Technical Report:
Response to AER Draft Decision & Evoenergy Revised Access Arrangement Proposal – 2021-26

Prepared by

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1. EXECUTIVE SUMMARY

TRAC Partners (**TRAC**) has been asked by Energy Consumes Australia (**ECA**) to provide expert regulatory advice on Evoenergy's revised access arrangement proposal for the 2021-26 period which was submitted to the Australian Energy Regulator (**AER**) in January 2021 (**Revised AA Proposal**) in response to the AER's Draft Decision of November 2020 (**AER DD**).

This report will assist submissions by Energy Consumers Australia (**ECA**) and other consumer organisations on Evoenergy's Revised AA Proposal and the AER DD. It follows a report TRAC prepared for the ECA in August 2020 which reviewed Evoenergy's original access arrangement proposal submitted to the AER in June 2020 (**Original AA Proposal**)[1].

The ECA has asked TRAC whether Evoenergy's Revised AA Proposal, when considered in its entirety, is capable of acceptance by the AER. In particular, TRAC has been asked to:

- identify material evidence gaps in the Revised AA Proposal, particularly in relation to the matters we raised in connection with Evoenergy's Original AA Proposal;
- respond to the aspects of Evoenergy's Revised AA Proposal which cover topics where the AER DD has requested further information to enable the AER to reach a settled position in the final decision and form a view as to whether:
    - we are satisfied with the further information provided by the business; and
    - we support the business' position adopted in respect of each topic; and
- consider whether Evoenergy's Revised AA Proposal reflects the long-term interests of ACT gas customers with respect to price and quality of services, both in terms of the proposal in its entirety and in respect of each of the elements used to determine the reference tariffs being proposed.

In so doing, TRAC has reviewed the Revised AA Proposal, the AER DD and Evoenergy's supporting documentation submitted together with the Revised AA Proposal.

Relevance of Evoenergy's Consumer Engagement Approach

We also comment on an overarching statement made by the AER in section 1.4 of the Draft Decision relating to the relevance of Evoenergy's consumer engagement in the AER's assessment of the Original AA Proposal under the statutory framework of the National Gas Rules (**NGR**) and National Gas Law (**NGL**)[2].

It gives rise to two issues.

Firstly, the role that consumer engagement plays in assessing the revenue proposals of businesses. While consumer engagement is an important consideration, it should not be a proxy for consistency with the National Gas Objective. Consumer engagement is only one of a number of factors that the regulator must take into account.

The second issue that the AER's statement gives rise to is what is relevant information that the AER must take into account when performing its statutory role. It is important for all relevant information

[1] While Evoenergy's Original AA Proposal was submitted in June 2020, the AER DD is based on amendments to the Original AA Proposal submitted by Evoenergy to the AER after that date, and with respect to which ECA was not asked to comment prior to the AER DD.
[2] AER Draft Decision, p 20-21, November 2020

to be considered by the AER, not just the subset of relevant information referred to in the AER's statement.

This is discussed in more detail in section 2 of our report. We have raised similar points in our report prepared for the ECA in response to the revised access arrangement proposal submitted to the AER by Australian Gas Networks SA in January 2021.

Topics where the AER has requested further information

In the AER DD, the AER requested further information in relation to a number of matters contained in the Original AA Proposal to enable it to be able to properly assess them in the final decision. They were:

- Certain aspects of forecast capital expenditure (capex), particularly:
    - the proposed market expansion capex ($24.8m) in brownfield developments, and how this interacts more broadly with ACT Government policy;
    - meter replacement capex; and
    - connections, capacity development, network renewal and non-system capex.
- The degree to which gas demand is forecast to fall over the 2021–26 period, in particular Evoenergy's post-model adjustment to increase the incremental impact on demand of the ACT Energy Efficiency Improvement Scheme (EEIS) from a 2.8% reduction (as forecast by Evoenergy's consultant, The Centre for International Economics (CIE)) to a 10% reduction by 2025–26.
- Evoenergy's post-model adjustment to triple the rate of permanent disconnections (abolishments) from CIE's forecast by 2025–26.
- Information on Evoenergy's actual investment in the Ginninderry development.
- Information on some of the actual minor capital works capex.

Furthermore, while the forecast operating expenditure proposed by Evoenergy was accepted by the AER in the AER DD (totalling $171.0 million ($2020/21)), stakeholders were not able to comment on it before the release of the AER DD because a revised forecast was provided to the AER in August 2020, after the closure of submissions on the Original AA Proposal. It is noted that Evoenergy has proposed to continue with this same revised forecast of operating expenditure (with adjustments for actual expenditure in 2019/20) in its Revised AA Proposal – totalling $170.97 million. We comment on the forecast of operating expenditure in section 7 of this report.

TRAC's position on the adequacy of the further information provided by Evoenergy in support of each of the above matters in the Revised AA Proposal is as follows:

- we believe the further information provided by Evoenergy in relation to the following matters would appear to make Evoenergy's position on these matters capable of acceptance by the AER:
    - information on Evoenergy's actual investment in the Ginninderry development;
    - information on some of the actual minor capital works capex.
- For the additional information sought by the AER in connection with Evoenergy's demand and disconnection forecasts, we believe that they are not yet capable of acceptance by AER and instead require further investigation by the AER before making its final decision. Our reasoning is outlined in section 4 of this report.

- In relation to the additional information provided for forecast capital expenditure more generally - see section 6 of this report.

Extent to which Evoenergy's Revised AA Proposal is in Consumer's Long-Term Interests

Evoenergy states that its Revised AA Proposal would result in a smoothed total revenue allowance of $310.17 million (nominal), which is 0.4% lower than the AER DD allowance of $311.9m. We note that notwithstanding the significant reduction in demand forecasts and customer connections in the revised forecasts included in the Revised AA Proposal, the tariff increases being proposed in the Revised AA Proposal are still at or below the rate of inflation.

Having regard to this and the points made in this report, it is our view that the positions adopted by Evoenergy in its Revised AA Proposal in relation to the following elements of the Revised AA Proposal would appear to contain sufficient information and be proposing methodologies and values which we believe are capable of acceptance by the AER in the final decision:

- The level of actual capital expenditure incurred for the 2016-21 period (including for 2015-16), subject to the AER reviewing the detailed information provided by Evoenergy supporting the level of actual expenditure.
- The approach to establishing the opening capital base for 1 July 2021.
- The methodology for determining the rate of return. Although we note that the values of some of the parameters being proposed differ from those that have been proposed by AGNSA for its revised AA proposal and we request that the AER satisfy itself that the difference is due solely to the cost of debt and the averaging period adopted to determine some elements of the cost of equity. This is addressed in section 5 of this report.

However, we believe that there are still a number of key aspects of Evoenergy's Revised AA Proposal which are not yet capable of acceptance by the AER and therefore require further consideration by the AER.

In light of this, we recommend that the AER make further enquiries before concluding that the Revised AA Proposal, when considered in its entirety, is capable of being accepted as being in the long-term interests of consumers and consistent with achieving the National Gas Objective. This report contains our detailed reasoning for reaching this conclusion.

Table 1 summarises our position on each of the key building blocks of the Revised AA Proposal.

Table 1: Key aspects of Evoenergy's Revised AA Proposal

Element of Revised AA Proposal	Sufficient supporting information provided to be capable of Acceptance?	Materiality	Key Findings
Opening Capital Base	Yes	N/A	This is capable of acceptance
Depreciation of capital base	Partly	$44.09 million ($nominal)	While we support the position adopted in relation to asset lives and the balance of the methodology for determining regulatory depreciation, we comment on the supporting paper contained in Attachment 9.6 to the Revised AA Proposal in section 3 of this report.
Rate of Return	Largely, yes	$83.37 million ($nominal)	Evoenergy's proposed rate of return is different to the rate proposed by AGNSA. We request that the AER satisfy itself that the only reasons for the difference are, the cost of debt and the averaging period used to calculate the risk free rate. This is addressed in section 5 of this report.
Forecast Operating Expenditure	Partly	$183.68 million ($nominal)	We are not convinced that the information provided to support the retention of the forecast of operating expenditure that was approved by the AER DD (with minor adjustments) is adequate to enable the AER to accept it, particularly in circumstances where there has been a fundamental and significant reduction proposed by Evoenergy in its forecasts for demand and connections. This is addressed in section 7 of this report.

Element of Revised AA Proposal	Sufficient supporting information provided to be capable of Acceptance?	Materiality	Key Findings
Forecast Capital Expenditure	Partly	$54.4 million	While we acknowledge that Evoenergy has made major adjustments to its forecast capital expenditure totals (a 29% reduction from current expenditure levels and 15% below what was forecast in the Original AA Proposal), and the supporting information enables us to understand how the reduction has been achieved, we have identified three issues which we think that the AER needs to consider before it can conclude that the forecast is consistent with the National Gas Objective. These issues are: - There should be evidence that Evoenergy has undertaken a root and branch review of all aspects of its approach to capital expenditure forecasting. - If the AER accepts our submission in relation to the timing for any reduction in in-fill connections, a consequential increase in connections capex should be allowed. - Evoenergy should be more transparent about its timing for renewable gas assumptions in its strategic plan as this will inform the approach to maintenance capex. This is addressed in section 6 of this report.
Forecasts of demand and connections	Partly	N/A	The inherent uncertainties caused by recent but significant changes in government policy demand that additional rigour be applied to the demand and connections forecasting methodology to have confidence that the estimate is a best estimate arrived at on a reasonable basis. Furthermore, consideration should be given to inserting a trigger event to re-open the demand and connection forecasts mid-way through the 5-year access arrangement period. See section 4 of this report.

Element of Revised AA Proposal	Sufficient supporting information provided to be capable of Acceptance?	Materiality	Key Findings
Incentive mechanisms	Yes	N/A	Capable of acceptance
Price Path	Yes	N/A	Capable of acceptance

2. RELEVANCE OF CONSUMER ENGAGEMENT

Before commenting on specific elements of the AER DD and the Revised AA Proposal submitted by Evoenergy, this report responds to an overarching statement made by the AER in section 1.4 of the Draft Decision relating to the relevance of Evoenergy's consumer engagement in its assessment of the Original AA Proposal under the statutory framework of the NGR and NGL as it applies to all of the specific elements:

> *"Once we have considered the nature, scope and impact of the consumer engagement, our final step is to consider whether the outcome, as presented by Evoenergy in its proposal is in the long-term interests of consumers. We do this undertaking our standard process. That is, we compare allowances proposed by Evoenergy with those our established models and approaches suggest represent alternative estimates. If Evoenergy's proposal aligns with or is below our estimates, we are able to have greater confidence that the results of the consumer engagement are in the long-term interests of consumers."*[3]

This statement gives rise to two matters.

Role of consumer engagement in the regulator's decision making

Firstly, the role that consumer engagement plays in assessing the revenue proposals of businesses. While we fully support meaningful and targeted consumer engagement as a prudent and important step in the process of developing a revenue proposal by a regulated business, TRAC believes that the regulator should not place undue importance on the consumer engagement process undertaken by the business when undertaking its statutory role of assessing a revenue proposal.

This is so for a number of reasons:

- Firstly, the NGL and NGR require that there are specific factors that the AER must consider when performing its statutory function of assessing an AA Proposal (for example, the National Gas Objective and the Revenue and Pricing Principles, among other factors). The AER cannot acquit itself of its statutory function solely by relying on the service provider claiming that its AA Proposal is a direct reflection of customers' preferences. Reflecting in an access arrangement proposal the outcomes of consumer engagement is not a proxy for achieving the National Gas Objective.
- Secondly, the AER's statutory role under the NGR and NGL is to (among other things) assess whether the Revised AA Proposal is consistent with, and will or is likely to contribute to the achievement of, the National Gas Objective – being "to promote efficient investment in, and efficient operation and use of, natural gas services for the long-term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas."[4]

  This statutory role is not an easy one to correctly perform. However, as the AER itself notes, it involves the consideration of a range of information and data. But it should not be the case that just because there was some form of consumer engagement, that it therefore follows that the proposal submitted by the business can be said to be consistent with, and does or is likely to contribute towards, the National Gas Objective. Nor should it be concluded that just because the nature, scope and impact of the consumer engagement has been assessed by the AER and considered to be effective, that the proposal submitted by the business is consistent with, and does or is likely to contribute towards, the National Gas Objective.

[3] AER Draft Decision, p 20-21, November 2020
[4] National Gas Law – section 28 and National Gas Rule, Rule 100

Relevant information the AER must take into account when performing its statutory role

The second issue that the AER's statement gives rise to is what is relevant information that the AER must take into account when performing its statutory role. While the AER's statement mentions this covers consumer engagement and comparing "*allowances proposed by Evoenergy with those our established models and approaches suggest represent alternative estimates*", there are other relevant sources of information that the AER must take into account. For example, submissions made by stakeholders must be taken into account by the regulator, although it is noted in the AER DD the AER has considered the submissions. But so too would expert advice obtained by the AER and stakeholders need to be taken into account. It is important for all relevant information to be considered by the AER, not just a subset of relevant information.

The AER should therefore be encouraged to ensure that undertaking its own independent review of the Revised AA Proposal by reference to all relevant information, not just "established models and approaches that suggest alternative estimates", is the primary and fundamental basis for considering whether the Revised AA Proposal is consistent with and is contributing towards the National Gas Objective and that the thoroughness of consumer engagement is not the main driver for this assessment.

3. THE FUTURE ROLE OF DISTRIBUTION NETWORKS

Context

Two of the key issues in the most recent round of revenue reviews for gas distribution network re-sets[5] have been:

- governments' policies on the future of gas as an energy source for consumers; and
- the increased competition of alternative energy sources and means by which energy is delivered for use by consumers,

and the impact that this has on the expected demand for use of networks, the setting of tariffs for the networks and, in turn, the delivered cost of gas for consumers.

From a consumers' perspective, this ultimately has an impact on the future role of gas distribution networks.

These issues are not being addressed consistently either by Australian governments or by the owners of gas distribution businesses. For example, in the case of governments:

- the Prime Minister stated on 15 September 2020 that gas is an important part of the Commonwealth Government's plan to reduce emissions without imposing new costs on households, while at the same time creating jobs, growing businesses and the economy and maintaining choice for the energy consumer[6];
- in states such as South Australia, Queensland and Victoria, the state governments have taken more active policy approaches to promote the hydrogen industry. For example, in Queensland, a hydrogen industry strategy has been developed which focuses on supporting innovation, facilitating private sector investment, ensuring an effective policy framework and building community awareness and confidence in hydrogen. Moreover, in South Australia, the state government has developed a Hydrogen Action Plan which outlines 20 actions to help scale up renewable hydrogen production for export and domestic consumption. Not only are they aimed at underpinning a safe and secure hydrogen export sector, they are also aimed at accelerating hydrogen into the SA domestic economy. Whereas
- in the Australian Capital Territory however, the ACT Labor and the ACT Greens have entered into a Parliamentary and Governing Agreement[7] under which they agree to phase out fossil fuel gas in the ACT by 2045 at least by doing the following (among other things):
    - Implement a program that will educate people about energy efficiency and the shift from gas to electric.
    - Legislate to prevent new gas mains network connections to future stages of greenfield residential development in the ACT in 2021-22.
    - Work with industry and other stakeholders, to advance all-electric infill developments, with a goal of no new gas mains network connections to future infill developments from 2023.

Furthermore, in the case of gas distribution businesses, while all have considered this issue in the current round of revised AA proposals submitted to the AER, they have only given thought to it in the context of how it affects the depreciation profile in determining the return of capital to be allowed in the total revenue

[5] Jemena Gas Networks AA review 2020-25, Evoenergy Network AA review 2021-26 and AGN SA Network AA review 2021-26

[6] Media Release, Prime Minister of Australia, 15 September 2020

[7] Parliamentary & Governing Agreement for the 10th Legislative Assembly of the Australian Capital Territory

for the revised access arrangements. But even in this context, the businesses have approached it differently. For example:

- In the ACT, Evoenergy has proposed that it will accelerate the depreciation of investment in new assets from 2021 onwards with shorter asset lives than for existing assets; and
- In SA, AGNSA has not proposed any reduction in asset lives in response to potential changes to the future of the energy sector.

Although it should be noted that there could well be significantly different drivers in for each business for this difference in approach. The key reasons for the difference in approach may well include the following:

- as mentioned above, the differences in policy and legislative frameworks in the two jurisdictions. In the ACT, the government has a legislated net-zero target whereas in SA, the government has not and moreover is actively investing in hydrogen. This reflects different risk profiles for the future of each of these distribution networks.
- Evoenergy is the owner of both the gas and electric distribution networks in the ACT whereas AGNSA (and the Australian Gas Infrastructure Group of which AGNSA forms part) only owns gas infrastructure assets. Evoenergy's more diverse asset portfolio may have meant addressing the impact of stranded asset risk through accelerated depreciation - which therefore will make gas less affordable for today's customers – will be a less risky outcome for its overall business because any impact this might have on usage of the network may not affect its overall business because there is likely to be a commensurate uplift in electricity demand which will improve the financial performance of its electricity business.
- Evoenergy is partly owned by the ACT government which has mandated a move away from non-renewable gas. It could well be that, as a major shareholder, this has been a major influence in Evoenergy's approach for the Revised AA Proposal.

The AER too has adopted different positions in various re-sets. For example, in the case of the AGNSA 5 - year plan for 2021-26, the AER has decided that there is no need to shorten the asset lives of either new investments or existing assets. However, in the AER DD for Evoenergy's AA Proposal, the AER:

- accepted Evoenergy's proposed straight line methodology for calculating the regulatory depreciation;
- accepted Evoenergy's proposed weighted average method to calculate the remaining asset lives as of 1 July 2021 (with minor updates made by the AER); and
- accepted Evoenergy's proposal to shorten standard asset lives of high-pressure mains from 80 to 50 years, and medium pressure mains and services from 50 to 30 years but only for assets in the ACT, while applying standard lives for these assets located in NSW.

Should a distribution network play a future in delivering energy to consumers?

In deciding whether something needs to be done, the threshold question should be asked - whether there should be a future role for distribution networks?

It is very much aligned to the core objectives of the ECA that distribution networks continue to play a future in delivering energy to consumers.

- *Providing genuine choice for households and small businesses.* Distribution networks facilitate energy diversity and choice for customers. Removing this choice has the potential for the following negative consequences for customers:

- Reliance on a single energy source – such as electricity – increases the risks to energy consumers of a reliable energy supply. As has been seen in the past, East Australia's electricity grid has faced reliability issues on several occasions in recent years even with the diversity of natural gas.

- It is important that consumers have diverse sources of energy from which to choose. Choice drives competitive pricing tension. As AGNSA's paper mentions, renewable electricity sources are already creating competitive tension for the pricing of gas distribution networks already. By just shortening asset lives, the price for using gas distribution networks will only increase further under the regulatory framework and potentially price them out of the market. Ensuring there are viable uses for the network in the future will ensure there is ongoing pricing tension and therefore choice into the future will be one of the single biggest drivers for ensuring energy remains affordable.

- *Energy affordability for consumers.* As has been demonstrated in recent plans submitted by gas distribution networks to the AER, there are billions of dollars in gas distribution network assets still to be depreciated – or returned to the service provider. To accelerate that depreciation profile will only mean one thing: today's consumers will have to pay more for energy, thereby putting pressure on the affordability of energy. To compound this issue however, for electricity networks to be able to accommodate the increased demand that will arise as a result of gas consumers transitioning to the electricity network, and to ensure that electricity can be provided reliably to this increased demand set and to present day electricity consumers, significant investment will be required to be made by electricity networks and generators. This too will come at a significant cost for consumers. And this doesn't take into account the cost to consumers of having to convert their gas appliances to electricity appliances. As noted in the recent report prepared by the Grattan Institute[8], the cost of switching an existing house from gas to electric stoves, hot water systems and heating systems is up to $20,000 on average. . No cost benefit analysis appears to have been undertaken which takes into account these whole of life cycle costs and benefits.

- *Optimised – reliability at value for customers*. All network businesses talk about a future use for the network with natural gas being replaced by renewable gas over time. They are investing in research and develop opportunities to prove the technical capability of both a blended network (blended with natural gas and renewable gas) and a purely renewable gas network. While this is being done by network businesses throughout the world, it will take time but, as we have seen with the electricity generation system, it has taken time for reliable, renewable electricity generation to replace non renewable electricity generation in a way that is economic for consumers. But the value for customers has not just been driven by industry, it has required support from government. In the case of renewable electricity generation, this has occurred through the establishment of government subsidies and rebate schemes to make renewable electricity more affordable, thereby creating demand for the product which, in turn, drives the pace of technological change and improves the cost competitiveness of renewable generation. Presently, renewable gas is not economic. However, internationally, there are signs that the cost is reducing. This has only come about with government support. However, with the cost of renewable electricity falling sharply (largely because of the level of government support that has been given to the industry over the years), it is even more important that governments also look to ways in which it can further support the renewable gas sector to make it more affordable and so that Australia's energy system remains optimised.

However, it may well be that the way in which these networks continue to play a role will vary from one jurisdiction to another if governments adopt different policy positions. This is beginning to bear out in Australia, as highlighted above.

[8] Grattan Institute, Flame Out – the future of natural gas, November 2020, Appendix D

AGNSA's Future of Energy Networks paper – Attachment 9.6

AGNSA has attempted to generate discussion on the issue of the future of energy networks, in particular gas networks, as the Australian economy transitions to a net-zero carbon emissions future through the preparation of Attachment 9.6 that it submitted to the AER as part of AGNSA's revised access proposal[9].

The paper primarily focuses on how to determine what changes might need to be made to depreciation profiles to meet the challenges faced by gas networks in a decarbonising economy and more competitive energy sector. While AGNSA has not proposed any changes to the status quo with its depreciation profile in its revised AA proposal, it is of the view that the status quo in respect of asset lives is unlikely to remain fit for purpose for much longer.

It is also noted that the AER has included it in its strategic work priority for 2020/21 but it too appears to be focusing on it in the context of "depreciation profiles, focussing on intergeneration equity and stranding risks".

While a more strategic engagement process on this issue is sensible (rather than just dealing with it in the context of 5 yearly access arrangement reviews), we believe that the engagement must consider the issue of the future of distribution networks more broadly than just in the context of asset lives and depreciation.

AGNSA's paper does touch on the issue through other prisms than just asset lives and depreciation but, it doesn't explore the issue in detail – it simply states that the value of the services provided by gas networks in future energy markets, even unconstrained by regulatory pricing, may be less than the efficiently-incurred cost of investments made today under an environment without competition and suggests that this may have profound consequences for regulatory frameworks as currently practised.

The issue is more than just about depreciation

While we appreciate that the AER is limited to working within the statutory framework of the NGR and NGL when reviewing access arrangement proposals such as Evoenergy's Revised AA Proposal, we believe that the issue of the future of gas networks needs to be considered more broadly than by asking either what can be done about it under the NGL and NGR or even how to address the issue in the depreciation profiles of a revenue proposal.

AGNSA's paper opens the door on this discussion in section 3.1 of its Attachment 9.6 by stating that a number of factors need to be considered.

However, we believe that government must play a central role in delivering solutions. For example:

- In the case of networks where the government has an ownership stake – such as is the case with Evoenergy – governments could look to writing down the value of their investments in the network. This could be addressed in the existing provisions of the NGR by the government shareholder in Evoenergy proposing that some of the assets are classified as redundant assets, therefore removing the requirement to continue making a depreciation allowance for those redundant assets. This will mean that costs for consumers are managed. To the extent that renewable gas becomes viable and demand on the network begins to increase, these assets can be returned to the capital base at that future point in time and the government is therefore able to resume earning a return of its investment.

- In other cases, there needs to be consideration given to the types of assistance schemes that have been developed to encourage renewable electricity generation and the take up of these emerging technologies and assess how similar support should be provided to networks and the alternative energy sources that could use these networks (such as hydrogen and biogas).

[9] Evoenergy Revised AA Proposal Attachment 9.6 – Future of Gas, January 2021

Issues with Evoenergy's depreciation approach in the Revised AA Proposal

Turning specifically to Evoenergy's Revised AA Proposal, we make two comments about Evoenergy's approach to depreciation.

Firstly, Evoenergy has accepted the AER DD to allow the shortening of standard asset lives for new long-lived mains and services assets located in the ACT. However, it has also adopted these same shortened lives to new assets across the entire gas network, including those located in NSW. The AER did not allow this in the AER DD.

Evoenergy has adopted the same approach to asset lives for all new assets across its network (including NSW) for the following reasons:

- allocating assets to discrete NSW and ACT sections is unworkable, because of the way the network is structured; and

- stranding risk does not differ across sections of the network – ie it is the same risk in the ACT as it is in NSW. If there are no ACT customers, the NSW part of the network will be marginal given that it represents only about 10% of current connections.

We note that one of the important indicators of the relevance of stranded asset risk (which the AER seeks to address solely through the measure of accelerated depreciation) is the demand and connections forecast. We are not convinced that the information provided by Evoenergy in respect of demand forecasts for NSW customers indicates a level of reduction of the same magnitude that has been adopted in respect of ACT customers. We also note that the NSW government has not adopted the same policy initiatives as the ACT government has adopted in its Parliamentary and Governing Agreement. We therefore request that the AER undertake further analysis on these issues.

The second point is that, if accelerated depreciation is to be allowed, this will result in higher tariffs compared with what they would be if depreciation were not accelerated. As a result, every effort should be made to investigate ways to offset this impact.

Therefore a root and branch review of both the approaches to determine both the opex and capex forecasts should be undertaken so as to identify all ways to reduce the levels of opex and capex that offsets the impact but in a way that doesn't compromise safety and service levels.

We have explored these points in more detail in both sections 6 (capex forecasts) and 7 (opex forecasts) of this report.

4. DEMAND & CONNECTIONS FORECASTS

AER DD and Revised AA Proposal

The AER DD did not accept Evoenergy's proposed demand forecast for individual volume consumers (Tariff VI). Instead, the AER provided an alternative forecast as a placeholder. While the AER accepted a number of aspects of Evoenergy's methodology to determine forecasts of demand and customer connections, it did not accept the following aspects of the methodology, pending the provision of further information by Evoenergy in its Revised AA Proposal:

- The post-model adjustment to reduce consumption per customer by 10 per cent by 2025–26 due to ACT climate change policy; and
- The post-model adjustment to triple the rate of permanent disconnections (abolishments) by 2025–26.

Also, in between the filing of the Original AA Proposal and the AER DD, a new ACT Government was elected and the two parties who formed government entered into a Parliamentary and Governing Agreement. Evoenergy claims that this agreement introduces a range of new policy measures which will have a significant and direct impact on the forecast demand for gas on the network and the forecast number of connections and disconnections in the 5 year plan period until 2026. They are listed in Table 8.2 of the Revised AA Proposal.

Accordingly, the AER requested additional information or analysis in respect of a number of aspects of Evoenergy's demand and connections forecasting methodology and the forecasts themselves. This is summarised in Table 8.1 of the Revised AA Proposal.

As a result, to support the demand and connection forecasts in Evoenergy's revised AA Proposal, Evoenergy:

- invited 30,000 of its customers to participate in a survey to better inform Evoenergy of customers' expectations in the 5 year plan period, particularly in light of the policy initiatives in the Parliamentary and Governing Agreement (including but not limited to the ACT Government's subsidies to encourage gas consumers to shift to electric appliances). 1,800 customers responded to the survey which Evoenergy contends is a sufficiently high response rate to enable the results to be statistically valid.
- revised its methodology for forecasting demand and connections from that adopted in respect of the Original AA Proposal. In particular, Evoenergy adopted a two step methodology:
    - A bottom up forecast from the Centre for International Economics (CIE). It integrates the market research referred to above and forms a view as to the impact on both demand and connections as a result of the following policy initiatives in the Parliamentary and Governing Agreement:
        - subsidies to encourage gas consumers to shift to electric appliances.
        - Legislating that no greenfields residential estates to have gas connections.
        - Commence a transition project, working with industry and other stakeholders, to advance all-electric infill developments, with a goal of no new gas mains network connections to future infill developments from 2023.
        - Ensure all new ACT Government buildings and facilities are fossil-fuel-gas free, including new leases. All retrofitting in Government buildings and facilities will have a goal of net-zero emissions post retrofit.
- a top down forecast from Core Energy and Resources, which EE used as a cross-check of CIE's bottom-up forecast.

Evoenergy conclude that while the forecasts were made independently of each other, the forecast impacts of policy and incentives on future gas demand estimated by both consultants' approaches were remarkably similar, giving Evoenergy confidence that the forecast is the best possible in the circumstances. Their best estimate is that by 2025-26:

- gas demand for the volume individual tariff customers (ie residential) will be over 20.4% lower than the actual demand in 2019-20, although the range could be between 16.4% and up to 23.1% lower;
- the number of connections on the volume tariffs is forecast to drop by 8.2% over the period;
- the number of new gas connections for infill developments will fall to zero from 2023 onwards; and
- total usage and chargeable demand for demand customers are forecast to fall by 10 per cent and 9 per cent, respectively.

Our Comments

Given the significance of the reductions in demand and connections forecasts between the Original AA proposal and the Revised AA Proposal we believe there a number of aspects of the forecasts that the AER should explore in more detail, before making its final decision:

- That the adoption of a single bottom up and top down approach to estimation of forecasts is sufficient to give stakeholders confidence that this is the best estimate arrived at on a reasonable basis. While we are of the view that it was necessary for Evoenergy to change its approach from the Original AA Proposal (particularly in light of the adoption of a non-transparent post model adjustment as part of the methodology adopted in the Original AA Proposal), it is important to note that the range of forecasts that have been derived from the methodology (for the VI tariff customers at least) is quite significant almost +/- 20% either side of Evoenergy's self proclaimed best estimate. While it will be inherently difficult to derive a forecast with any level of accuracy based on forming a view on the impact of government policy that is less than 6 months old (and much of which has not yet been given operational effect), these particularly unique circumstances may call into question the need for further independent analysis to substantiate the reasonableness of the estimate.
- Whether it is a best estimate arrived at on a reasonable basis to assume that the number of new connections for infill in brownfields areas will immediately reduce to zero from 2023 onwards. We believe this should be tested in more detail by the AER for the following reasons:
    - The certainty that this policy position in the Parliamentary & Governing Agreement will be made operational is not as high as it is with some of the other policy measures outlined. The Agreement only stipulates that "a transition project [should be commenced], working with industry and other stakeholders, to advance all-electric infill developments, with a goal of no new gas mains network connections to future infill developments from 2023". Whereas, the policy measure for no new gas connections for greenfields developments provides that this will be legislated for in 2021/22.
    - Given the policy position on this issue is not as certain, there is less certainty that it will become operational by 2023.
    - No evidence from stakeholders has been provided by Evoenergy (such as developers) which would indicate that they intend to advance all electric infill developments, let alone by 2023.
    - If this policy doesn't become operational by 2023, it may be more prudent to assume a phased reduction in the years following 2023, rather than the "cliff face" drop off to zero in 2023. Human behaviour suggests that it takes time for things to change.

  - Finally, we note that the AER was not convinced to adopt a change in the depreciation profile for the JGN 2020-25 access arrangement review based solely on a government policy that hadn't been given legislative effect.

- Given the inherent uncertainty of developing a forecast based on a suite of policy measures that are yet to have operational effect (and some of which are uncertain as to their timing, if at all), if the AER is to accept reductions in demand and connections of the magnitude being proposed by Evoenergy, the AER should consider whether to require a trigger event in the access arrangement in the event that say, in 2023, the demand forecasts have not materialised (within say, a 5% range of accuracy). By locking in demand forecasts for a 5 year period but where the forecasts have been derived in inherently uncertain times, there is an increased risk that the forecasting error will be greater than would ordinarily be the case. This is likely to exacerbate the financial impact on either customers or the service provider (depending on whether they are underestimated or overestimated). Accordingly including a trigger event to require the demand forecasts to be updated after say, 2023, will ensure that this financial impact is not locked in for the full 5 year period of the access arrangement. We recognise that the current process for revising an access arrangement is more protracted than has been in the past and so, a cost benefit analysis should be undertaken to assess the merits of including a trigger event.

5. FINANCING ISSUES

Rate of Return

It is noted that in the Revised AA Proposal, Evoenergy proposed an average rate of return of 4.57% during the AA period.

While we understand that these are placeholder amounts and it would be expected that the return on debt component for Evoenergy would differ from the return on debt component for AGNSA (given the adoption of the trailing average approach to determining the cost of debt will result in different values for each business), the same does not extend to the estimation of:

- inflation forecast;
- the nominal risk free rate (other than as a result of adopting different averaging periods); and
- the return on equity

Yet there appears to be differences as summarised in the table below:

RoR Parameter	Evoenergy Revised AA	AGNSA Revised AA
Nominal Risk Free Rate	0.91%	0.86%
Inflation Forecast	2.37%	1.95%
Return on Equity	4.57%	4.52%

We would expect the AER to adopt the same values for the above parameters in the final decisions for AGNSA and Evoenergy (except as a result of the businesses adopting different averaging periods for the purposes of estimating the risk free rate – which information we are not privy to). This is so for the following reasons:

- both businesses have proposed to apply all aspects of the rate of return guidelines;
- both businesses have adopted the methodology for estimating inflation as outlined by the AER in its December 2020 decision document; and
- the access arrangements for both networks are proposed to commence at the same time – ie 1 July 2021.

The AER should be encouraged to ensure that consistent values are applied to the above parameters in both Access Arrangement final decisions.

6. CAPITAL EXPENDITURE

We acknowledge that Evoenergy has made major adjustments to its forecast capital expenditure totals (a 29% reduction from current expenditure levels and 15% below what was forecast in the Original AA Proposal). Most of the reduction is as a direct result of its significant reduction in the forecasts of demand and customer connections during the 5 year period that were included in the Revised AA Proposal.

While the supporting information included in the Revised AA Proposal enables us to understand how the reduction has been derived, we have three issues which we think that the AER should consider before it can be in a position to conclude whether Evoenergy's forecast is consistent with the National Gas Objective.

"Root and branch" review of asset maintenance and management planning required

Firstly, the information provided does not appear to show that there has been a "root and branch" review undertaken by Evoenergy to its approach on all facets that impact capital expenditure forecasting. That this should be done now is important because:

- the significant reduction in Evoenergy's forecasts of usage of and connection to the network; and
- Evoenergy's approach to addressing the increased risk of asset stranding is to accelerate depreciation,

will both have the effect of increasing tariffs for customers.

Every avenue that could offset (fully or partially) the increase in tariffs caused by Evoenergy's approach on the above issues should be explored.

It is unclear whether a root and branch review has been undertaken by Evoenergy of all facets that impact capex forecast levels. The statement in section 3.4 of the Revised AA Proposal that, aside from the demand forecasts, all other aspects of Evoenergy's methodology for forecasting market expansion capex have been retained from the Original AA Proposal, suggests that a root and branch review hasn't been undertaken. If this has been replicated in relation to all other capex categories or if there is no evidence available to demonstrate that this has occurred, it is hard to see how the AER could conclude that Evoenergy's proposed capex (and for that matter, operating expenditure) forecasts are consistent with the National Gas Objective.

The following are examples of what should be covered by the root and branch review:

- The appropriateness of Evoenergy's current methodology relating to asset maintenance for certain capex categories – particularly stay in business network and meter renewal. For example, information should be provided to demonstrate that consideration has been given to whether maintaining assets on a "run to fail" approach rather than a "condition monitoring" approach would be likely to lead to lower capital expenditure (and operating expenditure) forecasts without unduly compromising the safe operation of the network. The importance of undertaking this analysis is underscored given that expenditure levels for these two capex categories account for over 75% of the total forecast capex proposed in the Revised AA Proposal (ie $41.6m out of $54.4m).
- Consideration should be given to whether there should be a change to the indirect costs and overheads allocation methodology, particularly the basis for allocating such costs between Evoenergy's electricity and gas businesses. This is particularly pertinent in the case of Evoenergy, where not only will the electricity business benefit from the reduction in gas demand (as customers switch to electric appliances), but where Evoenergy is the owner of both the gas and electricity networks in the ACT.

Forecasts for in-fill connections capex

The second issue relates to in-fill connections assumptions in the growth capex. Given our comments in section 4 of this report in relation to the appropriateness of reducing the forecast for in-fill connections to

zero from 2023, if the AER is inclined to agree with them, we acknowledge that a consequential increase in the market expansion capex allowance from 2023 onwards will be required.

Strategic Planning assumptions relating to renewable gas

We note that Evoenergy has not proposed to include as conforming capital expenditure any expenditure relating to projects to invest in renewable gas opportunities, but rather it proposes to make use of the speculative capex account provision in the access arrangement so that, in the future, these funds could be added to the capital base.

We think there would be merit in better understanding Evoenergy's assumptions in its strategic plan in relation to the timing for assuming:

- When it proposes to introduce renewable gas into the network; and
- When is the latest possible time to make a decision on whether to continue with investing in opportunities to inject renewable gas into the system.

This is important for a number of reasons:

- It will further inform how the service provider should approach maintenance of its assets during the access arrangement period
- it will inform stakeholders for how long capex initiatives relating to renewable gas should be allowed. It would not make sense to continue adding to the speculative investment fund if the company's own strategic plan indicates that it is too late to invest.

We note that AGNSA has been transparent in this regard (in its presentations to its reference group sessions) but we have not seen as similar level of transparency from Evoenergy.

7. OPERATING EXPENDITURE

In its Revised AA Proposal, Evoenergy has not revised its operating expenditure forecast that was submitted to the AER in August 2020 (other than to include details of actual opex for 2019/20) because the AER DD accepted that revised forecast. This results in a total of forecast opex of $170.97 million.

We are not convinced that the information provided to support the retention of the forecast of operating expenditure that was approved by the AER DD (with minor adjustments) is adequate to enable the AER to accept it, particularly in circumstances where there has been a fundamental and significant reduction proposed by Evoenergy in its forecasts for demand and connections.

As mentioned in sections 3 and 6 of this report, a "root and branch" review should be undertaken by Evoenergy to its approach on all facets that impact capital expenditure and opex forecasting. That this should be done now is important because the significant reduction in Evoenergy's forecasts of usage of and connection to the network will have the effect of increasing tariffs for customers (relative to if demand forecasts remained similar to the levels proposed in the Original AA Proposal).

Every avenue that could offset (fully or partially) the increase in tariffs caused by Evoenergy's approach on demand forecasts should be explored.

Furthermore, it is uncertain that a forecast of opex based on a demand forecast that is 20% lower than what was assumed when the opex forecasts were derived could be said to be a best estimate arrived at on a reasonable basis.

It would appear to be the case that a root and branch review has not been undertaken by Evoenergy of all facets that impact opex forecast levels. This is because the forecast was developed based on a 20% higher demand forecast.

It is therefore hard to see how the AER could conclude that Evoenergy's proposed opex forecast is consistent with the National Gas Objective.

The following are examples of what should be covered by the root and branch review:

- The labour levels required to operate an asset that is forecast to have significantly reduced usage. Consideration should be given to the impact on labour levels on reduced call out rates, customer numbers, reduced connections that require inspection and maintenance etc.
- The amount of UAFG required.
- Consideration should be given to whether there should be a change to the indirect costs and overheads allocation methodology, particularly the basis for allocating such costs between Evoenergy's electricity and gas businesses. This is particularly pertinent in the case of Evoenergy, where not only will the electricity business benefit from the reduction in gas demand (as customers switch to electric appliances), but where Evoenergy is the owner of both the gas and electricity networks in the ACT.
- The relevant labour price index to be adopted. We note that in the draft decision, the AER excluded the BIS Oxford Economics index because it did not reflect a realistic expectation of labour prices impacted by COVID-19. However, we understand that this index has now been updated to include the full COVID-19 impact. As we have previously recommended, a forecast based on multiple expert data is more likely to be a better estimate arrived at on a reasonable basis. Accordingly, the BIS Oxford Economics index should be included in determining the labour price index. This would be consistent with the approach adopted in respect of the AGNSA revised access arrangement proposal.