW)*; *Gas Supply Act 2003 (QLD)*; *Environment Protection and Biodiversity Conservation Act 1999 (Cth*).

68 This has been reflected in significant community opposition to the construction of the HGP. For example, some farmers and landholders have raised concerns over threats to farming and livelihoods, impact on water resources, and environment and safety risks associated with flooding and bushfires.

69 AER, *Regulating gas pipelines under uncertainty – Information paper*, November 2021, pp 3-26; APA submission, pp 6, 67-79; AEMO 2024 GSOO, pp 11, 23, 31, 50, 92-98; AEMO, *Victorian Gas Planning Report Update 2023*, March 2023, pp 16, 61; AEMO, *Victorian Gas Planning Report Update 2024*, March 2024, pp 2, 43, table 17.

5.3 Network externalities – covered gas services

Form of regulation factor (b)

'the presence and extent of any network externalities (that is, interdependencies) between a covered gas service provided by a service provider and any other covered gas service provided by the service provider'

Form of regulation factor (b) requires us to consider whether there are any network externalities (or interdependencies) between the covered services APA provides on the SWQP (i.e. pipeline services) and any other covered gas services it provides.[70]

Providing other covered gas services, such as other pipeline, compression, or storage services, can contribute to a service provider's market power in supplying services on a pipeline in several ways. This includes by providing it with a competitive advantage and/or increasing barriers to entry.

5.3.1 Stakeholder views

APA was the only stakeholder to make a submission on this form of regulation factor. It submitted that this form of regulation factor was introduced to distinguish point-to-point pipelines from other assets that exhibit network externalities, such as distribution networks and electricity systems where there are typically no options to bypass.[71] In support of this view, APA cited the following extract from the Expert Panel that developed the form of regulation factors:

> 'Network interdependencies and externalities are less pronounced for gas transmission pipeline which provide end-to-end services that can be operated independently without loss of efficiency. Thus, establishing means of contestability through tradable rights to pipeline capacity and pipeline-on-pipeline competition is more feasible in the gas transmission pipeline sector'.[72]

APA submitted that the SWQP does not exhibit network externalities in the same way as an electricity network or a gas distribution system. Instead, it contended that because the SWQP is a point-to-point pipeline, it is possible for shippers to bypass the SWQP.[73]

Further, APA submitted that where the SWQP services are offered alongside other services (e.g. multi-asset services), this does not give rise to network externalities as there is the same scope for the service to be bypassed.[74]

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70 Covered gas service is defined in section 2 of the NGL as a pipeline service, the supply of covered gas, or a service ancillary to the supply of covered gas. Further, network externalities under the form of regulation factors does not have the usual 'economic meaning' of how the benefit an agent derives from a good or service changes as the number of other agents consuming the same kind of good or services changes.

71 APA submission, p 39.

72 APA submission, p 39.

73 APA submission, p 39.

74 APA submission, p 39.

5.3.2 Our views

We consider that APA's supply of several other covered gas services, particularly other transmission pipeline services, contributes to its market power in the supply of services on the SWQP.

APA uses the following assets to supply covered gas services in the east coast:

- 21 transmission pipelines (totalling 7,500 km in length), 6 of which directly connect to the SWQP[75]
- 2 distribution pipelines[76]
- one storage facility[77]
- one processing facility.[78]

Of particular relevance to the SWQP are the other pipeline services APA provides across a large number of other transmission pipelines it owns, which APA refers to as the 'East Coast Grid' (see Figure 5.1 below).

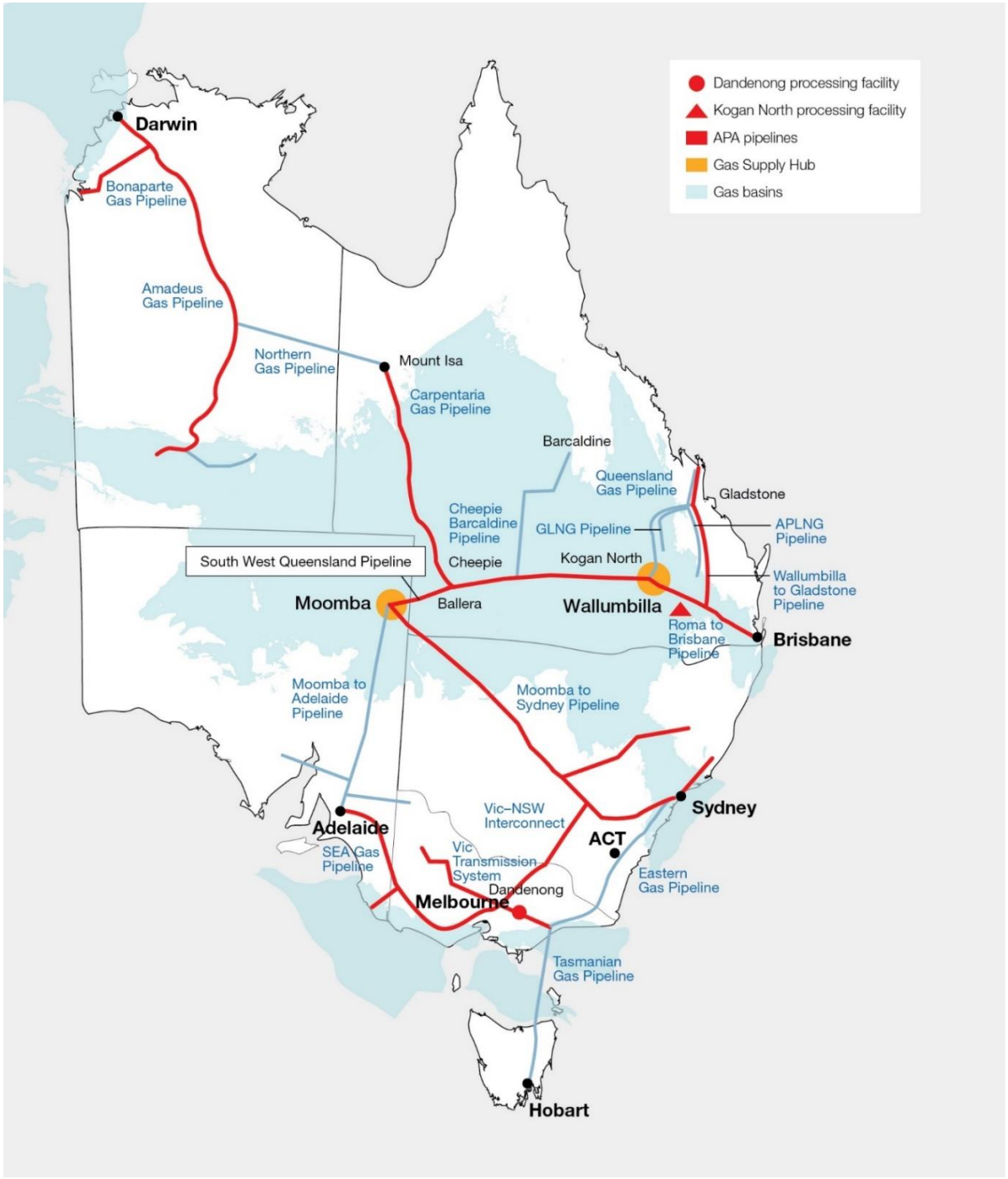
[75] APA, East coast grid, APA website, accessed 20 August 2024.

[76] APA, Gas distribution, APA website, accessed 20 August 2024.

[77] APA, Gas storage, APA website, accessed 20 August 2024.

[78] APA, APA overview, APA website, accessed 20 August 2024.

Figure 5.1 – APA's East Coast Grid



Source: AER map of APA's assets as described on APA's website.

Operating the East Coast Grid allows APA to offer multiple services across its network and make these agreements more attractive to shippers by generally charging less for these services than what it would cost to separately contract each service.[79] For example, APA can

[79] For example, in August 2024, APA's published price for the multi-asset service between Wallumbilla and Wilton was $2.4822 (including compression). In contrast, the published prices for the individual services totalled $2.9469 (i.e. transportation between Wallumbilla and Moomba was $1.5942 (including compression) and Moomba to Wilton was $1.3527), which is around 19% higher than the multi-asset service price. APA, APA tariffs and terms, APA website, accessed 27 August 2024.

transport gas between multiple locations (on an any point to any point basis) using multiple assets under a single agreement. Competitors, who do not have such an extensive network, are not able to offer the same degree of connectivity and flexibility.

APA's website promotes the benefits of the East Coast Grid, which the SWQP forms part of, stating that:

> 'APA Group's 7,500-kilometre East Coast Grid of interconnected gas transmission pipelines provides the flexibility to move gas around eastern Australia, anywhere from Otway and Longford in the south, to Moomba in the west and Mount Isa and Gladstone in the north'.[80]

Similarly, in November 2023, APA highlighted the benefits of its East Coast Grid by stating:

> '[APA's] Uniquely integrated portfolio of assets that enables the flexible, reliable and efficient delivery of services…
>
> APA's assets are geographically diverse and many of them, particularly those comprising its East Coast Grid, can operate as interconnected infrastructure or point-to-point assets, with major pipelines having the ability to flow gas bi-directionally. APA's integrated East Coast Grid spans thousands of kilometres of pipeline length and provides the capability to transport gas seamlessly from multiple gas production facilities to gas users across four Australian states and the ACT…
>
> Bi-directional and multi-asset services across APA's interconnected East Coast Grid have enabled it to be a "one-stop" shop for many energy producers and users... Many of the flexible services that are available as a result of APA's continued investment in and augmentation of the East Coast Grid are now incorporated into multi-asset and multi-service contracts of varying lengths'.[81]

[redacted]

The benefits APA gains from operating the East Coast Grid are also supported by views we heard from shippers. Several shippers told us that multi-asset agreements are simpler, more efficient and more flexible than multiple contracts for each pipeline. Some shippers also said that multi-asset agreements minimise administrative burdens, and one shipper noted that APA provided more flexibility around imbalance allowances and a more efficient nominations system under multi-asset agreements. [redacted]

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80 APA, east coast grid, APA website, accessed 20 August 2024.

81 APA, ASX Announcement: Lodgement of Offering Circular for Hybrid Capital Securities, 6 November 2023, APA website, accessed 20 August 2024.

82 [redacted]

[redacted]

Based on the above, we consider that operating the East Coast Grid contributes to APA's market power in the supply of services on the SWQP by providing APA with a competitive advantage and increasing the barriers to entry for potential competitors. It achieves this through the economies of scale and scope associated with the provision of these covered gas services, which give rise to efficiencies that are not otherwise available to other potential competitors.

Finally, we do not consider that because the SWQP can be characterised as a 'point-to-point' pipeline that interdependencies between APA's other covered gas services are not relevant as illustrated by the above points. We note that while the Expert Panel noted that interdependencies may be less pronounced for transmission pipelines than for electricity and gas distribution networks, it did not say they would be absent.[84] As discussed below, we also consider that there are currently few options to bypass the SWQP.

5.4 Network externalities – other services

Form of regulation factor (c)

'the presence and extent of any network externalities (that is, interdependencies) between a covered gas service provided by a service provider and any other service provided by the service provider in any other market'

Form of regulation factor (c) requires us to consider whether there are any network externalities (or interdependencies) between the covered gas services APA provides on the SWQP and any other services APA provides in any other market. For the purposes of this factor, we have considered any other market to include a market for any services other than 'covered gas services'.

Like form of regulation factor (b), providing other services can contribute to a service provider's market power in supplying services on a pipeline. For example, if a service provider was also an electricity generator, it may affect the service provider's incentives to transport gas for competing generators and/or to otherwise confer an advantage on its own generator.

5.4.1 Stakeholder views

APA was the only stakeholder to make a detailed submission on this form of regulation factor. It submitted that its provision of other services in non-gas markets does not affect how it supplies services on the SWQP, nor how users can access those services. In doing so, APA submitted that no material issues of vertical integration arise for the SWQP as it does not use the SWQP to serve any upstream or downstream interests (other than the Diamantina Power Station located near Mount Isa).

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83 [redacted]

84 Expert Panel on Energy Access Pricing, *Expert Report to the Ministerial Council on Energy*, April 2006, p 49.

APA noted that this means it cannot gain a competitive advantage in upstream or downstream markets from operating the SWQP, and it has no incentive to discriminate in providing access to services on the SWQP. APA also submitted that where it does provide services in a downstream market, namely by operating the Diamantina Power Station which uses the SWQP, it complies with the ring-fencing and associate contract provisions in the NGL.

5.4.2 Our views

We consider that APA's supply of other services does not contribute to its market power in the supply of services on the SWQP.

APA owns and/or operates several assets that are used to provide services in other markets, such as electricity generation and transmission services.[85] However, there is no evidence that these services impact how APA provides services on the SWQP or contribute to APA's market power in the supply of services on the SWQP. Importantly, most of these services are not provided in the same geographical location as the SWQP and, with the exception of the Diamantina Power Station, do not use the SWQP. We consider that the ring-fencing and associate contract provisions, which apply to the SWQP and Diamantina Power Station, are operating effectively and there is no evidence to suggest APA is gaining an advantage.

5.5 Countervailing market power

Form of regulation factor (d)

'the extent to which any market power possessed by a service provider is, or is likely to be, mitigated by any countervailing market power possessed by a user or prospective user'

Form of regulation factor (d) requires us to consider the extent to which the countervailing market power possessed by a user or prospective user (referred to as 'users' below) may mitigate APA's market power in the supply of services on the SWQP.

The greater the countervailing power of users, the more likely it is that those users will be able to protect themselves from exercises of market power by the service provider and to negotiate more economically efficient prices and conditions of access.

In general, users are more likely to have countervailing market power where:

- the users are large or concentrated (i.e. there are only a few pipeline users), are well-resourced and can credibly threaten to bypass the pipeline by building their own pipeline, or securing an alternative source of supply (e.g. by procuring gas from Victoria rather than Queensland), or

[85] For instance, APA owns and operates electricity transmission assets (Basslink, Murraylink, Directlink) and electricity generation assets (5 GPGs, 2 solar farms and one wind farm).

- the cost and demand circumstances of the service provider is such that it would be adversely affected if a user, or group of users, ceased to use the service (e.g. resulting in full or partial stranding of certain assets).[86]

5.5.1 Stakeholder views

APA views

APA submits that 'there has always been, and continues to be, a very real threat of competitive bypass' for the SWQP due to the availability of alternatives to use of the SWQP, such as supply from other basins, swap arrangements, different pipeline routes, and short-term capacity trading and auctions.[87] APA also notes that the SWQP is much more susceptible to bypass as it is a transmission pipeline, and not a distribution network.[88]

APA submits that due to these alternatives to use of the SWQP, shippers have been able to exercise 'considerable countervailing market power' in negotiating prior transportation arrangements and continue to be able to do so.[89]

In particular, APA indicates there is evidence to suggest that at least 2 of the foundation shippers (Origin, AGL) had countervailing market power when negotiating their foundation contracts, which underwrote extensions/expansions of the SWQP. In the case of AGL and the construction of the QSN Link, APA notes that there was significant under-utilisation of the SWQP at the time of negotiations. In the case of Origin and the expansion of the SWQP and QSN Link, Origin was considering alternatives (i.e. bypass options) at the time of negotiations.

Other stakeholder views

Several shippers consider that there is limited room for negotiations with APA outside of standard terms and conditions (as discussed further in the Access section below). Some shippers also considered that certain terms and conditions in contracts for the SWQP favoured APA. However, we did hear from some shippers that they don't have issues in negotiating access.

Further, as discussed below, some smaller shippers said it would be difficult for them to underwrite the construction of a new pipeline or that this was usually done by the large incumbent shippers. Additionally, as noted in section 5.6 below, many considered there were limited and/or only partial substitutes and alternative sources of supply to services on the SWQP.

5.5.2 Our views

We consider that only the largest shippers on the SWQP may have a degree of countervailing power on the SWQP, but that the majority of shippers, who contract a small volume of capacity, do not. The market power of the large shippers stems from the fact that they contract such large volumes on the SWQP, which means it is likely that APA is reliant

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86 Expert Panel on Energy Access Pricing, *Expert Report to the Ministerial Council on Energy*, April 2006, p 49.

87 APA submission, p 10.

88 APA submission, p 17.

89 APA submission, pp 10, 16-17.

upon these users to some extent. However, we also note that the degree to which this countervailing market power is exercised and results in benefits that flow through to other shippers (particularly those acquiring smaller volumes of transport) is not clear.

We note that the countervailing market power of SWQP shippers stems from the volume of capacity used, and not from a shipper's position as a foundation user. APA submitted that some foundation shippers had countervailing market power at the time foundation contracts were entered into. It may have been the case that some foundation shippers held countervailing market power in the past due to the conditions that existed when foundation contracts were entered into. However, it is the current countervailing market power of shippers we are concerned with for the Review. That is, under this form of regulation factor, we must consider the countervailing market power shippers currently have to negotiate with APA, either when they must negotiate new access contracts, or variations to current contracts.

We do not consider that foundation shippers continue to have countervailing market power as a result of the conditions that existed at the time they entered into foundation contracts (although they may have countervailing power from other sources). This is because the conditions which led to these shippers having countervailing market power at the time foundation contracts were entered into no longer exist.

Instead, as discussed below, we have assessed the *current* level of countervailing market power held by shippers by considering a) their current ability to threaten bypass of the SWQP, and b) APA's reliance on those shippers.

Threat of bypass or securing an alternative source of supply to the SWQP

We do not consider that shippers' ability to present a credible threat of bypass or secure alternative supply is currently a significant source of countervailing market power for the SWQP shippers.

As discussed above, there are high barriers to entry to the market in which the SWQP competes. Given these barriers, most shippers are unlikely to have the resources necessary to underwrite a new pipeline that allows them to bypass the SWQP. Further, it is unlikely that shippers on the SWQP will have the long-term transport requirements that would be necessary to underwrite the development of a competing pipeline.

This is reflected in the comments from two shippers who indicated that underwriting pipeline investment is usually done by large and incumbent shippers. However, large shippers indicated that even underwriting an expansion of the SWQP, which is lower cost than developing a new pipeline that could bypass the SWQP, would be difficult due to the long-term commitment that would be required. This indicates that it would be even more difficult for a shipper to underwrite an entirely new pipeline that could bypass the SWQP.

Further, there are currently only partial substitutes for services on the SWQP and for gas meaning there are limited alternative supply options for shippers. In particular, for users transporting gas south via the SWQP, there are currently no credible bypass options. However, if substitutes emerge in the future, bypass options could increase. These issues are discussed in more detail in the Substitutes section below.

APA's reliance on shippers

We have also considered whether any shippers have countervailing market power because APA is reliant upon them acquiring capacity on the SWQP.

We do not consider this gives the majority of shippers countervailing power. This is because the majority of shippers are currently contracting relatively small volumes of capacity on the SWQP. [redacted] Any decision by these shippers not to use the SWQP is therefore unlikely to have a material financial impact on APA. Further, as transport on the SWQP is likely to be increasingly important as other sources of supply in the south decline, and there appears to be high demand for the SWQP services, if one of these shippers elects not to use the pipeline, it is highly likely that APA will be able to sell the capacity to other users.

However, we do consider it is likely that APA is reliant upon the larger shippers to some extent which likely gives them a degree of countervailing market power. [redacted] If one of the large shippers decides not to use the SWQP, it may expose APA to greater adverse financial consequences. Therefore, it is likely these shippers may have a degree countervailing power when negotiating with APA.

The extent to which this countervailing power will significantly constrain APA is not clear. [redacted] Given the current lack of bypass and alternative supply options as discussed above, these larger shippers likely must use the SWQP, and would not be able to meet their demand in the southern states if they did not. Further, if they decided to decrease their use of the SWQP, it is likely that other shippers, most likely retailers, would contract to use any newly available capacity. This is because transport from Queensland to the southern states would still be needed to meet gas customer demand during the winter months. For example, we heard from one shipper that a concern about the SWQP was the ability to obtain capacity to transport gas south when gas is made available by Queensland gas producers; the alignment with available upstream gas supply is the key challenge. This suggests it would likely purchase additional pipeline capacity if it was available on reasonable terms and relevant gas supply was available.

Additionally, if one of these shippers stopped contracting capacity on the SWQP, or decreased their contracted capacity, it would result in less capacity being made available to other shippers through the DAA. This would mean that shippers that currently rely on the DAA to transport gas south would need to contract firm services on the SWQP.

[redacted] One shipper notes that it is possible for it to use gas swaps but does not appear to consider this as a full substitute. Instead, it appears to see swaps as a secondary option

used to optimise transport positions when appropriate. [redacted]

For these reasons, we think that the large shippers hold some countervailing power that likely constrains APA *to some* extent in bargaining with these shippers.

Potential limitations on the benefits of any countervailing market power flowing through to the broader market

As part of our assessment of countervailing market power, we also consider the degree to which countervailing market power held by any particular users has flowed through to benefit the broader market, including other users and also end-users.

We consider that even if the foundation shippers had a degree of countervailing power at the time foundation contracts were entered into, it appears that any benefits they gained from this have flowed through to smaller shippers in a limited way (discussed in Chapter 6). [redacted]

We also consider the extent to which foundation shippers exercise their countervailing market power to negotiate economically efficient prices and conditions is not clear. We would expect that Origin and AGL would be incentivised to negotiate such prices as it would provide them with a competitive advantage in downstream retail markets. However, some shippers have indicated that they pass on transport costs to their customers, with one specifically noting they are mostly concerned about whether they are paying the same price as their competitors (as opposed to achieving a more favourable price outcome).

While this does not mean that Origin and AGL would not use any countervailing market power they had in negotiations, it could suggest that they don't have a strong incentive to negotiate prices down to the economically efficient level. This *may* limit the benefits of countervailing power flowing through to end-users. [redacted]

Impact of non-scheme regulation on countervailing market power

Finally, we do not consider that the countervailing power of shippers has been 'enhanced in recent years through changes to the regulatory regime for non-scheme pipelines' as submitted by APA.[90]

That is, not to say non-scheme regulation has not resulted in some potential improvements in users' bargaining power. However, bargaining power is not the same as countervailing market power. The ability of users to credibly threaten to bypass the pipeline, or otherwise expose the pipeline to adverse financial consequences (e.g. partial or full asset stranding) by

[90] APA submission, pp 17, 34.

ceasing to use the pipeline, accords users with countervailing market power, which has not changed as a result of changes to non-scheme regulation.

5.6 Substitutes for a pipeline service

Form of regulation factor (e)

'the presence and extent of any substitute, and the elasticity of demand, in a market for a pipeline service in which a service provider provides that service'

Form of regulation factor (e) requires us to consider the presence and extent of any substitutes, and the elasticity of demand, in a market for a pipeline service in which a service provider provides that service.

The availability of substitutes and the elasticity of demand are closely linked because the greater the number of viable substitutes that users can switch to in response to an increase in a service provider's prices, the more elastic demand is likely to be, and the more constrained a service provider's market power will be. Conversely, where there are no viable substitutes for users to switch to, demand is likely to be relatively inelastic and a service provider is likely to be in a better position to exercise market power.

In applying this form of regulation factor, we have considered the extent of potential substitutes and elasticity of demand for services provided by the SWQP. In doing so, we have considered all services which would allow gas to be transported between points that can be served by the SWQP alone or in combination with other pipelines. This has ensured we have had regard to a wide range of potential substitutes, which are discussed below.

In considering these potential substitutes, we have also considered whether they are viable substitutes that users could switch to in response to a service provider's exercise of market power. In doing so, we have, where relevant, considered the comparability, availability, reliability, and price of these potential substitutes, as well as any costs that may be associated with switching.

5.6.1 Our views

We heard various views from stakeholders on the extent of substitutes. APA submitted that there are a number of available substitute services, including transport on other pipelines, locational gas swaps, the DAA and secondary capacity trading. In contrast, shippers expressed differing views on alternatives to the SWQP. These are discussed in more detail below.

We consider there may currently be some alternative services that can be used to supply gas to locations served by the SWQP, either alone or in combination with other pipeline services. However, for most SWQP users, these are either partial substitutes or complementary services. Therefore, most users won't be able to switch to alternative services in response to an increase in the price, or decrease in the quality, of the SWQP services. Further, as discussed below, most SWQP users also do not have an alternative to using gas. As a result, we consider that the demand for SWQP services is currently relatively inelastic, and likely contributes to APA's current ability to exercise market power in the provision of SWQP services.

However, it is possible that the demand for services on the SWQP could become more elastic in the future. That is, if the HGP is constructed and/or one or more LNG import terminals are developed in the south. If this were to occur and users considered these to be effective substitutes for the services provided by the SWQP, they could pose a more effective constraint on APA's market power.

Alternative gas sources and pipelines

The first potential substitute for the delivery of gas to locations served by the SWQP (either alone or in combination with other pipelines), is supply using alternative pipelines. We do not consider that this is an effective substitute to transport on the SWQP for many users.

The SWQP is the only pipeline that connects:

- gas basins in Queensland and the Northern Territory to southern markets
- gas basins in South Australia, Victoria, and the Northern Territory to Queensland (including to Mount Isa and LNG export facilities in Gladstone).

This means that there are no pipelines that can currently serve as a substitute for the SWQP for users in:

- southern states that wish to transport gas south from Queensland or the Northern Territory,
- Barcaldine that wish to transport gas from Queensland or the southern states,
- Mount Isa that wish to transport gas from Queensland gas fields or the southern states, and
- Queensland that wish to transport gas from southern states or the Northern Territory.

Although it is possible for some other shippers to transport gas from basins outside of Queensland using alternative pipelines, this is likely to only meet some of these users' supply needs due to limited gas available. Most users cannot solely rely on supply from the south given the decline in southern gas production, which will worsen in the future unless new sources of supply become available. The importance of the SWQP to meet demand in the southern states is supported by high demand for westernhaul services on the pipeline.[91]

For users of the SWQP in Mount Isa, an alternative could be to obtain gas from the Northern Territory, allowing them to bypass the SWQP. However, there are also constraints on the availability of gas in the Northern Territory, which show no sign of changing.[92] One shipper noted that supply from other basins is limited or unreliable.

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91 For example, in 2023 and 2024, during the winter months when there was peak demand in the southern states, almost all of the SWQP's capacity was reserved to transport gas south (based on AER analysis of AEMO's Gas Bulletin Board data).

92 For instance, in the ACCC's latest interim report, it noted that it had excluded production and expected supply from the Northern Territory from its forecasts given "continuing production issues in the region". It also noted that there "is a risk that the Northern Territory will require gas to be imported from Queensland."; ACCC June 2024 Gas Inquiry Report, pp 12-13.

Locational gas swaps

Locational gas swaps are another potential substitute for transporting gas on the SWQP. These involve bilateral agreements between parties to exchange gas between locations, which may reduce the need to us a gas pipeline to transport gas between locations.[93]

APA submitted that gas swaps are frequently used to trade significant volumes of gas, and several shippers said that gas swaps are an alternative to transport on the SWQP. Some also noted that swaps are often available at lower prices than firm transportation services on the SWQP.

However, we consider that locational gas swaps are a partial substitute for services on the SWQP, and that they are likely to provide a limited constraint on APA's market power in the supply of services on the SWQP due to a number of limitations.

For instance, to use a swap to bypass the SWQP, a shipper must be able to find a counterparty that has the required volume of gas at the right location and time and is willing to receive the relevant volume of gas at an alternative location. Shippers indicated that finding such a counterparty can be difficult for locational swaps.

In addition, swaps can take time to arrange which also makes them less substitutable, with some shippers noting that the time required to negotiate and activate swaps can be lengthy, meaning that swaps are not always feasible.

While AEMO's decision to implement an exchange-traded locational swap in March 2025 may help reduce some of the barriers to entering into short-term swaps,[94] it will not overcome the first limitation listed above, which will continue to pose a constraint on the extent to which swaps can be used to bypass the SWQP over the medium to longer term. This is because there are only a small number of parties in the east coast that are in a position to facilitate such swaps over the medium to longer term.[95]

Another important limitation on the use of swaps to bypass the SWQP is that to address the projected supply shortfalls in the south, gas needs to physically flow south on the SWQP. This necessarily places a cap on how much gas can be swapped. This point was made by a number of shippers who noted that declining production in the south means that swaps are likely to become less frequent in the future. It can also be difficult for those in more remote locations serviced by the SWQP, including Barcaldine and Mount Isa.

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93 For example, a shipper with gas at Wallumbilla that needs gas in Moomba could bypass the SWQP if it can find another party that requires the same volume of gas in Wallumbilla and that can supply the shipper with an equivalent quantity of gas at Moomba.

94 APA, 'Submission to the AER Draft Decision on the SWQP', 8 November 2024, accessed 15 November 2024, p 8. See also. AEMO, 'Gas Supply Hub Exchange Agreement v 17.0 Draft', 4 November 2024, accessed 18 November 2024.

95 For example, in order for a swap to occur between Wallumbilla and the southern states over the medium to longer term, there must be a party that has access to gas at Wallumbilla that it requires in the south and another party with gas in the south that requires an equivalent volume of gas at Wallumbilla. There are only a limited number of parties in the east coast that are in this position to do this over the medium to longer-term.

Finally, data on short-term locational gas swaps suggests that they are only a partial substitute for firm transportation services.[96]

[redacted]

DAA

Another substitute we have considered is the DAA, which allows a shipper to obtain access to SWQP services without purchasing them directly from APA. Under the NGL, any capacity that has been contracted by shippers for transport on a pipeline but is not nominated to be used the next day is made available to other shippers via an auction. The reserve price for the DAA is $0/GJ, but the actual price paid for DAA capacity will be higher if demand exceeds the available DAA capacity.

96 [redacted]

We consider the DAA is a partial substitute for, or a complement to, purchasing firm transportation on the SWQP.[97]

Capacity on the DAA is not guaranteed and only becomes available the day before it is to be used. This means that shippers cannot rely on the DAA in the same way as firm services as capacity may not always be available. This is supported by views we heard from several shippers. Some noted that they cannot always obtain the capacity they require on the DAA, particularly during peak winter periods. One shipper explained that as it requires consistent gas supply, it only uses the DAA to supplement its firm and non-firm pipeline services. Another shipper considers the DAA a useful alternative or a complement to using firm transport on a pipeline.

Data on how the capacity on the SWQP is sold using the DAA supports that most shippers do not rely on the DAA, and that it is a complement to firm transport.

[redacted]

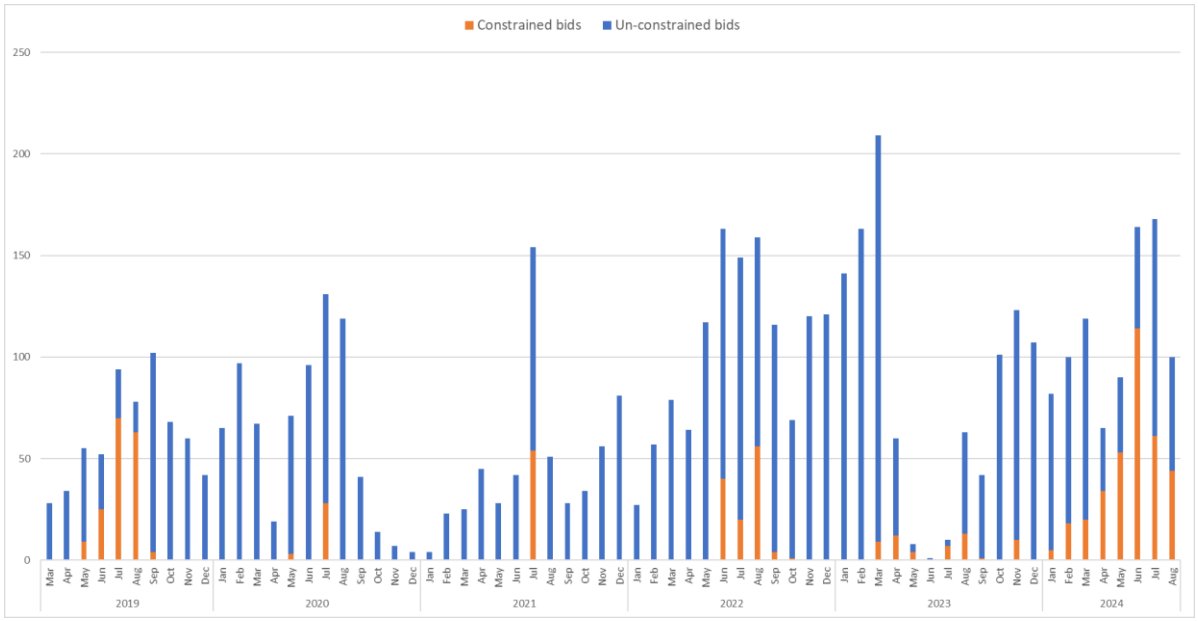
The availability of capacity on the DAA also illustrates why the DAA is not a full substitute for firm transport. On average, between March 2019 and August 2024, successful bids for capacity on the DAA exceeded the capacity available (i.e. the bids were constrained) around

97 We note that the DAA may be a substitute for day-ahead and within day firm transport services. However, these services make up only a small portion of transport on the SWQP, and therefore we do not consider this poses a significant constraint on APA.

20% of the time.[98] Figure 5.3 below shows that bids were particularly constrained for western transport in winter months when demand is high and shippers that have contracted capacity are more likely to use their capacity, resulting in less capacity going into the DAA.

As demand for capacity in winter increases in the future, less capacity is likely to be available in the DAA. This trend appears to be developing already. In the cooler months of 2024 (May to August), westernhaul transport bids were constrained between 36% and 70% of the time.

Figure 5.3 – Constrained and non-constrained successful DAA bids on the SWQP for westernhaul services



Source: AER analysis using day ahead auction data

Finally, SWQP firm transportation prices have not fallen since the introduction of the DAA.

Secondary capacity trading

APA submitted that purchasing unused capacity from other SWQP shippers (particularly the foundation shippers) may also be a substitute for the SWQP services.[99] However, no shippers raised secondary capacity trading as a substitute for transport on the SWQP.

We do not consider that buying unused capacity from shippers who have contracted large volumes of capacity to be an effective substitute for many shippers, and it is likely to become less so in the future. This is because to sell secondary capacity, a shipper must have contracted capacity which they do not intend to use. As outlined above, the use and demand for the SWQP is increasing, and it appears that shippers are increasingly using more of their contracted capacity. There is unlikely to be much scope for shippers to purchase secondary capacity when required.

98 Successful DAA bids are bids which acquired some capacity through the DAA, and do not include bids which failed to acquire any capacity.

99 APA submission, p 58.

It is also notable that there are no reported secondary capacity trades for the SWQP.[100]

Potential future substitutes - LNG import terminals

We consider that, if developed, LNG import terminals could provide an alternative to the supply of gas via the SWQP to the southern states for those users that require gas in the south.

Some shippers noted that they would consider supply via an LNG import terminal as an effective substitute for the supply of gas from Queensland via the SWQP. This included Origin, which stated in its submission that the four proposed LNG import terminals on the east coast would compete with the SWQP for pipeline services to the south if they proceeded.[101]

One shipper noted that LNG terminals could be viable, particularly if they were located in a desirable location. However, many others considered the price of acquiring gas via an LNG import terminal would likely limit its substitutability, with several shippers noting that LNG import terminals were commercially unviable at current prices. One shipper also noted the potential for higher greenhouse gas emissions associated with LNG import terminals may potentially affect their substitutability.

[redacted]

As noted in Chapter 4, there is still uncertainty about whether any of the proposed LNG import terminals will become operational. Of the proposed terminals, the Port Kembla terminal is the most progressed, but, according to the ACCC, it is yet to secure commercial underwriting for the project.[103] Recent ACCC analysis also suggests that even if this import terminal was to come online, the volume of gas it could supply into the market (approximately 130 PJ per year) would not, on its own, be sufficient to meet the projected supply shortfall in the southern states over the medium to longer term (150 PJ in 2029 and increasing to 350 PJ in 2032).[104] Retailers and gas users in the south are therefore unlikely to be able to completely bypass the SWQP, with material volumes of gas likely to still have to be supplied from Queensland or the Northern Territory via the SWQP.

Despite this, it is still possible that if an LNG import terminal is developed in the south it could pose a constraint on APA's market power. Whether or not it does pose such a constraint will, as several stakeholders observed, depend on the relative cost of supplying gas into the southern states via the SWQP or via an LNG import terminal. This will, in turn, depend on the assumptions made about:

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100 AER analysis using AEMO's Gas Bulletin Board data.

101 Origin Energy, 'Submission to the SWQP Review', 8 April 2024.

102 [redacted]

103 ACCC June 2024 Gas Inquiry Report, p 46.

104 ACCC June 2024 Gas Inquiry Report, pp 46, 66.

- the price payable for gas procured in Queensland and the cost of transporting that gas into the southern states via the SWQP and other pipelines
- the price payable for LNG and the cost of shipping that LNG to the southern states and then storing and regassifiying it.

For example, if we assume the price payable for gas supplied from Queensland is capped at the LNG netback price and there is no material change in the cost of transporting gas to Sydney, then we estimate that the price of LNG imports would be around $2.38/GJ-$2.67/GJ (12% to 14%) **higher** than gas supplied from Queensland via the SWQP. In effect, this means that the SWQP's price could increase by 250% before the LNG import price would pose a constraint on the price of SWQP services.

However, if we assume that the price payable for gas supplied from Queensland exceeds the LNG netback price (e.g. because there is a supply shortfall in the east coast) and/or that transportation costs from Queensland to Sydney increase (e.g. because the pipelines need to be expanded), this price differential could diminish. It is possible therefore that LNG imports could pose more of a constraint on APA's market power if supply shortfalls occur and/or investment in westernhaul pipeline capacity is required.

Potential future substitutes – Hunter Gas Pipeline

We consider that, if developed, the HGP could be a potential substitute for many, but not all, shippers of the SWQP. That is, it could be used by shippers transporting gas from Wallumbilla to NSW, Victoria, the ACT, and Tasmania, or from the southern states to Wallumbilla. However, it is uncertain whether the development of this pipeline will proceed, and the extent to which services would be available to shippers other than Santos if it proceeds.

Santos currently holds the rights to build the HGP, but the development of this pipeline is contingent on Santos making a decision to proceed with the development of its gas fields in Narrabri in north-west NSW, which it expects to make in 2025.[105] Santos has stated that it is also facing legal challenges.[106]

In addition to these challenges, the construction of the HGP is contingent on other regulatory and other approvals, and there is uncertainty about it receiving these approvals. In June 2024, energy advisory firm EnergyQuest noted that:[107]

> Obtaining approvals and land access for the Hunter Gas Pipeline (HGP), needed to connect Narrabri to east coast gas shippers, will be a major challenge for Santos in areas occupied by sophisticated landowners and stakeholders who object to the HGP (and Narrabri in general) and are financially well resourced.

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105 C Packham, 'Santos hopes for Narrabri start in 2025', *The Australian,* 22 August 2024, accessed 23 August 2024. The HGP was first proposed in 2008 but it has still not yet been developed. Santos acquired Hunter Gas Pipeline Pty Ltd in August 2022, which owned an approved underground pipeline route from Wallumbilla to Newcastle.

106 L Jackson and A Ojha, 'Santos hit with fresh legal blow over $2.4 billion Narrabri gas project', *Reuters*, 7 March 2024, accessed 17 September 2024.

107 EnergyQuest, *EnergyQuarterly report*, June 2024, p 39.

[redacted]

Whether the HGP would be considered a substitute for the SWQP will depend on whether it is built to service Santos' needs only, or if it will have some spare capacity. This is because while Santos would be required to provide third-party access to the HGP, it is only required to do so to the extent there is capacity available. If Santos builds a pipeline with capacity to only meet its own requirements, then there would be limited ability for other shippers to use the HGP.

However, if there is sufficient spare capacity and the HGP prices are competitive, then those shippers that need to transport gas from Wallumbilla to NSW, Victoria, the ACT or Tasmania, or from the southern states to Wallumbilla, could view the HGP as an effective substitute for the SWQP, which could pose a constraint on the price APA charges these users. The HGP would not, however, be an effective substitute for those shippers that have to use the SWQP to transport gas to Barcaldine or Mount Isa. Depending on the HGP prices, it may also be viewed as a less effective substitute for those requiring gas in South Australia, because additional costs would be incurred transporting the gas from Newcastle to South Australia.

5.7 Substitutes for gas

Form of regulation factor (f)

'the presence and extent of any substitute for, and the elasticity of demand in a market for, electricity or gas (as the case may be)'

Form of regulation factor (f) requires us to consider the extent to which there may be substitutes for gas in the markets that are served by the SWQP, and the elasticity of demand for gas in these markets.

Generally, the presence of viable substitutes for gas in the markets served by a pipeline can constrain a service provider's market power in supplying services on a pipeline. This is because users will be able to switch to alternatives if the service provider attempts to exercise its market power. As for form of regulation factor (e), the elasticity of demand for gas will be closely linked to the availability of substitutes for gas. In general, the fewer the viable substitutes for gas, the less elastic demand will be.

5.7.1 Stakeholder views

While we did not receive any detailed submissions on the presence or extent of substitutes for gas supplied via the SWQP, we did hear from shippers whose views on gas substitutes varied depending on what they use gas for. Most shippers did not consider that there would be viable substitutes for gas for some time. However, APA identified a range of potential substitutes for gas for various end-users, including GPG, miners, refiners, and other C&I users in its notice response. These substitutes include biomethane, electricity, and hydrogen.

108 [redacted]

APA also noted that the timing for the uptake of these substitutes depends on many drivers specific to each individual user.

5.7.2 Our views

We consider that gas substitutes are unlikely to pose a constraint on APA's market power in the supply of pipeline services on the SWQP. Most SWQP shippers' demand for gas is inelastic and likely to remain so for some time because there are no viable substitutes at this time (see Table 5.1).

Table 5.1 - Substitutability of gas and other products

Types of gas users	Substitutability of gas and other products
C&I	We heard from many C&I users that electrification, and other alternatives such as coal are not viable substitutes for them. One reason provided for this was that the costs for electrification and coal are considered prohibitive. We also heard that electrification is unable to produce the high heat required by some industrial operations. Similarly, we have heard other industrial customers that they also cannot modify their operations to use hydrogen even if it is competitively priced.[109] Based on the above, we do not consider that there are currently substitute services for gas for most C&I users, as electrification and alternative gases such as hydrogen are not currently able to meet these users' needs.
GPG	Although shippers had varying opinions about the viability of non-gas substitutes for GPGs, most of them said they faced challenges switching away from gas. One shipper could use distillate fuel if it was unable to use gas for its power station but preferred using pipeline gas transport. Another shipper said that diesel is more expensive than gas so there are logistical challenges in using diesel instead of gas for an extended period. Another shipper stated that although it had considered using diesel for its GPG, it did not consider it was commercially viable. As a result, we do not consider that there are viable substitutes for gas for GPGs.
LNG exporters	We consider that no substitutes are available as the nature of their business involves the supply of liquefied natural gas.
Gas producers	We consider that no substitutes are available as the nature of their business involves the supply of natural gas.
Retailers	We consider that no substitutes are available as the nature of their business involves the supply of gas. However, we note that the use of the SWQP by retailers will be heavily influenced by the actions of residential and small to medium enterprise customers. This is discussed further below.

In the case of residential customers and small to medium enterprises that are supplied by retailers, electrification is more likely to be a viable substitute. AEMO, for instance, is forecasting that gas consumption by these end-users will decline until 2035 and that there

[109] EUAA, *Submission to the SWQP form of regulation review discussion paper* (EUAA submission), 27 March 2024, p 4.

will be more significant switching to electricity over the medium to longer-term as the economy transitions to meet net zero emissions goals.[110]

Recent policy changes, such as Victoria's ban on new residential gas connections and the ACT's ban on new gas connections, are also likely to stimulate electrification by these customers.[111]

While electrification represents a more viable substitute for this group of end-users, we do not consider their potential to switch away from gas will materially constrain APA's market power in the supply of SWQP pipeline services for the following reasons:

- First, while it is clear the demand for gas will decline, and that the decline is expected to accelerate, how quickly consumers will switch away from gas is still uncertain. The Australian Government's recent Future Gas Strategy notes that there is a high degree of uncertainty about the timeframe over which this group of end-users will switch away from gas (particularly given the costs of replacing appliances), with gas still expected to be used by residential customers for many years.[112]

  We have also commented on this in recent gas distribution access arrangement decisions. Our May 2023 final decisions for Victorian gas distributors Multinet Gas Networks, AusNet Gas Services and Australian Gas Networks looked beyond the immediate period covered by those decisions to the considerable uncertainty around medium to long-term forecasts of demand, what the path to small customer 'electrification' may look like, and anticipated volumes of customer disconnections. We also noted the uncertainty of the role to be played by hydrogen and other renewable gases in the energy transition[113]
- Second, we consider that the SWQP-related transportation costs are likely to only make up a small percentage of the overall costs paid by these end-users. For example, the BCA has submitted that the SWQP comprises only 3% of the typical Victorian residential gas bill.[114] The small percentage means that increased gas transportation costs are unlikely to drive residential customers' decisions to move away from gas, and therefore the availability of substitutes for these end-users is unlikely to constrain APA.

110 AEMO 2024 GSOO, pp 6-7.

111 AEMO 2024 GSOO, p 7.

112 Australian Government, Department of Industry, Science and Resources, *Future Gas Strategy*, May 2024.

113 AER, *Final decision: AusNet Gas Services, gas distribution access arrangement 1 July 2023 to 30 June 2028 – Overview*, June 2023. See also, AER, *Final decision: Multinet Gas Networks, gas distribution access arrangement 1 July 2023 to 30 June 2028 – Overview*, June 2023, and AER, *Final decision: Australian Gas Networks (Victora & Albury), gas distribution access arrangement 1 July 2023 to 30 June 2028 – Overview*, June 2023.

114 BCA, *Submission to the SWQP form of regulation review discussion paper*, April 2024, p 3.

6 Promotion of access

The first element of the regulatory determination test requires us to consider the effect that regulating the SWQP as a scheme pipeline and a non-scheme pipeline would have on the promotion of access. The promotion of access includes the ability of users and potential users to negotiate access to pipeline services and the price and non-price terms and conditions on which access is provided.

To do this, we have considered:

- the extent to which APA access is currently being promoted under non-scheme regulation, by looking at how access to the SWQP is currently provided
- whether scheme regulation would better promote access to the SWQP including through improved price and non-price terms and conditions of access.

In doing so, we have had regard to our findings under the form of regulation factors. We have also had regard to the NGO.

In summary, we consider that there is evidence to suggest that access may improve under scheme regulation by leading to lower, more cost reflective pricing and more balanced non-price terms and conditions. However, the extent to which it could improve access is uncertain for the following reasons:

- Different methodologies used in setting the reference price are likely to lead to different results. Additionally, the level of uptake of reference services is difficult to predict. Considered together, the overall extent that prices paid could fall under scheme regulation is uncertain.
- The majority of capacity on the SWQP is currently contracted under long-term contracts, meaning that access for a large proportion of contracted capacity is unlikely to change in the near term.
- New measures under non-scheme regulation and other potential future constraints on APA's market power could also lead to improved terms and conditions of access under non-scheme regulation in the future.

Therefore, while we consider scheme regulation is likely to better promote access than non-scheme regulation, it is difficult to determine the extent of the benefit.

6.1 Access under non-scheme regulation

We consider that access under current non-scheme regulation may not be as effective as we would expect in a workably competitive market, and there are indicators that suggest APA may be able to exercise a degree of market power. However, there are also factors that suggest non-scheme regulation is still promoting access to the SWQP, and that it may become more effective in the future.

As noted in Chapter 5, we consider APA likely has market power in the supply of services on the SWQP due to high barriers to entry to the pipeline services market and the interdependencies between services provided on the SWQP and other pipeline services provided as part of APA's East Coast Grid. Additionally, we have found that substitute

services and products *currently* pose little competitive constraint on APA, and the majority of shippers appear to have little countervailing market power in negotiations with APA. However, larger shippers likely have a degree of countervailing power, and it is possible substitutes, such as LNG import terminals and/or the HGP, could constrain APA in the future.

6.1.1 Potential problems with access under non-scheme regulation

We consider there are indicators that suggest non-scheme regulation is not promoting access to the SWQP on terms and conditions we would expect in a workably competitive market. The following section first outlines the access issues we have observed under non-scheme regulation before responding to APA's submissions about how access to the SWQP is currently provided.

Ability of shippers to negotiate with APA

Feedback from many shippers indicates that they do not appear to be able to meaningfully negotiate with APA for services on the SWQP. This includes the following comments:

- **Negotiating price terms:** A number of shippers consider that there is limited ability to negotiate or move away from standing prices on the SWQP. For example, one shipper said that some price negotiations were undertaken on a 'take it or leave it' basis. Similarly, another shipper noted that discussions on price have been largely one-sided, with APA holding a strong balance of power in the negotiation.
- **Negotiating non-price terms:** A number of stakeholders consider there is limited ability to negotiate or move from standard non-price terms on the SWQP, with some also stating that certain terms are weighted in favour of APA. For example, a few shippers stated that non-price terms can be onerous and disproportionate for shippers, particularly liability, indemnity and consequential loss provisions, and considered there wasn't much ability to negotiate on these with APA.

We note that under non-scheme regulation, information disclosure and access dispute provisions are intended to assist shippers in negotiating access to pipelines. However, it appears that many smaller shippers consider that these measures have had limited impact on their negotiations with APA to date.

For example:

- A number of shippers stated the information that pipelines have been required to report under the NGR had been of limited use, indicating that they hadn't used the information or found it difficult to use/interpret, or considered it provided limited assistance in obtaining better price and non-price terms and conditions of access. One shipper indicated that even if it uses APA's published financial information to understand proposed pipeline pricing in negotiations with APA, it has no impact on the negotiated outcomes.
- A number of shippers indicated that they do not consider arbitration to be a viable option, given the cost, time and effort involved, which they noted would likely outweigh any potential benefits.

However, as discussed below, larger and better resourced shippers do find the information published under non-scheme regulation useful in their negotiations with pipeline operators

(including APA). For example, one shipper indicated that the prices payable information helps establish a reference point in negotiations with APA.

Prices and returns appear to be higher than we would expect in a workably competitive market

Our analysis of APA's financial information for the SWQP [redacted], suggests that APA prices and returns are high. We acknowledge that historical financial values are imperfect indicators of future returns and that there could be several reasons for the level of APA's prices and returns that are unrelated to market power. They could, for instance, be indicators of excess returns efficiency and/or temporary market conditions.

However, when considered in the context that APA likely has market power in supplying services on the SWQP and that there are few constraints on this market power, our analysis of prices and returns suggests that APA is earning more than it would in a workably competitive market. Therefore, through leading to more cost reflective prices, we consider a scheme pipeline determination for the SWQP could potentially reduce the price of access for shippers.

We note that our analysis of pricing and returns is indicative only and uses accounting estimates as an indicator of economic costs. Financial data is sensitive to various factors such as the choice of depreciation method and other accounting adjustments. However, we have used a range of measures and methodologies to reach our estimates.

The basis of our analysis is outlined in Appendix A.

Prices

According to information published on APA's website under the NGR, 26 out of 29 shippers pay standing prices for firm transportation. As of 1 July 2023, the standing prices for firm transportation services on the SWQP were:

- Westernhaul services: $1.4216/GJ/day of MDQ when compression is not required and $1.5356/GJ/day of MDQ when compression is required.
- Easternhaul services: $1.4216/GJ/day of MDQ when compression is not required and $1.6585/GJ/day of MDQ when compression is required.[115]

Our analysis, discussed below, found that these standing prices were around **1.5 to 2.4 times higher** than what the reference price(s) may have been under scheme regulation. This implies that APA has set and maintained prices which are not cost-based nor reflective of what would occur in a workably competitive market.

This may be because, as APA submitted, the past decade has been 'more successful' due to a significant increase in demand for SWQP services.[116] Rather than allowing prices to fall in line with the declining average cost of providing the services brought about by the increased

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115 We note there are standing prices as of 1 July 2024 available at APA, tariffs and terms, APA website, accessed 10 September 2024. We refer to 2023 standing prices as our financial analysis relies upon available financial data from 2019 to 2023 published by APA under the NGL.

116 APA's submission, p 19.

demand, APA has maintained the level of pricing in real terms, which has resulted in higher returns and above cost based prices.

Earnings and returns

Further, additional analysis of APA's financial information suggests that over the past 10 years, APA's earnings are higher than we would expect in a workably competitive market, as they appear to be significantly above what they would have earned under scheme regulation.

[redacted]

[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

[redacted]

We also calculated what the allowed regulatory rate of return for the SWQP would have been under a hypothetical scheme regulation access arrangement period of 2019 to 2023. When we compared this return to the weighted average cost of capital (WACC) that APA has assumed for the purposes of calculating the recovered capital value of the SWQP, we found the return assumed by APA was 1.5 to 1.8 times higher than would have applied under scheme regulation. However, we note that this is based on the SWQP's assumed WACC reported for the purposes of Part 10 and may not be reflective of the APA's internal WACC for the SWQP.[118]

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117 [redacted]

118 The SWQP's assumed WACC is calculated for the purposes of the publicly reported financial information published by APA under the NGR and may not be reflective of the SWQP internal WACC.

Table 6.2 – APA's assumed WACC and the regulatory rate of return

Year	APA assumed WACC	AER nominal vanilla WACC[119]
2019	7.49%	4.70%
2020	6.99%	4.61%
2021	6.98%	4.51%
2022	8.04%	4.50%
2023	8.07%	4.64%

Source: Part 23 financial reporting for the SWQP.

These findings are consistent with analysis conducted by the Brattle Group and Credit Suisse, which similarly found that the SWQP's prices and returns were significantly higher than cost based or scheme regulation would allow (discussed further below).

There are further indications that APA's returns may be higher than we would expect in a more competitive market. [redacted]

- [redacted]
- [redacted]
- [redacted]

APA submitted that its returns are no higher than necessary to compensate it for risks associated with the investment and operation of the SWQP, stating that:

- under non-scheme regulation, APA and its investors bear increased demand risk and also need to factor in stranding risk, leading to higher required returns compared to scheme regulation.

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119 We note that these WACCs are based on the 2018 AER rate of return instrument and assume an access arrangement period for the SWQP beginning in 2019.

120 [redacted]

121 [redacted]

122 [redacted]

- SWQP returns have not been unusually high compared to similar businesses, with the reference point for this statement being returns estimated by CEG, an economic consultancy group, to have been earned by US pipeline businesses.

It is possible that non-scheme pipelines may face greater risks than scheme pipelines in some cases, and this could justify a higher rate of return. In the case of the SWQP, APA citied demand and stranding risk as increasing the risk under non-scheme regulation. However, as discussed in Chapter 7, we consider it is likely that the SWQP would face similar demand and stranding risk under scheme and non-scheme regulation.

6.1.2 Indicators that non-scheme access may be effective for some shippers

We have also observed a number of indications that non-scheme regulation may be effective for some shippers.

First, while many smaller shippers, appear to have difficulty with meaningfully negotiating with APA on price and non-price terms for SWQP services, we have heard from a smaller subset of shippers that they don't have issues negotiating with APA. Additionally, other shippers consider that, despite some of the difficulties in negotiating with APA, APA does offer some flexibility in how it provides services. This appear to be mainly through providing shippers with the ability to use multi-asset services to access APA's East Coast Grid network. For example, one shipper identified issues with the SWQP non-price terms, but considered that APA could be flexible in multi-asset agreements. Similarly, another said that while small shippers generally don't have resources to dispute the price with the pipeline owner, their recent contract with APA provides them with required flexibility and allows them to switch to other pipeline services without amending a contract.

Similarly, we heard from larger and more resourced shippers that they find information published under non-scheme regulation useful in their negotiations with pipeline operators (including APA). For example, one shipper indicated that being able to see actual prices paid information allows it to establish a reference point in negotiations with APA. However, as noted above, the extent to which these measures assist smaller shippers in negotiations with APA appears limited to date.

Second, there are indicators that APA may face a degree of constraint in how it supplies services on the SWQP. [redacted]

APA also submits that it has not increased prices on the SWQP in real terms since 2009 and has consistently invested in increasing the SWQP capacity to meet the needs of its customers. It considers this is 'diametrically opposed to what would be expected under

conditions of market power'.[123] It is possible that if APA had exercised market power it would have increased the SWQP prices as it increased capacity to meet increasing demand for its services increased. However, there are other reasons this could occur. Prices could also have fallen in a workably competitive market as demand increased, because the fixed costs associated with providing services on the SWQP would be spread over a greater volume of capacity.

APA's views that access to the SWQP is shaped by competitive forces

As discussed above, there are indications that access to the SWQP is currently effective for at least some shippers, and that APA faces some constraints on its market power. However, we do not consider that access to the SWQP has always been 'shaped by competitive forces' as submitted by APA.

APA submits competitive forces and the countervailing market power of shippers have meant it has never been in a position to exercise market power or to 'extract monopoly rents in negotiating tariffs on the SWQP'.[124] APA stated that there was 'competition for the market' when the foundation contracts were entered into, resulting in competitive terms for these shippers, and that because foundation contracts are still on foot and non-foundation shipper prices have been 'anchored' to foundation contracts, the terms and conditions currently offered on the SWQP are competitive.[125]

We consider that any potential ongoing effect of 'competition for the market' and foundation contracts are unlikely to have significantly constrained APA's market power for the following reasons:

- First, even assuming the foundation contracts represented competitive outcomes at the time they were entered into [redacted], if the contracts were to be renegotiated today, the previous outcomes may not represent competitive terms now when market conditions, including demand, have changed.
- Second, there are also a number of indicators that the terms and conditions offered by APA in foundation contracts are no longer representative of 'competitive outcomes':
  - [redacted]
  - [redacted]
- Third, non-foundation shippers are not currently benefitting from any 'competition for the market' that may have occurred when the foundation contracts were agreed. While APA

123 APA submission, p 18.

124 APA submission, p 4.

125 APA submission, p 56.

126 [redacted]

submits that current prices are 'anchored' to the foundation contracts, [redacted]

6.1.3 Access under non-scheme regulation has the potential to improve in the future

We consider that there are a number of factors which could mean access to the SWQP under non-scheme regulation may improve in the future.

First, we note that the large shippers likely have a degree of countervailing power in dealing with APA due to the large volumes of capacity they contract. This means that when they negotiate with APA, they may be able to negotiate more favourable terms and conditions of access. There is the potential for such negotiations to take place in the future, as it appears one contract under which a large volume of capacity is contracted expires at the end of 2027 [redacted] and another in mid-2034 [redacted].[128]

[redacted]

Second, we note that if any LNG import terminals are developed in the southern states and/or the HGP is developed, this could also result in improved access under non-scheme regulation. This is because APA would face more of a competitive constraint when determining the terms and conditions of access to the SWQP.

Finally, we note that a number of additional measures were introduced into the non-scheme regulatory framework in early 2023, which are intended to improve the ability of shippers to negotiate with service providers. These include:

- the improved information disclosure obligations, including a requirement for service providers to publish information on the actual prices paid by all shippers
- an improved negotiation framework that service providers must comply with
- the introduction of a mediation option for small shippers.[129]

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127 [redacted]

128 This is based on MDQ and contract end date data published by APA as part of Actual Prices Payable Data. It assumes MDQ will remain relatively unchanged during the term of the contract. See APA, Transmission Part 10 Rule 101E Actual Prices Payable Data, APA website, accessed 17 September 2024.

129 The term 'small shipper' is defined as a user or prospective user for whom the total daily pipeline capacity right provided, or sought to be provided, under one or more contracts with the same service provider is not more than the lower of 5TJ/day or 20% of the pipeline's nameplate rating, but does not include a corporation with a market capitalisation > $500 m, or a related body corporate of that corporation.

There are also some new measures that are yet to be fully implemented, including the AER's pricing template (to be introduced by the end of 2025), which will make it easier for shippers to assess price terms offered by service providers in negotiations.[130]

We understand that shippers may not have yet had a need to negotiate/renegotiate with APA for SWQP services since the introduction of these measures, due to being part way through their current contract terms. As a result, shippers may not have had the opportunity to utilise the new information that is now available, or will soon be available, or to consider using the arbitration or mediation (for small shippers) dispute resolution mechanisms.

6.2 Access under scheme regulation

As outlined in Chapter 3, the key difference between scheme and non-scheme regulation is that the AER would approve the price and non-price terms and conditions for reference service(s). The reference service(s) must be made available to all shippers; however, shippers may choose to negotiate non-reference service(s). We consider that, in general, the approved price and non-price terms and conditions for reference service(s) may, form the basis for more informed and balanced negotiations for non-reference service(s).

As noted above, we consider it is likely that scheme regulation would lead to improved terms and conditions of access to the SWQP. The AER approved reference price(s) would be cost reflective and would likely flow through to lower prices for shippers, and lead to better access to services on the SWQP. However, we note that there are factors which make the scale of these benefits uncertain. Further, as we have noted above, our findings in relation to price are indicative estimates only, and actual values under scheme regulation may be higher or lower.

We also recognise that historical financial values can be imperfect indicators of future returns. However, we have applied APA's historical method of increasing prices by the Consumer Price Index for the purposes of the analysis looking forward.

6.2.1 Prices would likely be lower under scheme regulation

We consider that AER-approved reference price(s) would likely be lower than the prices shippers currently pay to use the SWQP, and scheme regulation could thereby better promote access. We have used multiple RAB methodologies to come to this conclusion and considered other analysis, as set out in Table 6.3 below:

Table 6.3 - SWQP's revenue compared to scheme regulation benchmarks

Source		Year(s)	Comparison of APA's revenue to scheme benchmark
AER analysis using different RAB methodologies	DBVM	2019 to 2023	1.5 to 2 times higher
	RCM	2019 to 2023	1.4 to 1.6 times higher
	DORC	[redacted]	[redacted]

130 The introduction of the new pricing template may occur earlier for service providers operating on a calendar year basis.

		[redacted]	[redacted]
	DAC	[redacted]	[redacted]
[redacted]		[redacted]	[redacted]
Other expert reports	Brattle Group[132]	2019	1.5 to 2.4 times higher (based on prices)
	Credit Suisse[133]	2016	1.8 times higher

Looking specifically at 2023 prices, the SWQP's standing price for long-term firm transport, which was payable by most shippers, was **$1.50/GJ to $1.68/GJ** if compression was required.[134] We estimate that if the SWQP had been subject to scheme regulation in 2023, the reference price for a firm transportation service including compression could have been around **$0.69/GJ to $1/GJ**.[135] This means that under scheme regulation, prices paid by most shippers may have been 33% to 59% lower.[136] [redacted]

This finding is broadly consistent with what the Brattle Group estimated in 2019. In short, the Brattle Group estimated that a cost-based price for the SWQP may have been between $0.59/GJ and $0.79/GJ. At the time, the standing price for a firm service was $1.20/GJ to $1.40/GJ, which is **1.5 to 2.4 times higher** than the Brattle Group's cost-based estimates.[139]

131 [redacted]

132 Brattle group, Financial Information Disclosed by Gas Pipelines in Australia, p 98.

133 Credit Suisse, APA-rty's over, 14 September 2016.

134 APA defines a long-term service as greater than or equal to 12 months. See: APA, Gas Transmission Services, accessed 30 September 2024.

135 It is likely that the reference price would have been lower because this estimate assumes that all of the SWQP costs were recovered from firm transportation services, rather than allocating some of the costs to other services that APA provides. These prices are based on the asset bases publicly reported by APA. See Appendix A for more detail.

136 We note that 33% represents a minimum difference by comparing the $1.68 standing price and $1 scheme estimate, while 59% represents a maximum difference the $1.50 standing price and $0.69 scheme estimate.

137 [redacted]

138 [redacted]

139 Brattle group, Financial Information Disclosed by Gas Pipelines in Australia, p 98.

Our findings are also consistent with analysis performed by Credit Suisse in 2016 which found that the SWQP was earning a return that was **1.8 times higher** than it would under scheme regulation.[140]

We also consider that non-price terms and conditions may improve under scheme regulation, thereby improving access. The AER approves both price and non-price terms of access, which could help to address some of the issues stakeholders have raised in relation to non-price terms.

6.2.2 The benefits of scheme regulation are uncertain

While we consider there may be potential benefits to scheme regulation in terms of improved terms and conditions of access, we also consider the extent of the benefits is uncertain for several reasons.

First, the extent to which prices would fall under scheme regulation depends on the methodology used to establish the initial RAB, which is a key input into the determination of revenue and reference prices. Because the SWQP was commissioned prior to the commencement of the NGR, the initial RAB must be determined in accordance with the National Third Party Access Code for Natural Gas Pipelines (Code). The Code provides that the initial RAB value should 'normally' fall between the DAC and the DORC, but also allows a range of other valuation methods and other factors to be considered. This means that there are several possible options that could be used to set the initial RAB.

In deciding on the methodology, the AER must consider the DAC and DORC methodologies but can also 'consider other well recognised asset valuation methodologies'. In determining which method to use, the AER must consider a range of issues, including the advantages and disadvantages of each methodology, the reasonable expectations of service providers, the impact on economically efficient utilisation of gas resources, and any other factors we consider relevant. [141]

We cannot currently say with certainty how the initial RAB for the SWQP would be set if it were made a scheme pipeline. Therefore, we have analysed multiple potential valuation methodologies to estimate the initial RAB to estimate how prices may change under scheme regulation. As discussed above, we consider that, under each methodology, it is likely that a reference price would be lower than the current prices for the SWQP. However, the scale of any price decreases may not be as significant under some methodologies.

We note that a DORC valuation is likely to lead to the highest reference price(s), which would mean that the impact of scheme regulation would be the smallest under a DORC valuation. The DORC value is difficult to estimate due to its dependence on inputs like current construction costs, which may change significantly over a short period of time. However, based on our analysis, we consider that prices could be lower under scheme regulation if a DORC method was applied to the SWQP.

[redacted]

140 Credit Suisse, APA-rty's over, 14 September 2016.

141 See clauses 8.10-8.11 of the National Third Party Access Code for Natural Gas Pipeline Systems.

[redacted] Further, we understand that the estimated cost to build the HGP is currently $1.2 billion.[142] While the SWQP is 100 km longer than the HGP and may face construction difficulties, the HGP does not, we consider that the HGP estimate suggests that the cost to build the SWQP today (less depreciation) may not be significantly higher than its reported $1.6 billion DBVM asset base (excluding 'other non-depreciable pipeline assets').

Second, under scheme regulation, shippers and APA would be free to agree to terms and conditions that differ from the reference service(s). This means that APA may still charge more if a shipper elects not to use the reference service(s). However, we expect that the presence of reference price(s) may anchor prices and help shippers to negotiate lower prices for non-reference service(s) than are currently paid.

We note that for APA's current scheme pipelines, APA tends to charge more than the reference prices as most shippers have not adopted the reference services. If this was to occur for the SWQP, then this may reduce the benefits of scheme regulation. For example, average prices on the RBP are 1.2 times higher than the reference price. [redacted]

When these two factors are considered together it means that overall the prices paid under scheme regulation, and the extent to which access may improve is not certain.

Third, the scale of the benefits is likely to be limited for some years because most of the capacity is contracted, and an approved access arrangement may not affect these contracts. For the westernhaul service most capacity appears to be contracted until the end of 2027, and for easternhaul services a large volume is contracted until the end of 2030.[143] [redacted] This means that the access for a large percentage of capacity contracted is unlikely to change for some time. As large shippers may have a degree of countervailing power, they may be able to obtain improved terms and conditions of access when they do eventually renegotiate contracts (or as they negotiate variations to their current contracts).

Further, it is not clear to what extent non-price terms and conditions would improve under scheme regulation. While non-price terms and conditions have not been a focus for scheme regulation access arrangements in the past, as discussed above, we have heard from some shippers that they have experienced issues in relation to non-price terms and conditions in negotiations with APA. The extent to which these issues might be addressed by scheme regulation may depend in part on the level of engagement the AER receives from shippers as part of the consultation on the terms and conditions for the SWQP reference service(s).

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142 The Australian Financial Review (AFR), 'Santos buys gas pipeline to 'inject new supply into NSW'', 11 August 2022, AFR website, accessed 18 September 2024.

143 This is based on MDQ and contract end date data published by APA as part of Actual Prices Payable Data. It assumes MDQ will remain relatively unchanged during the term of the contract. See APA, Transmission Part 10 Rule 101E Actual Prices Payable Data, APA website, accessed 17 September 2024.

Finally, as noted in section 6.1.3, we consider that non-scheme regulation may better promote access to the SWQP in the future. There is the potential for effective substitutes to emerge, meaning APA's market power on the SWQP could become more constrained. In addition, recent improvements to the non-scheme regime will likely have greater impact in the future once they have had time to be fully implemented and take effect. Overall, this also means that the extent to which scheme regulation could better promote access than non-scheme becomes less certain.

7 Cost of each form of regulation

The second element of the regulatory determination test requires us to consider the likely direct costs that would be incurred under each form of regulation by:

- an efficient service provider
- efficient users or efficient prospective users of pipeline services, and
- end-users (or consumers of gas).

In doing so, we have considered regulatory (or compliance), transaction, and administrative costs that are likely to be incurred under the two forms of regulation. Overall, we consider that the direct costs associated with scheme regulation are likely to be higher than they are under non-scheme regulation, but the difference is relatively small.

As part of our broader consideration of the NGO, we have also considered the potential indirect costs associated with scheme and non-scheme regulation (although we have not attempted to fully quantify such costs). In particular, we have considered the indirect costs that may be associated with delayed or reduced investment. We have found that the indirect costs associated with delayed or foregone efficient investment under scheme regulation could be more significant under scheme regulation. These could have broader implications for the east coast market at this point in time due to the potential of supply shortfalls in the southern states.

7.1 Direct costs

7.1.1 Stakeholder views

Scheme regulation

APA submits that the costs of scheme regulation are significantly higher than non-scheme regulation. Further, APA submits that its ability to pass any cost increases through to individual customers is constrained by the terms of transportation contracts unless provided for in a contract. Therefore, under scheme regulation, APA would factor in any regulatory costs into forecast expenditure for the purposes of determining reference prices.[144]

[redacted]

Energy Networks Australia submitted that scheme pipeline regulation is unlikely to result in lower costs for users.[146] The Energy Users' Association of Australia (EUAA), on the other

144 APA submission, p 36.

145 [redacted]

146 Energy Networks Australia, Submission to the SWQP review, 3 June 2024, p 3.

hand, expected costs for shippers to be lower under scheme regulation with a reference price and the AER as the arbitrator.[147]

Non-scheme regulation

[redacted]

Some shippers also commented on the information-related costs they may incur under non-scheme regulation. That is, the costs associated with transforming the information reported by a service provider under the NGR in order to determine what a reasonable price would be.

EUAA, for example, noted that the information reported under Part 10 of the NGR was very complex.[150]

A number of shippers also noted that commercial arbitration, which is available under non-scheme regulation, is generally a lengthy and expensive process, with some stating that the high costs of arbitration outweighed any potential benefits. One stakeholder also submitted that the lack of an arbitration on the SWQP to date indicated that buyers were unwilling to incur the costs associated with arbitration. In addition, some shippers indicated they viewed arbitration as a last resort and there were better ways of resolving disputes.

7.1.2 Our views

We consider that direct regulatory, transaction, and administrative costs that an efficient service provider, efficient users and prospective users and end-users are likely to incur under scheme regulation are likely to be higher than those under non-scheme regulation. However, the difference between these costs is relatively small, particularly when considered in the context of the revenue and expenses for the SWQP.

Costs to an efficient service provider and efficient users and prospective users

For an efficient service provider, many of the obligations under scheme and non-scheme regulation are the same or very similar. We therefore expect that many of the costs to an efficient service provider under scheme and non-scheme regulation should also be the same. This includes the costs of complying with the information disclosure requirements under Part 10, Chapter 4 of the NGR and the access and negotiation provisions in Part 11 of the NGR.

However, there are additional obligations under scheme regulation, such as the access arrangement requirements set out in Parts 8 and 9 of the NGR and associated obligations, which mean that the costs associated with scheme regulation are likely to be higher for an efficient service provider under scheme regulation than non-scheme regulation.[151] In

147 EUAA submission, p 3.

148 [redacted]

149 [redacted]

150 EUAA submission, p 2.

151 This includes submitting a reference service proposal, annual price variations, complying with reporting requirements, and negotiating contracts.

addition, it is likely that in the first access arrangement period, an efficient service provider will incur higher costs than it will in subsequent periods, as a result of having to develop the initial RAB and other key inputs to the access arrangement.

For an efficient user, or prospective user, there are fewer direct regulatory costs. However, they will likely incur transaction, and administrative costs under both forms of regulation.

Our findings on the likely costs to an efficient service provider and users under both forms of regulation, including estimates of costs where possible, and the key drivers are summarised in Table 7.1 below. Further detail on how we have estimated these costs is discussed below and in Appendix B.

Table 7.1 – Cost estimates for scheme and non-scheme regulation

	Scheme regulation	Non-scheme regulation
Efficient service provider	**Annual cost estimates**	
	First access arrangement period: $735,000 to $1,035,000 p.a. for the first 5 years **Subsequent access arrangement periods:** $490,000 to $690,000 p.a.	A maximum of $490,000 p.a. [redacted]
	Cost drivers	
	• Developing a reference service proposal (including costs of consultation with customers prior to submission) • Developing the first access arrangement (including costs of consultation with customers prior to submission), which is likely to be more costly than subsequent access arrangements because it will require a decision to be made about the initial RAB • Developing subsequent access arrangements (including costs of consultation), which is likely to give rise to lower regulatory costs than the first access arrangement • Preparing annual price variations for submission to the AER • Costs of complying with disclosure and other obligations in the NGL/NGR • Costs of complying with additional disclosure obligations imposed on scheme pipelines • Costs of negotiating and entering into contracts with users[1] • Costs of regulatory arbitration if it arises[1].	• Complying with disclosure obligations and other obligations in the NGL/NGR. • Negotiating and entering into contracts with users[1] • Commercial arbitration if it arises[1].
Efficient user/ prospective user	**Cost estimate**	
	Likely lower than non-scheme regulation because users and prospective users can rely on AER approved reference prices and access arrangement as the starting point for negotiations.	Likely higher than scheme regulation on both: • an individual user basis because users individually have to determine what a reasonable price and other terms and conditions are before negotiating • an aggregate basis because there are a large number of users and prospective

		users on the SWQP (approximately 30, but this fluctuates from time to time).
	Cost drivers	
	• Voluntary participation in access arrangement approval process • Negotiating and entering into contracts with the service provider • Participating in regulatory arbitration if they trigger a dispute.	• Negotiation access, including costs in determining what are reasonable price and non-price terms and conditions • Transaction costs during negotiations for pipeline services • Participating in arbitration if user decides to trigger these provisions (although there have been no arbitrations or disputes to date on the SWQP).

Notes: The estimated cost for an efficient service provider under both scheme and non-scheme regulation do not include the negotiation related costs, or the potential costs associated with arbitration.

As shown above, we estimate that the costs that an efficient service provider is likely to incur under scheme regulation will likely be higher than they would be under non-scheme regulation. However, we note that the difference between the scheme and non-scheme costs, particularly following the initial access arrangement period are relatively small. For the first access arrangement period, we estimate that the additional costs of scheme regulation would be around 1.68% of the SWQP's annual total costs (excluding depreciation and shared costs) in financial year 2022-23, and around 0.43% for subsequent periods.

We have not been able to quantify the costs that efficient users or prospective users are likely to incur. However, these costs would likely be lower under scheme regulation because users and prospective users would be able to rely on AER approved reference prices and access arrangement as the starting point for negotiations, rather than incurring costs estimating a reasonable price. However, the difference is unlikely to be substantial.

Overall, we consider the costs that an efficient service provider would incur are likely to be higher than the costs that efficient users and prospective users of the pipelines would incur. We therefore expect the direct costs under scheme regulation to be higher than they would be under non-scheme regulation.

Basis of cost estimate to an efficient service provider

[redacted]

[redacted]

[redacted]

152 [redacted]

[redacted]

For scheme regulation, we consider that the regulatory costs APA has reported for other scheme regulated transmission pipelines under Regulatory Information Notices (RINs) are likely to provide a good basis for an estimate of the costs that would likely be incurred by the SWQP. However, we note that the costs reported for other pipelines under the RINs do not include the additional costs that would be incurred during the first regulatory reset period when the initial RAB must be set, and other key inputs must be determined. Therefore, based on publicly available data reported by APA for its scheme pipelines under RINs, we consider a reasonable estimate of the regulatory costs that an efficient service provider is likely to incur under scheme regulation, following the first access arrangement period, to be between **$0.49-$0.69 million per annum** on average.

For the first access arrangement period, we have added 50% to the $0.49-$0.69 million per annum estimate above to account for these additional costs. On this basis, we estimate that the likely costs for the first access arrangement period will be between $0.74-$1.04 million per annum.

For non-scheme regulation we have based our estimate on the regulatory costs of non-scheme regulation for the SWQP under Part 10 of the NGR. In 2023, APA reported these to be **$0.49 million per annum** (in 2023 nominal terms). We have therefore used this as a basis for our estimates of the costs of non-scheme regulation. However, we estimate this may be at the upper end of the costs an efficient service provider would incur under non-scheme regulation as the costs reported for a number of other pipelines under Part 10 are lower.

[redacted]

7.1.3 Costs to end-users

In addition to considering the costs likely to be incurred by an efficient service provider and efficient users and prospective users, we have considered the likely costs for end-users.[153]

While end-users will not incur any costs directly under either form of regulation, they are likely to still be impacted because the service provider and users of the pipeline are likely to pass through the costs they incur to end-users in the form of higher prices. APA, for instance, stated that it would factor in any regulatory costs into the calculation of reference prices.[154] Some shippers have also confirmed that they can pass on transport costs to their own customers.

Therefore, it is likely that the costs to these users will be higher under scheme than non-scheme regulation, although the difference is likely to be relatively small.

7.2 Indirect costs

We have also considered the impact that scheme regulation may have on investment incentives. While this is not strictly a cost that would be 'incurred' by an efficient service provider or user, we have considered such indirect costs when having regard to the NGO.

We consider that the ongoing impact of scheme regulation on efficient investment in the SWQP, and gas infrastructure more broadly is not likely to be significant. However, we consider that the indirect costs associated with delayed or foregone efficient investment could be greater under scheme regulation than non-scheme regulation due to uncertainty created by the scheme regulatory process at a critical time for the east coast gas market. That is, uncertainty around how the initial RAB will be determined and how we would treat any major new investment until the first access arrangement is approved, could delay investment in the SWQP. However, this is likely to be transitory and relatively short term.

7.2.1 Stakeholder views on investment incentives

APA provided a detailed submission on the potential impact that scheme regulation would have on its incentives to invest in the SWQP and attached several expert reports in support of its position (including from consultants Incenta and CEG). These reports are discussed in detail below, but in summary APA submits that scheme regulation will disincentivise investment and/or result in delayed investment decisions because of:

- the potential truncation of investment returns
- the way in which stranding risk and uncertainty can be managed under scheme regulation
- the uncertainty surrounding the AER's approach to regulating in an 'uncertain' market environment.

APA also contends that the uncertainty created by the AER's form of regulation review will impact investment in gas infrastructure more broadly. Further, APA has stated that it has

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153 In some cases, end-users will also be a pipeline user (i.e. when the pipeline user is a C&I user, LNG exporter or GPG), while in other cases they will not (i.e. when the pipeline user is a retailer, producer or other type of intermediary).

154 APA submission, p 36.

suspended its decision to proceed with Stage 3 of the East Coast Grid expansion program due to the Review.

Martin Currie, Yarra Capital Management, and APA (quoting investors in APA) each submitted that a form of regulation decision to make the SWQP a scheme pipeline would raise the risk profile of APA and delay investment. Martin Currie submitted that such a decision would create investment uncertainty and delay investment decisions for APA and the wider infrastructure and utilities sector. We also heard concerns from a number of users that full regulation may stall investment.[155] However, one user, in relation to investment and expansion of the SWQP, considered the exercise of market power by APA resulted in inefficient outcomes.

7.2.2 Our views

In summary, we consider that there are a number of measures in the regulatory framework which mean incentives for *efficient* investment should be preserved under scheme regulation.[156]

However, we acknowledge concerns raised in submissions that the uncertainty associated with the introduction and application of scheme regulation has the potential to delay some investment in the SWQP and related pipelines in the east coast market. We consider that much of this risk is transitory, associated with the process of determining an initial RAB and approving an access arrangement. However, if we were to make a scheme pipeline determination for the SWQP now, these regulatory processes would occur at a time when the supply outlook for gas is particularly challenging.

7.2.3 Truncation of investment returns

APA submits that 'truncation risk' is a well-documented economic cost associated with the application of cost-based regulation to assets with high investment requirements and uncertain demand.[157] That is:

> "*the truncation problem, refer[s] to a situation where conventional ex ante price regulation exposes the regulated business to the downside demand risk, but limits the ability of the service provider to capture the benefits of upside demand risk."*

APA consider that this applies to the SWQP because investment is needed in the next decade and demand is uncertain.

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155 For instance, one shipper considered scheme regulation would inhibit investment, citing the VTS as an example. Another considered that non-scheme regulation would better facilitate investment and provide "room to invest in that pipeline". A final shipper considered that the review itself created uncertainty in the regulatory framework, which would delay or prevent investment.

156 "Efficient investment" in the context of natural monopoly infrastructure is investment which meets genuine current and future service needs, and is priced so that it best balances "productive efficiency" (providing services at lowest cost), "allocative efficiency" (encouraging the best use of existing capacity), and "dynamic efficiency" (preserving incentives to undertake new investment). See: AEMC, *How the national energy objectives shape our decisions*, August 2024, p 4.

157 APA submission, p 23.

We consider that there are a number of reasons why the 'truncation problem' is unlikely to create disincentives for investment in the SWQP if the AER determines that it should be a scheme pipeline.

First, we do not consider that scheme regulation would appropriate or truncate the returns in any contracts that are in effect. This is because terms and conditions in pre-existing contracts are protected under the NGL, meaning the returns expected under these contracts would be locked in.

Second, we consider that setting a reference price under scheme regulation is unlikely to lead to a truncation of returns. This is because there are a number of ways this can be addressed under scheme regulation, such as the following:

- **Delaying the recovery of capital:** In setting access arrangements, the AER can delay the recovery of capital when demand is initially low but expected to grow over time. This can protect service providers from demand risk. This can be done by reducing the depreciation allowance initially and allowing a greater amount of capital to be recovered as demand increases.
- **Accelerating the recovery of capital:** This tool can be used to deal with stranding risk associated with investment. This can be done by increasing the depreciation allowance from what would otherwise apply under straight line depreciation.[158] The AER has recently used accelerated depreciation to address stranding risk in a number of distribution pipeline resets.[159]
- **Contracting on terms that differ from the reference service:** Under scheme regulation, parties can contract on price and non-price terms and conditions that differ from those approved by the AER. These agreements are protected under the NGL and cannot be overridden by an access arrangement.[160] While potentially constrained under scheme regulation, this does not eliminate APA's ability to earn unregulated revenue commensurate with the risks faced, as they would under non-scheme regulation.[161]

Third, there is little evidence to suggest that the risk of regulatory truncation under scheme regulation would inhibit investment. It does not appear that concerns about regulatory truncation have prevented investment in scheme pipelines in the past. Rather, we observe

158 This approach is available under the framework established in the NGR. See NGR, r 89 and AER, *regulating pipelines under uncertainty*.

159 For example: AER, AusNet Gas Services, 2023-28 final decision - attachment 4; AER, Multinet Gas Network 2023-28 final decision - attachment 4.

160 NGL ss 114, 115.

161 Section 115 of the NGL provides that, subject to sections 83C and 135, nothing in the scheme regulation framework is to be taken as preventing service providers from entering into agreements with users on terms that are different from an access arrangement. NGL s 114 provides that an access arrangement must not deprive a person of a pre-existing contractual right.

that there has been continued investment in scheme pipelines, including those owned by APA.[162]

7.2.4 Uncertainty and stranding risk

APA submits that scheme regulation will not allow it to deal with the uncertainty and risk associated with operating the pipeline. It considers that under non-scheme regulation it can 'calibrate its required return on investment' to reflect the risk associated with the investment and can seek to share the risk with customers (e.g. through long-term contracts). However, APA considers that scheme regulation does not provide scope for the regulator to align the rate of return with the risk on an investment. APA submitted that the only tools available to address future uncertainty are depreciation and the potential for adjustment of prices in future reviews.

We consider that the tools available to deal with stranding risk and demand uncertainty are very similar under scheme and non-scheme regulation, and the form of regulation applying to the SWQP should not significantly impact APA's ability to manage these risks. As explained in section 7.2.3, these tools include accelerating the recovery of capital, and contracting on terms different to the reference service, as well as the following:

- **Entering into long-term contracts:** The principal way for APA to manage demand uncertainty and stranding risk is to 'shift demand risk' to shippers through the use of long-term contracts under which shippers agree to pay for a specified volume of capacity over a period of time, irrespective of whether they use it or not. A service provider is able to do so under both scheme and non-scheme regulation.
- **Writing off the investment:** APA can also write off some of the investment under both scheme and non-scheme regulation. While this is unlikely to be a preferred way to deal with stranding risk, the mechanisms and reasons for doing so are the same under scheme and non-scheme regulation.

7.2.5 Uncertainty around regulatory approach

APA submits that because the demand outlook for the SWQP is 'highly uncertain' due to 'rapidly changing market dynamics', it will be very difficult to predict the need for capacity investment more than a year or 2 ahead of it being required.[163] It considers that in this context non-scheme regulation is more appropriate, because the AER will not be in as good a position as APA (or the proponent of the investment) to decide whether the investment should take place. Further, APA considers that because the AER has not made decisions under such uncertainty in the past, this will create uncertainty around how the AER will assess capex proposals and cost recovery, which will have a 'chilling effect' on investment.[164]

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162 For example, APA has invested $150 million to expand the Goldfields Gas Pipeline in 2012 and invested in the Roma to Brisbane Pipeline Lytton Lateral ($9.05 million, in July 2010) and RBP8 ($80.2 million, in August 2012) expansions. See: APA, 'APA Goldfields Gas Pipeline – further capacity expansions supporting customer growth', 23 January 2012; Wilson Cook & Co, Review of Expenditure Forecasts for Roma-Brisbane Gas Pipeline Access Arrangements for FYS 2013-17, p 4.

163 APA submission, p 24.

164 APA submission, p 25.

We agree that there is some uncertainty as to how the east coast gas market will evolve and how pipelines will be used in the future. However, we consider that we are well-placed to make decisions on capex and investment in such an environment.

First, the AER makes a scheme pipeline determination using information that is available to APA and will also have the benefit of wider consultation (including with APA and other shippers) to inform its decision. The AER can also rely on its own consultants and leverage their technical and subject matter expertise where required. As such, we consider that we will have the information and expertise necessary to make a decision.

Second, the AER has often made regulatory and other decisions where there is uncertainty about the future. These include recent gas distribution pipeline determinations where there is considerable uncertainty around future demand for gas.[165]

Finally, the regulatory framework for scheme pipelines and the AER's approach to assessing access arrangement proposals, including capex, is well established and understood by service providers and stakeholders. We also note that non-scheme regulation does not remove the uncertainty of outcomes, and APA will still face challenges in how to address uncertainty around demand.

7.2.6 Delayed investment

APA submits that there will be delays to investment if the SWQP is subject to scheme regulation. APA considers that the current market dynamics mean that investment decisions must be made more quickly. For example, APA notes that for the East Coast Grid expansion decisions were made less than 2 years ahead of capacity being required.

APA submits that it could not make such 'nimble' investment decisions if the SWQP was subject to scheme regulation. This is because any proposed capital expenditure would need to be included in an access arrangement proposal (which are only considered every 5 years), or an application under rule 80 of the NGR.[166] APA considers that it is highly likely that such approvals could lead to 'a delay of several years' and potentially prevent the investment required to meet the market needs, or result in more costly solutions. APA also stated that there are disincentives to using rule 80.[167]

We recognise that APA and investors will likely wish to have certainty around the reference price before undertaking investment, as it will be important to inform contracting and pricing decisions. If we were to make a scheme pipeline determination, there would be uncertainty around how the initial RAB value will be determined, and how we would treat any major new investment, until the first access arrangement is approved. This would unlikely be completed until late 2027 at the earliest, as the scheme pipeline determination would not come into effect for 6 to 12 months after it is made. APA would then have 3 months to prepare and submit the initial access arrangement proposal, followed by AER assessment and approval.

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165 For example, the 2023-28 regulatory determinations for AusNet Gas Services and Multinet Gas Networks. See: AER, Multinet Gas Networks 2023-28 Final Decision – Overview, June 2023; AER, AusNet Gas Services 2023-28 final decision – Overview, June 2023.

166 NGR, r 80.

167 NGR, r 80.

We therefore consider it is possible that this uncertainty could lead to some delayed or forgone investment in the SWQP and related pipelines. However, the effect that this uncertainty could have on investment is likely to be transitory and relatively short-term. Once the first access arrangement process is finalised, and APA and investors had clear guidance on our regulatory approach, there would be greater certainty, which should be sufficient to ensure that efficient investment is not deterred. Therefore, in the medium to long term, we do not consider that in general uncertainty created by the scheme regulation process would significantly impact pipeline investment.

However, in the case of the SWQP currently, while this uncertainty is relatively short-term, it could have broader implications for the east coast gas market at this time. This is due to the role investment in the east coast grid may play in meeting potential supply shortfalls in the southern states. The ACCC and AEMO predict possible supply shortfalls in the southern states could occur as early as 2027 or 2028 unless additional sources of supply are developed, and that one potential source is additional capacity being made available on pipelines used to transport gas from Queensland.[168]

In addition, the uncertainty posed by regulatory approvals under scheme regulation could potentially delay investment decisions if APA and others wish to obtain the AER's approval before investing. However, we do not consider that scheme regulation would result in 'a delay of several years' as suggested by APA.[169] Access determinations for scheme pipelines and other regulatory approvals for investment, have generally taken around 6 to 12 months from initiation to final decision.[170] Further, access determinations can be sought simultaneously alongside standard capital planning processes (such as developing a business case, and seeking Board approval), which could minimise these timeframes. Investment may however be particularly sensitive to timeframes when the investment may be needed quickly to address supply shortages.

We also consider that, more generally, there are a number of measures under scheme regulation that can be used to provide service providers the flexibility to make investment decisions in a timely manner. These should work to minimise the impact that scheme regulation has on the incentives for a service provider to make timely investment in gas infrastructure. These include:

- the ability to contract on different terms and conditions to those set out in an access arrangement, meaning that pipeline investment can still be underwritten by long term agreements with shippers.[171]

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168 Australian Competition and Consumer Commission (ACCC), *Gas Inquiry 2017-2030 report – Interim update on east coast gas market June 2024*, June 2024 (ACCC 2024 Gas Inquiry Report), pp 34-39; and Australian Energy Market Operator (AEMO), *2024 Gas Statement of Opportunities*, March 2024 (AEMO 2024 GSOO).

169 APA submission, p 26.

170 For example, the Australian Gas Network (AGN) Mount Barker network extension, which took 6 months from date of application to final determination; the Victorian Transmission Network expansion of the South West Pipeline, which took one year from proposal submission to final decision; and, the Roma to Brisbane Pipeline RBP8 and Lytton Lateral expansions, which took approximately 10 months (from date of application to final determination) for both expansions.

171 NGL, s 115.

- the use of speculative capital expenditure accounts expenditure accounts under the NGR. This mechanism allows APA to incur capex that is not rolled into the RAB.[172]
- seeking regulatory approval of capex undertaken during an access arrangement period through ex-ante approval, or advanced determinations. [173]

Delays to Stage 3 of the East Coast Grid program

APA submits that it has paused a decision to seek Board approval for Stage 3A of the East Coast Grid expansion program, submitting that this is due to the regulatory uncertainty posed by the form of regulation review. As discussed above, we acknowledge that the uncertainty created by this Review has the potential to delay investment in gas pipelines.

Any uncertainty the review has created is short term, and we consider that there are mechanisms in the regulatory framework which support ongoing investment, by providing flexibility to make investments in a timely manner.

172 NGR, r 84.

173 For instance, the Roma to Brisbane Pipeline Lytton Lateral and RBP8 expansions, and the Dampier to Bunbury Natural Gas Pipeline. See: APTPPL, Roma Brisbane Pipeline 2012-17 Reference Service Proposal, pp 5, 37; AER, Roma to Brisbane Pipeline Access Arrangement 2012 to 2017 Final Decision – Overview, p 42; DBP Media Statement, Pipeline expansion key to State's Development, 21 February 2007.

8 Conclusion

Our final decision is not to make a scheme pipeline determination for the SWQP at this time as we are not convinced that the benefits of scheme regulation will outweigh the costs.

This final decision is finely balanced. We have concerns about the extent of APA's market power, and that current access prices may not be cost reflective. However, we have not heard clear support for scheme regulation from many stakeholders. Further, outcomes under non-scheme regulation could potentially improve in the future. Given this, the potential for APA's power to be constrained to some extent and access under non-scheme regulation to improve in the future, and as there are lower costs associated with non-scheme regulation, we consider that non-scheme regulation is more appropriate for the SWQP at this time. In making this decision we have considered the effect of regulation on promotion of access to the pipeline and costs incurred by APA and users. We have had regard to the NGO and the form of regulation factors in relation to these factors.

Promotion of the NGO

In relation to the NGO, as noted in Chapter 3, the focus of our assessment when having regard to the NGO is the extent to which each form of regulation will promote the efficient investment in, and operation and use of, the SWQP and other covered gas services (i.e. other pipeline services, the supply of covered gas, or a service ancillary to the supply of covered gas). In general, we consider that the form of regulation that is able to constrain the market power and promote access to the SWQP at the lowest costs will best promote the efficient investment in and use of covered gas infrastructure.

As discussed in the preceding chapters, we consider that both scheme and non-scheme regulation have the potential to promote efficient investment and use of infrastructure by helping to constrain APA's ability to exercise market power on the SWQP. However, the costs of scheme regulation will very likely be higher than non-scheme regulation. Therefore, as we have found that non-scheme will likely do this at the lowest costs, we consider it will likely better promote the NGO.

Future monitoring

We also intend to closely monitor APA's behaviour and the terms and conditions of access to the SWQP through the pipeline information disclosure regime and our monitoring and reporting powers under sections 63A and 63B of the NGL. Given our findings on current terms and conditions, we would like to see greater downward pressure on prices on the pipeline and negotiation on non-price terms and conditions improving, particularly for smaller shippers. We are aware that capacity on the pipeline will begin to become available from early 2028. We will closely monitor the prices, terms and conditions on which the newly available capacity is sold. If we see prices on the SWQP increase without reasonable justification, this could justify further review of the form of regulation in the future.

Appendix A – Financial analysis

This appendix sets out the details of our analysis of APA's financial information discussed in Chapter 6. As noted above, there are a number of assumptions underlying our analysis and we emphasise that the values are our best estimates based on the information available.

It is important to note that this analysis is indicative only and uses estimates which would be refined if a scheme pipeline determination is made for the SWQP. Further, the financial data is sensitive to various factors such as the choice of depreciation method and other accounting adjustments. To account for some of this variation, we used multiple estimates and asset valuation methodologies to test the sensitivity of the inputs.

NGR Part 9 building block methodology

We applied the building block methodology set out for scheme pipelines under Part 9 of the NGR to calculate an estimate of what the allowed annual revenue would have been for the SWQP if it had been a scheme pipeline. We then took this allowed revenue and divided it by the contracted MDQ for firm services in the relevant year to calculate an estimate of what the reference tariff may have been.

The Part 9 building block methodology is set out below:

> Revenue =
>
> (a) a return on the projected capital base for the year; and
>
> (b) depreciation on the projected capital base for the year; and
>
> (c) the estimated cost of corporate income tax for the year; and
>
> (d) increments or decrements for the year resulting from the operation of an incentive mechanism to encourage gains in efficiency; and
>
> (e) a forecast of operating expenditure for the year.

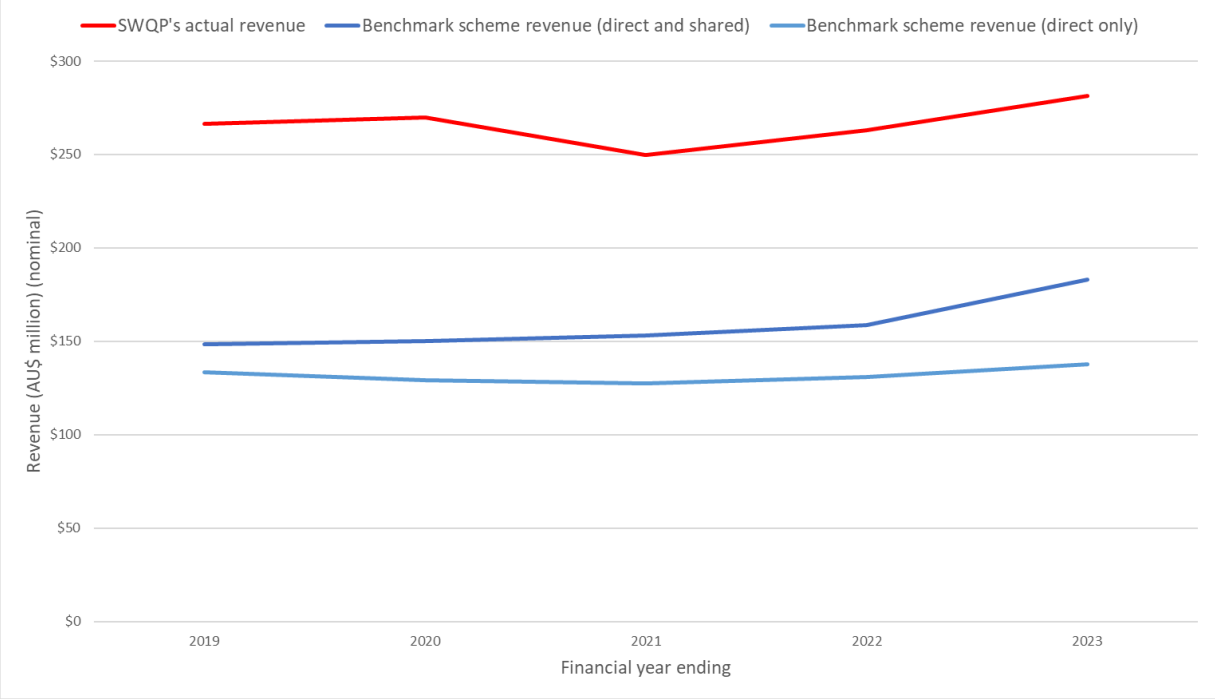
DBVM

When we applied this approach to the SWQP's publicly reported asset base for June 2018 ($1.6 billion) to June 2023 ($1.6 billion), we found that the revenue APA earned from the SWQP over this period was around **1.5 to 2 times higher** than what it may have if it had been subject to scheme regulation.

We note that the DBVM asset base includes around $787 million of 'other non-depreciable pipeline assets', which represents around a third of the SWQP's asset value as reported by APA. We consider that this value may include goodwill which would not be included in a cost-based approach nor if the SWQP was subject to scheme regulation. We have therefore excluded it from our analysis.

In Figure 1 below, we have compared these estimated revenues under scheme regulation to the revenue APA has reported that it has earned from the SWQP over this period.

Figure 1 - SWQP's actual and estimated regulated (DBVM) revenue

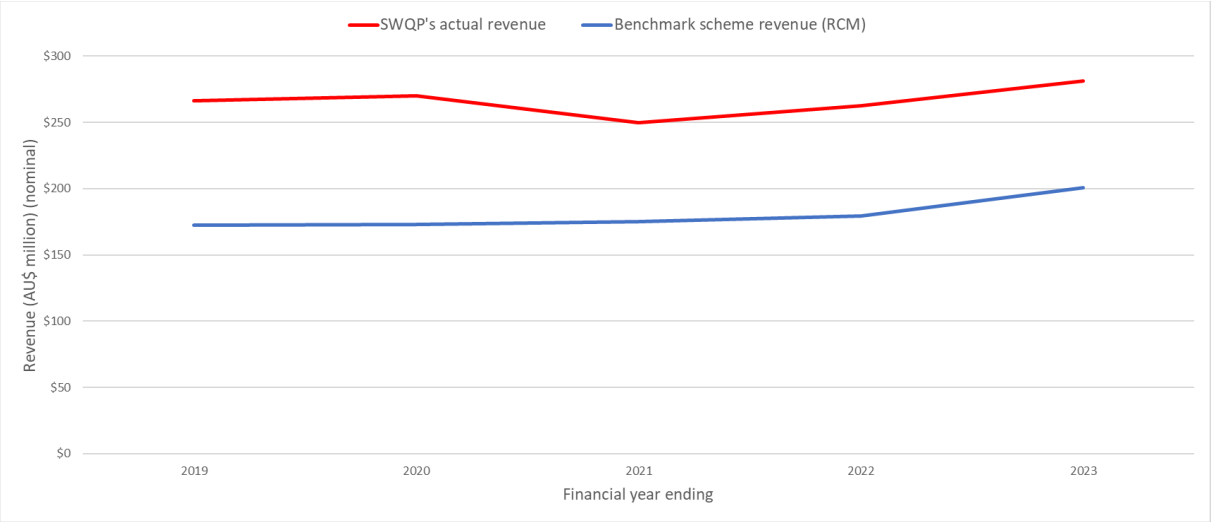


RCM

When we applied this approach to the SWQP's publicly reported RCM value for June 2018 ($2.1 billion) to June 2023 ($2 billion), we found that the revenue APA earned from the SWQP over this period was around **1.4 to 1.6 times higher** than what it may have been if it had been subject to scheme regulation.

In Figure 2 below, we have compared these estimated revenues under scheme regulation to the revenue APA has reported that it has earned from the SWQP over this period.

Figure 2 - SWQP's actual and estimated regulated (RCM) revenue



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Appendix B – Regulatory costs analysis

To determine the potential scale of direct regulatory (or compliance), transaction, and administrative costs that an efficient service provider is likely to incur under the two forms of regulation, we analysed information reported by service providers in response to both the AER's regulatory information notices (RINs) and Part 23 (now Part 10) reporting requirements, [redacted]

Scheme pipeline regulatory costs

To help inform our assessment of the costs likely to be incurred by an efficient service provider under scheme regulation, we reviewed the information reported by APA on the regulatory costs incurred by its scheme pipelines: the Amadeus Gas Pipeline (AGP), the Roma to Brisbane Pipeline (RBP), and the Victorian Transmission System (VTS).

This information, which is summarised in Table 1, was reported as 'Licence and regulatory expenditure' in the annual RINs for the 2019-20 to 2022-23 financial years, and includes the:

- regulatory costs associated with scheme pipelines, which we understand should include the costs of:
  - developing and consulting on a reference service proposal (RSP) for submission to the AER
  - developing and consulting on an access arrangement for submission to the AER
  - preparing annual price variations for submission to the AER
  - complying with RINs and other disclosure and regulatory obligations
- licence related costs, which we understand to be a relatively small portion of total costs.

Table 1 – 'Licence and regulatory expenditure' reported for APA's scheme pipelines under Regulatory Information Notices (RINs)

Pipeline	FY2019-20	FY2020-21	FY2021-22	FY2022-23
Amadeus Gas Pipeline (AGP)	N/A (no reported data)	$489,882.00	$490,151.00	$490,165.00
Roma to Brisbane Gas Pipeline (RBP)	$576,863.00	$605,313.00	$639,051.00	$690,156.00
Victorian Transmission System (VTS)	N/A (no reported data)	$500,415.76	$555,012.44	$598,470.81

Source: Annual RIN Response, by pipeline: AGP: AER, Amadeus Gas pipeline information – RIN responses, AER website, accessed 30 August 2024. RBP: AER, Roma to Brisbane Gas pipeline information – RIN responses, AER website, accessed 30 August 2024. VTS: AER, APA Victorian Transmission System pipeline information – RIN responses, AER website, accessed 30 August 2024.

[redacted]

[redacted]

Table 2 – Regulatory costs reported by APA for scheme pipelines

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Amadeus Gas Pipeline (AGP)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Roma to Brisbane Gas pipeline (RBP)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Victorian Transmission System (VTS)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

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We consider the regulatory costs incurred on the SWQP as a contract carriage pipeline are more comparable to the AGP and RBP rather than the VTS (a market carriage pipeline). Therefore, we consider a reasonable estimate of the regulatory costs that an efficient service provider is likely to incur under **scheme regulation to be on average $0.49-$0.69 million per annum** (or $2.45-$3.45 million over 5-year access arrangement period).

It is important to note that this estimate does not include the additional costs that a service provider is likely to incur in the first access arrangement period as a result of having to develop the initial RAB and other key inputs to the access arrangement. This is because the costs set out in Table 2 are for pipelines that are up to the fourth or fifth access arrangement.

Because the RABs for these pipelines were set so long ago, we have been unable to rely on RIN data to estimate the costs an efficient service provider is likely to incur in the first access arrangement period. We have therefore had to estimate these costs. To do so, we have assumed that the costs for the first access arrangement period are 50% higher than in subsequent access arrangement periods. In adopting this 50% assumption, we have decided to err on the side of overestimating, rather than underestimating these costs.

Adding 50% to the $0.49-$0.69 million per annum estimate above, results in an estimate for the **first access arrangement period of $0.74-$1.04 million per annum** (or $3.68-$5.18 million over the first 5-year access arrangement period). Over the first 5-year access arrangement period, the 50% assumption translates to an additional cost of $1.23-$1.73 million, which as noted above, likely overstates the additional costs an efficient service provider would incur.

Non-Scheme pipeline regulatory costs

To help inform our assessment of the costs likely to be incurred by an efficient service provider under non-scheme regulation, we considered information reported by APA and other service providers under the previous Part 23 information disclosure requirements (‘Licence and regulatory costs’ line item of the AER Template). These costs are summarised in Table 3 below.

As this table shows, in the 2022-23 financial year regulatory costs ranged from as low as $8,670 for SEA Gas’ Port Campbell to Iona (PCI) pipeline to $639,333 for the Carpentaria Gas Pipeline (CGP). The SWQP’s reported licence and regulatory expenditure in the 2022-23 financial year amounted to $493,162. We consider that this is likely to represent the upper limit of an annual estimate of the costs an efficient service provider would likely incur under non-scheme regulation.

Table 3 – Non-scheme pipelines licence and regulatory expenditure reported under Part 23 for FY2019-20 to FY 2022-23

Pipeline	Service Provider	FY2019-20	FY2020-21	FY2021-22	FY2022-23
BassGas Sales Pipeline	Beach Energy	-	-	$33,437.00	$44,705.00
Berwyndale Wallumbilla Pipeline	APA Group	$24,682.32	$27,160.20	$37,565.42	$39,136.00
Carpentaria Gas Pipeline	APT Pipelines (APA Group)	$562,822.85	$536,971.26	$574,556.94	$639,333.00
Central West Pipeline	APT Pipelines (APA Group)	$21,496.96	$21,497.01	$32,375.99	$21,497.00
Moomba Sydney Pipeline	East Australian Pipeline (APA Group)	$231,684.42	$362,873.97	$447,105.89	$281,388.00
Moomba to Adelaide Pipeline System	Epic Energy South Australia	$564,177.12	$358,552.36	$377,963.00	$377,011.00
Pt. Campbell to Adelaide	SEA Gas Partnership	$229,947.00	$194,460.00	$198,721.64	$238,765.00
Pt. Campbell to Iona	SEA Gas Partnership	$8,139.00	$7,079.00	$7,226.16	$8,670.00
South East South Australia Pipeline	APT Pipelines (APA Group)	$23,113.65	$23,967.92	$24,116.46	$24,731.00
South West Queensland Pipeline	**APA Group**	**$444,428.00**	**$462,577.85**	**$487,295.21**	**$493,162.00**
Tasmanian Gas Pipeline	Tasmanian Gas Pipeline	$372,977.51	$439,333.13	$587,180.46	$341,940.00
Wallumbilla Gladstone Pipeline	APA Group	$263,727.25	$274,721.21	$459,599.36	$545,808.00

Source: Compiled based on Part 23 information reported by pipeline owners/operators.

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