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Joint submission to the Australian Energy Regulator (AER) from Victorian community organisations

2023–2027 APA Victorian Gas Transmission System Access Arrangement

As a consortium of Victorian consumer organisations, we would like to thank the Australian Energy Regulator (AER) for the opportunity to make a submission to APA's Initial Proposal for the 2023–2027 Victorian Transmission System (VTS) Gas Access Arrangement.

This joint submission has been prepared by Brotherhood of St. Laurence (BSL), and Renew, in consultation with other community organisations. We represent residential, and particularly vulnerable, consumers.

For households facing financial stress and other forms of disadvantage, ensuring that energy remains affordable while we transition to a zero-carbon economy is crucial. Regulators must ensure that the risks to households are mitigated while facilitating a transition away from fossil gas in line with Australia's international commitments.

This submission represents our preliminary response to the issues presented by the draft proposals – with the possibility that our position may be refined as the process progresses.

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The views expressed in this document do not necessarily reflect the views of Energy Consumers Australia.

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Summary of recommendations

Two Victorian community organisations – the Brotherhood of St. Laurence (BSL) and Renew – have prepared this joint submission to represent the interests of consumers, especially vulnerable households, in APA's proposed Victorian Transmission System Gas Access Arrangement for 2023–27.

Our organisations recognise the importance of this process for energy affordability for Victorians while achieving an effective transition away from forms of energy that produce carbon pollution.

Our organisations strongly support ambitious climate action paired with measures to ensure that households facing disadvantage do not face undue risk or unaffordable energy bills as we transition to a zero-carbon economy.

Our recommendations are informed by research funded by Energy Consumers Australia (ECA). Analysis was undertaken for BSL by TRAC Partners, whose relevant findings included as the second part of this document.

Recommendations

1. **Energy affordability for Victorian consumers must remain a priority**

Energy debts are known to be a strong early indicator of economic hardship, and a driver for further household debt.[1] Energy bills consume a high and growing proportion of the expenditure of low-income households,[2] and for many households, high energy costs restrict access to necessities.[3]

Victorian Council of Social Service's (VCOSS) 2018 Battling On report found that even before the pandemic, high energy costs were causing 3.6% of Victorians to face a temporary inability to heat their home, and 1.8% to face a persistent inability. [4]

There is evidence of growing energy hardship in Victoria, as the withdrawal of COVID-19 government supports such as JobKeeper continues to affect households. Moreover, the impact of the disruptions of COVID-19 has been unequal, with some households and businesses facing disproportionate hardship.

Recent data shows that gas and electricity disconnections increased significantly across the first three weeks of 2022; more residential energy users missed bill payments in December than any time since 2019, and energy debt levels are high.[5]

Delivering affordable energy will be an important way to support the recovery for those most impacted by the pandemic, as well as for the economy at large.

[1] Consumer Action Law Centre. 2019. *Energy Assistance Report*, accessed 1 March 2020 https://consumeraction.org.au/wp-content/uploads/2019/07/190620_Energy-Assistance-Report_FINAL_WEB.pdf
[2] Australian Council of Social Service & Brotherhood of St Laurence. 2018. *Energy stressed in Australia*, ACOSS, viewed 2 September 2019, http://library.bsl.org.au/jspui/bitstream/1/10896/4/ACOSS_BSL_Energy_stressed_in_Australia_Oct2018.pdf
[3] Australian Council of Social Service. 2019. '*I regularly don't eat at all': Trying to get by on Newstart*, accessed 1 March 2020, https://www.acoss.org.au/wp-content/uploads/2019/07/190729-Survey-of-people-on-Newstart-and-Youth- Allowance.pdf
[4] VCOSS. 2018. *Battling On report.* https://vcoss.org.au/wp-content/uploads/2018/11/Persistent-Energy-Hardship-FINAL-Web-Single-Page.pdf
[5] Essential Services Commission. 2022. *Energy customer support during the coronavirus pandemic* https://www.esc.vic.gov.au/electricity-and-gas/market-performance-and-reporting/energy-customer-support-during-coronavirus-pandemic

2. Victorian Government decisions are not the primary driver of stranding risk

Government policy has not created the stranding risks faced by networks, and there is no regulatory requirement that these risks be mitigated

There are a number of drivers with the potential to cause a stranding risk for the gas networks. These include lower electricity prices due to renewables, improved energy efficiency of electrical appliances, and rapidly declining flexible supply from Victoria's legacy Bass Strait sources.

Federal and state climate targets are unavoidable as the means by which our government will meet commitments to the global United Nations agreements established to combat the existential threat of climate change.

3. Accelerated depreciation should not be deployed as an approach to manage uncertainty – a more holistic consideration of risk is required

We have also responded to the AER's Regulating Pipelines Under Uncertainty Paper.

In summary, we do not support APA's proposal to adopt accelerated depreciation as a response to uncertainty.

Accelerated depreciation does not address the risks for consumers associated with stranded assets, and it should not be applied without adequate measures in place to avoid increasing these risks (e.g. arising from hydrogen investment and ongoing augmentation), and measures to address consumer risks and fairly allocate risks and costs.

Accelerated depreciation might be considered within a framework to fairly manage committed or expected asset retirement before end-of-life, rather than as an approach to respond to uncertainty.

4. APA's proposed hydrogen study should not be funded

The APA's proposed hydrogen study is a particularly high-risk research and development project, which does not meet the NGL's requirements for conforming revenue.

5. The South West Pipeline should be subject to robust options analysis, and avoided if possible

The South West Pipeline has been proposed to address short term supply/demand imbalances that may affect peak day loads if the Port Kembla terminal is not built to schedule.

This augmentation been proposed despite an identified stranding risk – and consumers have been asked to carry this risk, through fixed principal conditions as well as accelerated depreciation.

These circumstances warrant collaboration between decision makers to ensure that an active and thorough options analysis is undertaken to find an appropriate alternative, including a full consideration of demand management and load shifting opportunities.

6. The Western Outer Ring Main (WORM) should be subject to a revised business case

The circumstances of the current access arrangement are significantly different to the last period's.

The WORM is now being proposed at a higher cost, as a project subject to a stranding risk, in the context of declining demand. The requirement for approvals has the potential to delay this project further.

Consideration of this spending should be contingent on a revised business case that demonstrates an ongoing requirement for this project, as well as an options analysis.

7. Rule 80 applications have the potential to result in overbuilding

Rule 80 proposals have been proposed on fixed principal terms, and subject to accelerated depreciation.

We are concerned about the potential for overbuilding if preapproval is granted to these projects. This may be especially high, given that floating terminals have the capacity to be relocated over their operational life.

We also note the lack of social licence for floating terminal projects in Victoria (as per the denial of permits to AGL's proposed Crib Point project).

8. The opex base year should be questioned

The opex for the nominated base year is higher than others in the previous period. We question whether sufficient evidence has been presented to demonstrate its efficiency.

9. Carbon offsets should not be funded through opex

APA has proposed to purchase Australian carbon credit units (ACCUs) to offset a proportion of its pipelines' Scope 1 emissions. This has been calculated with reference to Victoria's emission reductions.

There is insufficient evidence provided that this is a legal requirement. Also, investment in offsets to improve APA's corporate climate reporting should be funded by the business, not consumers.

10. Demand/supply forecast should be revised according to the 2022 Australian Energy Market Operator (AEMO) Gas Statement of Opportunities (GSOO) and Victorian Gas Planning Report (VGPR), as well as implications of Victoria's Gas Substitution Roadmap

Given that only marginal peak day shortages are forecast for the upcoming period (without contribution from the Port Kembla Gas Terminal) we support a revision of supply/demand forecasts with reference to the 2022 GSOO.

Revised forecast should also take into account the findings of the Victorian Gas Substitution Roadmap, to be released in the first half of 2022 – which are unlikely to be reflected in the 2022 GSOO.

11. Further detail and supporting evidence should be provided by APA before AER makes a decision about the proposal

Several aspects of APA's proposal and supporting information lack sufficient evidence to demonstrate the proposed expenditure meets consumer needs. Additional evidence is required.

12. APA's Roundtable was open and informative – some reported results do not reflect our feedback

APA conducted a constructive and informative stakeholder roundtable and was responsive to stakeholder requests for specific research and analysis.

However, some reported results of this engagement do not reflect feedback given by BSL.

1 Affordability

1.1 Gas affordability remains critical to allow Victorians to access essential energy services

Energy debts are known to be a strong early indicator of economic hardship, and a driver for further household debt.[1] Energy bills are known to consume a high and growing proportion of the expenditure of low-income households[1], and for many households, high energy costs restrict access to necessities.[1]

VCOSS's 2018 Battling On report found that, even before the pandemic, high energy costs were causing 3.6% of Victorians to face a temporary inability to heat their home, and 1.8% to face a persistent inability. [1]

There is emerging evidence of growing energy hardship in Victoria, as the impact of the withdrawal of COVID-19 government support programs such as JobKeeper continues to affect households. The impact of the disruptions of COVID-19 have been unequal for Victorians, with some households and businesses facing disproportionate hardship.

Data shows that gas and electricity disconnections increased significantly across the first three weeks of 2022; more residential energy users missed bill payments in December than any time since 2019, and the size of energy debt levels are high.[1]

Delivering affordable energy will be an important way to support the recovery for those impacted by the pandemic, as well as for the economy at large.

It's also important to develop an adequate response to the emerging risks for gas consumers that are highlighted in this access arrangement, so as to secure long-term access to affordable energy for all Victorian households – in the upcoming period, and through the ongoing transition.

Key points:

1. Affordable energy is critically important to allow access to essential energy services.
2. Delivering affordable energy costs will be an important way to support the recovery for those impacted by the pandemic, as well as for the economy at large.
3. An adequate response to the emerging risks for gas consumers is essential to secure long-term affordability for Victorian consumers through the ongoing transition.

2 Future of gas

2.1 Victorian Government decisions have not caused APA's stranding risk

APA states that 'the key theme throughout this access arrangement consultation process is the Victorian Government's Net Zero 2050 initiatives and their impact on future gas consumption levels.'[6] However this overstates the extent to which Victorian Government policy is a primary driver for this stranding risk.

We agree with the AER's Information Paper into regulating gas in conditions of uncertainty's summary of factors impacting the future planning of the gas industry:

- renewables deployment driving lower electricity prices, especially rooftop solar
- Improved energy efficiency of electrical appliances, especially heat pump home space heating and hot water systems
- The growing awareness that electrification offers favourable economics (positive NPV) for many households (as well as climate benefits)[7]
- Rapidly declining flexible supply from Victoria's traditional Bass Strait supply in the near term and increasing gas supply uncertainty in the long term
- the technical and commercial constraints, high costs, and high uncertainty associated with proposals to repurpose the existing network to reticulate renewable gas.

Most of those drivers are facets of the broad market environment, that have been foreseeable for decades. Many also drive disruption for many non-regulated businesses, and should not be considered to be primarily the result of government decisions.

2.2 Accelerated depreciation may increase risks for consumers, and current proposals should not be allowed as a way to manage uncertainty

APA has requested to cap asset lives, for the purposes of depreciation, at 30 years, in response to the possibility that loads are electrified and gas pipelines become underused or stranded.

Our organisations have made a separate response to the issues raised by the AER in the Information Paper on regulating gas pipelines under uncertainty. This separate submission provides more detail on the proposal for accelerated depreciation.

In summary:

1. We do not believe a regulatory compact exists that entitles gas infrastructure owners to accelerated depreciation (or other measures) to resolve the risks of uncertainty and guarantee them the ability to a return of and return on their investments:

[6] APA. 2021 *A Look at Plans for VTS APA Victorian Transmission System 2023-2027 access arrangement proposal overview* https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/apa-victorian-transmission-system-access-arrangement-2018-22/proposal

[7] Renew. June 2018. *Household fuel choice in the National Energy Market* https://renew.org.au/wp-content/uploads/2018/08/Household_fuel_choice_in_the_NEM_Revised_June_2018.pdf

- As discussed above, the stranding risk facing the gas networks is not primarily caused by policy decisions
- Neither the regulated Rate of Return, the National Gas Objective nor the Revenue and Pricing Principles in the National Gas Law entitle networks to accelerated depreciation or full mitigation of stranding risks

2. The current proposal for accelerated depreciation does not manage the risks for consumers associated with electrification, and in fact, may increase them:
    - An electrification scenario poses potential risks, as well as benefits, to residential energy consumers, including high prices for remaining gas consumers on an underused network, and the potential to replace appliances quickly in an unmanaged wind-down scenario
    - Accelerated depreciation does not address the risk of electrification for consumers:
        - Accelerated depreciation may accelerate disconnection from the gas network – in a way that may cancel any opportunity to recover contribution from a larger customer base. In the scenario that customers disconnect, prices would be raised in response, potentially exacerbating an unmanaged disconnections 'spiral' (increases in gas market price may also drive this behaviour, independently from network tariffs).
        - Accelerated depreciation does not address the need for policies to enable all customers to access electric appliances – such as subsidies for low-income households, and standards for private rentals
        - Measures will be needed to establish a transition schedule for network assets, and to safeguard affordability as the network becomes underutilised
    - Accelerated depreciation may increase risks for consumers
        - Accelerated depreciation will increase consumer gas tariffs in the near term, increasing the risk of energy stress for vulnerable consumers
        - A consumer exit from the gas network is more likely to be unmanaged, if it is accelerated and brought forward by higher prices caused by accelerated depreciation
        - Networks more likely to propose inefficient investment (e.g. to research hydrogen or build infrastructure to address short term supply/demand imbalance) where they are able to pass the risk of this investment on to consumers
    - Where the RAB becomes artificially low, accelerated depreciation may risk the financial viability of network service providers, and the adequacy of the income derived from the RAB (return of/on capital) to fund ongoing essential operations
    - A continual adjustment of depreciation timeframes would be particularly high-risk for customers – it would justify increased continued spending to expand the network and pursue high-risk

spending into hydrogen, while passing the risk to consumers. At the same time, it would lead to increased prices if an exit spiral scenario emerged.

- Voluntary exit from the gas network must be better understood, and accounted for.

3. Addressing uncertainty will require changes to regulations must be considered on a holistic basis and should be expected to require measures beyond the current tools in the regulatory framework of the NGR. It will require coordination with government.

    - Government involvement will be needed to manage consumer risks in an electrification scenario, and especially if parts of the network are wound down

    - The NGO should be revised to include decarbonisation as a core objective; however the AER should optimise investment to support efficient decarbonisation even without revision to the NGO and NEO – as decarbonisation of stationary energy is essential to meeting the long-term interests of consumers with respect to the safety, and the reliability and security of supply of gas.

    - As cited in the Information Paper, the NGL should facilitate optimal energy objectives, not consider gas in isolation from electricity

    - As cited in the Information Paper, the NGL should not encourage growth in gas connections or consumption

4. Risk mitigation for networks should only be considered where consumer risks are also addressed:

    - Adequately addressing consumer risks may require negotiation with the networks

    - The expected timeline for decarbonisation is not a reason to overlook consumer rights in a transition process, given the potential for network disconnections to emerge as a 'spiral' scenario

    - Accelerated depreciation should not be considered where networks are being augmented, or new customers are being connected

    - Accelerated depreciation should not be considered where revenue is being invested in future gas projects

    - Accelerated depreciation should not be considered without a framework that establishes appropriate ownership of assets, and decommissioning, at the end of the depreciation timeframe

    - An adequate framework may also require asset revaluation

Addressing uncertainty or stranding risks should be considered as a holistic policy response to securing a fast, fair and effective energy transition to a sustainable climate future – not as an isolated or incremental regulatory mechanism

Key points:

1. Government decisions are not the key drivers of the stranding risk facing the gas networks
2. Accelerated depreciation does not address the risks for consumers associated with stranded assets, and it should not be applied to address uncertainty. Adequate measures are required to avoid increasing stranding risks for consumers (through hydrogen investment and ongoing augmentation), and measures to address consumer risks and fairly allocate risks and costs

2.3 The hydrogen safety study should not be funded

APA has proposed a $37.9 m study to determine the compatibility of its pipes with a proposed 10% hydrogen blends.

APA has told stakeholders that until the study is conducted, it is not known whether hydrogen will be compatible with their pipeline at any pressure (pressure levels may need to be lowered.) They have also said that it is not known whether the pipes would be suitable for higher levels of hydrogen.

This study is a research project, and as such, it is high-risk investment – not conforming to the NGO's requirement for efficient spending. We are not satisfied that any evidence has been presented regarding its relevance to pipeline services for the upcoming period, and as such, seems inconsistent with Rule 79.

Attached analysis from TRAC Partners notes that the networks typically have contractual arrangements in place to control the quality of gas that can enter the pipeline. If that is the case, there will be pre-existing contractual rights in place to limit or restrict hydrogen blends from entering their pipelines. Given the protection under the NGL (s321), APA will not be required to introduce this blend.

The hydrogen study should be considered a particularly high-risk research proposal, because hydrogen's reticulation via the high-pressure network may prove to be unnecessary, for reasons including:

- The likelihood that much of the current gas load will be electrified, leading to a decarbonisation pathway under which hydrogen transport via transmission pipelines is not required
- The many uncertainties around the way that hydrogen or renewable gas might be deployed in future, which may not need the high-pressure transmission network[8]
- The potential for hydrogen transport in the existing high-pressure pipelines to prove unviable, due to embrittlement, leakage etc
- The likelihood that any hydrogen blend trials in the short term will be conducted at the distribution scale[9]

[8] Advisian. 2021 *Australian Hydrogen Market Study* https://www.cefc.com.au/media/nhnhwlxu/australian-hydrogen-market-study.pdf

[9] Energy National Cabinet Reform Committee. 2021 *Extending the national gas regulatory framework to hydrogen blends and renewable gases* https://www.energy.gov.au/sites/default/files/2021-

APA has cited the Energy National Cabinet Reform Committee's decision to fast-track expedited rule changes to allow a 10% hydrogen blend to be introduced to the distribution network, as the grounds for this research. However, the ENCRC's Consultation Paper states that they support the blend's introduction to the distribution network, and they do not support its introduction into transmission pipelines.[10]

The ENCRC's statement also implies that introducing a 10% blend has been assumed to be compatible with existing infrastructure – which suggests that it has been assumed not to require a significant investment.[11]

This assumption has already proven to be incorrect. Victorian gas distributors have proposed a total of $57m for 'hydrogen readiness' in their current access arrangement, which they have said is largely related to the prospect of accommodating a blend – and APA has proposed $37.9m in research. This period's proposed spending has not been presented as the total spending required to accommodate a blend, with no estimate of a total provided.

Australia's November 2019 National Hydrogen Strategy (NHS) states that their rationale for the proposal to introduce a 10% blend is to create a demand that might eventually bring down the cost of green hydrogen production (by driving lower electrolyser costs).[12] This strategy echoes a similar suggestion in the IEA's Future of Hydrogen report.[13] However, now that the proposal has incurred unexpected proposed network spending, we believe this stated objective for introducing the 10% blend should be tested against the NGO.

While we support an interpretation of the NGO that pursues decarbonisation, the NHS's proposal for a 10% blend is not primarily its direct emissions reduction, but an attempt to facilitate hydrogen development. Competitive emissions reduction can be achieved already for residential users, through the alternative pathway of electrification.

Australia's green hydrogen industry is entering an early research phase. There are many different potential ways hydrogen might be deployed in future. The prospect of using the existing high-pressure network is not assumed to be practical in most hydrogen studies, and it may not be an important part of the future ways we use hydrogen.

We challenge APA's claim that that this research must 'realistically' happen now. If a future business case emerges for the use of the transmission network to accommodate hydrogen, then this would be an appropriate future driver for conducting this research.

We also question the proposal to depreciate this spending in 5 years, given that if any benefit is delivered to consumers by this research, it will be over a very long term.

10/Extending%20the%20national%20gas%20regulatory%20framework%20-%20Officials%20consultation%20paper.pdf

[10] ENCRC. 2021

[11] ENCRC. 2021 *Extending the national gas regulatory framework to hydrogen blends and renewable gases webpage* https://www.energy.gov.au/government-priorities/energy-ministers/priorities/gas/gas-regulatory-framework-hydrogen-renewable-gases

[12] COAG Energy Council. 2019. *Australia's National Hydrogen Strategy* https://www.industry.gov.au/sites/default/files/2019-11/australias-national-hydrogen-strategy.pdf

[13] International Energy Agency. 2019 *The Future of Hydrogen* https://www.iea.org/reports/the-future-of-hydrogen

Key points:

1. The proposed study is a research project that does not comply with the conforming capital expenditure criteria in the NGR.
2. Accommodating a hydrogen blend in the high-pressure transmission network is a low priority for commercialising hydrogen, and there is no strong consumer-centric case to make this investment now.

3 Capital expenditure

3.1 A significant amount of augex has been proposed, despite the stranding risk

3.1.1 The South West Pipeline Augmentation Project should be avoided

APA has proposed a $97m upgrade to the South West Pipeline on a fixed principal basis, with capital returned though an accelerated depreciation schedule.

3.1.1.1 The SWP business case should be reassessed with data from the 2022 GSOO

The project has been proposed to address a perceived marginal peak-day load shortage that would emerge should the Port Kembla gas terminal fail to be built as scheduled in 2023. AEMO's 2021 GSOO suggests that Port Kembla will resolve those shortages; however APA has questioned its inclusion given the project does not yet have FID.

It is important that the justification for all proposed augmentation focuses on consumer requirements, rather than responding to the investment status (e.g. FID approval), of gas development projects. (APA cites Lochards' FID as the driver for this project in their Overview document, describing the project as 'investment in security related compression on the South West Pipeline to accommodate Lochard Energy's expansion of Iona Storage Facility capacity').'[14]

A re-evaluation of the need for this project should be undertaken in light of the current uncertainty of the supply/demand imbalance. This should be done with reference to the 2022 GSOO, and also a consideration of the impacts of the Victorian Government's Gas Substitution Roadmap, to enable the NGR's requirement for best estimates arrived at on a reasonable basis.

If the SWP is being proposed to address the 2023 potential peak day imbalance, it is important to confirm it will be operational by that date. The Regulatory Information Notice (RIN) cites 2024 and 2025 commissioning date for compressors.[15]

[14] APA. 2021. *APA VTS 2023-27 Access Arrangement Reset RIN Response – Public* https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/apa-victorian-transmission-system-access-arrangement-2018-22/proposal

[15] APA. 2021.

3.1.1.2 A broad options analysis should be conducted for the SWP

The circumstances of the current access arrangement – given APA's identification of an emerging stranding risk – warrant a high standard of evidence of a need for any new augmentation. These should be recognised as exceptional circumstances that require adopting a broad and thorough approach to exploring alternatives.

It is important that low-cost options like demand management are fully explored as a way to avoid investment at risk of stranding.

Although APA has suggested that a consideration of demand management is not their responsibility, this proposal has been made in a context where APA has proposed to bypass the consumer protections of the capital redundancy provisions. In this context, consumers expect decisionmakers – including energy governance bodies (AEMO and AER), government and networks – to collaborate to overcome any ambiguities of responsibilities, and any other aspects of the framework that might act as a barrier to deploying appropriate low-cost solutions to short-term supply/demand imbalance.

It is also important that these access arrangements consider the full potential cost savings of measures that might avoid augmentation on both the distribution and the transmission networks – such as the introduction of a policy to cease new gas connections.

As is noted by APA's own consultant, Oakley Greenwood:

There future conditions affecting the domestic gas market are inherently uncertain – more so now than possibly at any time in its history. This uncertainty increases the value of flexible supply and infrastructure options to meet projected seasonal supply gaps, or put another way, it increases the risk associated with making long-term, large scale investments, in the face of this uncertainty.[16]

This must be a consumer-centric options analysis. The fact that Lochard has reached FID for the Iona expansion does not contribute to a business case for this project.

3.1.1.3 The SWP should not be allowed to be proposed as fixed principal investment

APA has proposed fixed principal terms for the SWP – that would prevent capital expenditure from being removed from the capital base even if assets cease to be used – as well as accelerated depreciation of that capital expenditure.

The provision to remove redundant capital from the capital base has been included in the NGR to manage the type of asset stranding risk that APA has identified as likely for the SWP. This is consistent with the terms of the NGL's Revenue and Pricing Principles, that don't guarantee full cost recovery, especially where investment is not efficient.

APA states that the fixed principal is required to provide access to capital for this project. APA's unwillingness to be exposed to the risk of this project is an indication of an uncommercial level of risk, and it underlines the importance for consumers to avoid this investment if possible.

[16] Oakley Greenwood, Issues Affecting Demand and Supply for Gas on the Victorian Transmission System, Final Draft September 2021, p13

3.1.1.4 The SWP exemplifies the emerging network risks of uncertain supply sources

The SWP is a long-term asset that has been proposed to address a short-term marginal peak-day forecast shortfall - because of a lack of visibility into the development schedule for a NSW project expected to be on line next year. At the same time, it has been flagged by APA as at risk of stranding even before it is built.

This situation should be recognised as being an example of the emerging risks for natural gas consumers as legacy supplies are exhausted, and consumers are required to access new natural gas sources.

It is important that these real risks are captured in the current modelling exercises that compares electrification with 'future gas' decarbonisation pathways (e.g. ISP, Victoria's gas roadmap, KPMG Future of Gas etc), because electrification provides a competitive means for residential consumers to reduce their exposure to this type of risk.

3.1.2 The Western Outer Ring Main (WORM) should not be approved without re-evaluation for the upcoming period

3.1.2.1 The Access Arrangement does not demonstrate a business case for the WORM in the current conditions

The documentation provided regarding the WORM in APA's Initial Proposal did not include a detailed revised business case for the WORM in the current period.

There are many important differences impacting the proposed proposal for the upcoming period, compared to the last:

- The WORM is now expected to cost significantly more ($184.5m compared to $126.7m)
- AEMO demand forecasts are lower than they were in 2017 and
- the project has been identified as being at risk of stranding, with consumers bearing that risk through accelerated depreciation.

The 2017 business case assessment states that the purpose of the WORM is to improve access to northern gas sources, especially for Iona storage, to allow it to be replenished faster. The VTS's need for this capacity over the next period should be demonstrated with respect to updated demand/supply data – preferably from the 2022 GSOO.

The WORM has been delayed four years past its intended construction schedule, and the new timeline for a 2023 operational date is still subject to approvals. It is possible that the WORM will not be online to assist with the shortfalls that APA is forecasting could affect winter 2023 (if Port Kembla is not available as expected) – and in the context of steady or declining gas demand, the need for this investment should be scrutinised in more detail.

Furthermore, more detail is required to justify the significant increase in forecast capital expenditure for the project, given:

- APA has only given reasons to explain some of the increased cost for the project. There is no explanation of drivers for the remainder of the increase; and

- Where APA has given reasons, it has only provided a few paragraphs to explain certain line items, some of which have caused the project's forecast capex to increase by more than $20m.

3.1.2.2 A broad options analysis should be conducted for the WORM

As for the SWP, and all proposed augmentation, it is particularly important that a broad options analysis is conducted to explore alternative low-cost opportunities that would allow the at-risk augmentation to be avoided.

This should include demand management, and policies that would also alleviate augmentation for distribution networks – like a cessation of new connections to the gas network.

3.1.3 Rule 80 Applications should be avoided

APA has made Rule 80 applications for other items of forecast capital expenditure:

- Upgrades to accommodate proposed Viva LNG terminal at Geelong

  Upgrades to SWP, Brooklyn Terminal and Brooklyn Lara Pipeline

  (Capacity: 600 TJ/day over the course of the southern winter)

  (Cost: $14.78m)

- Upgrades to accommodate Vopak LNG import terminal at Avalon

  Upgrades to SWP, Brooklyn Terminal and Brooklyn Lara Pipeline

  (Capacity: 600 TJ/day over the course of the southern winter)

  (Cost: $14.78m)

- Upgrades to accommodate further upgrades at Lochard Iona Gas Storage facility

  Upgrades: looping of the SWP, and upgrade to Brooklyn City Gate

  (Cost: $215m)

While we note that the NGR Rule 80 applications for these three projects are only concerned with seeking the AER's pre-approval from that the forecast capex for each is conforming capital expenditure under Rule 79 of the NGR, APA has flagged that, if pre-approved, when it seeks to include the capex into the access arrangement, it will do as a fixed principal development, subject to accelerated depreciation. APA has stated that without these allowances, 'the resultant risk/reward balance will render it very difficult to attract capital to these projects.'

3.1.3.1 A broad options analysis should be conducted for the Rule 80 projects

For the same reasons as stated for the SWP and the WORM, a full consideration of low-cost alternatives to avoid this investment should be considered.

It is also important that all proposed augmentation projects are evaluated as competing options.

Given that the lack of social licence and environmental impacts of the proposed AGL Crib Point terminal were so severe that this prevented this project from gaining necessary approvals to be constructed – a full options analysis is particularly important for the floating terminal proposals.

3.1.3.2 Preapproval for these projects may lead to over-investment

As stated in APA's Rule 80 proposal, there are a number of projects with the potential to meet the forecast peak-day shortages and connect Victoria to new sources of gas.

These include three projects listed by APA that don't require VTS upgrade, as well as the three they have put forward for Rule 80 approval. The SWP upgrade and the WORM, both included within the Access Arrangement as augmentation, also serve similar purposes.

Our preference is that all avenues that would allow this augmentation to be avoided be explored. However, if network expansion is ultimately found to be unavoidable, it is important that this is limited to only the best value solution.

However, the way the Rule 80 application has been framed, if any of the three projects– along with the SWP expansion project that has been included in the access arrangement – are approved and proceed to achieving a FID, there is a real risk it will lead to over-investment in the VTS. All projects are targeted at addressing the same underlying issue: APA's projected short-term shortfall in peak demand gas supplies.

We also note that two of the proposed projects are associated with floating LNG import terminals, which are able to be relocated and repurposed. Therefore, the business cases for these private projects are not necessarily based on the assumption that they will operate in place over their design life, or to meet any expected demand for gas (if for example, the terminal operator is able to secure a more attractive return in another location in the world). FID for one of these projects does not demonstrate that their construction is a commercial solution to supply gas to Victoria, or that long-term VTS asset construction is warranted.

If preapproval is given to multiple Rule 80 projects, there is a risk for consumers that more of these projects will progress than absolutely necessary, and the VTS will be overbuilt. Given the stable-or-declining load forecasts, the identified stranding risks, and the proposal that these projects will be on a fixed principal basis with accelerated depreciation – this is an especially high risk for Victorian consumers.

Key points:

1. Given the identified stranding risk, and the proposal for fixed principal projects and accelerated depreciation, all augmentation should be avoided if possible, with a broad and robust options analysis being implemented to find appropriate low cost, alternatives
2. The WORM should be re-evaluated in the context of changed circumstances
3. Rule 80 proposals should be avoided if possible, given the potential for overbuilding

3.2 SOCI expenditure is necessarily confidential but should be closely evaluated

Given the sensitivity of this investment category, AER's analysis of the SOCI proposal will draw on information provided privately by APA.

The attached report from TRAC Partners raises questions for consideration about the SOCI proposal (see pages 27 & 42).

This includes confirmation that the forecast aligns to identified gaps, and any potential for double counting between SOCI and IT capital expenditure (TRAC page 27).

The analysis also raises the question of whether SOCI capex was included in the last period's proposal, and whether any was incurred by APA (TRAC page 42).

Key points:

1. Given the sensitivity of the business case, this assessment is private - we have raised questions only in relation to the SOCI analysis

3.3 Proposed repex is significantly higher than last period, despite the stranding risk

APA's forecast repex is proposed to be $45.4m (148%) more than what it expects to spend in the current period, to total $122.9m. Much is associated with the Integrity Management and Unpiggables programs, with APA citing urban encroachment and the identification of more condition-based repairs due to new methods.

Although we acknowledge that safety remains critical, in the context of an identified stranding risk, a higher standard of evidence to demonstrate the safety requirement for proposed repex should be required.

We note the comments included on pages 31–34 of the attached TRAC report.

Proposals to 'improve' reliability should consider current reliability levels, and whether there is evidence these are inadequate.

The analysis also raises the question (page 34) whether large repex projects, such as the Brooklyn Compressor Stations upgrade project, have been adequately assessed in light of whether run-to-fail would provide a more efficient and more appropriate solution. This is particularly relevant given the project end-date past 2027, and the uncertainty of future loads.

Small repex projects (less than $500,000) make up a significant proportion of the proposed replacement program. Attached analysis from TRAC Partners (page 31) has suggested conducting a sample of business cases for these smaller projects to better understand this spend.

Key points:

1. The context of an identified stranding risk requires a high standard to demonstrate the requirement for repex, particularly given the significant increase in capital expenditure being proposed in this category.

3.4 Capex in the 2018–2022 period was higher than forecast

Actual capex in the 2018–2022 period exceeded the regulatory allowance by 21%, despite the delay of the period's major capex project, the WORM.

The attached TRAC report has questioned the adequacy of the RIN document's justification for this discrepancy (page 26) against the NGR.

This includes the cost for projects with significantly higher than forecast final costs, and the refurbishment of the Dandenong office, which may not have been included in the period's proposal.

The attached analysis also points to the high proportion of small repex projects making up around 20% of repex at the start of the last period, and in the current proposal.

Key points:

1. Capex in the previous period exceeded the regulatory allowance, despite the fact that the major augex project, the WORM, was not completed.

4 Operational expenditure

4.1 The opex for the nominated base year (2020 or 2021) is higher than others in the current period

APA has nominated 2020 as a base year; however we note that this year (or 2021 if that year is proposed as an alternative) is higher than earlier years in the last period. We question whether there is sufficient evidence that this is an efficient base level of operating expenditure. We are not confident that there is sufficient information included in APA's proposal to explain the drivers for 2020 and 2021 being higher levels of opex (see TRAC report page 43).

We note that regulatory precedent suggests the penultimate year of the current access arrangement period is a standard reference for the base year.

4.2 APA has proposed a significant amount of opex step change revenue

APA has proposed the following opex step changes to justify even higher opex levels than in proposed base year.

Table 1 Opex step changes

Carbon offsets	$1.5m (total 5 years)
SOCI	$6.6m (total)
ICT	$9.4m (total)
Property Taxes	$614,252 per year
WORM	$605,800 per year
SWP	$562,521 per year per compressor (1 compressor after 2024 and 1 after 2025)

4.3 Avoiding unnecessary augex will incur significant opex step change savings

Section 3.1 stresses the importance of pursuing available avenues to avoid augmentation that is at high risk of stranding.

Table 1 shows that this will also deliver opex savings of more than $1.5m per year (plus any opex associated with Rule 80 applications.)

4.4 Carbon offsets should not be funded through revenue

APA has proposed $1.5m to cover the cost of Australian Carbon Credit Units to cover a proportion of the Scope 1 carbon emissions associated with calculated fugitive emissions associated with their pipelines (they have argued that Scope 1 emissions associated with compressor operation are attributed to AEMO.)

This proportion has been calculated along an emissions reduction trajectory in line with Victoria's reduction targets.

APA has not provided sufficient evidence that the proposed offsets procurement is a legal requirement.

Investment in offsets to improve APA's corporate climate reporting should be funded by the business, not consumers.

4.5 The cost allocation methodology should be reviewed

APA's Cost allocation methodology governs the distribution of shared costs between the VTS and APA's other assets, including unregulated and regulated businesses.

Pages 45 and 46 of the attached TRAC report raises issues with respect the current suitability of APA's CAM and the level of corporate based opex proposed.

Given the increasing pressures on consumers' debt levels caused by rising energy bills, there should be a heightened scrutiny of the appropriateness of the CAM approach. This is especially the case given the increased level of opex proposed for in the upcoming period.

If APA acquires or develops a significant asset during the access arrangement period, it is important that there is an adequate mechanism to pass gains from economies of scale on to VTS consumers.

Key points:

1. The nominated base year is higher than others in the period.
2. Carbon offsets is inappropriate expenditure for revenue.
3. Avoiding unnecessary augex will deliver significant opex savings.
4. The cost allocation methodology should be reviewed.

5 Supply and demand forecasts

5.1 Supply and demand forecasts should be revised according to the 2022 GSOO, and also, any impact of the Victorian Gas Substitution Roadmap

We recommend the adoption the 2022 GSOO as the basis for the demand forecasts for the 2023-27 access arrangement, with an allowance for a potential impact from the Victorian Gas Substitution Roadmap due to be released in the first half of 2022.

Before allowing for any impact of the Victorian Gas Substitution Roadmap, the 2022 GSOO is likely to derive a forecast of demand that is the 'best estimate arrived at on a reasonable basis' (and therefore consistent with the requirements of the NGR for estimates and forecasts for the following reasons:

- The GSOO for 2022 will be based on more accurate, up to date and complete information than the 2021 GSOO
- AEMO has broader information collection powers and so is able to ensure all relevant information is taken into account; and
- The AEMO GSOO is developed following a robust and well-established consultation process.

TRAC Partners has raised a number of potential inconsistencies in the supporting information used by APA to substantiate demand forecasts (see pages 52–53).

Key points:

5. Supply and demand forecasts should be revised according to the 2022 GSOO, and also, any impact of the Victorian Gas Substitution Roadmap

6 Customer engagement

6.1 APA's Roundtable was open and informative

APA ran a consumer engagement roundtable starting in November 2020. BSL was involved from August 2021. APA was proactive in making an offer to bring BSL up to speed.

The information presented by APA was clear and useful in supporting a discussion regarding the key points of contention of the proposal. They responded to roundtable member requests for supply–demand modelling.

Because of the complexity of the issues raised by the current reset, the consultation process did not reach consensus on many issues. Therefore, it was appropriate that consultation did not attempt to be too far to the 'involve' pole of the IAP2 spectrum, and that the AER conduct a detailed evaluation. This should not be considered a shortcoming of APA's approach.

It's also important to note that APA's consultation with consumer representatives was combined with consultation with other stakeholders. This included industry interests, including representatives from Viva and Lochard. That did not make the consultation less effective, however it does highlight the importance properly allocating roundtable feedback to member organisations.

6.2 Reported engagement results did not always reflect feedback

The APA Overview Paper summarises stakeholder feedback in a table on page 15.

As noted, engagement included both industry (gas producers) and consumer stakeholders, who should be expected to have opposing interests with regards to many issues raised by this complicated access arrangement.

BSL made a written submission to the draft proposal submitted by APA. There are a number of issues listed in this table that we did not endorse, either in roundtable discussions, private discussion with APA, or in our written submission.

Most significantly, BSL did not endorse the following responses as cited in this table:

- 'To reduce uncertainty, supply forecasts include only projects that have reached Final Investment Decision'
- 'Capping maximum asset lives to accelerated depreciation of assets'
- 'Review of asset lives and depreciation profile if there is a change in circumstances'

- 'Hydrogen safety and integrity testing to assess possibility of repurposing VTS pipelines.'

Key points:

1. APA Roundtables were open and constructive.
2. Some of APA's documented responses do not reflect BSL's feedback.

7 Supporting information

7.1 Additional supporting information is required for a number of expenditure forecasts

There are a number of aspects of the proposed revised access arrangement which do not appear to have adequate supporting information to demonstrate their conformance.

In particular, further substantiating information should be provided for the following aspects of APA's proposed revised access arrangement:

- Augex expenditure for the WORM, SWP and Rule 80 proposals
- Forecast capital expenditure associated with the SOCI Act – particularly given the confidentiality and sensitivity of this category of expenditure
- The adequacy of the cost allocation methodology for shared capex and opex.
- Supply & Demand forecasts, particularly where APA has diverted from the forecasts included in AEMO's GSOO.
- Some opex step changes, such as the proposal for carbon offsets, need more supporting evidence.

Key points:

1. Additional supporting information is required for a number of expenditure forecasts.

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BSL RESPONSE TO APA VICTORIAN TRANSMISSION SYSTEM (VTS) 2023-27 ACCESS ARRANGEMENT PROPOSAL

Brotherhood of St Laurence
Working for an Australia free of poverty

TRAC Partners

EXECUTIVE SUMMARY

OVERARCHING OBJECTIVES THAT SHOULD FRAME APA'S AA

In order for APA's AA be able to be seen to be consistent with the National Gas Objective, it needs to at least meeting these three key objectives:

- Objective#1 - Keeping gas prices as low as possible for today's household and small business consumers. Importance is underscored by:
  - While transmission tariffs represent a relatively small percentage of the total price of gas for consumers, there are already indications that gas prices are increasing significantly in Victoria – eg the average daily weighted imbalance price for gas in Victoria has increased by more than 100% in the last 12 months.
  - Increase in debt levels for residential gas consumers and the increase in the number of consumers receiving tailored support (based on the Vic ESC reports – June and September 2021) and in light of customers already moving away from natural gas to electrification.
- Objective #2: the costs of transitioning to lower emissions energy sources must be efficient and to the extent allowed, borne equitably by today's and tomorrow's consumers.
- Objective #3: sufficient supporting information must be provided to enable AER to assess whether proposal is capable of acceptance under NGR.

BSL'S KEY FOCUS AREAS

In preparing this review, we have also paid close attention to BSL's key focus areas when it comes to energy pricing:

Focus Area	BSL's Position
Affordability for consumers	- Continued tariff increases come at a time when energy debts are increasing, and some households will have been disproportionately impacted by the pandemic, and the withdrawal of financial support mechanisms. - Even a "business-as-usual" approach to regulated asset pricing will create further stress for consumers who are already facing increased distress - But, an approach that seeks to transfer more risk, and therefore cost, to consumers will only compound this distress. This is not in the short term or long term interests of today's or future consumers
Tariff levels and tariff path stability	- If proposed AA is approved, this will result in there being a 47% increase in transmission tariffs between 2018 and 2027

Future of gas	- In considering whether to allow measures proposed by regulated businesses to address a perceived increase in uncertainty as to the future of gas, regulators need to:
	  - recognise that the increased uncertainty is more a function of market forces than government policy on climate change
	  - acknowledge that in a competitive market, investors have no guaranteed right to full capital recovery
	  - take into account the increased risks to consumers that any measure introduces

BSL'S KEY FOCUS AREAS (CONT'D)

Focus Area	BSL's Position
Accelerated depreciation as a measure to address uncertainty	This measure should not be supported on a standalone basis because it: - incentivises businesses to continue to propose higher risk investments - does not replicate how a business would respond in a competitive market - adversely impacts on consumers who either can not afford to switch to electricity or can not substitute gas for electricity - will disincentivise operators from investing once capital is recovered, putting service quality at risk - raises costs for today's consumers at a time where there is already increasing cost pressure Addressing the issue of the uncertainty of gas must be considered wholistically and in the case of Victorian regulated energy businesses, this should be done in isolation from the Victorian Government's Climate Change transition planning process. Consideration needs to be given to such issues as: - How to manage any wind down of the use of assets - Service quality certainty - Ownership of depreciated assets - Funding for R&D into alternative, renewable energy sources

BSL'S KEY FOCUS AREAS (CONT'D)

Focus Area	BSL's Position
Prudency & Efficiency of opex and capex	- A "business-as-usual" approach to expenditure can not, of itself, be considered prudent - Past business cases for investments need to be re-evaluated against the criteria in light of the current market circumstances. The AER should not just accept them because they were accepted 5 years ago. - It should not be assumed that the cost of managing any increased risk to the service provider should be borne by consumers.

Adequacy of supporting information	- There are a number of aspects of the AA which do not appear to have supporting information to enable AER to determine whether the AA is capable of acceptance. The AER should ask for further substantiating information on the following:
	  - WORM expansion capex
	  - Supply & Demand forecasts
	  - SW Pipeline expansion capex

Investment in hydrogen readiness costs	- Insufficient information has been submitted to substantiate APA's proposal to enable AER to accept it - Without knowing the potential total costs of transitioning the system to hydrogen, it is difficult to know whether the proposal is "no regrets" - A competitive market would not ordinarily allow recovery of this type of R&D expenditure – speculative investment provisions of NGR should be used - Unclear of the extent to which APA is using combined research efforts of pipeline industry to minimise costs

APA'S ISSUES AND RELEVANT FEATURES OF AA

- APA claims that the AA has been developed to address a number of issues:

Issue	Relevant Feature of AA
Investment incentives impact during uncertainty	- Capping maximum asset lives (to 30yrs) to accelerate depreciation of assets - Fixed Principle to ensure SWP capex is not subject to capital redundancy provisions at future re-sets - Hydrogen safety & integrity capex program
Consumer affordability	- Smoothing tariff path to apply only CPI increase between 2022 and 2023 but then allow annual increases of CPI+3.4% each other year - Reduced impact of accelerated depreciation by increasing maximum asset lives cap to 30yrs instead of 25yrs - Stage the SWP Expansion capex during the period rather than in one year
Security of supply and of VTS, but not at any price	- Continued with the WORM project - SWP expansion project - NGR Rule 80 Application for other security of supply projects - Significant increase in Security of Critical Infrastructure expenditure

APA'S ISSUES AND RELEVANT FEATURES OF AA

Issue	Relevant Feature of AA
Prudent & Efficient opex and capex levels	- Hydrogen safety & integrity capex program - Maintaining system security in line with obligations under Security of Critical Infrastructure framework. But this leads to significant increase in forecast Security of Critical Infrastructure expenditure - Forecast capex and opex underpinned by principle of needing to minimise risk to as low are reasonably practicable in line with good industry practice (as per AS2885)
Intergenerational equity between consumers	- Capping maximum asset lives (to 30yrs) to accelerate depreciation of assets - With accelerated depreciation, adopt the principle of start early, start small, and monitor - Minimise capex given move to accelerated depreciation

HOW APA'S MAIN FEATURES OF AA ALIGN WITH KEY OBJECTIVES

We have made the following assessment of how each of the main features in the proposed AA align with the key objectives, based on the information submitted by APA (and refer to the slides in this report where we expand on our comments):

AA Feature	Key Objectives Alignment	Slides
• Capping maximum asset lives (to 30yrs) to accelerate depreciation of assets	1☒ 2☒ 3☒	13-14
• Fixed Principle to ensure SWP capex is not subject to capital redundancy provisions at future re-sets	1☒ 2☒ 3☒	15
• Forecast hydrogen safety & integrity testing capex program to assess repurposing options	1☒ 2☒ 3☒	16-18
• Smoothing of tariffs during AA period to limit 2023 tariff increase to CPI and then 3.4% above CPI annual increases	1☑ 2☒ 3☒	19
• Only include forecast capex to support gas supply projects that have reached FID BUT….	1☒ 2☒ 3☒	20
• Rule 80 application for capex to support other gas supply projects not yet at FID	1☒ 2☒ 3☒	20
• Continue with the WORM project capex	1☒ 2☒ 3☒	21
• Significant increase in forecast Security of Critical Infrastructure capex and opex program	1☒ 2☒ 3☒	27 & 42
• Minimise forecast capex and opex – invest only in what is needed to minimise risks to as low are reasonably practicable in line with good industry practice	1☒ 2☒ 3☒	26-28 & 31-34
• Minimise forecast capex in light of move to accelerated depreciation	1☒ 2☒ 3☒	48-49

DETAILED COMMENTS ON KEY FEATURES OF APA'S AA

COMMENTS ON KEY FEATURES

The following slides comment on each of the initiatives and how consistent they are with the key objectives outlined at the beginning of this report. Our comments are based on the information submitted by APA to the AER in support of the AA proposal and which has been made publicly available.

In each slide, we have adopted the following legend as our comment:

-  - consistent with key objectives
-  - further work or analysis required before we could recommend that BSL could accept that it is consistent with the key objectives

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments

Capping maximum asset lives (to 30yrs) to accelerate depreciation of assets 	• APA has wrongly claimed that all stakeholders supported the capping of maximum asset lives to 30 years. BSL is not in support of this proposal.
	• Consideration does not appear to have been given to the additional risks consumers will be faced with as a result of adopting accelerated depreciation:
	  • Increased costs for gas consumers could make the switch to electrification even more economic, thereby accelerating the voluntary moving away from the use of gas pipelines.
	  • It will result in higher costs for remaining customers who are less able to switch to electrification because of either the cost involved or they are reliant on gas for their downstream operations
	  • It exacerbates existing stresses of consumers who are already facing increased debt levels for energy usage
	  • Incentivises service providers to continue spending on expansions to the infrastructure and R&D for alternatives to natural gas, which costs are also being proposed to be passed through to consumers
	• When combined with the following other features of the AA, the risk of asset stranding appears to be unfairly being transferred wholly to consumers:
	  • The tariff structures are such that consumers wear demand risk
	  • Debt financiers place a significant importance on demand and asset stranding risk and this should already be factored into the allowed cost of debt
	  • The costs of assessing alternative (renewable) energy to use the asset is being wholly passed on to consumers
	  • In the case of the SWP expansion, a fixed principle is being proposed.

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments

Capping maximum asset lives (to 30yrs) to accelerate depreciation of assets (Cont'd) 	Proposed use of accelerated depreciation does not appear to be consistent with the NGR and NGL. While the depreciation criteria in Rule 89 of the NGR sets out the criteria that should be applied for the design of an asset's depreciation schedule, the criteria must be applied so as to:
	• promote the efficient operation and use of natural gas services for the long term interests of consumers, particularly with respect to "price", "quality" and "reliability" (as per the NGO).
	• Have regard to the revenue and pricing principles (RPP). The particular RPPs the AER should consider are:
	  • A service provider should be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in (a) providing reference services (s24(3) NGL). It is not mandatory that service providers be given certainty that they will recover their costs;
	  • A reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates (s24(5) NGL).
	Given the above matters, the AER should be satisfied that acceleration of depreciation schedules should be allowed in the setting of reference tariffs.
	In competitive markets, it is the firm which takes on the risk of price and quality of sales and where there is a material stranded asset risk, it is the firm that manages that risk. The use of accelerated depreciation in the regulatory framework as a tool to manage that risk is an attempt to require the consumer to manage the risk.

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments
Capping maximum asset lives (to 30yrs) to accelerate depreciation of assets (Cont'd) 	Any decision to allow accelerated depreciation in part needs to be part of a total package of measures that should address the above matters, such as: • A cessation of gas network augmentation – and the establishment of policies (eg electrification programs) that allow gas network augmentation to be avoided. Or, if they are required, that they are not funded by the consumers who do not benefit from them or they are funded by government. • Expenditure incurred on research and development into alternative energy sources to natural gas such as hydrogen/biogas research or readiness should not be allowed as part of capital or operating expenditure in any tariff calculation. It could be allowed as speculative investment and not recovered under tariffs until the alternative sources are commercially proven. • Appropriate consideration should be given to transfer of the ownership of any potentially useful assets after full depreciation so as to create incentives for ongoing use of the assets • Support for consumers unable to manage a transition away from the use of gas infrastructure (eg appliance replacement subsidies, financial support for hardship) • Government support for network operators to invest in R&D for alternative, decarbonised energy sources to replace natural gas, rather than seeking to have consumers pay • A strategy to fund assets that become underutilised to avoid spiralling costs – this may include asset write downs and government support

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments
Fixed Principle to ensure SWP capex is not subject to capital redundancy provisions at future re-sets 	If SWP expansion capex is to be accepted by the AER, the practical effects of this proposal are that: • If the asset becomes redundant (ie it is not required for the provision of services) before it has been fully depreciated, only APA has the ability to not seek to recover the capital costs associated with the SWP expansion and to discontinue earning a return on that capital. There will be no ability for the AER to remove the capex from the capital base. • This places almost all of the risk associated with SWP Expansion capex onto the consumer, particularly when coupled with the adoption of accelerated depreciation and the tariff structure. This would not seem to be consistent with the Revenue and Pricing Principles. They do not evidence the existence of a regulatory compact as contended by APA. If anything, due to the acknowledgment that this project is being proposed to only address a short term supply risk and one that is a risk to only peak demand, it follows that the AER's assessment of the prudency of this capex should enquire as to how APA's board sought to manage redundancy risk, particularly when its own sustainability report doesn't identify redundancy of its assets as a major short term or long term risk. We would expect more explanation for why this should be allowed. Insufficient justification has been provided to be able to support this concept.

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments
Forecast hydrogen safety & integrity testing capex program to assess repurposing options 	The proposal to include this category of expenditure in APA's forecast capex program raises a number of issues which we would encourage the AER to explore in more detail: Firstly, given the drive to full electrification by residential consumers and the current economics making electrification a more cost effective option than continuing with gas (even with the cost of switching and augmentation of the electricity network), today's residential consumers should not have to pay for the cost of exploring an alternative to natural gas in the pipeline network when a more likely scenario appears to be that most consumers will cease using the gas pipeline in a shorter time frame than it will take to commercialise hydrogen. It would not seem to be intergenerationally equitable to have today's consumers pay for something that they are unlikely to derive a benefit from. Secondly, there needs to be a reasonably foreseeable likelihood that the commodity will enter the system in the foreseeable future. While "Foreseeable future" isn't limited to the next access arrangement period (ie 5 years) there is presently not even certainty as to whether hydrogen is able to enter the pipeline let alone when that is likely to occur. But even if there were some level of foreseeability about hydrogen being commercialised and today's residential consumers do remain as consumers of gas (in whole or in part), it would appear to be sufficiently far away to seriously question the appropriateness of today's residential consumers having to start paying the costs of something which they are not likely to derive a benefit from for some time (if at all).

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments
Forecast hydrogen safety & integrity testing capex program to assess repurposing options (cont'd) 	Thirdly, while it is acknowledged that the AEMC has commenced a process to consider changes to the NGR to give effect to a decision of the Energy Ministers in August 2021 to allow hydrogen blends and renewable gas blends to be regulated under the NGR, that, of itself, doesn't justify the allowance of hydrogen related expenditure to be included in APA's forecast capex. We would encourage the AER to explore in detail the following in principle issues: - The NGR only allows capital expenditure to be incurred in connection with providing pipeline services (Rule 79(2)(a). A pipeline service is defined (amongst other things) by the terms and conditions of the service. Currently, the terms and conditions are likely to define gas by reference to a specification which is unlikely to include renewable gases such as hydrogen. So, given hydrogen is not part of the definition of "gas" in the terms and conditions of service, incurring expenditure relating to a commodity that is not able to enter a pipeline can not be in connection with a pipeline service. - Even if there is a likelihood that hydrogen blends will be allowed under the regulatory framework (as a result of the current AEMC process), there are likely to be contractual limitations that prevent hydrogen from entering the pipeline. Presently, a pre-existing contractual right is protected under the NGL (s321) such that an access arrangement must not have the effect of depriving a person of a relevant protected contractual right. So, unless counterparties to all contracts with such contractual limitations in them agree to either waive this right or remove it from the agreement, the AER can not approve this category of expenditure.

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments
Forecast hydrogen safety & integrity testing capex program to assess repurposing options (cont'd) 	Fourthly, even if there is some likelihood that hydrogen may be commercialised in the next 5 years and it is considered appropriate for today's residential consumers to pay for capex in relation to an opportunity that they are unlikely to derive any benefit from, it may be more appropriate for the expenditure to be allowed by the AER but for it to be included in a "speculative capital expenditure account" under Rule 84. APA would be afforded the opportunity of the account increasing each year with a return component. Further, Rule 84(3) provides a level of certainty that these amounts would be able to be rolled into the capital base as conforming capital expenditure if hydrogen is commercialised and the type of services provided on the pipeline would accommodate hydrogen. This would appear to provide the certainty to investors. Fifthly, to propose to include this forecast capex does not appear consistent with the objective of keeping gas prices as low as possible for today's household and small business consumers. Sixthly, in a competitive market, these costs would be equivalent to R&D costs and would only be passed on to consumers once the concept was commercialised and even then, only if the R&D costs (together with a return on it) didn't make the option uneconomic against alternatives. Finally, regulatory precedent would suggest that it should not be allowed as conforming capex. In the Australian Gas Networks SA gas distribution system access arrangement decision for 2021, the AER approved expenditure for hydrogen research as speculative capital expenditure rather than as conforming capex.

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments
Smoothing of tariffs during AA period to limit 2023 tariff increase to CPI and then 3.4% annual increases 	Leaving aside our comments on the individual building blocks that make up the total revenue, the limiting of tariff increases in year one of the access arrangement period to only CPI provides stability of prices for residential consumers from one access arrangement period to the next. However there are two issues which we would encourage the AER to consider further: - to increase tariffs in each subsequent year by CPI plus 3.4% would seem to go against price stability, particularly given the low inflation environment that consumers have become used to and the increase debt burden of vulnerable consumers. - We have not seen an analysis of the likelihood (or otherwise) of variability in tariffs at the start of the AA period for 2028-22. We note that the AER's preference for distribution networks is for that variability to be limited to +/-3% between access arrangement periods.

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments
Inter-relationship between the SWP Expansion capex and the NGR Rule 80 application	APA has submitted a NGR Rule 80 application associated with capex for other security of supply projects that each require a lesser amount of capex to be incurred on the VTS (or none at all) than compared with the VTS but yet they could deliver the same security of supply benefit as the SWP project. However, these projects are stated as being dependent on the proponents of the projects achieving FID. This raises a number of issues: - Why should there be afforded greater certainty to the SWP project than to the other projects, particularly if they deliver equivalent security of supply benefit to users as the SWP project? Just because the Lochard Project (which appears to be the sole basis for the need for the SWP expansion) has achieved FID, it doesn't follow that it should be allowed as conforming capex. - There should be an opportunity for all projects that are addressing the issue of supply certainty to achieve FID within the relevant period (up until the final decision perhaps) and then it should be the lowest cost option that delivers the required certainty that should be allowed as conforming capex. - If the other projects achieve FID, then does this mean that all capex gets rolled into the VTS capital base and users are expected to pay for the capex of all projects. This would mean that there the users are paying for more than what is required to address what is (only) a short term need. - We would expect the NGR Rule 80 assessment process to be run in parallel with the AER's assessment of the VTS AA proposal. This is not yet clear from the AER's timeline and the fact that the NGR is not as prescriptive about the NGR 80 process as it is about the AA assessment process.

COMMENTS ON KEY INITIATIVES

Key Initiatives	Comments

WORM Pipeline project 	$126.7m was approved for this project in the 2018-22 AA. However its timing has been delayed (now expected to be completed in 2023) and, the revised forecast capex for this project has now increased to $184.5m due to 3 stated factors – additional HDD and rock disposal (+$24m), additional land access and approvals costs (+$20m) and higher steel prices (+$7.5m). This raises a number of issues:
	
	- Past business cases for investments need to be re-evaluated against the criteria in light of the current market circumstances. The AER should not just accept them because they were accepted 5 years ago.
	- What other factors are driving the $57.8m increase?
	- Given the significance of the increase and change in scope, a revised business case should be submitted before AER could accept
	- AER should make enquiries about whether:
	  - the project is still required given changes in demand
	  - the additional capex is a best estimate
	  - APA is including any contingency amounts in its forecast for this project (and any other project for that matter). Contingency amounts should not be allowed.
	- APA will have been earning a return on and a return of the previously approved amount of forecast capex for this project even before it had started construction, and so, the AER needs to:
	  - Ensure this capital recovery is returned if the project is not conforming capex; or
	  - If it is conforming capex - recognise this early capital recovery when setting the framework for depreciation in relation to this upcoming AA, and to make sure that the depreciation schedule limits recovery to only recovering the capital to no more than once.

COMMENTS ON SPECIFIC BUILDING BLOCKS

TARIFF IMPACTS AS A RESULT OF PROPOSED BUILDING BLOCKS

- The key changes in the proposed AA relative to the current AA are as follows:

Building Block	Change	Impact
Actual capex for 2018-22 vs approved forecast	+$109.4m	45.10% ↑
Forecast capex for 2023-27 vs actual capex	+$60.6m	20.80% ↑
Forecast opex for 2023-27 vs actual opex	+$43.6m	31.89% ↑
Depreciation (2018-22 vs forecast)	+$100.3m	47.42% ↑
Rate of Return (allowed in 2018-23 vs proposed)	-0.85%	14.8% ↓

- This results in the following system wide tariff impacts (nominal impact):
  - 2027 tariff will be 46.9% higher than 2018 tariff.
  - 14.3% increase for the first year of proposed AA relative to the tariff in the first year of the current AA (ie 2023 tariff compared with 2018 tariff).
  - A tariff path in the proposed AA period that results in a 28.6% increase from year 1 to year 5.

HOW EACH BUILDING BLOCK ALIGNS WITH KEY OBJECTIVES SO FAR

We have made the following assessment of how each of the building blocks in the proposed AA align with the key objectives, based on the information submitted by APA:

AA Building Block	Alignment with Key Objectives	Slides
• Roll forward of Capital Base (RAB) – actual capex	1☒ 2☒ 3☒	25-28
• Forecast replacement capital expenditure	1☒ 2☒ 3☒	29-34, 40-42
• Forecast expansion capital expenditure	1☒ 2☒ 3☒	20-21, 35-39
• Rule 80 application for capex to support other gas supply projects not yet at FID	1☒ 2☒ 3☒	20 & 35-39
• Operating Expenditure	1☒ 2☒ 3☒	43-47
• Cost Allocation	1☒ 2☒ 3☒	44-45
• Asset lives and Depreciation	1☒ 2☒ 3☒	12-14, 48&49
• Rate of Return	1☑ 2☑ 3☑	50
• Taxation	1☑ 2☑ 3☑	50
• Total Revenue and smoothing	1☒ 2☒ 3☑	4 & 19
• Incentive Mechanisms	1☑ 2☑ 3☑	50
• Supply and Demand assumptions	1☑ 2☒ 3☒	51
• Tariff setting	1☒ 2☒ 3☒	4 & 19

ROLL FORWARD OF RAB

- APA's methodology for the roll forward of the capital base (RAB) appears consistent with regulatory precedent.
- However, in relation to the total actual capex expected to be incurred in 2018-22:
  - It is $51m or 21% more than what the AER approved as forecast capex for 2018-22.
  - There are also significant year-by-year variances between actuals and what was approved by the AER as forecasts for 2018-22 as outlined below:

Variance							
Expansion	$m,2022	-32.3	-41.3	-48.0	30.6	97.3	**6.3**
Replacement	$m,2022	-8.5	-0.1	2.2	16.4	5.5	**15.5**
Other	$m,2022	0.0	0.0	0.0	0.0	3.7	**3.7**
Non-System	$m,2022	3.5	11.7	7.3	1.8	1.2	**25.5**
Total	$m,2022	**-37.3**	**-29.6**	**-38.5**	**48.7**	**107.7**	**51.0**

- While most of the expansion capex variances are timing, this does not appear to be the case with respect to the other capex categories. The significance of the variances should be a prompt for the AER to probe in more detail into the forecasting methodology adopted by APA in developing the forecast capex program for 2023-27.

ACTUAL CAPEX ISSUES

Issue	Initial Assessment	Comment
Explanation for variances in replacement capex approved in 2017 and the actual replacement capex		• While section B3.3 of the Reset RIN Response outlines the categories where there are differences and what categories drove the difference between the initial AER forecast and the actuals for 2018-22, we would expect a justification as to why each item of capex is conforming capex against the criteria in the NGR. There is only a general claim in the response in section B3.3 • We would expect to have seen information to demonstrate the risk assessment for the previously approved projects that got deferred or those that got added to the 2018-22 capex program – to demonstrate why it was appropriate to deviate from the previously approved forecast of projects and capex • We would also expect there to have been an explanation as to what drove the increases in cost for particular projects that were in the 2017 approved forecast • It is not apparent why the refurbishment of Dandenong office and storage project ($9.5m) was undertaken when it was not included in the forecast for 2018-22 (although noting that it was included as a forecast back in the 2013-17 AA). These issues should be clarified with APA.

ACTUAL CAPEX ISSUES

Issue	Initial Assessment	Comment
Level of SOCI capex incurred during 2018-22	☜	It is not clear if the AER approved forecast capex for 2018-22 included any allowance for SOCI program capex. There also appears to be discrepancies between the filed documents as to whether any such capex was actually incurred by APA. While the Reset RIN response document indicates there was expenditure, the workbook attached to it (workbook 2) doesn't appear to include any amount in the worksheets. Moreover, the table on p28 of the Reset RIN Response document seems to indicate that there is expected to be some expenditure in 2022 but then, it is not clear whether these costs represent a share of APA's total SOCI program costs or not. This is because: - Most of the business case document for the SOCI related capex has been redacted due to confidentiality claims; and - Where information has not been redacted, APA states that "SOCI physical security" expenditure is directly attributable to a particular asset but yet the table indicates that the amounts are "APA VTS's allocation of SOCI program costs" (p28 of Reset RIN Response). There is $2.9m of expenditure expected to be incurred in 2022 which is classified as "SOCI physical security. The AER should clarify these issues with APA.

ACTUAL CAPEX ISSUES

Issue	Initial Assessment	Comment
Justification of capex projects with total expenditure of less than $500k		From 2016-2018, projects each with a total value of less than $500k make up between 18% and 23% of the total forecast replacement capex (repex). Yet, no business cases have been made available for these items of expenditure. Given this is quite a high percentage of total repex, the significant increase in total replacement capex being forecast for the proposed AA period (20%) and the impact this has on revenues, we would encourage the AER to review the business cases for a sample of these projects to ensure they meet the criteria for conforming capex under the NGR
Option analysis for some actual (and forecast) capex projects		For some capex projects, the submitted business cases (eg the VTS unpiggables BC259) included only 2 options that had been assessed – either “do nothing” or the “proposed solution”. We would have expected a prudent operator would have considered additional options to address the issue, rather than just the proposed solution, particularly in relation to BC259 project (which involves $54.472m of actual and forecast capex). Potential options such as: - Derating the maximum allowable operating pressure of the unpiggable pipes; and - Staging the timing of expenditure to better manage tariff impacts (where it did not increase the risk profile. We would expect the AER to explore these options in further detail with APA.

FORECAST CAPEX ISSUES

- APA's total forecast capital expenditure program for 2023-27 is $352 million ($2022) which is $58.4 million (20%) higher than the total actual capital expenditure of $293.6 million for the current AA period (ie 2018-22) and $109.4m (45.1%) higher than the total approved by the AER for the 2018-22 AA as forecast capex.

	2023	2024	2025	2026	2027
Replacement	26,903,877	35,886,584	25,976,960	18,107,320	16,060,076
Expansion	80,722,171	52,419,233	6,823,008	-	-
Non-network	3,127,996	3,853,490	2,045,934	1,329,627	2,984,457
Capitalised network overheads	11,426,221	11,603,801	11,512,003	10,672,152	7,996,187
Capitalised corporate overheads	8,436,331	7,106,273	3,193,537	2,070,002	1,738,323
Other capex	-	-	-	-	-
Capital contributions *included in the above*					
Total *(less capital contributions)*	**130,616,596**	**110,869,381**	**49,551,442**	**32,179,101**	**28,779,043**

- While expansion capex accounts for approximately 40% of the total forecast, there is a 148% (+$45.4m) increase in replacement capex compared with actuals from 2018-22. At a time where the future of gas pipeline infrastructure is being raised as a major issue, the appropriateness of this level of expenditure and the increase should be scrutinsed more closely by the AER

FORECAST CAPEX ISSUES - GENERAL

Issue	Initial Assessment	Comment
Potential inconsistency in the total forecast capex		The total actual capex amount for 2018-22 referred to on p5 of the FP ($293.6m) differs from the total actual capex amount for that period referred to in section 2.1 of the Access Arrangement Information ($291.4m). We would encourage the AER to clarify this apparent inconsistency.
Asset replacement methodology		We would expect to see more information to: - explain the replacement program; and - Analyse the costs and benefits of different types of replacement programs – eg run to fail v condition monitoring based replacement. This is particularly important in circumstances where accelerated depreciation is being proposed because of expected shortened life of the asset due to reduced demand.

FORECAST REPLACEMENT CAPEX ISSUES

Issue	Initial Assessment	Comment
Further explanation required to ensure that saving expenditure in one period on preventative maintenance does not lead to greater expenditure being incurred in subsequent periods on reactive maintenance		There does not appear to be adequate information in the AA to form a view on this issue and we encourage the AER to investigate further.
Justification of capex projects with total expenditure of less than $500k		In the first 3 years of the proposed AA period, projects each with a total value of less than $500k make up between 18% and 23% of the total forecast replacement capex. Yet, no business cases have been submitted for these items of expenditure. Given this is quite a high percentage of the total repex, the significant increase in total replacement capex being forecast for the proposed AA period (20%) and the impact this has on revenues, we would encourage the AER to review the business cases for at least a sample of these projects to ensure they meet the criteria for conforming capex under the NGR

FORECAST REPLACEMENT CAPEX ISSUES

Issue	Initial Assessment	Comment
Methodology for estimating replacement capex	☜	• Forecast capex total is 20% more than the total actual capex for current AA. • APA should also outline the extent to which the replacement capex it proposes to incur will align with the AER's industry practice application note for asset replacement planning. Notwithstanding this guideline is developed primarily for electricity networks, most of the topics in this guideline are relevant to pipelines but yet APA's supporting information on replacement capex doesn't appear to address these matters.
Long term approach v short term approach to asset replacement	☜	It is not clear the extent to which, if at all, APA has undertaken an assessment between adopting a long term approach to replacement capex versus a short term approach, particularly if both approaches don't impact on service levels. If one approach results in a lower tariff, this option should be pursued, particularly given: - The impact that the proposal currently has on tariffs - The uncertainty as to the future of gas pipeline infrastructure Much of the replacement capex seems to be for projects that will either upgrade an asset (eg battery charger upgrades, inlet filter upgrades etc) or to install an asset design with principles that underpin existing, long-lived assets. In an uncertain environment, an assessment of this nature should be pursued. We would encourage the AER to explore this with APA

FORECAST REPLACEMENT CAPEX ISSUES

Issue	Initial Assessment	Comment
Should capex for projects which ***improve*** the safety, security and reliability of services be conforming capex	☜	Many of the projects have been slated as “upgrade” projects or projects which “improve” safety. However, the business case documents do not appear to demonstrate that: - current safety levels are unacceptable (which may therefore justify steps to improve safety); or - An upgrade is required It’s not clear why consumers should be required to bear the costs associated with “improving” the safety security and reliability and integrity of services if the level of expenditure in the current capex was considered by the AER to have been prudent last time around. Moreover, the conforming capex criteria of the NGR only allows capex to “maintain” such levels. Just because a project spans multiple AA periods doesn’t mean that capex for the project should be approved in the upcoming AA period

FORECAST REPLACEMENT CAPEX ISSUES

Issue	Initial Assessment	Comment
Justification for replacement capex programs for certain assets that span multiple AA period	☜	There are some projects which are scheduled to span multiple AA periods. An example is the Brooklyn Compressor Stations upgrade project, which is slated to incur expenditure over 2 consecutive AA periods: - 2018-22 - $5.050m - 2023-27 - $10.300m This raises a number of issues: - It's not clear why it is justified to spend this amount just to extend the life of this asset to 2031 - The "do nothing" option that has been considered concludes that adopting a "run to fail" approach to this replacement capex has the potential to interrupt reliability and security of supply. However, no analysis has been included to identify how likely this would be and what the financial cost would be. It may be a more efficient outcome than what is being proposed if the "financial costs" were less than the proposed capex. This should be explored by the AER

FORECAST EXPANSION CAPEX ISSUES – SWP EXPANSION

Issue	Initial Assessment	Comment
Have Options to SWP Expansion been adequately explored	☜	The SWP Expansion Project is identified as a project required to meet short term supply issues and only then, for peak demand in that short term period. Yet, the proposed capex will be recovered over the life of the asset, notwithstanding there is a high likelihood that the asset will not be required to meet level of services for that period. APA claims that it looked at alternatives such as: - Other projects that don't require investment in the VTS; and - Demand side management options such as curtailing peak demand users APA has not pursued demand side management options because it is not APA's responsibility under the rules applicable to the VTS (rather it is AEMO's responsibility). This should not however be a reason for not considering this option further, particularly if it would be a more efficient option. AER should investigate more efficient demand side management options before making a decision on this proposal. Further, if the other options that are the subject of the NGR Rule 80 application are cheaper, they too should be considered ahead of the SWP Expansion project.

FORECAST EXPANSION CAPEX ISSUES – SWP EXPANSION

Issue	Initial Assessment	Comment
Should all users pay for the costs of the SWP Expansion		APA notes that most of the support for projects that are addressing security of supply matters are businesses who rely on gas. There has been no record of support from residential consumers. The NGR requires the AER to assess the benefit of an expansion for users. If one category of user is claiming it will benefit them but others are not, it would follow that, if the AER considers the capex for the project to be conforming capex under the NGR, the AER should be looking at ensuring that only those users who will benefit from the relevant project/s should pay for it. There are mechanisms in the NGR that allow for the costs to be recovered from only a class of users: - If it is conforming capex – pursuant to Rule 95 NGR - If it is not conforming capex – a surcharge can be levied with AER approval under Rule 83 NGR These options should be explored by the AER

FORECAST EXPANSION CAPEX ISSUES – SWP EXPANSION

Issue	Initial Assessment	Comment
Capex should not be justified if it serves to improve the integrity of services or capacity levels		APA appears to have justified this project under Rule 79(2)(c)(ii) or (iv) – capex is necessary to maintain the integrity of services or to maintain capacity to meet levels of demand for services. But then it appears to argue that it is to improve (rather than just maintain) things. The AER should challenge whether these projects will maintain or improve service levels and capacity to meet demand.
Uncertainty of supply and demand makes it hard to justify that the capex is "necessary" to maintain capacity to meet levels of demand.		APA itself notes (at p 17 of its overview document) that the decision to invest in the SWP expansion hinges on the accuracy of the supply and demand forecasts but then notes that these forecasts are the most uncertain aspects of the AA. If that is the case, it is not clear how a forecast investment in the SWP to date could be allowed under the NGR – which requires: - forecasts to be best estimates arrived at on a reasonable basis; and - the capex to be necessary to maintain the capacity to meet levels of demand for services Furthermore, to then propose a fixed principle for the capex associated with it (see below) places all risk on the user.

FORECAST EXPANSION CAPEX ISSUES – SWP EXPANSION

Issue	Initial Assessment	Comment
Is the forecast capex for this project efficient and prudent?		If the project is to be assessed as part of the AA (rather than together with the NGR Rule 80 application being made with the other projects), an explanation should be given by APA as to why the total capex forecast for the project has increased from the estimated $71m in the First Look document to now $97m in the formal proposal. No sound reason has been given to explain this significant increase.
Is it a key element of the regulatory compact in the NGR to give assurance to the providers of capital that they will be able to earn a return on, and of, their invested capital?		APA makes this claim on p32 of its Overview document. However, that is not what the NGR framework is set up to do. It reflects a workably competitive market and as such, one doesn't have this type of assurance. This is reinforced by: - the wording of the Revenue and Pricing Principles in Section 24 of the NGL. In particular, the RPPs only provide that the service provider should be provided with a **reasonable opportunity to recover at least the efficient costs the service provider incurs**. - other parts of the framework such as the speculative investment and capital redundancy provisions and the tariff setting rules (Rule 95(1)(b) provides that a tariff must be designed……to generate from the user or class of users to which the reference service is provided, the portion of total revenue referable to providing the service to the particular user or class of users.

FORECAST EXPANSION CAPEX ISSUES – SWP EXPANSION

Issue	Initial Assessment	Comment
Should a fixed principle also be allowed to prevent SWP Expansion capex from being made redundant capital in future AAs?		The practical effect of this proposal is that, if accepted by the AER, it will mean that only APA has the ability to not seek to recover the capital costs associated with the SWP expansion. So, if the asset becomes redundant into the future, there is no ability for the AER to remove it from the capital base as redundant capital. This places almost all of the risk associated with SWP Expansion capex onto the user, particularly when coupled with the adoption of accelerated depreciation. It would not seem to be consistent with the Revenue and Pricing Principles. We would expect more explanation for why this should be allowed. Insufficient information has been provided to be able to support this concept.

FORECAST CAPEX ISSUES – HYDROGEN ASSESSMENT

Issue	Initial Assessment	Comment
Proposed forecast capex of $37.9m for hydrogen safety and integrity assessment	☜	While we have previously made comments about why the AER should challenge the appropriateness of any hydrogen related capex in the forecast, we believe the AER should make enquiries about the amount being proposed: - APA should outline more clearly the overall strategy of APA and the pipeline industry towards hydrogen to understand the possible total capital costs which could be incurred for the VTS to enable hydrogen to be commercially injected into the VTS. We are concerned that this may be the "thin end of the wedge" in terms of R&D capex, putting long term pressure on affordability when demand is declining. - What are the key milestones/gatepoints in the strategy so that consumers aren't continually being asked to wear the costs (not that consumers should have to pay). It is noted in footnote on p35 of the Overview document that APA claims it has optimised the costs in the AA proposal by proposing a staged assessment methodology (see sec 5.2.2) but it's not clear what the overall strategy is. - Similarly, what additional costs are likely to be incurred to allow more than 10% hydrogen to be blended into the VTS gas stream. - It makes a lot of sense for the industry to be pooling their resources on this (particularly given that there is no real "first mover advantage" for one pipeline company over another to use hydrogen in its network). However, it's not apparent how much of the forecast represents APA's share of industry R&D expenditure.

FORECAST CAPEX ISSUES – HYDROGEN ASSESSMENT

Issue	Initial Assessment	Comment
Proposed forecast capex of $37.9m for hydrogen safety and integrity assessment	☜	While we have previously made comments about why the AER should challenge the appropriateness of any hydrogen related capex in the forecast, we believe the AER should make enquiries about the amount being proposed: - It is not clear whether the forecast represents the proportion of total capex attributable to the VTS or whether they are the total costs for APA's assessment – given the assessment is likely to benefit most, if not all, of APA's pipeline assets, it would seem appropriate that only a proportion of these costs should be allocated to the VTS forecasts. - One of the justifications for proposing this capex is that APA claims that "absent detailed engineering testing, we do not have sufficient knowledge to understand the scope for the various pipelines comprising the VTS to safely accept hydrogen blends." It is not clear of the extent to which, if at all, APA has undertake a literature review of work that has been done on other pipelines throughout the world that have similar characteristics to the various types of pipe that make up the VTS to see if integrity studies on similar pipeline infrastructure have in fact, already been undertaken. This would avoid APA then having to replicate the assessment and therefore reduce costs. - The forecast of some of the line items that make up the total forecast seem very high – eg: The cost of preparing a final report - $700k. It is not clear how this estimate has been derived.

FORECAST CAPEX ISSUES – SOCI ACT CAPEX

Issue	Initial Assessment	Comment

Amount of Expenditure being proposed	☜	Given most of the substantiating information for this forecast has not been made public, we would be expecting the AER to make the following enquiries:
		
		- We would expect an explanation as to how the forecast aligns to a plan for addressing the gaps outlined in the EY gap analysis on a risk assessed basis.
		- The AER should clarify whether any SOCI related expenditure is included in APA's IT Forecast capex. There appears to be some confusion and potential for double counting because of the following:
		  - APA mentions that this forecast is separate from the IT portfolio forecasts but then it mentioned in section 10.4 of the Overview Document that the total SOCI program cost is shown in the table in section 10.4 that deals with IT portfolio forecasts. It is not clear if there has been a double counting of expenditure items.
		  - Section 11.1 of the Overview Document states that the SOCI program has been discussed separately in section 10.

OPERATING EXPENDITURE ISSUES

- While we recognise that APA has proposed a methodology that is consistent with the methodology applied by the AER for other regulated gas pipeline networks – the base step trend methodology - we have some comments:

Issue	Initial Assessment	Comments
Establish 2020 as the efficient base year	☜	The AER should question the appropriateness of 2020 as the efficient base year because: - 2020 actual opex is 9.4% higher than the actual opex in 2018 and 12.0% higher than 2019 actuals - It is not clear what has driven this year on year increase in costs. A more thorough explanation should be provided by APA before the AER should be comfortable about using 2020 as the base year. It is also not clear whether, consistent with other regulatory approvals processes, the base year is to be changed to 2021 during the course of the AA approvals process (once the 2021 actuals are known). Based on the AAI document (section 2.2), opex for 2021 is expected to be$28.7m, which is higher again.

OPERATING EXPENDITURE ISSUES (CONT'D)

Issue	Initial Assessment	Comments
Cost Allocation Methodology		While we note that the CAM was approved by the AER some time ago, given the significant increase in opex, the AER should re-scrutinise the methodology because: - The allocation of costs that are not directly attributable on a revenue basis is problematic in that there is a risk that revenue from non regulated assets may not be set on a cost basis. - The allocation of costs that aren't attributable directly to an asset on a revenue basis could have issues when revenue under each asset is not all determined on the same basis – ie using a cost of service/building block approach. - It is not clear why all forecasts for Transformation & Technology, right of use leases (for motor vehicles and building and property) are shared corporate costs. Surely there are certain items of expenditure under these categories which are directly attributable to particular assets (including the VTS). This should be interrogated by the AER

OPERATING EXPENDITURE ISSUES (CONT'D)

Issue	Initial Assessment	Comments
Cost Allocation Methodology (cont'd)	☜	Given the level of increase in opex, we would encourage the AER to inquire as to how (if at all) will either of the following change as a result of APA's acquisition of new businesses: - The CAM itself; or - The amount of capex and opex that is allocated to APA VTS under the CAM The proposal doesn't make any mention of this but what if there is a significant acquisition by APA during the AA period (such as what could have occurred with AusNet)? Consideration should be given to the inclusion of some trigger event mechanism to deal with a need to change the CAM in such circumstances, particularly with the inclusion of the EBSS incentive mechanism.

OPERATING EXPENDITURE ISSUES (CONT'D)

Issue	Initial Assessment	Comments

Explanation for step change in opex levels compared with current AA period	☜	The forecast opex for the AA period is a step increase in prior period opex levels:
		- 2023 opex is 26.1% more than the base year (2020).
		- The total forecast opex for the 5 year AA period ($180.3m) is 31.9% more than the actual for the current AA period ($136.7m)
		- Opex per km of pipeline is increasing during the AA period (see table 6.1 in the AAI document – p18)
		While some of this increase has been explained by APA, the level of increase should be explored by AER particularly when the two ways customers are intended to benefit can be challenged:
		- The first of these apparent benefits (APA brings economies of scale) do not appear to be bearing out with the proposed forecast.
		- The second reason ignores the reality that there should be just as much focus on the costs of VTS as a standalone business than for the other parts of the APA business for a number of reasons:
		  - VTS opex is reviewed by the AER each 5 years and must always be efficient. It could therefore be reduced
		  - It is not clear what allowance has been made in the tariffs set for non regulated pipelines.

OPERATING EXPENDITURE ISSUES (CONT'D)

Issue	Initial Assessment	Comments
Inclusion of carbon offset costs as a step change	☜	APA has proposed $1.5m as a step change to cover the costs of purchasing Carbon Credit Units to offset emissions from pipelines so as to align with the Vic Government's net zero 2050 transition plan. This should be challenged by AER on a number of fronts: • There doesn't appear to be any legislated obligation to purchase CCUs • Is the estimated emissions from pipelines a real estimate given a set formula has been applied and there is no testing of the estimate against such benchmarks as UAFG which may be a better measure to estimate pipeline based emissions • What incentives are there to reduce emissions from pipelines if costs are being passed through to consumers? • If costs should be borne, at least in part, by consumers, are the cost of purchasing CCUs the most efficient carbon offset mechanism given the CER's latest Carbon Market Report (Table 4.2) indicates market sources suggest that some units are trading in the range of $2-8 per unit, whereas APA has estimated $33.50 per CCU • Even if CCU's are appropriate units, its not clear why an allowance of $33.50 per unit should be allowed when the latest CER carbon market report indicates that the spot price of such units is only $26.50.

DEPRECIATION & ASSET LIVES

- APA proposes to change the standard asset lives for all assets (including new investments) to include a maximum cap of 30 years. Changes from the asset lives used in the current AA are shown in red below.
- The justification for this is to align with the Government's climate policy framework of net zero emissions by 2050.
- This change will increase APA's revenue in the 2023-27 AA by $ZZm (compared to retaining the current standard lives):

Remaining asset lives for depreciation purposes

Asset class	Proposed Standard life (years)	Standard life in Current AA (years)
Pipelines	30.0	55.0
Compressors	30.0	30.0
City Gates & Field Regulators	30.0	30.0
Odourant Plants	30.0	30.0
Gas Quality	10.0	10.0
Other	5.0	5.0
General Building	30.0	60.0
General Land	n/a	??
Integrity Inspections	10.0	n/a
WORM	30.0	n/a
SWP_570	30.0	n/a
Hydrogren safety	5.0	n/a

DEPRECIATION & ASSET LIVES

- We do not believe this approach delivers on what we believe should be the primary objective of keeping gas prices as affordable as possible
- We have not seen the detailed calculations or the assumptions used in the cost/benefit analysis to test the veracity of the analysis and would encourage the AER to undertake this work before the Draft Decision
- The NGL and NGR do not guarantee the service provider recovery of capital, rather they give the opportunity to recover the investment and a return on it. Moving to accelerated depreciation to improve that guarantee should not be allowed, particularly if it creates more risks for consumers (see slide XX)
- It is not clear why 5 years should be allowed for the depreciation of the forecast hydrogen assessment capex when there is a high degree that hydrogen will not be proven as a commercially viable alternative within that timeframe.

OTHER BUILDING BLOCK ISSUES

Issue	Initial Assessment	Comments
Rate of Return		We support APA's proposal to fully adopt the AER's prevailing rate of return instrument. However, there are some apparent inconsistencies amongst the various documents submitted in applying the current instrument which the AER should clarify with APA: - cost of debt – the formal overview document and the Reset RIN response documents both indicate cost of debt is 2.43% but yet, in the AAI document (table 7.1), the cost of debt for 2023 is assumed to be 3.85% dropping to 2.94% by 2027. It's not clear what cost of debt has been assumed. - Notwithstanding the above, in all documents the same WACC value is adopted
Incentive Mechanism		We support the retention of only one incentive mechanism (EBSS). However, it is not clear how the adjustments to the total revenue in table 9.2 of the AAI reconcile with the efficiency carryover amounts in the table 9.1. this should be clarified by the AER.
Corporate Tax		We support APA's methodology and proposed value of gamma (0.585)

SUPPLY AND DEMAND ISSUES

Issue	Initial Assessment	Comments
		[to be inserted]