

Consumer
Challenge
Panel

APA: Victorian Gas Transmission System Access Arrangement 2023–27

CCP28 Advice to the AER

18 February 2022

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Statement from CCP28

CCP28 is deeply concerned that this price review is being undertaken against a background of many unanswered questions. Unfortunately, many of these questions are not even being asked.

Let's be in no doubt. Consumers will pay the cost if these questions are not asked and answered thoroughly before far-reaching regulatory decisions are made as part of the APA-VTS access review.

Sometimes, it is clear who needs to answer these questions. At other times, responsibilities are blurred, leaving consumers exposed to costs that could be avoided if the relevant parties stepped up and fulfilled the role expected of them by the community.

What questions are we talking about? Well, here are just a few.

- Does APA intend operating gas assets in Victoria in the future (post-2050)?
- If so, which legacy assets will be part of that future network?
- Who will be its customers?
- Will its assets be price regulated or unregulated?

and more broadly:

- Who is responsible for identifying the value customers place on, and willingness to pay for, different levels of reliability – taking into account the long-term viability of the network?
- Who will take responsibility for coordinating, *at least cost* to the community, the changing balance between demand and supply over the next 2-3 decades?

and perhaps the biggest questions of all:

- Who should be paying (and for what) between now and the future? And who gets to decide the answer to that question?

The APA-VTS proposal does not ask or answer these questions, neither do the AER's recent information paper on *Regulating gas pipelines under uncertainty*¹ or AEMO's *2021 Gas Statement of Opportunities*² – so how and when will they be answered?

Where does this leave consumers? We suggest it leaves them very exposed to cost claims that might not otherwise be justified.

Where do these unanswered questions leave the AER as the immediate decision-maker? In our view these unanswered questions leave the AER having to make decisions for which it is not well-placed.

We know these are difficult and awkward questions, and they need to be explored openly and answered transparently before a regulatory decision is made.

¹ AER, *Regulating gas pipelines under uncertainty: Information Paper*, November 2021

² AEMO, *2021 Gas Statement of Opportunities*, March 2021

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Acknowledgements

CCP28 wishes to acknowledge the cooperation and support of APA and AER staff, and the stakeholders who have generously provided information and insights to assist us in our review of the APA VTS Access Arrangement Proposal.

We also advise that to the best of our knowledge this report does not present any confidential information.

1 Summary of advice

1.1 CCP28's role

CCP28 was appointed in November 2021 to review the following Victorian Gas Access Arrangement resets

- APA Victorian Transmission Service (VTS) (2023-27)
- AGN (Victoria & Albury), AusNet Services and Multinet Gas distribution services (2023-28)

This advice relates to APA's Victorian Transmission Service (VTS) (2023-27) Access Arrangement proposal (hereafter referred to as APA's proposal). In line with our role, and within the time and resources available to us our advice focuses on addressing the following:

- An assessment of APA's consumer engagement activities, including the extent APA's proposal reflects consumer preferences
- The extent APA's proposal considers the long-term interests of consumers

A summary of our assessment and advice follows.

1.2 Consumer engagement

Details are in Section 3

1.2.1 Assessment

APA's consumer engagement is a significant "step-up" from previous resets and we commend APA for its efforts and commitment. This improvement is evident in:

- APA's engagement planning and successfully executed engagement and supporting documentation
- The breadth of customer representatives and stakeholder groups who participated in APA's roundtables
- Generally favourable feedback from stakeholders on APA's engagement materials and roundtables
- APA publishing an early draft proposal and seeking stakeholder feedback on the draft
- APA's engagement report lodged with its proposal

In the future, APA could enhance its consumer engagement by:

- Being specific and clear as to its engagement expectations
- Allowing sufficient time throughout to enable:
 - Comprehensive engagement on proposals over which stakeholder can reasonably be expected to have influence as indicated in the AER's *Better Resets Handbook*
 - Stakeholders to provide feedback and be genuinely involved in shaping APA's proposals in line with APA's stated expectations (inform, consult, involve)

- Clearly acknowledging differences in stakeholder perspectives
- Publishing its draft plan to allow sufficient time for stakeholders to engage and prepare submissions
- Specifically demonstrating how consumers influenced its proposals, for example by including direct references to consumer influence, consumer benefits against capex proposals and proposed opex-step changes

1.2.2 Consumer influence on APA's proposal

- Although APA reported on key concerns raised by stakeholders and provided responses to stakeholders' concerns in its *Proposal Overview*, how these responses influenced APA's specific proposals is not obvious
- Consumers would also benefit if APA's proposal included a clear business narrative setting out APA's plans for the next five years within the context of its longer-term business plans
- APA's proposal overview is lacking detail in some key areas, such as operating expenditure and there is no evidence of consumer influence on APA's opex proposals
- APA's *RIN Response* is difficult to follow and not presented in a consumer-friendly format, so it is difficult to link consumer influence to the information in the *RIN Response*
- In both documents consumer benefits of APA's proposals are not always apparent or clearly stated
- Differences in stakeholder perspectives should be reported, including whether perspectives are consistent between stakeholder groups or whether they are divergent, and if so how APA considered these differences in its proposals

1.3 CCP28's advice on APA's proposal

Demand forecasts

Details are in Section 4

- We encourage the AER to accept an updated proposal from APA and revised stakeholder submissions when the latest forecasts from AEMO are released
- The AER should require APA to work with its customers to develop a better understanding of their tolerances to possible intermittent disruptions to their gas supply
- We urge the AER to work with all relevant agencies and businesses to establish a demand management mechanism to help address short-term and intermittent mismatches between demand and supply in the Victorian gas network

Capital expenditure

Capex proposal	Advice to the AER
<p>South West Pipeline expansion</p> <p>Details are in Section 5.2</p>	<ul style="list-style-type: none"> • We urge the AER to work with all relevant authorities and businesses to establish a demand management mechanism to help address short-term and intermittent mismatches between demand and supply in the Victorian gas network. • When assessing APA’s proposal for the SWP expansion and its request for application of the Fixed Principle to this capex, the AER should openly consider how granting the Fixed Principle would alter the risk profile of this investment and how that should be reflected in the allowed return on capital for this capex • In addition, if this project is to proceed: <ul style="list-style-type: none"> ○ We urge APA and the AER to consider more appropriate cost and risk sharing arrangements, including the possibility of capital contributions ○ Any regulated expenditure on the SWP expansion should be treated under speculative capex arrangements until the need is proven
<p>Western Outer Ring Main (WORM)</p> <p>Details are in Section 5.3</p>	<ul style="list-style-type: none"> • When assessing APA’s proposal for the WORM and its request for application of the Fixed Principle to this capex, the AER should openly consider how granting the Fixed Principle would alter the risk profile of this investment and how that should be reflected in the allowed return on capital for this capex • The AER should require APA to provide a full re-assessment of the business case for the WORM in light of the changed circumstances since 2017 • Any regulated expenditure on the WORM should be treated under speculative capex arrangements until the need is proven
<p>Hydrogen safety and integrity assessment</p> <p>Details are in Section 5.4</p>	<p>The AER should:</p> <ul style="list-style-type: none"> • Determine whether APA has a regulatory obligation to undertake a hydrogen safety and integrity assessment on its regulated assets <ul style="list-style-type: none"> ○ If so, assess whether APA’s project estimates, methodology and assumptions are reasonable • Assess the necessary timing for such an assessment, and determine whether it is required within the next regulatory period • Consider whether this project should be funded by Victorian gas consumers as part of APA’s regulated revenue stream <ul style="list-style-type: none"> ○ Current law and rules may not support funding of this project by Victorian gas consumers

Capex proposal	Advice to the AER
Security of Critical Infrastructure Details are in Section 5.5	<ul style="list-style-type: none"> Determine whether the work proposed is responding to a genuine legislative obligation Determine whether EY have appropriately identified gaps in APA's security posture Confirm that the most cost-effective options have been proposed for closing any identified security gaps Confirm that the proposed cost allocations between APA's businesses are fair and reasonable
Information technology Details are in Section 5.6	<ul style="list-style-type: none"> Seek an IT Strategic Plan and Roadmap from APA, setting out its future IT portfolio directions for the next 5 years, the relationships between the various components of the program, timings, costs and risks, as well as identifying whether the projects are shared across all of the APA businesses or stand alone Require each project proposed within the plan to be justified by a costed business case

Operating expenditure

Opex proposal	Advice to the AER
Base year Details are in Section 6.2	<ul style="list-style-type: none"> The AER should seek further information from APA that its chosen base year is not materially inefficient
Trend Details are in Section 6.3	The AER should ask APA to: <ul style="list-style-type: none"> Review its proposed lack of productivity improvement aim Ask APA to provide supporting evidence for not forecasting any price growth
WORM step change Details are in Section 6.5	<ul style="list-style-type: none"> Consider the quantum and timing of APA's proposed WORM opex step change alongside our concerns regarding APA's capex proposal for the WORM Establish whether APA's proposed WORM opex step change is legitimate Has this expenditure has been treated as a growth factor in the current regulatory determination or should be treated as such in the 2023-2027 regulatory period?

Opex proposal	Advice to the AER
<p>SWP expansion step change</p> <p>Details are in Section 6.4</p>	<ul style="list-style-type: none"> Consistent with our advice regarding APA’s capex proposal for the SWP expansion, we do not support APA’s SWP expansion opex step change
<p>Property taxes</p> <p>Details are in Section 6.6</p>	<ul style="list-style-type: none"> Seek more information from APA to establish whether this tax is a genuine step change Seek from APA evidence of the method of calculating the proposed opex amount, and APA’s assumptions behind those calculations
<p>Security of critical infrastructure</p> <p>Details are in Section 6.7</p>	<p>Our advice related to APA's opex proposal for security of infrastructure, follows our advice related to APA's capex proposal for security of infrastructure</p> <ul style="list-style-type: none"> Is APA's methodology for assessing the step change allowance sound, including the apportionment to APA's VTS business? Is APA's opex proposal for security of infrastructure consistent with EY's conclusions?
<p>Information technology</p> <p>Details are in Section 6.8</p>	<p>As per our IT capex expenditure advice, the AER should:</p> <ul style="list-style-type: none"> Seek an IT Strategic Plan and Roadmap from APA, setting out the future directions for its IT portfolio for the next 5 years, the relationships between the various components of the program, timings, costs and risks, as well as identifying whether the projects are shared across all of the APA businesses or stand alone Require each project proposed within the plan to be justified by a costed business case Clarify the principles for assessing the reasonableness of APA's proposed migration of IT expenditure from capex to opex The soundness of APA's methodology for assessing its proposed IT opex step change allowance
<p>Victoria Net Zero 2050 – carbon offsets</p> <p>Details are in Section 6.9</p>	<ul style="list-style-type: none"> We do not support this step change, given APA has not undertaken any consumer acceptance testing of APA’s proposal Subject to consumer acceptance testing of APA’s proposal, the AER needs to be satisfied that APA’s methodology and assumptions for calculating its proposed allowance are reasonable

Network life shortening/accelerated depreciation

Details are in Section 7

- The AER should obtain independent expert advice clarifying the following matters ahead of deciding on the proposal from APA for network life shortening and accelerated depreciation:
 - Does the so-called “regulatory compact” have a legal foundation? If so, is it unconditional?
 - Where the National Gas Law contemplates the redundancy of assets, must the assets already be redundant? Do the relevant provisions extend to the *prospective* redundancy of assets? Do they extend to uncertain or speculative claims of redundancy?³
 - Where the National Gas Law contemplates asset redundancy, do those provisions ipso facto extend to the simultaneous redundancy of an entire network of assets?
 - Where the National Gas Law and rules provide for regulatory judgement in relation to the treatment of redundant assets, how do the relevant provisions inform and/or constrain the exercise of the AER’s judgement? For example:
 - i. the National Gas Objective which refers to promoting efficiency in investment⁴
 - ii. clause 85(3) of the National Gas Rules which refers to *sharing* costs when demand for pipeline services is declining, and
 - iii. clause 85(4) which refers to the effect of uncertainty on users.
- Before considering APA’s proposal for shortening the life of its network and accelerated depreciation, the AER should require APA to outline, to the best of its ability, the future it sees for itself following the stranding of its network and the transition pathway it expects to follow to that future
- Before considering APA’s proposal for network life shortening and accelerated depreciation, the AER should require APA to outline and model its intended approach to maintaining service standards and asset safety and integrity over the next 2-3 decades. This disclosure should include how APA expects associated costs to be treated within the regulatory framework and the impact this will have on regulated revenues and prices during this period
- Before considering APA’s proposal for asset life shortening and accelerated depreciation, the AER should require APA to propose a binding, long-term commitment mechanism regarding the repatriation of cashflows to debt and equity holders that safeguards the long terms interest of consumers
- The AER should require APA to develop a clear and accessible business narrative about its future, including its explanation for why consumers should be funding investments and write-offs (i.e. accelerated depreciation) in support of that future. This narrative should be tested with end-use consumers to gauge their support

³ For example, see clause 85(1) of the National Gas Rules does refer to “assets that cease to contribute in any way to the delivery of pipeline services” and not “assets that **will [or might]** cease to contribute in any way to the delivery of pipeline services”.

⁴ The National Gas Objective as stated in the National Gas Law (NGL, s.23) is: “to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.”

- The AER should satisfy itself that APA gave due consideration to emissions-related network stranding risk when considering the prudence and efficiency of its past investments

Tariffs

Details are in Section 8

The AER should require APA to:

- Provide estimates of the impact its proposal will have on tariffs (at least, system-wide average tariffs) over the long-term, say, to 2050 – and the likely impact this will have on the demand for its pipeline services and asset utilisation
- Resume its consumer consultation on tariffs
- Clarify and provide examples about how its proposed tariff variation mechanism will operate, how this differs from current arrangements, and the impacts the mechanism will have on tariffs and consumers if it is triggered during the regulatory period

Rate of return

Details are in Section 9

- The AER should investigate whether a regulatory decision to approve a shortening of a network's asset life reduces that network's systematic risk exposure, and if so, how this might be reflected in the value of beta used in the Sharpe-Lintner CAPM.

2 Background

2.1 CCP28's role

In November 2021 the Australian Energy Regulator (AER) appointed Consumer Challenge Panel (CCP) III as follows:

- To assess network service providers' consumer engagement activities, including the extent network proposals reflect consumer preferences
- To advise whether network proposals consider the long-term interests of consumers

CCP28, a sub-panel of the CCP, was appointed in November 2021 to review the following Victorian Gas Access Arrangement resets:

- APA Victorian Transmission Service (VTS) (2023-27)
- AGN (Victoria and Albury), AusNet Services and Multinet Gas distribution services (2023-28)

This advice relates to the APA VTS Access Arrangement reset (APA's proposal).

To achieve its aim, since it was appointed in November 2021 CCP28 has:

- Informed itself of APA's broad business operations, engagement approach, and proposals through multiple meetings with APA and the AER
- Reviewed published material from APA's earlier roundtables, APA's engagement plan and other background documents
- Met with several APA stakeholders to obtain independent feedback on APA's engagement activities
- Participated in the AER's Public Forum on 1 February 2022⁵

Unfortunately, APA's roundtable engagement had concluded by the time CCP28 was appointed so we were not able to observe any of their sessions. This has limited our assessment of APA's engagement to feedback from a sample of stakeholders, feedback from APA and a review of APA's presentations.

2.2 Focus of this advice

We have not attempted to examine every aspect of APA's proposal. Rather within the time and resources available to us we have focused on those aspects which will have the greatest impact on consumers, as well as those elements which may establish broader regulatory precedents. Details of our areas of focus are contained within the relevant sections.

⁵ Consumer Challenge Panel Sub-Panel 28, *APA: Victorian Gas Transmission, System Access Arrangement 2023–27, CCP presentation to AER Public Forum*, 1 February 2022

2.3 Context

APA's 2023-27 Access Arrangement Proposal is being lodged and appraised in a period of great uncertainty for the Australian national energy market, particularly for owners and operators of gas infrastructure. CCP28 suggest that the following factors all play a role in contributing to an environment characterised by complexity.

2.3.1 No consistent view on the future of gas

The November 2021 *National Gas Infrastructure Plan*⁶ identifies a long-term development pathway for gas supply and infrastructure in Australia to 2041. This appears to be inconsistent with the Federal Government's commitment to Net Zero Carbon Emissions by 2050⁷

The Victorian Government has set interim emissions reduction targets of 28 to 33% by 2025 and 40-50% by 2030⁸, and Infrastructure Victoria's 'Towards 2050: Gas infrastructure in a zero emissions economy (July 2021)'⁹ identifies 'limited opportunity to repurpose existing natural gas infrastructure over the long term (beyond 2040)', however release of the Victorian Government's Gas Substitution Roadmap which was due for completion by the end of 2021 is now not expected to be released until mid 2022.

In AEMO's *Gas Statement of Opportunities* (GSOO)¹⁰ future Victorian gas demand is forecast to be flat or falling slightly, but it is unclear if government emissions reduction policy projections have been included in demand forecasts. An updated GSOO is due to be published in March 2020. AEMO's demand forecasts do not include assessment of demand flexibility or demand management possibilities.

Future gas supply options for Victoria are uncertain. While Victorian production is expected to decrease over the regulatory period, there are questions over whether proposed LNG import terminals at Port Kembla, Geelong, and Avalon will proceed.

There are various views on future viability and timing of hydrogen as a natural gas replacement. The future is even more uncertain for gas transmission pipelines. Steel pipelines face technical challenges in transporting hydrogen. If hydrogen does emerge as a replacement for natural gas, it is more likely that it will be produced close to demand centres, rather than being transported over long distances.

There are questions about whether the electricity network will be capable of accommodating wholesale electrification of the current gas load.

AER's Information paper, *Regulating gas pipelines under uncertainty*, discusses some of these issues.

⁶ Australian Government, Department of Industry, Science, Energy and Resources, *2021 National Gas Infrastructure Plan*, 2021

⁷ Taylor, A., *Australia's plan to reach our net zero target by 2050*, Joint media release with Prime Minister the Hon Scott Morrison MP, 26 October 2021

⁸ Victoria State Government, Environment, Land, Water and Planning, *Victorian Government action on climate change*, 9 February 2022,

⁹ Infrastructure Victoria, *Towards 2050: Gas infrastructure in a zero emissions economy Interim report*, June 2021

¹⁰ AEMO, *2021 Gas Statement of Opportunities*, March 2021

2.3.2 Climate change

Increasingly communities expect governments (and businesses) to take action to respond to climate change. There is a perception that Australia is ‘dragging the chain’ in relation to emissions reduction actions, and community pressure for governments and businesses to respond more quickly.

2.3.3 *Better Resets Handbook*

In December 2021, the AER published the *Better Resets Handbook - Towards Consumer Centric Network Proposals*. The purpose of *Better Resets* is to encourage better engagement with energy consumers by energy networks such that consumer preferences drive the development of networks’ regulatory proposals. Under the *Better Resets* framework, energy networks can opt for an ‘early signal pathway’ which incentivises them for preparing a regulatory proposal that reflects consumer preferences and is capable of acceptance at the draft decision stage¹¹.

While APA is not seeking an ‘early signal pathway’, the *Better Resets Handbook* sets out AER’s expectations for network engagement with consumers and how networks should present their proposals and provides general guidance for AER’s assessment of a regulatory proposal’s building blocks.

Whilst we acknowledge APA has not indicated it is seeking an early signal pathway, we consider *Better Resets* provides good practice guidance for reviewing a network proposal and have therefore assessed APA’s Proposal against the *Better Reset Handbook’s* expectations.

2.3.4 COVID

The COVID-19 pandemic continues to impact consumers and businesses alike. Consumer behaviour has changed with more people spending more time at home changing the pattern of demand for energy. COVID-19 also continues to impact businesses undertaking regulatory resets, creating uncertainty around demand forecasts as well as constraining consumer engagement to COVID-safe approaches rather than face-to-face engagement. This engagement constraint, whilst potentially reducing the costs of engagement also limits engagement to an “online” population. Victorians during the 2020 lockdowns were typically willing participants in online engagement, but as lockdowns extended into 2021, engagement practitioners and social researchers alike have observed increasing difficulties engaging with consumers (regardless of the subject matter) due to ‘engagement fatigue’. We note these challenges may have impacted APA in the preparation of its proposal.

¹¹ AER, *Better Resets Handbook*, 1 December 2021, p.3

2.3.5 Factors in the macro environment

APA has suggested the current low interest rate environment provides customers with a buffer against the higher costs that would otherwise result from the proposals in its submission. These higher costs would follow from its proposed opex step changes, large capex projects increasing the value of its RAB, and accelerated depreciation. For example, in its presentation to the AER hosted public forum on 1 February 2022, when discussing tariff outcomes, APA observed:¹²

“Maintaining tariff stability as much as possible

- **increase in depreciation offset by declines in rate of return** [highlight added]

All things being equal, APA’s observation may be correct, however, “all things” are unlikely to remain equal in the years ahead. Interest rates will almost certainly start increasing– especially in the early years of the next regulatory period. Moreover, APA’s observation does not acknowledge that household debt has significantly increased in recent years (in response to low interest rates). Even a small increase in rates will have a significant impact on many household budgets. In other words, the “offset” mentioned by APA at the public forum is likely to be short-lived.

Consumers are also likely to face higher costs from elsewhere in the energy environment. Most prominently, consumers are likely to face higher costs arising from the network infrastructure required to support the transition to a decarbonised electricity system. The likely pathways for this transition are described in the Australian Energy Market Operator’s (AEMO) Integrated System Plan (ISP).¹³ Some of these costs may begin flowing through to some consumers in the years spanned by APA’s upcoming regulatory period.

Beyond these energy-related cost pressures, households are facing pressure from elsewhere in the macro-economy – for example, rising inflation and declining real wages.

Regardless, we caution APA against assuming away the impact its proposal will have on many household budgets.

2.4 Key features of APA’s gas transmission network plans

The key features of APA’s Access Arrangement Proposal are as follows:

- Declining forecast gas volumes i.e. 206PJ (2023) -> 198PJ (2027)
- \$352 million capex (\$2022) – 20% higher than current period
 - Continued investment in the Western Outer Ring Main (WORM) - \$49m
 - Investment in South West Pipeline (SWP) - \$97.2m
 - Replacement expenditure - \$122.9m
 - Hydrogen safety and testing - \$37.9m
- Flat opex - but APA is proposing six step changes

¹² APA (2021) *Victorian Transmission System 2023-27 access arrangement. Presentation to public forum* (February), slide 12

¹³ Australian Energy Market Operator, *2022 Integrated System Plan (ISP)*, n.d.

- Increases in:
 - Regulated Asset Base ~ 16.6%
 - Regulated revenue \$553.6m -> \$644.1m (~16%)

We consider that these are not signs of a network in decline.

3 APA's consumer and stakeholder engagement

3.1 Overview of APA's engagement

In 2020, APA prepared a draft *Engagement Plan* (EP) based on the draft plan it prepared for its Amadeus Gas Pipeline Access Arrangement. The draft EP details APA's engagement purpose, principles and plans for engaging with stakeholders.

Five principles underpin APA's consumer and other stakeholder engagement (hereafter referred to as stakeholder engagement):

APA underpinned its engagement by:

- No surprises
- Clear accurate and timely information
- Easy to understand
- Transparent
- Provides for influence

APA's EP identified the ways it was proposing to engage including, through:

- Its VTS stakeholder engagement group
- Roundtables
- VTS engagement webpage
- Individual meetings

APA also published information about its engagement on its website, such as its timeline for engagement.¹⁴

APA established its VTS stakeholder engagement group in 2020.

From our discussions with APA we have established that APA invited around 80 stakeholders representing a diversity of customer groups and other stakeholders to join the group, including:

- **Consumer advocates** who could represent consumer perspectives, given residential and small business consumers are typically unaware of the role of a gas transmission business. For example, APA approached the Brotherhood of St Laurence, Consumer Advocacy Law Centre, Council on the Ageing, Energy Consumers Australia, St Vincent de Paul and the Victorian Council of Social Service.
- **Advocacy organisations representing commercial and industrial energy users** such as Energy Users Association of Australia and Major Energy Users, and its **key customers** such as Lochard Energy
- Importers

¹⁴ APA, Victorian Transmission System Access Arrangement, VTS Engagement Timeline, 2022,

- Retailers
- Victorian and Commonwealth government representatives
- AEMO
- AER and Australian Competition and Consumer Commission (ACCC) representatives as observers

Ultimately APA’s stakeholder engagement group included “a wide section of the VTS community”, and included “direct customers, prospective customers, industry representatives, consumer advocates, and Victorian Government”.¹⁵

During Roundtable 1,¹⁶ APA shared its draft EP and sought comment from stakeholders. Stakeholder feedback was reported in APA’s Roundtable 2.¹⁷ APA incorporated stakeholder feedback into subsequent roundtables. For example, stakeholders suggested APA should indicate its engagement intentions consistent with the International Association for Public Participation (IAP2) Spectrum of Public Participation.¹⁸ We note, APA responded by including a statement of its engagement intentions in subsequent roundtables. Another stakeholder suggested APA should release an early draft proposal for consultation. Consequently, on 15 October 2021 APA published its *First look at proposal for VTS 2023-27 access arrangement*,¹⁹ and sought feedback from stakeholders in Roundtable 12.²⁰ APA also held a roundtable on hydrogen at the request of stakeholders.

APA held 12 roundtable meetings between October 2020 and November 2021. These sessions were internally facilitated by members of APA’s regulatory team, support by APA subject matter specialists and consultants as appropriate. We understand APA executives did not participate in the roundtables. APA reported that an average of around 25 to 30 stakeholders attended its roundtable meetings with more than 50 stakeholders attending one session. Due to COVID-19 restrictions all meetings were held online.

APA published the roundtable presentations on its VTS engagement webpage.²¹ Presentations 2 to 12 include summaries of stakeholders’ questions and VTS responses.

Additionally, APA offered to meet stakeholders individually. APA reported several stakeholders took up APA’s offer at times to catch up on missed information, clarify content or raise matters of individual interest.

APA documented its engagement in an engagement report which the AER published alongside APA’s proposal.²² This report details APA’s engagement approach, activities and outcomes, including a summary of stakeholder feedback and APA’s responses to that feedback.

¹⁵ APA, *VTS, 2023-37 Access Arrangement Engagement Plan*, October 2021, p. 4

¹⁶ APA, *VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 1 Presentation* 28 October 2020

¹⁷ APA, *VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 2 Presentation*, 25 November 2020

¹⁸ IAP2, *IAP2 Spectrum of Public Participation*, 2018

¹⁹ APA, *First look at proposal for VTS 2023-27 access arrangement*, 15 October 2021

²⁰ APA, *APA VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 12, Our proposal and stakeholder influence*, 22 November 2021

²¹ APA, *Victorian Transmission System Access Arrangement, 2022*, <https://www.apa.com.au/about-apa/our-projects/victoria-transmission-system-access-arrangement/>

²² APA, *Victorian Transmission System, 2023-27 access arrangement proposal, Engaging with stakeholders on VTS plans*, 1 December 2021

3.2 Stakeholder feedback

3.2.1 APA stakeholder poll

APA conducted an online poll at its November 2021 Roundtable 12.²³ It asked stakeholders the following questions:

1. Was the information (slides, presentations, papers) for the VTS stakeholder engagement easy to understand?
2. Was the information (slides, presentations, papers) for the VTS stakeholder engagement transparent?
3. Do you feel that you had influence? Did we take on board your feedback?
4. In a few words, how would you describe the stakeholder engagement?
5. Do you have suggestions for ways we could engage better?

APA reported the findings in its engagement report that accompanied its proposal,²⁴ although the sample size was not reported so it is not clear the extent these findings can be generalised to all stakeholders who participated in APA’s Roundtables. Among those who responded to the poll:

- Most (around 82%) considered the information APA provided was ‘easy to understand’ (around 82% considered the information was “excellent” or “good” and around 18% considered it was reasonable)²⁵
- Most (around 82%) considered the information APA provided was ‘transparent’ (around 46% rated the transparency as “excellent” or “good” and around 54% considered it was reasonable)²⁶
- 93% considered that they had some level of influence (around 50% rated the level of influence as “excellent” or “good” and around 43% considered it was reasonable)²⁷

APA produced a word cloud to summarise participants’ descriptions of VTS stakeholder engagement. The feedback presented in APA’s engagement report is generally positive, with comments such as “informative”, “inclusive”, “open” and “issues rich”.²⁸ Despite this positive feedback, participants also suggested ways APA could better engage, such as more small-group sessions, more guidance from stakeholders and earlier provision of information.

3.2.2 CCP28 interviews with stakeholders

Given CCP28 was appointed after APA was well advanced in its stakeholder engagement program, to compensate for our inability to observe APA’s workshops we interviewed three stakeholders who had participated in most or a considerable proportion of APA’s roundtable activities. Stakeholders

²³ APA, APA, *VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 12, Our proposal and stakeholder influence*, 22 November 2021

²⁴ APA, *Victorian Transmission System, 2023-27 access arrangement proposal, Engaging with stakeholders on VTS plans*, 1 December 2021

²⁵ Ibid, p. 27, inferred from Table 1

²⁶ Ibid

²⁷ Ibid

²⁸ Ibid, p. 28

acknowledge the complexity of this reset, given the uncertain future of natural gas, with one commenting “they did a good job on a tough gig”.

Stakeholders had different views about including industry stakeholders and consumers in the same sessions, particularly given the complexity of some information and APA’s inability to attribute different perspectives to different stakeholder groups.

Regardless, all three stakeholders we interviewed identified various positive attributes in APA’s engagement, that were consistent with or expanded on APA’s online survey findings, such as:

- APA’s approach was “a step up from what they did in the past”, and “anything could be better than what they did last time”
- APA’s information was understandable
- APA was responsive to stakeholder requests for additional information/sessions
- APA appeared to value discussions between participants, and generally demonstrated openness and good faith in discussions
- Overall APA’s roundtable activities were well planned and executed
- The facilitators let people talk

However, the three roundtable participants also had concerns with APA’s approach:

- APA’s engagement falls well short of gas distributors’ consumer engagement
- Content was provided with insufficient time before the roundtables to review it or adequately consider APA’s questions during the round tables, “slide packs were received on the day of the session; they asked questions we couldn’t answer - APA must have known what they were doing”
- APA in Roundtables 9 to 12²⁹ claimed it was “informing, consulting, involving – but it was never clear which bits were which ... I can’t remember any strong example of ‘involve’”
- Divergent views of stakeholders were not reflected in APA’s proposal, with one stakeholder commenting APA “presented unanimous decisions that were not unanimous” and “they did a little bit of fudging when they said consumers all agreed and were happy – but actually [some] consumers were not happy with any accelerated depreciation”
- APA’s *Proposal Overview* lacks detail and locating more detailed information is too difficult

²⁹ APA, *VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 9, – Demand & Supply Final Report*. Depreciation. Engagement timeline refresh, 15 September 2021
APA, *VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 10, First look at regulatory positions*, 6 October 2021
APA, *VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 11, First Look at regulatory positions – Q&A and discussion*, 25 October 2021

3.3 CCP28's assessment of APA's engagement

Our assessment of APA's engagement is guided by the AER's *expectations* for consumer engagement outlined in its *Better Resets Handbook*.³⁰ In summary, the AER expects networks to:

- Engage sincerely, openly and genuinely with consumers, such that consumers have confidence in the process
- Consider consumers as “partners”, rather than simply being asked for feedback
- Equip consumers with accurate and unbiased information so they can engage effectively
- Be accountable to consumers
- Engage broadly and deeply with consumers, including defining their expected level of participation and influence
- Allow consumers to guide the development of network proposals, based on consumers' desired outcomes
- Use a variety of engagement methods
- Provide evidence of consumer impacts on their regulatory proposal

The AER suggests networks should consider the IAP2 spectrum of public participation, which depicts the *level of influence* the public can have on an outcome or decision. The spectrum has five levels of increasing influence from inform at lowest end of the spectrum, to consult, involve, collaborate then empower at the upper end. However, “informing” alone does not necessarily mean an organisation is ineffective in its engagement; nor does collaborating mean it is effective. These levels reflect an organisation's engagement intentions, rather than measure engagement success in terms of the *value* of consumer and stakeholder engagement.

In line with the AER's emphasis on the IAP2 framework, we have objectively assessed APA's engagement against the IAP2's core values.³¹ When assessing the quality of engagement, these values are more meaningful and objective than the five well-known categories on the IAP2 spectrum. The seven IAP2 core values are as follows:

1. Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process
2. Public participation includes the promise that the public's contribution will influence the decision
3. Public participation promotes sustainable decisions by recognising and communicating the needs and interests of all participants, including decision makers
4. Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision
5. Public participation seeks input from participants in designing how they participate

³⁰ AER, *Better Resets Handbook*, December 2021

³¹ IAP2, *IAP2 Core Values*, 2019

6. Public participation provides participants with the information they need to participate in a meaningful way
7. Public participation communicates to participants how their input affected the decision

The following table (Table 3-1) provides an overall assessment of APA’s engagement against AER’s *Better Resets* guidance.³² Table 3-2 follows with an overall assessment of APA’s engagement against IAP2 core values.³³ Specific observations related to stakeholders’ support or otherwise for the various aspects APA’s proposals, such as demand forecasts, capex, opex etc. are included within the relevant sections of our advice and assessment of APA’s proposal. Consumers’ perspectives on these specific elements of APA’s proposal are discussed in subsequent sections of this advice.

³² AER, *Better Resets Handbook*, December 2021, pp. 12-18

³³ International Association for Public Participation, *IAP2 Core Values*, 2019

Table 3-1: Overall assessment of APA’s engagement against AER guidance

AER <i>Better Resets</i>	Strengths	Concerns/opportunities to improve
<p>Engage sincerely, openly and genuinely with consumers, such that consumers have confidence in the process</p>	<ul style="list-style-type: none"> As recognised by stakeholders and from our observations APA’s engagement for this proposal was a significant improvement on its engagement for the current regulatory period suggesting a genuine interest in consumer engagement³⁴ Feedback from stakeholders indicates they felt APA’s information was transparent and easy to understand, and they had opportunities to talk APA’s roundtable presentation content appears clear and easy to follow 	<ul style="list-style-type: none"> Stakeholders were given limited time to consider the roundtable content and respond to APA’s questions Stakeholders considered they had some influence but in limited areas We agree with stakeholder observations and our review of APA’s roundtable presentations that APA was it is not always clear about which aspects its intention was to inform, consult or involve
<p>Consider consumers as “partners”, rather than simply being asked for feedback</p>	<ul style="list-style-type: none"> APA’s intentions to consider stakeholders as partners appear well-founded, especially compared to its former mindset as observed by CCP11³⁵ 	<ul style="list-style-type: none"> Whilst APA aspired to “involve” stakeholders on some aspects of its proposal, we found limited evidence or examples of stakeholder involvement in shaping APA’s proposal Feedback from stakeholders and the structure of the roundtable presentations suggests stakeholders were, in line with the IAP2 spectrum, more often informed or consulted than involved

³⁴ Consumer Challenge Panel (CCP11), *Response to proposal from APA for a revenue reset/ access arrangement for the period 2018 to 2022*, 3 March 2017.

³⁵ Ibid.

<i>AER Better Resets</i>	Strengths	Concerns/opportunities to improve
<p>Equip consumers with accurate and unbiased information so they can engage effectively</p>	<ul style="list-style-type: none"> Stakeholders were provided with copies of the presentation information to scrutinise (albeit with little lead time before each roundtable) APA’s survey results provide some indication that stakeholders felt the information they received was transparent, and this finding is generally supported by stakeholders we interviewed 	<ul style="list-style-type: none"> APA’s roundtable sessions were internally facilitated, and whilst we have not found any evidence of deliberate bias, external facilitation would provide us with greater confidence that information was objectively provided to stakeholders As CCP28 was appointed after most sessions were completed, we are unable to comment on the extent that participants were presented with unbiased information. We note AER attended some sessions as observers, and those views should be considered in assessing the extent stakeholders were equipped with accurate and unbiased information Engagement on some aspects of APA’s proposal where stakeholders could meaningfully contribute, such as operating expenditure were skimmed over

<i>AER Better Resets</i>	Strengths	Concerns/opportunities to improve
Be accountable to consumers	<p>APA demonstrated accountability by:</p> <ul style="list-style-type: none"> • Developing and publishing consumer-oriented engagement principles to underpin its approach • Seeking feedback on its draft engagement plan • Allowing stakeholders an opportunity to talk and ask questions during its roundtables • A willingness to meet stakeholders one-on-one • Publishing a draft proposal and seeking stakeholder consultation • Publishing an engagement report and including a summary of stakeholder feedback in its roundtable presentations and engagement report • Providing an overview of the relationship between engagement outcomes and how they influenced APA’s proposal 	<p>Greater accountability could be achieved through:</p> <ul style="list-style-type: none"> • Greater emphasis on involving stakeholders (beyond informing and consulting) • Broader engagement in line with AER expectations, for example on tariffs and opex step changes, as referenced in <i>Better Resets</i> • Clearer links in APA’s draft plan between stakeholder feedback and APA’s proposals, such as demonstration of the greater customer benefit resulting from the engagement • APA publishing its draft proposal with sufficient lead time (i.e. six months ahead of its lodgement date) to allow stakeholders to meaningfully engage on the draft plan and have sufficient time to prepare submissions, rather than publishing it only around six weeks before it lodged its final proposal with the AER

AER Better Resets	Strengths	Concerns/opportunities to improve
<p>Engage broadly and deeply with consumers, including defining their expected level of participation and influence/</p> <p>Allow consumers to guide the development of network proposals, based on consumers’ desired outcomes</p>	<ul style="list-style-type: none"> • APA’s engagement was broad to the extent a diversity of residential, commercial and industrial consumer representatives participated in APA’s roundtables, alongside importers and retailers • APA broadly defined stakeholders expected level of participation and influence in its presentations 	<ul style="list-style-type: none"> • APA did not engage <i>directly</i> with residential or small business consumers; this may be reasonable given most gas end consumers’ limited interaction with their gas transmission network, but this is an untested assumption • While APA broadly defined stakeholders expected level of participation and influence in its presentation, stakeholders were not always clear within individual roundtables whether they were simply being informed, consulted or were being given an opportunity for greater involvement • The extent stakeholders could influence different outcomes is not apparent in the roundtable presentations beyond APA’s broad statements around its intended level of engagement in each session
<p>Use a variety of engagement methods</p>	<p>APA’s engagement methods included:</p> <ul style="list-style-type: none"> • Informing customers and the community by publishing information about its proposal, pricing, roundtable presentations and other relevant information on its website • Informing and consulting via 12 roundtables • Informing and consulting individual stakeholders on request <p>COVID-19 restrictions affected APA’s ability to engage face to face with consumers, so all engagement was online</p>	<ul style="list-style-type: none"> • Some stakeholders commented the group was large and diverse. APA’s engagement could be enhanced with breakout rooms during the roundtables

AER <i>Better Resets</i>	Strengths	Concerns/opportunities to improve
Provide evidence of consumer impacts on their regulatory proposal	<ul style="list-style-type: none"> APA’s engagement report provides evidence of APA listening to stakeholders and its responses, suggesting at a minimum APA thought about and considered stakeholder concerns 	<ul style="list-style-type: none"> Clearer links in APA’s draft plan between stakeholder feedback and APA’s proposals, such as demonstration of the greater customer benefit resulting from the engagement

Table 3-2: Overall assessment of APA’s engagement against IAP2 core values

IAP2 core value	CCP28 observations and assessment
<p>Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process</p>	<p>APA demonstrated a belief that those who are affected by a decision have a right to be involved in the decision-making process by:</p> <ul style="list-style-type: none"> • Developing and consulting on its draft engagement plan • Committing to and delivering a comprehensive engagement program with stakeholders who it identified would be affected by their proposals • Ensuring stakeholders were well informed
<p>Public participation includes the promise that the public’s contribution will influence the decision</p>	<ul style="list-style-type: none"> • We are uncertain as to the extent APA’s engagement <i>influenced</i> its proposal, as discussed above • The AER’s obligation to act in the long term interests of consumers, implies it too must demonstrate how its decision has been influenced by consumers
<p>Public participation promotes sustainable decisions by recognising and communicating the needs and interests of all participants, including decision makers</p>	<ul style="list-style-type: none"> • The extent stakeholders were able to communicate their needs, interests and concerns was constrained to some extent by the chosen engagement topics, their experience of the subject matter and availability to respond • Some consumer representatives commented that their interests were not accurately represented in APA’s proposal • Consumer representatives and other stakeholders have an opportunity to prepare submissions to the AER to formally raise any issues or concerns they have with APA’s proposal • The AER is expected to promote a “sustainable” decision, based on the long term interests of consumers

IAP2 core value	CCP28 observations and assessment
Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision	<ul style="list-style-type: none"> • APA sought to ensure a diversity of consumer and stakeholder groups participated in its engagement activities • APA’s engagement with consumers was predominantly <i>indirect</i> through consumer advocates
Public participation seeks input from participants in designing how they participate	<p>Stakeholders had limited opportunity to design how they participate:</p> <ul style="list-style-type: none"> • APA prepared a draft engagement plan and sought stakeholder comments, rather than involving stakeholders in the development of the plan; however APA adapted the plan in response to stakeholder suggestions
Public participation provides participants with the information they need to participate in a meaningful way	<ul style="list-style-type: none"> • APA provided stakeholders with information that they could understand, allowing them to have sufficient knowledge to participate in APA’s engagement activities
Public participation communicates to participants how their input affected the decision	<ul style="list-style-type: none"> • Clearer links in APA’s proposal between stakeholder feedback and APA’s proposals, such as demonstration of the greater customer benefit resulting from the engagement would help demonstrate how consumer input influenced the proposal • We expect the AER will explain how consumer interest influenced its decision on APA’s proposal

3.4 Conclusions

3.4.1 Our assessment of APA'S engagement

1. APA's consumer engagement is a significant "step-up" by from previous resets and we commend APA for its efforts and commitment, in particular:
 - For preparing engagement plan and allowing stakeholders opportunities to review the plan and suggest changes, which APA accommodated
 - Producing clear and easy to follow information
 - Publishing its engagement materials
 - Including a breadth of stakeholders ranging from residential and small business consumer representatives to direct customers and industry stakeholders
 - Engagement broadly, covering a range of issues and deeply on some issues of particular interest to stakeholders, such as hydrogen
 - Publishing a draft plan (*First look at proposal for VTS 2023-27 access arrangement*) in October 2021, and inviting stakeholder feedback
 - APA preparing and lodging with the AER an engagement report as evidence of its engagement
2. Opportunities exist for APA to enhance its future engagement activities, in particular:
 - Clarifying expectations of engagement participants on specific issues in line with the IAP spectrum of public participation
 - Dedicating more time to its engagement to:
 - Provide more opportunities for stakeholders to shape and influence proposals by involving them (rather than simply informing or consulting)
 - Ensure stakeholders have sufficient opportunities to consider issues put before them
 - Address obvious gaps in engagement such as opex step changes, and in particular APA's proposed carbon credit expenditure and tariffs
 - Ensuring differences in stakeholder perspectives are understood

3.4.2 Consumer influence on APA's proposal

Although APA reported on key concerns raised by stakeholders and provided responses to stakeholders' concerns in its *Proposal Overview*, how these responses influenced APA's specific proposals is not obvious.

- Consumers would also benefit if APA's proposal included a clear business narrative setting out APA's plans for the next five years within the context of its longer-term business plans
- APA's proposal overview is lacking detail in some key areas, such as operating expenditure and there is no evidence of consumer influence on APA's opex proposals

- *APA's RIN Response* is difficult to follow and not presented in a consumer-friendly format, so it is difficult to link consumer influence on the information in the *RIN Response*
- In both documents consumer benefits of APA's proposals are not always apparent or clearly stated
- Differences in stakeholder perspectives should be reported, including whether perspectives are consistent between stakeholder groups or whether they are divergent, and if so how APA considered these differences in its proposals

4 Long term interests of consumers and demand forecasts

Whereas in traditional resets, where demand and supply growth can generally be assumed to be ongoing, the upcoming regulatory period represents a turning point (or perhaps a point of inflection) in the future direction of both sides of the gas market. The next five years is characterised by uncertainty in demand and supply forecasts. Demand appears to be on a trajectory of long-term decline of unclear breadth and timing. At the same time, there is some uncertainty in the decline of Victoria's traditional source of gas supply (Longford), while investors' commitment to investing in infrastructure to facilitate new sources of supply remains unclear. If demand is in long-term decline, such investments could potentially look very expensive for the benefits they deliver.

In other words, the challenge of this reset differs from those that came before it. In the past, resets could singularly focus on efficient investment in assets facilitating additional sources of supply to meet growing demand. This reset requires a far more nuanced set of decisions. The focus must now be on the efficient, real-time balancing of shifting patterns of supply with declining consumption – without leaving unnecessary legacy costs for consumers.

4.1 Forecasts

APA's *Proposal Overview* explains that it relies heavily on the demand and supply forecasts prepared by AEMO. AEMO's most recent forecasts were provided in its GSOO.³⁶ APA's overview states:³⁷

“Following the release of AEMO's forecasting information, there were several announcements that, in our view, were likely to affect the forecasts. These included APA's planned expansion of the East Coast Grid, Origin's contemporaneous supply contract with APLNG, and Esso and Qenos curtailing consumption in Altona.”

As a result, APA commissioned Oakley Greenwood³⁸ to investigate factors likely to affect demand and supply in the Victorian gas market and potential implications for the VTS. APA also engaged stakeholders in discussions about the challenges of forecasting demand and supply in the years ahead (see Section 4.2).

APA's proposal applies different assumptions from those adopted by AEMO. Most prominently:

- AEMO includes the proposed Port Kembla Gas Terminal (PKGT) whereas APA does not include PKGT because it considers PKGT is not a committed project.
- AEMO's modelling sees forecast peak day shortfalls deferred to at least 2026 whereas APA's proposal suggests possible shortfalls in 2023.

The consequence of the adjustments made by APA to the assumptions applied by AEMO is to bring forward the 'crunch point' at which supply may not be sufficient to always meet demand. APA's *Proposal Overview*, *RIN Response* and presentation at the AER hosted public forum on 1 February 2022 only report this possibility at a whole-of-system level. APA has not provided information about

³⁶ AEMO, *2021 Gas Statement of Opportunities*, March 2021

³⁷ APA, *A look at plans for Victorian Transmission System. APA Victorian Transmission System 2023-2027 access arrangement proposal overview*, December 2021, p.16

³⁸ Oakley Greenwood, *Issues Affecting Demand and Supply for Gas on the Victorian Transmission System*, APA, October 2021

where such shortfalls are likely to emerge, who it may affect, for how long and with what probability. At the public forum, APA summed-up this risk as “customers having cold showers on the coldest days of the year.”

We are not in a position to engage in the duelling over modelling assumptions. We must leave it to the experts to identify the most reasonable assumptions about future demand, supply and system capacity. However, we note AEMO is scheduled to release an update GSOO in March 2022. The timing of this latest modelling is less than ideal, but it is the reality with which all the parties must deal.

We urge APA and the AER to assess urgently and openly the latest forecasts from AEMO when they are released and, wherever possible, take them into account before the draft decision.

4.2 APA’s engagement on forecasts

We acknowledge APA’s efforts to engage stakeholders in discussions about supply and demand forecasts. We understand Oakley Greenwood provided regular updates and sought feedback during stakeholder roundtables.

To some extent, however, we are surprised by the limited nature of those discussions. For the main part, they seemed to be about inputs to the modelling rather than dealing with the suggested consequences highlighted by the modelling. This approach invited debates about which assumptions produced the most desirable outcome for stakeholders. For example, the overview paper reports:³⁹

“Consumer groups were of the view that APA VTS should adopt AEMO forecasts which included the PKGT providing gas into Victoria. Consumer groups considered that AEMO forecasts were likely to be the most reliable in the market. The underlying concern by consumer groups was that excluding PKGT increased the likelihood of the need for augmentation of the South West Pipeline. And in the view of consumer groups, there was potential for customers to bear the risk of potential stranding of South West Pipeline assets, if demand for gas fell.”

To be clear, we support the concerns raised by consumer groups about investing in assets that may soon become redundant – but that is a separate concern for APA to explore. It should not be bundled into APA’s stakeholder engagement on appropriate modelling assumptions.

As noted in the opening paragraphs of this section, this reset differs from past resets. The predominant concern is no longer promoting efficient investment to facilitate supply that meets steadily growing demand. Those days are over for the foreseeable future, and maybe forever. This reset and future resets can no longer be limited to modelling demand simply for the purpose of identifying the cost of satisfying that demand.

A more complete approach to engaging stakeholders on forecasts of supply and demand would have included an exploration of their tolerances to different outcomes – in the words of APA’s

³⁹ Ibid, p.17

representatives at the public forum, customers’ tolerance for the possibility of “cold showers on the coldest days of the year” (and the risk of disruptions to supply for business and industrial users).

For the next few decades, modelling needs to be used to identify:

- the risks of supply shortfalls
- the options to mitigate those shortfalls, and
- the community’s willingness to pay for those mitigation strategies and/or bear any residual risks of supply shortfalls.

Investments and regulatory decisions concerning electricity networks are informed by the AER’s Value of Customer Reliability measure. We question whether a similar device would assist in the regulation of investment expenditures in declining gas networks – though we recognise that the many uncertainties surrounding the future of gas may require a more flexible approach.

4.3 Who is responsible for dealing with the transition?

Stakeholders, AEMO and APA’s consultants (Oakley Greenwood) raised the potential for demand management to defer or avoid significant investment expenditure.⁴⁰ AEMO has also referred to the potential for demand management to support “minimal investment regret”.⁴¹ In the electricity market, new mechanisms have been, and continue to be, implemented to facilitate demand-side participation.

All the above, invites the question:

Can demand side mechanisms be used to address the risk of intermittent shortfalls in supply over the short-term?

APA’s *RIN Response* openly acknowledges this opportunity:⁴²

“There is clearly an opportunity to investigate demand side options in assessing the need for augmentation capital expenditure.”

Having made this observation, APA continues:⁴³

“AEMO is responsible for managing the gas supply and demand balance over the course of the day.”

“APA VTS does not have a customer relationship with users under which it can ask users to curtail demand, nor a mechanism under which it can report that demand response to the [Declared Wholesale Gas Market].”

“As a demand response option is not open to APA VTS, it is left with the augmentation option proposed.”

⁴⁰ Ibid, p.16

⁴¹ AEMO, *2021 Gas Statement of Opportunities*, March 2021, p.61

⁴² APA, *RIN Response*, 1 December 2021, p.42

⁴³ Under the market carriage model as governed by Part 6, Division 2 of the National Gas Law and Part 19 of the National Gas Rules.

In its recent information paper on *Regulating gas pipelines under uncertainty*, the AER acknowledges the challenges of regulating gas networks if they are becoming a “sunset industry”.⁴⁴ Section 5.5 of the AER’s paper discusses mechanisms to manage uncertainty while Section 6 explores a range of potential changes required in the national gas regulatory framework. The AER’s information paper does not, however, discuss opportunities for demand management at the scale required to manage the risks emerging in the Victorian gas networks.⁴⁵ Perhaps this is not surprising as it is not a change the AER can effect.

So where does this leave consumers?

It leaves them facing the prospect of funding expensive long-lived assets to deal with a *potential*, short-term and intermittent mismatch between demand and supply. Consumers are left facing this situation because it appears no-one is directly responsible for establishing demand management mechanisms to deal with potential, short-term mismatches between supply and demand.

4.3.1 Advice to the AER

- We encourage the AER to accept an updated proposal from APA and revised stakeholder submissions when the latest forecasts from AEMO are released
- The AER should require APA to work with its customers to develop a better understanding of their tolerances to possible intermittent disruptions to their gas supply
- We urge the AER to work with all relevant agencies and businesses to establish a demand management mechanism to help address short-term and intermittent mismatches between demand and supply in the Victorian gas network

⁴⁴ AER, *Regulating gas pipelines under uncertainty: Information Paper*, November 2021

⁴⁵ The only reference to demand management in the AER’s paper comes in an earlier chapter describing a Victorian energy efficiency program providing funds encouraging businesses to invest in energy efficiency and demand management technologies.

5 Capital expenditure

APA has proposed a capital expenditure program of \$352 million (\$2022) in the 2023-2027 access arrangement period. This is \$58.4 million (\$2022) or 20% higher than the expected total capital expenditure of \$293.6 million (\$2022) for the current period.⁴⁶ It is also 35% higher than the \$259.9 million AER allowance for the current period.⁴⁷

In the same timeframe, the Regulated Asset Base (RAB) is forecast to increase by \$190 million (\$2022),⁴⁸ an increase of 16.6% over the period.

APA's proposed capex program formed a major element of the stakeholder engagement program, with Roundtables 5, 7 and 8 focussed primarily on capex issues. In addition, in response to the high levels of interest shown by stakeholders, APA prepared a Capital Program – Issues Paper in May 2021 and convened a Capital Program – Issues Workshop for stakeholders in July 2021.

The AER's *Better Resets Handbook* sets out four expectations for networks' capital expenditure programs and provides guidance on the assessment of a network business's capital expenditure proposal. In summary, the four expectations are:⁴⁹

1. Top-down testing of the total capital expenditure forecast and at the category level – not materially above current period spend
2. Evidence of prudent and efficient decision-making on key projects and programs
3. Evidence of alignment with asset and risk management standards
4. Genuine consumer engagement on capital expenditure proposals.

The following table (Table 5-1) provides an overall assessment of APA's capital expenditure proposal against the AER's *Better Resets* guidance.

Table 5-1: Overall assessment of APA capital expenditure proposal against AER expectations

AER expectation	CCP28 observations and assessment
<p>1. Top-down testing of the total capital expenditure forecast and at the category level</p> <ul style="list-style-type: none"> • Forecast capital expenditure is not materially above current period actual spend • Recurrent components of forecast are not materially different from current spend; if it is the reasons are provided 	<ul style="list-style-type: none"> • Forecast capital expenditure is materially above current period actual spend (20%) • Capital expenditure is predominately made up of large non-recurrent projects e.g. South West Pipeline and Western Outer Ring Main projects • A capital efficiency sharing scheme is not in place • Repex forecasts are materially different from current spend. Business cases are provided. • There is no AER repex model for gas network businesses

⁴⁶ APA, *Proposal Overview*, 1 December 2021, p. 23

⁴⁷ APA, *RIN Response*, p.29

⁴⁸ APA, *Presentation – VTS Access Arrangement Public Forum*, 1 February 2022, p. 25

⁴⁹ AER, *Better Resets Handbook*, December 2021, pp. 20-22

AER expectation	CCP28 observations and assessment
<p>2. Evidence of prudent and efficient decision-making on key projects and programs</p> <ul style="list-style-type: none"> • Evidence of the need • Quantitative cost benefit analysis • Evidence of fully accounted for trade-offs between capital expenditure and operating expenditure 	<ul style="list-style-type: none"> • Business cases are provided for the majority of network capex expenditures • Observations on specific business cases are provided in the following sections
<p>3. Evidence of alignment with asset and risk management standards</p> <ul style="list-style-type: none"> • Consistent with standards such as ISO 55000 and ISO 31000 	<ul style="list-style-type: none"> • APA states that their risk management system aligns with ISO 31000⁵⁰ • We are uncertain whether APA’s asset management framework is consistent with ISO 55000
<p>4. Genuine consumer engagement on capital expenditure proposals.</p> <ul style="list-style-type: none"> • Should include discussion on regulatory asset base and long-term price outcomes • Other options available 	<ul style="list-style-type: none"> • Capital expenditure proposals were discussed in detail at roundtable sessions, however the engagement was primarily at the inform and consult levels of the IAP2 spectrum. RAB and price outcomes were not generally discussed • Responding to stakeholder interest, APA prepared a Capital Program – Issues Paper in May 2021, and convened a Capital Program – Issues Workshop for stakeholders in July 2021 • Observations on consumer engagement for individual capital expenditure proposals are provided in the following sections

We conclude that while the AER’s statement of expectations on capital expenditure provide a useful starting point, its relevance for assessing capital expenditure proposals for gas transmission businesses is limited.

⁵⁰ APA VTS, *Access Arrangement 2023-27 - Asset Performance & Lifecycle Plan*, December 2021

5.1 Overall perspective

CCP28, like other stakeholders, has concerns regarding the quantum of APA’s proposed capex program and the forecast growth in the RAB. This aspect of APA’s proposal appears to be inconsistent in an environment where overall demand on the gas network is falling, and the business is proposing to shorten asset lives to mitigate the risk that the VTS assets will not be in service long enough to recover their value over what was originally set as their life. Major capital investments at this time will be exposed to significant asset stranding risk, leaving customers exposed to uncertain costs. Section 7 of this Advice discusses asset stranding risk and risks to customers in more detail.

APA reported that this was a key theme that emerged from Roundtable discussions i.e.

“Key theme emerging is whether its appropriate to invest using long lived assets for what may be a short term supply issue.”⁵¹

5.2 Expansion of the South West Pipeline

5.2.1 APA’s proposal

APA is proposing to invest \$97.2 million (\$2022) to expand the South West Pipeline (SWP) to allow more gas from Lochard’s Underground Gas Storage facility to be injected into the VTS during winter to reduce the risk of supply shortfall in the VTS during winter in the short term.⁵²

While proposing this investment for inclusion in its 2023-27 capital expenditure program, APA acknowledges:

- “1. It is not clear that there will be an ongoing role for the SWP expansion in the context of the Net Zero 2050 horizon, and
2. With mooted demand reductions, the SWP expansion investment may become exposed to the capital redundancy provisions of Rule 85 of the National Gas Rules.”⁵³

To address the risks inherent in the proposed SWP expansion investment i.e. the risk of assets becoming redundant before the end of their economic life or ‘asset stranding’, APA is proposing:⁵⁴

- “1. a maximum 30-year asset life be applied to the SWP expansion investment to align with the Net Zero 2050 horizon, and
2. a Fixed Principle (Rule 99) be included in the access arrangement that the investment in SWP expansion is not subject to the Rule 85 capital redundancy provisions (this would apply on an ongoing basis).”

APA’s Business Case for the SWP expansion project⁵⁵ does not contemplate options beyond the ‘do nothing’ option, or various network upgrades. Demand management options for dealing with a short term supply shortfall are not considered. The Business Case also notes that if the recommended

⁵¹ APA, *VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 9, – Follow up from Roundtable 8*, p. 5

⁵² APA, *Proposal Overview*, 1 December 2021, p. 31

⁵³ Ibid, p. 32

⁵⁴ Ibid

⁵⁵ APA, *VTS - Access Arrangement 2023-27 - Business Case 601 - SWP Expansion 570 TJ*, December 2021

network upgrade is approved, there would still be a risk of shortfall during winter peak demand from 2023, as part of the project can only be delivered by winter 2024 at earliest.⁵⁶

5.2.2 Stakeholder perspectives

Roundtable participants consistently raised concerns regarding the prospect of asset stranding, particularly in relation to the SWP expansion investment proposal. Stakeholder views reported by APA include:

“What happens if new capex gets stranded – who pays for it?”⁵⁷

“Why can't the FSRU⁵⁸ proponents pay for the additional capex required to extend the pipelines to get the gas to market”⁵⁹

“Key theme emerging is whether its appropriate to invest using long lived assets for what may be a short term supply issue”⁶⁰

“Victoria should avoid investing in assets that are at risk of stranding where possible”⁶¹

In addition, Brotherhood of St Lawrence reflected on the justification required to support investment in the SWP:

“Circumstances require a higher-than-BAU level of evidence”⁶²

Unsurprisingly, Lochard Energy, owners of the Iona Underground Gas Storage Facility, provided support for the SWP expansion proposal on behalf of “a number of participants in the Victorian Gas Market and users of the Victorian Transmission System (VTS)”.⁶³ We note this was in response to APA’s *First look at proposal for VTS 2023-27 access arrangement*, and assumed a project cost of \$71 million, not the \$97.2 million estimate presented in APA’s final proposal.

5.2.3 CCP28’s observations

It is clear that viability of the SWP expansion project is highly dependent on demand and supply forecasts for the Victorian gas market in the light of the Victorian Government’s emissions reduction targets and changes in community attitudes and preferences. It is also clear that there is a high degree of uncertainty surrounding demand and supply forecasts at this time. CCP28’s observations on demand and supply forecasts are discussed in section 4 of this Advice. We question whether the updated GSOO forecasts due to be published by AEMO in March 2022 will support the need for the SWP expansion. CCP28 understand that APA is forecasting a 1 in 20 risk of shortfall in peak winter demand over a couple of days. We consider that a demand management option is likely to be a far more cost-effective solution to a short term supply shortfall than a major investment in new

⁵⁶ Ibid, p. 10

⁵⁷ APA, *Roundtable 2*, p. 6

⁵⁸ Floating Storage and Regassification Unit

⁵⁹ APA, *Roundtable 3*, p. 8

⁶⁰ APA, *Roundtable 9*, p. 5

⁶¹ APA, *Roundtable 12*, p. 9

⁶² Brotherhood of St Laurence, *VTS Access Arrangement 2023-2027, APA Initial Proposal*, presentation to AER Public Forum, 1 February 2022, p. 8

⁶³ Lochard Energy, *Submission to APA re South-West Pipeline Capacity Requirements for Inclusion in the Revised VTS Access Arrangement 2023-2027*, 17 November 2021

infrastructure. We also note that even if the SWP expansion proceeds as proposed, action may still be required to address a potential peak supply shortfall in winter 2023.

Under current regulatory arrangements, and additional indemnity arrangements proposed by APA,⁶⁴ VTS customers would carry the full risk of the proposed SWP expansion investment. Indeed, major beneficiaries of the investment – APA, Lochard Energy, other existing and potential gas production facilities, stand to benefit if this proposal goes ahead without bearing any of the financial risk. Should this project proceed, we urge APA and the AER to consider more appropriate cost and risk sharing arrangements. At the very least, the SWP expansion should be treated under speculative capex arrangements until the need is proven.

With the high degree of uncertainty facing Victorian gas customers, investors and regulators as a result of the energy transition and emissions reduction initiatives, CCP28 does not support providing an exemption from capital redundancy provisions in perpetuity.

5.2.4 Advice to the AER

Re-iterating our advice from Section 4:

- **The CCP urges the AER to work with all relevant authorities and businesses to establish a demand management mechanism to help address short-term and intermittent mismatches between demand and supply in the Victorian gas network.**
- **When assessing APA’s proposal for the SWP Expansion and its request for application of the Fixed Principle to this capex, the AER should openly consider how granting the Fixed Principle would alter the risk profile of this investment and how that should be reflected in the allowed return on capital for this capex**

In addition, if this project is to proceed:

- **We urge APA and the AER to consider more appropriate cost and risk sharing arrangements, including the possibility of capital contributions**
- **Any regulated expenditure on the SWP expansion should be treated under speculative capex arrangements until the need is proven**

5.3 Western Outer Ring Main (WORM)

5.3.1 APA’s proposal

In the AER’s 2017 Final Decision on the 2018-22 access arrangement for VTS, a total of \$126.7 million (\$2017) was included in the VTS capital program to undertake the WORM project.⁶⁵ In 2019, the WORM project was delayed due to a determination by the Victorian Minister for Planning that an Environmental Effects Statement was required. Work on the WORM has now resumed, however the estimated overall project cost has increased significantly to \$184.5 million (\$2022). Of this total,

⁶⁴ Application of a Fixed Principle Rule to ensure the SWP expansion investment is not subject to Rule 85 capital redundancy provisions

⁶⁵ APA, *Proposal Overview*, 1 December 2021, p. 33

APA forecasts that \$135.8 million (\$2022) will be spent in the current regulatory period, with \$49.0 million (\$2022) carried forward to the next period.⁶⁶

The current expected completion date for the WORM is mid 2023, however some planning approvals are outstanding

We have been advised by the AER that APA has formally sought application of a Fixed Principle to exempt the investment in the WORM from capital redundancy provisions, similar to that sought for the SWP expansion. For the WORM, however, the application is to extend the exemption to expenditure that has already been undertaken on the WORM, and expenditure that is expected to be undertaken in 2022.

5.3.2 Stakeholder perspectives

APA reports that:

“Concerns were raised about whether it could potentially face a stranding risk in the future considering changes in energy policy”⁶⁷

Comments made related to the SWP expansion proposal (Section 5.2.2) are also relevant to the WORM proposal.

5.3.3 CCP28’s observations

Despite an increase in project costs of around 45%, we are surprised that there does not appear to be an update to the business case that was prepared for this project in April 2017.⁶⁸ We question whether the original project is still justified at this level of expenditure, whether the need remains given the significant delays experienced since the project was initially approved, and whether other lower cost, feasible options should have been examined to deliver the most cost-effective solution for customers.

We question whether the updated GSOO 2022 forecasts will reflect an ongoing need for the WORM. As with the SWP expansion project, there is a potential risk that the WORM will become redundant under the Victorian Government’s Net Zero 2050 ambitions, with an expectation that Victorian consumers will continue to pay for it until 2050.

CCP28 does not support the complete transfer of risk for the WORM onto consumers by providing an exemption from capital redundancy provisions, particularly for current period expenditure.

Providing an exemption would pre-empt the possibility the assets could be repurposed in the future.

⁶⁶ APA, *First look at proposal for VTS 2023-27 access arrangement*, 15 October 2021, p. 17

⁶⁷ APA, *Proposal Overview*, 1 December 2021, p. 33

⁶⁸ APA, *Western Outer Ring Main (WORM) Project, VTS - Access Arrangement 2023-27 - Business Case 506*, April 2017

5.3.4 Advice to the AER

- When assessing APA’s proposal for the WORM and its request for application of the Fixed Principle to this capex, the AER should openly consider how granting the Fixed Principle would alter the risk profile of this investment and how that should be reflected in the allowed return on capital for this capex
- The AER should require APA to provide a full re-assessment of the business case for the WORM in light of the changed circumstances since 2017
- Any regulated expenditure on the WORM should be treated under speculative capex arrangements until the need is proven

5.4 Hydrogen safety and integrity assessment

In August 2021, Energy Ministers agreed there is a need to reform the national gas regulatory framework to bring hydrogen blends, biomethane and other renewable gases within its scope. A work program has been established involving jurisdictional officials, the AEMC and AEMO. Draft legislative amendments are expected to be presented to Energy Ministers for agreement in mid 2022, with consultation on proposed initial Rules, Procedures and other subordinate instruments in late 2022.⁶⁹ APA contend that this will place an obligation on the gas pipelines to accept hydrogen blends in the gas stream.⁷⁰

APA has proposed to undertake an assessment of its network to assess the integrity impacts and suitability for hydrogen blending up to 10% by volume. The cost estimate for this project is \$37.9 million (\$2022).⁷¹ Bill impacts of the proposed program were presented at Roundtable 12.⁷²

APA has provided a business case in support of this proposal.⁷³

5.4.1 Stakeholder perspectives

APA reports that:

“Some stakeholders considered there was merit in an assessment being undertaken but there were concerns about the cost and who should fund such an assessment. Others did not support customers funding the study.”⁷⁴

All stakeholders interviewed by CCP28 expressed the view that as this is an investment in APA’s future business model, customers should not be required to fund the investment,

⁶⁹ Australian Government, Department of Industry, Science, Energy and Resources, *Extending the national gas regulatory framework to hydrogen blends and renewable gases*, 19 October 2021 energy.gov.au

⁷⁰ APA, *Proposal Overview*, 1 December 2021, p. 34

⁷¹ *Ibid*, p. 37

⁷² APA, *Roundtable 12*, p.13

⁷³ APA, *APA VTS - Access Arrangement 2023-27 - Business Case 200 - Hydrogen Safety and Integrity*, December 2021

⁷⁴ *Ibid*, p. 34

In its submission on APA's *First look at proposal for the VTS Access Arrangement for the period 2023-2027*, AEMO supported the proposed assessment of hydrogen compatibility for the VTS, however was silent on who should fund the study.⁷⁵

5.4.2 CCP28's observations

CCP28 observes that there is no current obligation on the VTS network to accept hydrogen blends, biomethane or other renewable gases. Determinations by the jurisdictional officers, AEMC and AEMO will not be known until the end of 2022. The timeframes for action by gas networks as a result of these determinations are yet unknown.

While there may be merit in an early assessment, consistent with the view expressed by stakeholders, we are not clear why consumers should fund this investment in APA's future. We note that similar studies on the Dampier Bunbury Pipeline were funded by the West Australian Government, not West Australian gas consumers. CCP28 is of the view that this work should be funded by parties other than Victorian gas consumers. Potential candidates include APA, the Victorian Government and ARENA.

CCP28 is not aware of a 'whole of system' approach to hydrogen-readiness testing of the interconnected east coast gas network. We suggest that it is incumbent on gas industry participants including APA to plan, fund and execute a coordinated, systematic, 'whole of system' approach to testing hydrogen readiness for the entire east coast gas network to harness economies of scale and to exploit opportunities for sharing findings across the sector. The plan should assess the probability of different assets being used to transport hydrogen.

5.4.3 Advice to the AER

- **Determine whether APA has a regulatory obligation to undertake a hydrogen safety and integrity assessment on its regulated assets**
 - **If so, assess whether APA's project estimates, methodology and assumptions are reasonable**
- **Assess the necessary timing for such an assessment, and determine whether it is required within the next regulatory period**
- **Consider whether this project should be funded by Victorian gas consumers as part of APA's regulated revenue stream**
 - **Current law and rules may not support funding of this project by Victorian gas consumers**

5.5 Security of Critical Infrastructure

5.5.1 APA's proposal

APA's VTS assets fall within the scope of the Security of Critical Infrastructure Act (2018) which will be superseded by the Security Legislation Amendment (Critical Infrastructure) Bill (SoCI Amendment

⁷⁵ Australian Energy Market Operator, *Feedback for proposal for VTS 2023-27 Access Arrangement*, Letter to Scott Young Manager Regulatory APA Group, 23 November 2021

Bill) 2020 proposed to pass in two separate bills to address urgent elements of the reform as soon as possible.⁷⁶ The first component of this legislation was passed in November 2021, and the reforms are expected to be passed in their entirety by mid-2022.

APA engaged EY to conduct a gap analysis of APA’s capabilities to meet the SoCI obligations. EY found that APA requires a range of capabilities to meet new compliance requirements in the following domains:

- Governance
- Personnel
- Physical security
- Cyber security
- Supply chain⁷⁷

The forecast expenditure required to complete the proposed SoCI program in the 2023-27 period is \$15.0 million (\$2022) in capital costs and \$6.6 million (\$2022) in operating costs for the 5-year period⁷⁸. This includes expenditure on overall program elements, cyber security and physical security. CCP28 note that while physical security costs are site-specific and allocated to individual VTS sites, the other elements of the program costs are allocated to APA businesses according to the cost allocation methodology. It is estimated that \$3.7 million (\$2022) will be spent on the SoCI program in 2022.⁷⁹

We understand APA has submitted a confidential business case to support this project.

5.5.2 Stakeholder perspectives

SoCI obligations were not presented to stakeholders until Roundtable 10 in October 2021.⁸⁰

APA reports that:

“Stakeholders sought assurance that APA’s response to meeting SoCI obligations was reasonable and proportionate. There was a concern that the quantum of costs to be incurred by APA VTS and stakeholders wanted to understand principles for allocating the costs between APA’s regulated and unregulated pipelines and that the allocation is a fair, reasonable, and transparent.”⁸¹

In its submission on the *First look at proposal for VTS 2023-27 access arrangement*, AEMO commented:

“AEMO agrees with the feedback that there should be greater clarity on principles for allocating the costs between APA’s regulated and unregulated pipelines and to ensure that the allocation is fair and reasonable.”⁸²

⁷⁶ APA, *Proposal Overview*, 1 December 2021, p. 38

⁷⁷ Ibid, p. 39

⁷⁸ Ibid, pp. 40 and 41

⁷⁹ APA, *RIN Response*, p.28

⁸⁰ APA, *VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 10*, p. 10

⁸¹ APA, *Proposal Overview*, 1 December 2021, p. 39

⁸² Australian Energy Market Operator, *Feedback for proposal for VTS 2023-27 Access Arrangement*, Letter to Scott Young Manager Regulatory APA Group, 23 November 2021, p. 5

5.5.3 CCP28's observations

CCP28 recognise that APA's pipeline infrastructure is subject to the national Critical Infrastructure legislation and acknowledge the importance of hardening Australia's critical infrastructure against security threats of all types.

However, CCP28 do not have the technical capability to review either the 'gap' report provided by EY, or the options, costings and timing for this project that were developed by APA.

We have not viewed the confidential business case provided by APA and expect the AER and its consultants to critically examine the details of this proposal.

5.5.4 Advice to the AER

In particular, we advise the AER to:

- Determine whether the work proposed is responding to a genuine legislative obligation
- Determine whether EY have appropriately identified gaps in APA's security posture
- Confirm that the most cost-effective options have been proposed for closing any identified security gaps
- Confirm that the proposed cost allocations between APA's businesses are fair and reasonable

5.6 Information Technology

5.6.1 AAP's proposal

APA advises its Information Technology organisation covers the following core functions:

- **Enterprise Program Management Office (EPMO)**, responsible for ensuring projects deliver optimum business value as early as possible and ensuring a continuous improvement focus
- **Operational Technology**, to ensure APA has appropriate, resilient, and high performing real time systems and engineering applications, data, and solutions
- **Information & Technology**, partners with business units to deliver end to end I&T solutions.⁸³

⁸³ APA, *Proposal Overview*, 1 December 2021, p. 42

Proposed IT capital expenditure for each of these functions is shown in the following table:⁸⁴

Figure 5-1: APA’s proposed IT capex by IT function

Information Technology portfolio	Unit	2023	2024	2025	2026	2027	2023-2027
EPMO	\$2022	2.1	2.1	1.2	0.4	0.4	6.2
Operational Technology	\$2022	0.8	0.8	0.6	0.7	0.7	3.5
Information Technology	\$2022	0.1	0.0	0.0	0.1	-	0.2
Total	\$2022	3.0	2.9	1.9	1.2	1.1	9.9

Proposed IT opex for each function is shown in the following table:⁸⁵

Figure 5-2: APA’s proposed IT opex by IT function

Information Technology portfolio	Unit	2023	2024	2025	2026	2027	2023-2027
EPMO	\$2022	2.4	3.0	1.7	1.1	1.1	9.2
Operational Technology	\$2022	0.0	0.0	0.1	0.1	0.1	0.2
Information Technology	\$2022	-	-	-	-	-	-
Total	\$2022	2.4	3.0	1.7	1.1	1.1	9.4

APA suggest that the key drivers impacting its Information Technology Portfolio are⁸⁶:

- Replacement of obsolete legacy systems
- Migration to cloud-based services
- Routine upgrades and maintenance

We understand that for enterprise-wide system costs, APA VTS is allocated an 8.2% share of system costs.

5.6.2 Stakeholder perspectives

There was little discussion regarding the detail of APA’s proposed IT program at Roundtable sessions. APA reports that⁸⁷:

“Feedback we received from the stakeholder engagement group, was to ensure that the IT program was proportionate and efficient. The stakeholders sought assurance that proposed expenditure was efficient and that the APA-enterprise wide costs (shared costs) were being allocated to VTS in a fair, reasonable and transparent manner”

CCP28’s observations

It appears that APA’s Information Technology portfolio is a ‘work in progress’. While APA’s ‘*Information Paper. Information Technology*’ is presented in support of APA’s IT expenditure

⁸⁴ APA, *Proposal Overview*, 1 December 2021, p. 44

⁸⁵ Ibid

⁸⁶ Ibid, p. 43

⁸⁷ Ibid, p. 42

proposals, it does not provide a sufficient basis on which to assess whether the proposed expenditure is prudent and efficient.

We note that more work is required to finalise APA's Information Technology proposal, including:

- On page 10 of APA's *Information Paper. Information Technology*:⁸⁸
"EPMO is managing the upgrades of four programs - Grid customer services, Asset Management, Back Office and Field Mobility. Business solutions for the programs are currently being prepared but are not ready in time for the VTS proposal. We expect to have better information in early 2022."
- On page 13:⁸⁹
"Energy Components (EC) Grid Solutions is a proposed replacement of APA Grid. At this stage we are in the early phases of scoping this piece of work..... The numbers presented here are our best estimates at this time and we intend to have a preliminary business case in early 2022"
- On page 27:⁹⁰
"The forecast operating and capital expenditure is based on best information we have to date about the scope of information, communication and operational business solutions. The scope of the programs is subject to ongoing assessment and a better understanding of APA requirements will be available in early 2022."

We contend that good industry practice would require APA to provide an overall IT strategic plan and roadmap, as well as business cases for all of the proposed projects comprising the plan. We are not aware of the existence of any of these documents.

5.6.3 Advice to the AER

The AER should:

- **Seek an IT strategic plan and roadmap from APA, setting out the future directions for its IT portfolio for the next 5 years, the relationships between the various components of the program, timings, costs and risks, as well as identifying whether the projects are shared across all of the APA businesses or stand alone.**
- **Require each project proposed within the plan to be justified by a costed business case.**

⁸⁸ APA, *Information Paper. Information Technology, Victorian Transmission System 2023-2027 access arrangement proposal*, 1 December, 2021, p. 10

⁸⁹ *Ibid*, p. 13

⁹⁰ *Ibid*, p. 27

6 Operating expenditure

APA’s operating expenditure (opex) proposal is contained in less than two pages in its *Proposal Overview*, with some further details included within its *RIN Response*. We also note from discussions with AER staff that they have sought and are awaiting further information from APA associated with its opex proposals.

From our observations, review of APA’s Roundtable presentations and our stakeholder interviews, it is evident that APA’s engagement with stakeholders on opex was limited. In Roundtable 4,⁹¹ APA introduced opex as one of its revenue proposal building blocks. Opex formed part of APA’s Roundtable 7b presentation, which as stated by APA, the purpose of that session was to “inform **and consult**” (emphasis added).⁹² However, APA’s Roundtable 7b recap presented in Roundtable 8 does not demonstrate any evidence of stakeholder feedback on any aspects of opex.⁹³

Our following comments on opex are therefore limited to our observations, against the AER’s guidance presented in the AER’s *Better Resets Handbook* and our meetings with AER subject matter specialists.

6.1 Total opex

Consistent with the AER’s preferred methodology,⁹⁴ APA has applied a top-down base-step-trend framework for forecasting opex. APA provides a brief overview of its approach and forecast opex in its *Proposal Overview*, while further details are included in its *RIN Response*.

We have prepared the following table from information provided by APA and the AER to summarise APA’s total opex in the current regulatory period, 2018-22 and its proposed total opex for 2023-27.

Figure 6-1: APA’s current and proposed opex

\$m real Dec 2022	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
AER approved ⁹⁵	28.41	28.52	28.53	29.63	29.84						144.93
Actual ⁹⁶	27.78	26.61	29.64								143.95
Estimated ⁹⁷				29.89	30.03						
APA proposed ⁹⁸						36.0	38.0	38.1	39.0	40.0	180.28

From these figures we observe:

- APA is forecasting a total operating expenditure of \$180.28m (\$2022) for the 2023 to 2027 regulatory period

⁹¹ APA, Roundtable 4, 16 March 2021

⁹² APA, *Roundtable 7b*, 16 June 2021, p. 3

⁹³ APA, *Roundtable 8*, 18 August 2021

⁹⁴ AER, *Better Resets Handbook*, p. 25

⁹⁵ Based on estimates provided by the AER to the CCP28, 31 Jan 2022

⁹⁶ Ibid

⁹⁷ Ibid

⁹⁸ APA, *Presentation – VTS Access Arrangement Public forum*, 1 February 2022, p. 25.

- This total is \$35.35m (\$2022) more than the AER approved amount for the current regulatory period, an increase of 24%
- While APA’s estimated expenditure for the current regulatory period is marginally less than AER’s approved allowance, it is estimated to marginally overspend in 2021 and 2022

6.2 Base year

6.2.1 APA’s proposal

APA’s proposed base year for its opex proposal, is 2020, being the most recent year for which actual opex was available at the time of publishing its proposal.⁹⁹ We note that APA’s actual base year expenditure of \$29.64m (\$2022) is 4% more than the amount allowed by the AER for 2020 (as shown in Figure 6-1 above).

APA is not forecasting any growth in operating expenditure from the current regulatory period (in real terms).¹⁰⁰

In line with AER’s guidance in the *Better Resets Handbook*, we have sought to establish evidence from APA’s proposal to demonstrate that 2020 is “not materially inefficient”.¹⁰¹

Significantly we note that APA underspent its opex allowance in 2018 and 2019, then overspent in 2020, with no explanation or evidence to indicate to consumers 2020 is an efficient year for the purpose of its proposal.

However, we note from discussions with APA, that its base year may change when its actual opex for 2021 is published (expected April 2021).

6.2.2 Advice to the AER

- **The AER should seek further information from APA that its chosen base year is not materially inefficient.**

6.3 Trend

6.3.1 APA’s proposal

APA is forecasting operating expenditure will remain flat in real terms from its 2020 level,¹⁰² noting the only changes will result from changes in the Consumer Price Index (CPI).¹⁰³

The AER’s *Better Resets Handbook*,¹⁰⁴ in relation to gas, expects forecast to be consistent with:

- output and productivity growth
 - output growth net of productivity growth should be no greater than [the] mid-point of the reasonable range, based on econometric analysis

⁹⁹ APA, *Proposal Overview*, 1 December 2021, p. 48.

¹⁰⁰ Ibid.

¹⁰¹ AER, *Better Resets Handbook*, p. 25

¹⁰² APA, *Proposal Overview*, 1 December 2021, p. 48

¹⁰³ APA, *RIN Response*, p.57

¹⁰⁴ AER, *Better Resets Handbook*, pp. 25-26

- adopt AEMO’s consumption and demand forecasts
- forecast growth in customer numbers consistent with the historic trend
- price growth
 - zero real non-labour price growth forecast
 - use an average of two state-specific utilities industry wage price index growth forecasts for forecasting real labour price growth, including one engaged by the AER

6.3.2 Output and productivity growth

APA is not forecasting any output growth¹⁰⁵ or productivity improvements.¹⁰⁶ APA’s *Proposal Overview* and *RIN Response* provide limited information as to how APA made these no growth forecasts.

We question why APA is not proposing any output or productivity growth for the following reasons:

1. A customer-centric organisation, should as **standard practice**, aim to improve its productivity. For example, AusNet Services in its 2021-25 Electricity Distribution Price Review was willing to compromise with the Customer Forum’s expectation that the network could improve its productivity, moving from an initial position of a 0.5% productivity improvement to 1.0%.¹⁰⁷

The AER notes in its 2021 Annual Benchmarking Report for Distribution Network Service Providers that productivity in the sector actually improved by 1.2% over 2020¹⁰⁸ while Electricity transmission productivity as measured by total factor productivity (TFP) increased by 1.7% over 2020¹⁰⁹. Notwithstanding these consumer-oriented productivity expectations and improvements relate to electricity distribution and transmission networks, and the uncertain future of gas, we believe consumers would also expect a gas transmission business to strive to improve its productivity. APA argues instead that customers and consumers benefit from “economies of scale in its operations” in a range of its corporate functions.

2. Productivity is not just a function of economies of scale. The Productivity Commission defines Productivity as, “a measure of the rate at which output of goods and services are produced per unit of input (labour, capital, raw materials, etc.)”¹¹⁰. It also notes, productivity growth is affected by many factors including, “**technological improvements**, economies of scale and scope, workforce skills, management practices, **changes in other inputs (such as capital)**, competitive pressures and the stage of the business cycle”¹¹¹ (emphasis added).
3. We note, and discussed below, APA is proposing an IT step change which should significantly modernise its IT efficiency, and it is forecasting the WORM and SWP expansion capex projects to become operational in the 2023 to 2027 regulatory period. Both these factors along with its

¹⁰⁵ APA, *RIN Response*, p.55

¹⁰⁶ APA, *RIN Response*, p.57

¹⁰⁷ AusNet Services Customer Forum, *AusNet Services EDPR Customer Forum – Final Engagement Report*, 31 January 2020, p. 12

¹⁰⁸ AER, *2021 Annual Benchmarking Report for Distribution Network Service Providers*, November 2021, p. iii, <https://www.aer.gov.au/node/79287>

¹⁰⁹ AER, *2021 Annual Benchmarking Report for Transmission Service Providers*, November 2021, p. iii, <https://www.aer.gov.au/system/files/Transmission%20-%20Report%20-%20AER.pdf>

¹¹⁰ Australian Government Productivity Commission, *What is Productivity?*, n.d., <https://www.pc.gov.au/what-is-productivity>

¹¹¹ *Ibid*

economies of scale would reasonably lead consumers to expect APA to propose productivity improvements for the next regulatory period.

6.3.3 Price growth

APA is not forecasting any price growth, including labour and non-labour operating inputs, although its forecasting increases in capital expenditure associated with the WORM (as previously discussed).

We question APA's lack of forecast price growth, particularly as in other parts of the APA business, APA has forecast "a real labour price change of approximately 0.40%".¹¹² We also note the AER expects proposals to use an average of two state-specific utility wage price index growth forecasts for forecasting real labour price growth. There is no evidence that these have been considered in APA's proposal.

6.3.4 Efficiency carryover

The AER's efficiency carryover mechanism is designed to provide service providers with an additional incentive to improve their operating expenditure efficiency and has provided the AER with supporting calculations to retain the efficiency mechanism from the current regulatory period.¹¹³ We have not had the opportunity to review APA's workbook. We assume the AER will scrutinise APA's approach to establish the reasonableness of its efficiency carryover proposal.

6.3.5 Advice to the AER

The AER should ask APA to:

- Review its proposed lack of productivity improvement aim
- Ask APA to provide supporting evidence for not forecasting any price growth

6.4 Proposed step change 1: WORM

6.4.1 APA's proposal

APA is proposing six step changes in its operating expenditure proposal. In general, we note:

- APA's *Proposal Overview* contains limited information about its opex proposal to the extent it makes no mention of its proposed step changes
- Whilst APA's *RIN Response* lists six step changes (discussed below), the detail to support these step changes is not easy to find (acknowledging that some information is confidential)
- Consistent with its limited engagement on opex overall, APA has not consulted with stakeholders in any depth on its proposed step changes
- APA's focus has been to justify its step changes from an operating perspective to the extent it has not attempted to demonstrate how consumers will benefit from its proposals

¹¹² APA, *Amadeus Reset RIN response*, 1 July 2020, p. 47, <https://www.aer.gov.au/system/files/Amadeus%20-%20Reset%20RIN%20-%20Response%20-%201%20July%202020.pdf>

¹¹³ APA, *RIN Response*, 1 December 2021, p. 86

- Most step changes are quoted in \$2021, whilst APA’s step change for security of critical infrastructure is quoted in \$2022. This inconsistency makes it difficult to assess the relative contribution of APA’s proposed step changes.

Our specific observations in relation to APA’s six proposed step changes and specific advice to the AER follows.

We discussed APA’s capex proposal for the WORM and presented our subsequent advice to the AER in relation to APA’s capex proposal for this project in Section 5.3. This project has been delayed twice, with an original expected completion date of 2019, deferred until 2021 and now expected to be completed by mid-2023. APA is expecting to complete this project in 2023¹¹⁴ and is therefore proposing an opex allowance of \$605,800 (\$2021) per year¹¹⁵ for easement patrol, inspection and maintenance.

Consistent with our advice regarding APA’s capex proposal for the WORM, i.e. the AER should require APA to provide a full re-assessment of the business case for the WORM in light of the changed circumstances since 2017, we do not support APA’s WORM opex step change

We also question this step change for several reasons:

- Given the project has already been delayed twice, what confidence can consumers have that it will come into service in the next regulatory period?
- APA has not *specifically* engaged with stakeholders on its WORM opex proposal for the 2023-2027 regulatory period

If the WORM comes into service, we also assume this would contribute to improvements in APA’s operating efficiency.

6.4.2 Advice to the AER

We advise the AER to:

- **Consider the quantum and timing of APA’s proposed WORM opex step change alongside our concerns regarding APA’s capex proposal for the WORM**
- **Establish whether APA’s proposed WORM opex step change is legitimate**
 - **Has this expenditure has been treated as a growth factor in the current regulatory determination or should be treated as such in the 2023-2027 regulatory period?**

6.5 Proposed step change 2: SWP expansion

6.5.1 APA’s proposal

We discussed APA’s capex proposal for the SWP expansion and presented our subsequent advice to the AER in relation to APA’s capex proposal for this project in Section 5.2. APA is expecting to complete this project in 2023¹¹⁶ and an expectation of it being commissioned into service in 2024

¹¹⁴ APA, *Proposal Overview*, 1 December 2021, p. 31

¹¹⁵ *Ibid*, p. 59

¹¹⁶ *Ibid*, p. 31

and is therefore proposing an opex allowance of \$562,521 (\$2021) per year¹¹⁷ for compressor operating costs from 2024.

Consistent with our advice regarding APA's SWP expansion proposal, we do not support this step change. We also note APA has not *specifically* engaged with stakeholders on its SWP expansion opex proposal

If the SWP expansion comes into service, we also assume this would contribute to improvements in APA's operating efficiency.

6.5.2 Advice to the AER

Consistent with our advice regarding APA's capex proposal for the SWP expansion, we do not support APA's SWP expansion opex step change

6.6 Proposed step change 3: Property taxes

6.6.1 APA's proposal

APA is proposing a step change of \$614,250 (\$2021) to cover an increase in Victorian State Government charges.¹¹⁸ APA explains its 2020 base year includes an accrual of \$574,800 for land taxes being the average of previous years' assessments. APA then explains, the State Revenue Office of Victoria (SRO) increased the value of APA lands that it assessed of which \$1,189,050 is attributable to APA's VTS, which is \$614,250 more than APA included in its 2020 base year opex.¹¹⁹

We have a number of concerns regarding this step change.

1. We are unclear whether these property taxes are a genuinely new regulatory obligation. We note APA describes the proportion it is seeking as a step change as an "increase" in property taxes, rather than a new tax being imposed on it by the SRO. Accordingly, we are unclear whether this is a genuine new regulatory obligation requiring a step change
2. While APA states the SRO issued a land tax assessment which "featured increases in the value of the lands assessed", and APA has subsequently determined an amount it attributes to the VTS, APA has not provided:
 - Any detail that we could readily locate as to how it calculated
 - The accrual amount of \$574,800 added to its 2020 baseline
 - The total increase of \$1,189,050 which it attributes to its VTS
 - The assumptions underpinning its calculations
 - Evidence that it is legally obliged to pay land tax and the amount stated, given there are some circumstances for which an exemption can be sought,¹²⁰ and a valuation can also be appealed

¹¹⁷ Ibid, p. 59

¹¹⁸ APA, *RIN Response*, 1 December 2021, p. 59

¹¹⁹ \$1,189,050 less \$574,800 equals \$614,250, where \$1,189,050 corresponds to the revalued proportion attributable to VTS, \$574,800 corresponds to the amount APA allowed in its 202, baseline opex. The difference is \$614,250, which it attributes to the increase.

¹²⁰ State Revenue Office Victoria, *Land tax exemptions*, n.d., <https://www.sro.vic.gov.au/landtaxexemptions#municipal>

6.6.2 Advice to the AER

The AER should:

- Seek more information from APA to establish whether APA's claimed land tax is a genuine step change
- Seek from APA evidence of the method of calculating the proposed opex, and APA's assumptions behind those calculations

6.7 Proposed step change 4: Security of critical infrastructure

6.7.1 APA's proposal

APA is proposing a step change of \$6,566,963 (\$2022) spread evenly over the 2023-27 regulatory period (\$1,313,393 per annum) to cover new regulatory obligations under the Security of Critical Infrastructure Act (2018). APA engaged EY to undertake a gap analysis and forecast its requirements to meet its obligations. Given the information is confidential, we have not reviewed the details of APA's proposal, although APA comments that EY found the scope of the new obligations to be significantly greater than APA's current obligations.

6.7.2 Advice to the AER

Our advice related to APA's opex proposal for security of infrastructure, follows our advice related to APA's capex proposal for security of infrastructure

- Is APA's methodology for assessing the step change allowance sound, including the apportionment to APA's VTS business?
- Is APA's opex proposal for security of infrastructure consistent with EY's conclusions?

6.8 Proposed step change 5: Information technology

6.8.1 APA's proposal

APA is proposing a step change of \$9,371,715 (\$2022) to upgrade its information technology to migrate its IT systems to cloud-based technology. Almost 60% of this allowance is included in APA's 2023 and 2024 opex forecast. APA claims these are "new and incremental costs".¹²¹ We also note, APA's migration of its IT from in-house to cloud-based services is captured as a shift from capex to opex for IT expenditure.¹²²

6.8.2 Advice to the AER

As per our IT capex expenditure advice, the AER should:

- Seek an IT Strategic Plan and Roadmap from APA, setting out the future directions for its IT portfolio for the next 5 years, the relationships between the various components of the

¹²¹ APA, *RIN Response*, 1 December 2021, p. 62

¹²² *Ibid*, p. 73

program, timings, costs and risks, as well as identifying whether the projects are shared across all of the APA businesses or stand alone

- Require each project proposed within the plan to be justified by a costed business case
- Clarify the principles for assessing the reasonableness of APA’s proposed migration of IT expenditure from capex to opex
- The soundness of APA’s methodology for assessing its proposed IT opex step change allowance

6.9 Proposed step change 6: Victoria Net Zero 2050 – carbon offsets

6.9.1 APA’s proposal

APA is proposing a carbon offset step charge of \$1,505,253 (\$2021) gradually increasing from \$266,271 (\$2021) in 2023 to \$350,141 (\$2021) in 2027. APA is proposing this step change “in compliance with Victoria’s Net Zero 2050 interim targets”.¹²³ However, in our January 2022 discussions with APA, it acknowledged it has no formal requirement to purchase carbon offsets but considers it *should* participate in the Victorian Government’s scheme.

We note APA has not engaged with stakeholders on this step change, and we consider it reasonable and meaningful for consumers to have a view on whether they are willing to support APA’s carbon offset proposal, particularly as APA has no regulatory obligation to contribute.

APA provides details of its rationale and calculations in its *RIN Response*.¹²⁴ APA has extrapolated its expected performance using a straight-line projection from its current progress towards the 2050 target, aiming to be 50% below 2005 levels by 2030. It has then considered its current carbon dioxide emissions and allowed for the WORM to come into service. APA then extrapolates the proportion of the target that is expected to relate to its VTS and uses the 26 October 2021 spot price for Australian Carbon Credit Units as its reference price for determining carbon offset step charge of \$1,505,253 (\$2021).

Although we broadly follow APA’s methodology, APA’s proposal and its methodology and assumptions raise a number of questions:

- In principle do consumers support funding APA to reduce its carbon emissions?
 - To what extent do consumers support this step change?
 - How much are they willing to pay?
 - Has APA considered other options to reduce carbon emissions?
- Regardless, is APA’s methodology behind its calculations reasonable?
- What evidence is there that APA’s figures are reasonable?

¹²³ Ibid, p. 63

¹²⁴ Ibid, p. 61

- Is the 26 October 2021 spot price for Australian Carbon Credit Units a *representative* or reasonable price to use given APA applies this price as a constant over the regulatory period?
- Is it reasonable to include the WORM in the calculations, given APA expects it to become operational in mid-2023, but there is no guarantee
- Given APA is not legally obliged to contribute to the Victorian Government’s Net Zero 2050 interim targets, how can consumers be confident APA will use this proposed opex allowance for its intended purpose?

6.9.2 Advice to the AER

- **We do not support this step change, given APA has not undertaken any consumer acceptance testing of APA’s proposal**
- **Subject to consumer acceptance testing of APA’s proposal, the AER needs to be satisfied that APA’s methodology and assumptions for calculating its proposed allowance are reasonable**

6.10 Other opex allowances

With the time and resources available, we have not examined APA’s proposals for other opex allowances.

7 Network life shortening/accelerated depreciation

We contend accelerated depreciation is not provided to regulated networks ‘as of right’ under the regulatory framework. This section outlines a range of factors APA needs to address, and the AER should consider, before a regulatory decision is made in response to the proposal for accelerated depreciation from APA.

7.1 Introduction: regulating gas pipelines under uncertainty

The regulatory revenue model is a cashflow model. Its objective is to provide regulated networks with sufficient cash revenue to meet their efficient expenditures. The model developed and applied by the AER is largely premised on a steady-state system of service provision – namely:

- demand grows incrementally and reliably
- preferences are broadly stable
- technology evolves gradually and not disruptively, and
- productivity gains are gradually revealed by service providers.

Where these premises fail, they generally do so within an ongoing model of service provision. For example, if technological breakthroughs see assets needing replacement before the end of their technical lives, those assets are replaced by assets that lead to the continuation of the service (possibly in an improved form). In any event, these new technologies do not threaten the ongoing existence of the regulated service provider.

The future now facing gas networks does not accord with the premises on which the regulatory framework is predicated. It is now no longer just a matter of individual assets becoming stranded. APA now appears to be suggesting its entire network could become redundant.

The AER began a discussion about the challenges this poses for networks, consumers and the regulatory framework in its November 2021 paper, *Regulating gas pipelines under uncertainty: Information paper*.¹²⁵

Unfortunately, that paper was not part of a broader review or stakeholder consultation seeking to identify the principles and rules about when, how or whether the regulatory framework provides network owners with a consumer-funded indemnity against network redundancy. It simply concluded by inviting interested parties to participate in the upcoming Victorian gas transmission and distribution resets. This means some profound regulatory challenges need to be addressed in the ‘heat’ of the reset process with little clarity about how networks, consumers or the AER should treat these challenges. Moreover, how these challenges are addressed within the context of these individual resets will create precedents that may have consequences for consumers elsewhere, and for decades to come.

¹²⁵ AER, *Regulating gas pipelines under uncertainty: Information paper*, November 2021

Nonetheless, we accept “we are where we are” and some fundamental and broad-ranging regulatory principles will need to be resolved during the access arrangement reviews for Victorian gas networks.

For this reason, the following section addresses APA’s proposal within a broader discussion about the regulatory treatment of stranded assets.

7.2 Conflicting views about the purpose of the regulatory framework

As already noted, economic regulation seeks to provide sufficient cashflows to keep regulated businesses whole – that is, able to meet their expenses while providing an efficient return on invested funds. This is a mechanical definition. It provides little insight into the philosophical underpinning of the regulatory framework. More insightful descriptions can be found across various recent papers from the AER.

The Regulating gas pipelines under uncertainty information paper observes:¹²⁶

“Economic regulation is designed to provide a functional proxy for competitive markets. The regulatory settings are designed to provide appropriate incentives for regulated businesses to invest by preserving the expectation of recovering the efficient costs of their investments, including a normal return.”

A similar view was expressed in a discussion paper recently released as part of the AER’s review into its incentive schemes. For example:¹²⁷

“We seek to incentivise network service providers to run an efficient business so that customers pay no more than necessary for services that they value the most. The framework is designed to mimic the outcomes from effectively competitive markets.”

Clearly, the notion of the regulatory framework mimicking or proxying the disciplines of a competitive market is predominant. However, there is not a great deal of discussion on the nature of the disciplines being mimicked. Perhaps this is because, all things being equal, these disciplines are self-evident. Presumably these market disciplines include:

- discovering and satisfying consumer preferences
- optimising the balance between price and quality
- driving costs to their efficient level
- stimulating capital formation and loss, e.g. when assets become redundant

These characteristics coexist and are inseparable in a competitive market – with no one characteristic having priority over or below the others. If that is the case, why would it be different in a regulatory framework seeking to mimic the discipline imposed by competitive markets?

Nonetheless, the AER has previously observed:¹²⁸

¹²⁶ Ibid, p. 28

¹²⁷ Ibid, p. 7

¹²⁸ AER, *Draft decision. AusNet Services transmission determination 2017–18 to 2021–22. Attachment 5 – Regulatory depreciation*, July 2016, p. 23

“The EUCV’s [Energy Users’ Coalition of Victoria] submission to our Issues paper did not support such compensation on the basis that in competitive markets businesses bear the cost of any stranded assets. However, we do not consider the NER [National Energy Rules] allows such uncompensated adjustments to the RAB [Regulated Asset Base]. We agree with the EUCV’s statement that the regulatory framework allows service providers certain benefits that may not be available in competitive markets such as being allowed a return on assets that may only be partially utilised. However, such benefits are a trade-off so that service providers are willing to make large sunk investments in the first place. That is, such benefits are part of the ‘regulatory compact’ as some economists have labelled it.”

When read in their totality, these three observations would appear to suggest the purpose of the regulatory framework is to mimic competitive disciplines but, according to this last observation, those disciplines are curtailed by a consumer-funded indemnity (against stranding risk). The claimed benefit for consumers from extending this indemnity is the willingness of investors to make further large sunk investments in the network.

This claimed benefit may have had merit when the four premises identified above remained intact, however, this is no longer the case. The ongoing need for large sunk investments in the gas network will, all things being equal, diminish from here on.¹²⁹ Therefore, the consumer benefit of continuing to fund the indemnity which the AER has described as being part of the ‘regulatory compact’ is far less clear.

Considering emerging realities about the future of gas, the claimed benefit of an ongoing indemnity against asset stranding reflects what is known as a ‘sunk cost fallacy’. Investors will decide whether to invest in new assets based on the returns those new assets are expected to deliver. That decision should not be affected by the returns earned on past sunk investments.

Beyond these economic concerns, we also question whether the existence of a ‘regulatory compact’ is necessarily true in all the circumstances. For example, do the National Gas Law and Rules provide an absolute indemnity, or do they merely provide the opportunity for the regulator to consider the circumstances and consequences at each point in time when deciding whether a full or partial indemnity should be extended to a network?

The extract on the previous page appears to suggest the AER considers the indemnity to be absolute. In contrast, the AER’s more recent *Regulating gas pipelines under uncertainty* information paper appears to suggest the scope of the indemnity remains an open question.¹³⁰

“In our view, the NGL [National Gas Laws] guiding revenue and pricing principle that regulated businesses should be provided with a reasonable opportunity to recover at least the efficient costs they incurred in providing services does not mean gas consumers must guarantee that the regulated businesses recover their costs under any circumstances.”

“We must carefully consider what regulatory actions may be appropriate to promote the efficient investment in, operation and use of the gas networks while maintaining reasonably affordable and predictable gas access prices, both of which are in the long-term interests of gas consumers.”

¹²⁹ Our response to APA’s specific capital proposals was detailed in Section 5

¹³⁰ AER, *Regulating gas pipelines under uncertainty: Information paper*, November 2021, p.29

We are concerned about the asymmetry consumers face in seeking to ensure the regulator correctly interprets its legislative mandate in this matter. Whereas networks can readily muster the resources to challenge any interpretation adopted by the AER, consumers have no equivalent capacity. They are totally reliant on the AER to correctly interpret and apply its authority. We therefore urge the AER to seek and share independent, expert advice on the standing of the indemnity against stranded assets that APA is now seeking to exercise.

7.2.1 Advice to the AER

- **The AER should obtain independent expert advice clarifying the following matters ahead of deciding on the proposal from APA for network life shortening and accelerated depreciation:**
- **Does the so-called “regulatory compact” have a legal foundation? If so, is it unconditional?**
- **Where the National Gas Law contemplates the redundancy of assets, must the assets already be redundant? Do the relevant provisions extend to the prospective redundancy of assets? Do they extend to uncertain or speculative claims of redundancy?¹³¹**
- **Where the National Gas Law contemplates asset redundancy, do those provisions ipso facto extend to the simultaneous redundancy of an entire network of assets?**
- **Where the National Gas Law and rules provide for regulatory judgement in relation to the treatment of redundant assets, how do the relevant provisions inform and/or constrain the exercise of the AER’s judgement? For example:**
- **the National Gas Objective which refers to promoting efficiency in investment¹³²**
 - i. **clause 85(3) of the National Gas Rules which refers to *sharing* costs when demand for pipeline services is declining, and**
 - ii. **clause 85(4) which refers to the effect of uncertainty on users**

7.3 There can be no accelerated depreciation without a reasonable view of the future

In applying for an accelerated depreciation allowance (or asset life shortening), APA has failed to provide any specific detail about the expected future of its network and, indeed, its business in Victoria. We consider that at a minimum, APA must answer the following questions to the best of its ability given its existing expectations about the future.

- Does APA intend operating gas assets in Victoria in the future (post-2050)?
- If so, which legacy assets will be part of that future network?
- Which assets are decommissioned and when?

¹³¹ For example, see clause 85(1) of the National Gas Rules does refer to “assets that cease to contribute in any way to the delivery of pipeline services” and not “assets that **will [or might]** cease to contribute in any way to the delivery of pipeline services”.

¹³² The National Gas Objective as stated in the National Gas Law (NGL, s.23) is: “to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.”

- Who will be its customers and its competitors?
- Does it expect its assets will be price regulated or unregulated?

These are all critically important factors when considering how the regulator should respond to APA's proposal for accelerated depreciation in the upcoming regulatory period. The most that can be said at this stage, is that APA-VTS sees itself as the business equivalent of Schrödinger's cat – it sees itself as simultaneously existing and not existing in the future; that is, its assets are fully redundant, but it is also a carrier of 'renewable gas' and is competing with other energy sources.

7.3.1 Advice to the AER

- **Before considering APA's proposal for shortening the life of its network and accelerated depreciation, the AER should require APA to outline, to the best of its ability, the future it sees for itself following the stranding of its network and the transition pathway it expects to follow to that future**

7.4 The impact of accelerated depreciation on revenues and prices

It is disappointing that little consideration has been given to the impact of accelerated depreciation on regulatory revenue allowances and therefore, the consumer cost of network services, over the period of accelerated depreciation.

The AER's recent paper *Regulating gas pipelines under uncertainty* does not explore these impacts other than at a very high level of generality, while the APA submission cites apparently "landmark work by renowned regulatory economists Crew and Kleindorfer" in support of its claim to accelerated depreciation.¹³³

While we have not had the opportunity to study the Crew and Kleindorfer analysis in detail, we note two important omissions from their analysis.¹³⁴ These two omissions are markedly important if the Crew and Kleindorfer's analysis is being used to justify the accelerated depreciation of a gas network.

First, Crew and Kleindorfer make no allowance for the relationship between the state of the asset and service standards. In effect, they appear to implicitly assume that the asset owner will 'sweat the asset' without having any regard to whether this leads to a deterioration in service standards. Of course, in a highly regulated environment this could also lead to penalties or other sanctions being imposed on the asset owner.

Second, and this is particularly relevant when considering the Crew and Kleindorfer modelling in the context of a gas network, their analysis makes no provision for ensuring the ongoing safety and integrity of the assets. We note how APA's current proposal highlights asset safety and integrity as a primary driver of new expenditure.

¹³³ APA, *Proposal Overview*, 1 December 2021, p.46

¹³⁴ Crew, M and Kleindorfer, P, *Economic Depreciation and the Regulated Firm under Competition and Technological Change*, *Journal of Regulatory Economics*, 4(1), 1992, pp. 51-61.

These are not trivial oversights by APA when claiming the Crew and Kleindorfer analysis supports its claims for an accelerated depreciation allowance.

Our preliminary and highly stylised modelling indicates that ongoing expenditure on sustaining service standards and asset safety and integrity could see regulatory accelerated depreciation turning into **accelerating** depreciation during the shortened life of the asset. When coupled with the widely held expectations that demand is likely to decline over the same period, there is a risk that accelerated (accelerating) depreciation will lead to runaway price increases.

We acknowledge the limitations of our own modelling but are very concerned that neither APA nor the AER has (so far) undertaken any modelling of the consequences of accelerating the depreciation of an entire network. Such modelling must include reasonable and transparent assumptions over the remaining life of the network and how these expenditures will be treated under the regulatory framework, about expected:

- new capital expenditure
- replacement expenditure
- maintenance expenditure
- asset decommissioning costs

Given the average life of APA's assets is currently 34 years (and it is proposing to shorten the average to 30 years), we anticipate many assets will reach the end of their technical lives over the next decade or two. APA needs to be clear about how it will maintain service standards (and system safety and integrity) as these assets are withdrawn from service.

Full and open disclosure means APA must provide this information to the community – no matter how caveated its modelling might be – so that consumers and policy makers can clearly see the consequences that await over the proposed shortened regulatory life of the network.

7.4.1 Advice to the AER

- **Before considering APA's proposal for network life shortening and accelerated depreciation, the AER should require APA to outline and model its intended approach to maintaining service standards and asset safety and integrity over the next 2-3 decades. This disclosure should include how APA expects associated costs to be treated within the regulatory framework and the impact this will have on regulated revenues and prices during this period.**

7.5 Cash flow and the repatriation of capital investment

All things being equal, accelerated depreciation recognises the potentially shorter useful life of an asset and in doing so, it pulls forward cashflows. APA's submission does not address what happens to that cash once it is in the hands of the network. Likewise, the AER's recent *Regulating gas pipelines under uncertainty* information paper is silent on this matter.

Once again, careful consideration needs to be given to the difference between the accelerated depreciation of individual assets within a much larger asset base, and the accelerated depreciation

of an entire network. In the first case, how the accelerated recovery of funds is returned to debt and equity holders by the network business is of no great consequence to consumers. This is not necessarily true when the accelerated cashflows are generated from hastened depreciation of the entire network.

For ease of exposition, the following example assumes an extreme scenario only to demonstrate our concern.

An accelerated depreciation allowance will generate higher cashflows for the business. If, from the commencement of the accelerated depreciation program, the network business pays out all these funds to equity holders (in the form of dividends, special dividends, share buybacks, etc), it would see the RAB decline in value with no corresponding decline in company debt. Conceivably, as some point in time, the value of the RAB would fall below a threshold value after which the finance building block would no longer be generating sufficient cashflow (through return on and return of capital) to cover the business's debt costs.

What happens next is not immediately obvious but presumably equity holders would not re-inject funds into the business, and debt holders would be unwilling to extend additional loans to the business. Would the network have the regulator over a 'cashflow barrel'? Would the regulator seek to extract additional funds from customers, or would it allow the network business to 'go bust'? Might the business be happy to go 'belly up' at this stage in order to avoid future decommissioning costs?

For the avoidance of doubt, we are not suggesting APA would pursue such a capital repatriation strategy. Nonetheless, there is nothing in the APA proposal that guarantees consumers will not be required to pay twice for the accelerated depreciation of an entire network. Likewise, the AER's information paper does not explore whether such an outcome is possible and if so, what safeguards it might put in place to avoid such an outcome.

We urge the AER to explore and model whether capital repatriation strategies by network businesses might expose consumers to the risk identified above – and if so, what conditions and safeguards (including reporting requirements) should be attached to any regulatory approval given to a business proposal to accelerate the depreciation of its entire network.

One such strategy might include requiring a network to deposit funds raised from an accelerated depreciation allowance into an escrow account until such time as the future viability of the network becomes clearer. Only at that time would the funds be released – either to the network if the assets turn out to be truly stranded or returned to consumers if the network has a viable future.

How these funds would be "returned to consumers" requires detailed consideration and community consultation, given it is likely to represent an inter-generational transfer. One option might involve using these funds to establish a scheme to assist future vulnerable consumers to navigate their transition away from a reliance on gas.

7.5.1 Advice to the AER

- **Before considering APA's proposal for asset life shortening and accelerated depreciation, the AER should require APA to propose a binding, long-term commitment mechanism**

regarding the repatriation of cashflows to debt and equity holders that safeguards the long terms interest of consumers.

7.6 Engaging customers on accelerated depreciation

APA sought to engage stakeholders in a discussion about accelerated depreciation in various roundtable discussions in 2021. We acknowledge APA's efforts.

There are many difficult challenges when attempting to engage consumers in a discussion about concepts such as accelerated depreciation. It is a concept so particular to the regulatory framework and so foreign to the daily lives of millions of consumers. For the main part, APA did not need to confront these challenges because its engagement program consisted of informed stakeholders (or stakeholders who could become informed with comparatively little effort).

7.6.1 APA VTS stakeholder roundtables

While stakeholders at the roundtables were given some information, this fell far short of the range of matters identified in the AER's information paper on regulating gas pipelines under uncertainty – let alone some of the issues discussed in this. We recognise the roundtables pre-dated the information paper, but we contend that a consumer-focussed business would have pre-empted many of these concerns and addressed them in its discussions with stakeholders.

APA's failure to pre-empt these issues has clearly left stakeholders confused. As one well-informed consumer representative emphasised at AER's Public Forum on 1 February 2022, there is no clear "narrative" flowing through APA's proposal. We agree.

The proposal contains contradictory, conflicting or just confusing claims on consumers' funds. For example:

- APA is seeking to write down the RAB value of the existing network, i.e. accelerated depreciation, while investing large sums in new assets, resulting in a net increase in the value of its RAB.
- APA is asking consumers to pay for the accelerated write down of the network's RAB, i.e. accelerated depreciation, because of the declining future returns the network can earn, while at the same time asking consumers to pay to prepare that same network so it can earn revenue in the future.
- APA is asking consumers to pay more now, via the accelerated depreciation of the network, to ensure APA can compete with electricity in the future, without making it clear why consumers should be gifting this competitive opportunity to APA.

We have not sought to reconcile these claims. That is not our role. We note, however, that if APA fails to establish a coherent and internally consistent narrative in support of its proposal, then it will be positioning itself 'behind the eight ball' in terms of earning the trust of its consumers, the broader community and presumably the regulator.

7.6.2 Engaging consumers, not stakeholders

It is always challenging for an upstream infrastructure provider to engage directly with end users – after all, those end users have no direct relationship with the upstream infrastructure provider. Does this separation absolve APA from engaging more broadly on its proposal? We do not think so.

While the financial impact of the APA proposal may be small relative to the total gas bill, who's to say that it is so small that it is immaterial to end users? Only end users can answer that question. And even if they consider the impact to be financially immaterial, experience from other sectors shows they may not consider it immaterial from other perspectives.

As noted above, regulatory depreciation is a meaningless concept to consumers. And it should stay that way. This means the onus rests with APA to find an opportunity to engage with consumers about its underlying concerns, possibly without ever mentioning the words “accelerated depreciation”.

We note, the Victorian gas distribution companies have begun their efforts to engage their *direct* customers on similar challenges to the ones addressed in APA's proposal. When it comes to accelerated depreciation, the distribution companies have sought to explain it via an analogy based on someone taking out and repaying a home loan. We consider a more relevant point of comparison would be to discuss how a firm without a regulated revenue stream would deal with a similar situation of asset stranding. It would then be up to APA to make the case to consumers for why its situation is different. It is perfectly conceivable that in such a discussion there would be no need to even refer to accelerated depreciation. From a consumer perspective, it's their accelerated payments that matter.

There is no denying that these are complicated issues and are not likely to grab the imagination of consumers. The challenge for APA, and other gas network operators, is to try, and keep trying, to overcome that barrier.

7.6.3 Responsibility for the redundancy of a gas network

When discussing its stakeholder engagement, the APA overview states:¹³⁵

“We presented the view that under the legislated Victorian Government policy there is a risk that the VTS assets will not be in service long enough to recover the value of the assets over what was originally set as their life. That is, the government driven policy change affects the economic life of prudent and efficient investments.”

APA's *RIN Response* repeats this view verbatim and continues:¹³⁶

“We presented the view that these investments need to be recovered from users through accelerated depreciation.”

APA's overview takes a slightly different approach. It continues by seeking to link “government driven policy change” with a claim under the so-called “regulatory compact”.¹³⁷

¹³⁵ APA, *Proposal Overview*, 1 December 2021, p.45

¹³⁶ APA, *RIN Response*, 1 December 2021, p.76

¹³⁷ APA, *Proposal Overview*, 1 December 2021, p.45

“We presented the view that these investments need to be recovered from users as part of the ‘regulatory compact’.”

We are not convinced by the causal relationship APA is endeavouring to establish between “government driven policy change” and its claim for accelerated depreciation.

The risks posed by greenhouse gas emissions, concerns about the ongoing combustion of fossil fuels and the need for emissions reduction policies, have been debated in Australia since the mid-to-late 1980s.¹³⁸ In one form or another, these policy debates have continued to evolve and crystallise into policy action ever since. But perhaps more importantly, there can be no denying that this process of evolution is closely correlated with shifting community attitudes and growing support for such policy action. Alternatively stated, policy action reflects changing community attitudes – or in economic jargon, changing consumer preferences.

APA’s assertion that it is the consequence of changed government policy is overly simplistic.

Emissions-related asset and network stranding has been a known risk for decades. We contend unless APA can demonstrate it reasonably considered this risk when assessing its past capital expenditures, then it cannot now self-abrogate from its share of responsibility for making those investments. When considering the APA proposal, the AER should satisfy itself that APA gave due consideration to network stranding risk when considering the prudence and efficiency of past investments. If APA failed to do so, then it must bear some responsibility (and cost) for the potential stranding of its network.

7.6.4 Advice to the AER

- **The AER should require APA to develop a clear and accessible business narrative about its future, including its explanation for why consumers should be funding investments and write-offs (i.e. accelerated depreciation) in support of that future. This narrative should be tested with end-use consumers to gauge their support.**
- **The AER should satisfy itself that APA gave due consideration to emissions-related network stranding risk when considering the prudence and efficiency of its past investments.**

7.7 The APA proposal has not provided the information expected by the AER

Even though the AER’s information paper on regulating gas pipelines under uncertainty does not consider many of the issues canvassed in this section, it does nonetheless outline the information the AER would expect a network to submit when proposing accelerated depreciation of its network.¹³⁹ Alternatively stated, the AER has outlined the information it would require in order to make a regulatory decision. The AER’s expectations are reproduced in Box 7-1 on the following page.

¹³⁸ Former science minister, Barry Jones, claims that he was the first Australian politician to have raised the issue of global warming when he delivered a speech on the subject in November 1984. See: Barry (2008), *Can humanism survive in the 21st Century?* http://www.manningclark.org.au/html/Paper-Jones_Barry-Can_Humanism_Survive_in_the_21st_Century.html

¹³⁹ AER, *Regulating gas pipelines under uncertainty: Information paper*, November 2021, pp.45-47

In its 2016 draft decision responding to a proposal for accelerated depreciation from AusNet Services Electricity Transmission, the AER provided a detailed account of the matters it would expect to be addressed in a regulatory proposal.¹⁴⁰ While details of that earlier application (and the reasons for the AER’s proposed rejection of it) are quite different from the factors motivating APA’s proposal, many of the matters raised by the AER remain germane to the current proposal.

We acknowledge the AER’s information paper on regulating gas pipelines under uncertainty was published only days before the APA submitted its proposal. Nonetheless, the AER’s expectations about the information that should accompany a proposal for accelerated depreciation are largely self-evident. Moreover, much of the required information was foreshadowed in the 2016 draft decision mentioned above.

It is not clear how the AER can consider a proposal for accelerated depreciation when that proposal falls so far short of the information the AER has identified as being required in order to make a regulatory decision on the matter.

Box 7-1: The AER’s information requirements to support accelerated depreciation proposals¹⁴¹

(p.45) “To demonstrate stranded asset risk, we expect regulated businesses to provide plausible future energy scenarios that covers a spectrum of outlooks from the most pessimistic to the most optimistic for their networks, and to estimate the likelihood (probability) of each scenario. We expect regulated businesses to demonstrate the magnitude of stranded asset risk and possible divestment and investment plans under each scenario. In particular, to demonstrate the materiality of stranded asset risk and the justification for early regulatory intervention, we expect a regulated business to provide compelling evidence to identify:

- the factors that influence the estimates of expected economic lives, such as applicable government policies, evidence of their customers’ sentiments in switching away from gas, developments in competing technology etc
- those assets that may be repurposed for transporting hydrogen and those that cannot be
- those assets whose economic lives may need to be adjusted to reflect the potential decline in long-term demand
- the value of stranded assets under the different forecasting scenarios
- the costs that may be avoided or incurred in the different forecasting scenarios
- the level of customer support for the business’s proposed action to manage the risk and the quality of that customer engagement
- analysis of the price impact for the business’s proposed action”

(p.46) “We would expect regulated businesses to provide compelling evidence to justify the asset lives that they have proposed...”

(p.47) “We expect that, in proposing any variation to the existing depreciation schedules, regulated businesses would actively and meaningfully engage with their customers on the range of available options and reflect customers’ feedback in their proposals. We consider that good consultation will involve a range of scenarios being put to consumers with respect to demand forecasts, expenditure and any stranding mitigation measures, together with the price impacts of those scenarios.”

¹⁴⁰ AER, *Draft Decision. AusNet Services transmission determination 2017–18 to 2021–22. Attachment 5 – Regulatory depreciation*, July 2016

¹⁴¹ As outlined in AER, *Regulating gas pipelines under uncertainty: Information paper*, November 2021

7.8 What about the long term interests of consumers?

In its current strategic plan, the AER outlines its purpose as:¹⁴²

“The AER exists so that energy consumers are better off, now and in the future.”

We thoroughly endorse this purpose and expects it aligns closely with community expectations. What is far less clear however, is how this purpose can be given expression in the AER’s upcoming decision on APA’s proposal to accelerate the depreciation of its entire network. How *will* customers be made better off, now and in the future, by the AER accepting such a proposal?

We have sought to answer this question ourselves. We have repeatedly challenged ourselves to think about how **we** would explain to consumers they are better-off (“now and in the future”) if they pay higher network charges to cover the cost of the accelerated depreciation of APA’s network? Going through this exercise has highlighted just how many questions about accelerated depreciation are yet to be answered. These are the questions we have raised in this section.

Dealing with these concerns as part of a regulatory reset is not ideal, but it is the reality we face. Our advice in this section seeks to draw out information that will provide consumers with greater confidence that the AER’s response to APA’s proposal for accelerated depreciation will in fact, reflect the long term interests of consumers.

¹⁴² Australian Energy Regulator, *Strategic Plan 2020–2025*, December 2020, p.3

8 Tariffs

16 of APA's *Proposal Overview* outlines its proposal for tariffs over the upcoming regulatory period.¹⁴³ Further information is provided in section B.15 of APA's *RIN Response*.¹⁴⁴ Our commentary is based on the information provided in these two proposal documents and focusses on average system-wide tariff outcomes (rather than tariffs for particular services).

8.1 APA's proposal

APA's *Proposal Overview* helpfully summarises the impact of its proposal on system-wide tariff in Table 8¹⁴⁵, reproduced below in Table 8-1.

Table 8-1: APA's actual and forecast system-wide tariff 2018 to 2027

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Volumes (PJ)	220	229	222	225	206	206	203	201	197	198
Target revenue(\$m nominal)	108	110	111	112	113	115	122	128	136	143
System wide average tariff \$/GJ	0.49	0.48	0.50	0.50	0.55	0.56	0.60	0.64	0.69	0.72

In its *Proposal Overview*, APA observes that average (or "composite") tariff increases from \$0.52/GJ to \$0.61/GJ between the two regulatory periods. APA continues with a discussion of the impact of the new tariffs for residential and small business customers. The *Proposal Overview* highlights the price increase in the first year of the new regulatory is in the order of \$0.22 and \$2.05 for these customer groups, respectively.¹⁴⁶ No further discussion is provided in APS's *Proposal Overview*.

8.2 CCP28's comments

While it is understandable APA's *Proposal Overview* discusses the price increase at the start of the new regulatory period in 2023, the 'real action' on prices only begins in 2024. By design, nominal prices only increase by CPI in 2023. From 2024, prices are estimated to increase by over 6% per annum. The overview describes these as "small tariff increases" and "without significant impact".¹⁴⁷

We are somewhat surprised by APA's nonchalance towards price increases that will substantially exceed inflation over the regulatory period. We understand that transmission charges are only a relatively small proportion of the final gas bill most consumers pay, nonetheless, that is the component for which APA is responsible. It should not take for granted the responsibility it bears when increasing its share of the bill by over 30% over the regulatory period.

¹⁴³ APA, *Proposal Overview*, 1 December 2021

¹⁴⁴ APA, *RIN Response*, 1 December 2021

¹⁴⁵ APA, *Proposal Overview*, 1 December 2021

¹⁴⁶ Using the benchmark customer profiles adopted by the Essential Services Commission (Victoria).

¹⁴⁷ APA, *Proposal Overview*, 1 December 2021, p.10 and p.47

Despite its commentary on the impact of its proposed price increases, the APA submission does not discuss the results of any modelling of the impact of its proposed price increases on demand for its services or the utilisation of its assets over the regulatory period.¹⁴⁸ Furthermore, given the significance of the approach APA is proposing for additional expenditure and accelerated depreciation, we would expect APA's proposal to provide consumers with information about long-term price trajectories, no matter how tentative or qualified.

In addition, we note that APA's consumer engagement on tariffs was deferred pending preparation of an issues paper on tariff structures.¹⁴⁹ We acknowledge that engaging on tariffs is difficult and engaging on tariff reform is particularly difficult. However, APA is not proposing tariff reform in this proposal, so it is not clear why it did not recommence its public engagement on tariffs prior to submitting its proposal to the AER.

8.3 Tariff variation mechanism

APA's *RIN Response* describes its proposed tariff variation mechanism in the following terms:¹⁵⁰

“The proposed tariff variation mechanism is largely unchanged from the current mechanism.”

But at the same time APA observes:¹⁵¹

“APA VTS has reinstated a feature from the 2008 AA tariff variation mechanism...”

We find these two statements somewhat contradictory and advise the AER to seek confirmation from APA about whether it is or is not changing the tariff variation mechanism that has operated during the current regulatory period (2018-22).

Moreover, in the interests of full disclosure, the AER should require APA to provide some modelled examples about how and when the variation mechanism would be triggered and the effect this would have on tariffs and consumers.

¹⁴⁸ The CCP notes no further information is provided in the supplementary documents submitted by APA – namely, APA (2021) *Victorian Transmission System Tariff derivation approach* (December) – also referred to as: *Access Arrangement 2023-27 - B.15.2 Tariff Derivation*.

¹⁴⁹ APA, *Proposal Overview*, 1 December 2021, p.13

¹⁵⁰ APA, *RIN Response*, 1 December 2021, p.95

¹⁵¹ *Ibid.*

8.4 Advice to the AER

The AER should require APA to:

- Provide estimates of the impact its proposal will have on tariffs (at least, system-wide average tariffs) over the long-term, say, to 2050 – and the likely impact this will have on the demand for its pipeline services and asset utilisation
- Resume its consumer consultation on tariffs
- Clarify and provide examples about how its proposed tariff variation mechanism will operate, how this differs from current arrangements, and the impacts the mechanism will have on tariffs and consumers if it is triggered during the regulatory period

9 Rate of return

Since mid-2020, the AER has been conducting a review into its Rate of Return Instrument (RoRI). The review is considering the matters the AER should consider and the methodologies it should apply when estimating an efficient rate of return to be earned by network service providers. In 2020, the AER established a Consumer Reference Group (CRG) to support its review of the RoRI.¹⁵²

One matter explored during that review is whether gas networks should earn a higher rate of return than electricity networks because of the stranding risk they face. The gas networks have argued this higher return should be provided via a higher value for the beta parameter in the Capital Asset Pricing Model (CAPM) used by the AER to estimate an efficient return on equity.

The beta parameter seeks to reflect the systematic risk faced by a firm. The AER has estimated beta using observable market data.

We note in Chapter 14 of APA's *Proposal Overview* and in Section B.13 of its *RIN Response*, APA treats the estimation of the applicable rate of return as a purely mechanical exercise guided by the RoRI. The following discussion is not concerned with the approach applied by APA. Our comments are directed at the AER. We raise questions about how it will estimate the rate of return if it approves asset life shortening.

9.1 The relationship between stranding risk and beta

In December 2021, the AER released an information paper summarising its position on a wide range of matters addressed through its RoRI review.¹⁵³ In that paper, the AER effectively concluded there was no evidence of a relationship between stranding risk and beta.¹⁵⁴

“While we acknowledge that there may be some differences between gas and electricity networks, we do not consider that they are significant enough to warrant setting a different equity beta for gas networks. It is also unclear whether, and to what degree, the stranding risk may be systematic risk in nature. We have not received empirical evidence in the submissions suggesting stranding risk may be a systematic risk.”

The AER's recent information paper on regulating gas pipelines under uncertainty reinforces this point.¹⁵⁵

“We (and the ACCC) have taken a theoretically based approach to rate of return and stranded asset risk in the past. While we have not found the risk to be material to date, to the extent that the risk warrants any regulatory action, we expressed the view that it should not be compensated through the regulated rate of return, but in the form of a cash payment for the expected loss from the risk. This is on the basis that stranded asset risk is a non-systematic expected loss and therefore it should be accounted for in cash flow compensation and not in the cost of capital.”

¹⁵² Two members of CCP28 for the Victorian gas resets are also members of the CRG for the AER's 2022 RoRI review – namely, Helen Bartley and Ron Ben-David.

¹⁵³ AER, *Rate of return. Information paper and call for submissions*, December 2021

¹⁵⁴ *Ibid*, pp. 22-23

¹⁵⁵ AER, *Regulating gas pipelines under uncertainty: Information paper*, November 2021, p. 32

In an earlier submission to the RoRI review, CRG reached a similar conclusion:¹⁵⁶

“Until a compelling case is made suggesting otherwise, a single benchmark value for beta should be applied across electricity and gas businesses.”

In other words, the CRG did not consider stranding risk to be a systematic risk needing recognition in the estimation of the rate of return applicable to gas networks.

We support the conclusions reached by the CRG and the AER about stranding risk not being relevant to the estimation of beta.

When it suggests stranding risk could be considered elsewhere in the regulatory framework, the AER’s RoRI information paper cross-references the AER’s *Regulating gas pipelines under uncertainty* information paper.¹⁵⁷

“We note that the AER’s recent information paper on regulating gas pipelines under uncertainty identified a range of options for addressing gas stranding risk. Therefore, we are of the view that it may be appropriate to consider stranding risk under the broader regulatory framework (e.g. through cash flow and/or depreciation) rather than as part of the rate of return. We are open to further examining any relevant evidence on this matter.”

In effect, the AER shifted contemplation of stranding risk from its RoRI review to its review of regulating gas pipelines under uncertainty. That latter paper then shifted the issue again when it concluded that interested parties can express their views on these matters in their submissions to the Victorian gas transmission and distribution resets.¹⁵⁸

In doing so, one important concern has fallen through the cracks.

9.2 Setting the rate of return if asset life shortening is approved

The AER may have effectively concluded in its RoRI information paper that stranding risk does not affect the estimation of beta, but the AER’s gas uncertainty information paper does not then contemplate whether a regulatory decision to shorten the regulated asset life of a network (in response to stranding risk) ought to be considered when estimating beta or the overall rate of return.

Figure 9-1 illustrates the relationship between these regulatory decisions. The AER’s RoRI has effectively determined there is no relationship between the top two boxes in the diagram. Its information paper on regulating gas pipelines under uncertainty signals the AER would give due consideration to a network proposal that reflects the left downward sloping arrow in Figure 9-1. Neither information paper addresses the right upward sloping arrow.

In the past, the AER may have viewed whether there is a relationship between a regulatory decision to shorten asset lives and the value of beta as a question to be answered empirically using market

¹⁵⁶ Consumer Reference Group *Advice to the Australian Energy Regulator. CRG Response to the AER’s July 2021 Draft Working Papers: The Overall Rate of Return, Debt Omnibus and Equity Omnibus Papers*, September 2021, p. 92

¹⁵⁷ AER, *Rate of return. Information paper and call for submissions*, December 2021, p. 23

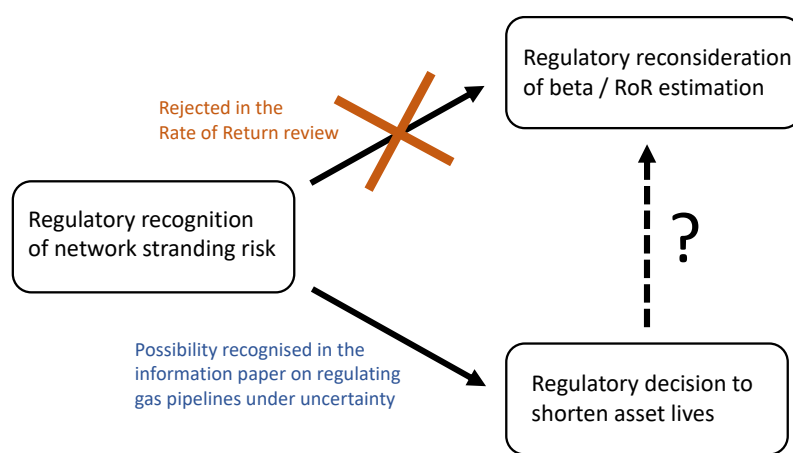
¹⁵⁸ AER, *Regulating gas pipelines under uncertainty: Information paper*, November 2021, p. X

data. This empirical approach is no longer available, or will no longer be available in the future because of the rapidly shrinking set of listed networks in Australia.

The RoRI review recognises the challenges delisting will present to the AER and seeks to engage stakeholders in a discussion about what proxies might be used to estimate beta for network businesses. We consider it very unlikely that the AER will find proxies that reliably mimic network asset stranding risks – let alone a regulatory decision to shorten asset lives.

The absence of suitable market data means the AER will have no other option but to exercise its judgement when considering how a regulatory decision for shortened asset lives needs to be recognised when it estimates of beta.

Figure 9-1: Regulatory decision regarding network stranding risk



9.3 What impact might regulatory asset shortening have on the value of beta?

In one of the working papers published as part of its RoRI review, the AER described the meaning of the beta parameter (or its purpose within the regulatory model) as follows:¹⁵⁹

“The equity beta parameter in the Sharpe-Lintner CAPM compensate investors for bearing systematic risk. It measures the ‘riskiness’ of a firm’s returns compared with that of the market. Specifically, the equity beta measures the standardised correlation between the returns on an individual risky asset or firm with that of the overall market.”

That paper also noted the AER’s views about the forward-looking nature of risk, the relationship between a firm’s ownership of assets and its exposure to systematic risk, and the long-lived nature of the assets in question.¹⁶⁰

“Risk is the degree of uncertainty about an event-such as the uncertainty around the expectation of the return on an investment. It is strictly a forward-looking concept, as no event is uncertain after it has occurred.”

¹⁵⁹ AER, *Equity Omnibus Draft working paper*, July 2021, p.37

¹⁶⁰ *Ibid*, pp.37, 37 and 43, respectively

“A firm’s sensitivity or exposure to systematic risk will depend on its business activities and its level of financial leverage.”

“We set the forward looking rate of return for relatively long-lived assets. Therefore the investment horizon (and risks) needs to be compatible with these assets (which is better met by estimates from the longest estimation period).”

When read *in toto* these explanations appear to suggest that the role of beta in the regulatory model is to determine the regulated compensation to be paid for the expected future systematic risk borne by owners of long-lived assets, over the long life of those assets. In the current context, the assets in question are the entire network.

If that is the case, then we query: What are the consequences of shortening the network’s regulated asset life?

All things being equal, it would seem to suggest that if the regulated asset life of the network is shortened, then the total expected future systematic risk borne by owners of the network is necessarily lowered. That is, shortening the regulatory asset life of a network reduces the time over which a network is exposed to systematic risks and therefore it reduces the total systematic risk faced by that firm.

If the role of beta is to capture a network’s total exposure to systematic risk, then a reduction in that exposure brought about by a decision to shorten the regulatory asset life of a network would imply a downward adjustment to the value of beta (leading to a lower overall return on equity provided under the regulatory framework).

9.4 Conclusion

We do not have the resources to explore in further detail the relationship between a regulatory decision to shorten the asset life of a network and the resultant impact on the value of that network’s beta. Nonetheless, we believe this is a legitimate and pressing concern that has not yet been considered by the AER.

There can be no doubt that it is becoming increasingly difficult (if not impossible) for the AER to rely on market data to estimate beta – let alone the value of beta if it also approves asset life shortening of a network. In the absence of market data, the AER would have no other option but to exercise its judgement to give effect to the relationship between a decision to shorten a network’s asset life and its approach to determining the value of beta.

The AER may need to bring forward the exercise of that judgement if it proposes to approve asset life shortening in the current round of gas network resets.

We therefore urge the AER to examine openly the relationship between a decision to shorten the asset life of a network and its impact on the value of beta. Without fully considering this relationship, the AER risks handing a windfall gain to network owners at consumers’ expense.

9.5 Advice to the AER

- The AER should investigate whether a regulatory decision to approve a shortening of a network's asset life reduces that network's systematic risk exposure, and if so, how this might be reflected in the value of beta used in the Sharpe-Lintner CAPM.

Glossary

Abbreviation	Name
ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
<i>Proposal Overview</i>	<i>APA, A look at plans for Victorian Transmission System, APA Victorian Transmission System 2023-2027 access arrangement proposal overview, 1 December 2021</i>
<i>RIN Response</i>	<i>APA, APA VTS 2023-27 Access Arrangement Reset RIN Response – Public, Access Arrangement RIN Response and Basis of Preparation, 1 December 2021</i>
CAPM	Capital Asset Pricing Model
Capex	Capital expenditure
CCP	Consumer Challenge Panel
CCP11	Consumer Challenge Panel Sub-Panel CCP11
CCP28	Consumer Challenge Panel Sub-Panel CCP28
CPI	Consumer Price Index
CRG	Consumer Reference Group
EP	Engagement Plan
EPMO	Enterprise Program Management Office
EUCV	Energy Users' Coalition of Victoria
GSOO	Gas Statement of Opportunities
IAP2	International Association for Public Participation
ISP	Integrated System Plan
IT	Information technology
NER	National Energy Rules
NGL	National Gas Laws
NGO	National Gas Objective
Opex	Operating expenditure
PKGT	Port Kembla Gas Terminal
RAB	Regulatory Asset Base
Repex	Replacement expenditure
RIN	Regulatory Information Notice
RoRI	Rate of Return Instrument
Roundtable 1	<i>APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 1 Presentation 28 October 2020</i>
Roundtable 10	<i>APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 10, First look at regulatory positions, 6 October 2021</i>

Abbreviation	Name
Roundtable 11	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 11, First Look at regulatory positions – Q&A and discussion, 25 October 2021
Roundtable 12	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 12, Our proposal and stakeholder influence, 22 November 2021
Roundtable 2	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 2 Presentation, 25 November 2020
Roundtable 3	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 3, Asset Management, 19 February 2021
Roundtable 4	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 4 – Calculating regulated revenues and tariff structure, 16 March 2021
Roundtable 5	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 5, Overview of 2021 Victorian Gas Planning Report; and first look at capital program for VTS, 14 April 2021
Roundtable 7	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement (AA6), Roundtable 7, Capital program update & first look at operating expenditure, 29 July 2021
Roundtable 8	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 8, Capital issues continued, 18 August 2021
Roundtable 9	APA, VTS Stakeholder Engagement Group 2023-27 access arrangement, Roundtable 9, – Demand & Supply Final Report. Depreciation. Engagement timeline refresh, 15 September 2021
SoCI	Security of Critical Infrastructure
SRO	State Revenue Office of Victoria
SWP	South West Pipeline
VTS	Victorian Transmission System
WORM	Western Outer Ring Main

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Weblinks are correct at 18 February 2022

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APA, *APA VTS - Access Arrangement 2023-27 - Business Case 200 - Hydrogen Safety and Integrity - December 2021*, December 2021, <https://www.aer.gov.au/system/files/APA%20VTS%20-%20Access%20Arrangement%202023-27%20-%20Business%20Case%20200%20-%20Appendix%20B%20-%20Australia%27s%20First%20Hydrogen%20Pipeline%20Conversion%20Project%20-%20December%202021.PDF>

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