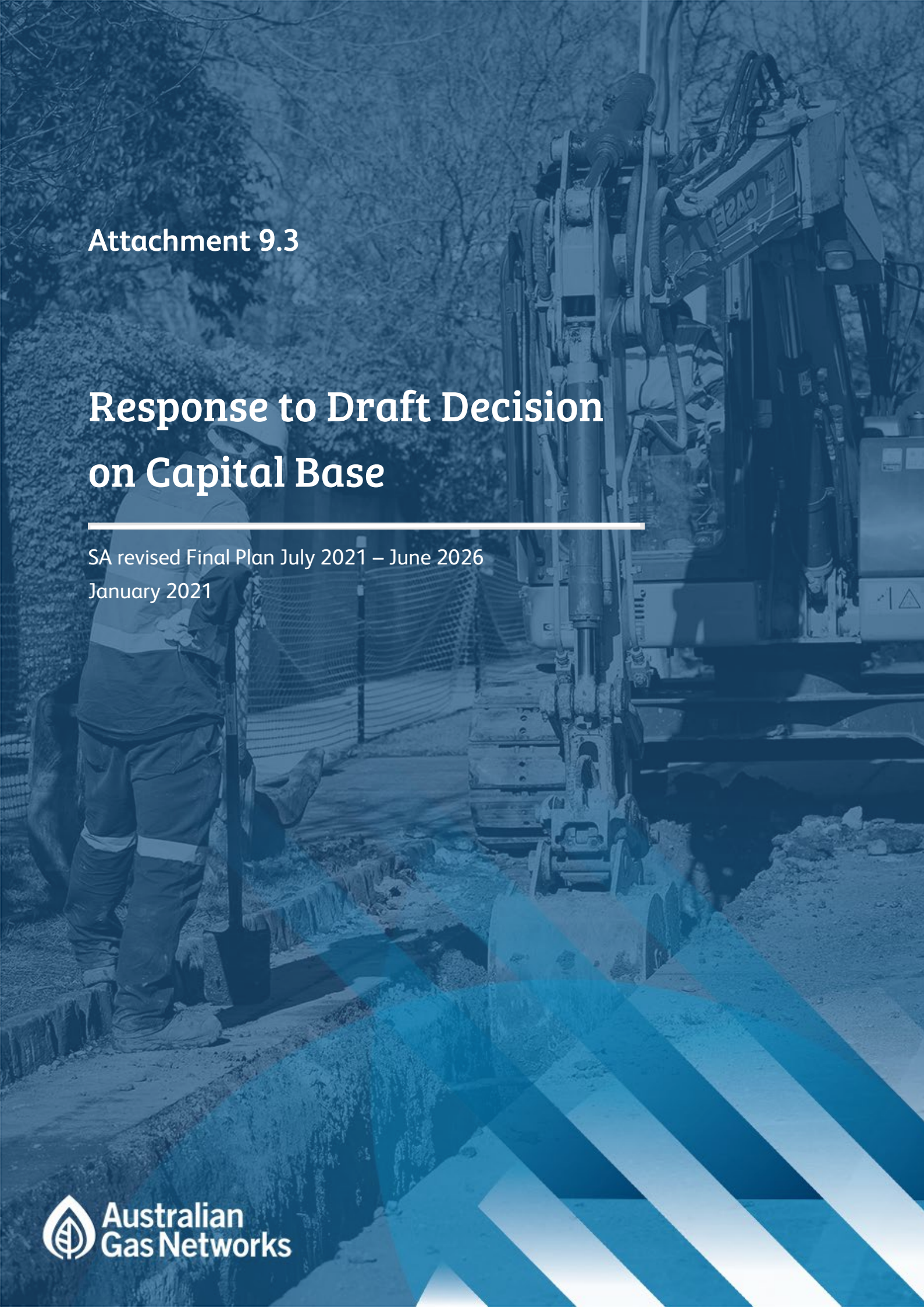

Attachment 9.3

Response to Draft Decision on Capital Base

SA revised Final Plan July 2021 – June 2026

January 2021

Australian Gas Networks

1. Response to Draft Decision on Capital Base

We estimate that the value of our capital base will be $1,937 million at 30 June 2026 in nominal (after inflation) terms.

1.1. Overview

This attachment sets out our response to the AER's Draft Decision on the capital base for our South Australian gas distribution network over the current Access Arrangement (AA) period and the next AA period (2021/22 to 2025/26).

1.2. Stakeholder and customer feedback

In preparing the revised Final Plan we have continued to engage with stakeholders, including our Reference Groups and through our consideration of submissions provided to the AER on our Final Plan.

A summary of the feedback provided on our capital base is provided in Table 1.1 below.

Table 1.1 Summary of customer and stakeholder feedback

Customer and Stakeholder Feedback	Our Response
The AER reduced the amount of regulatory depreciation in our Final Plan to reflect the lower Draft Decision mains replacement and other distribution capex and to reflect its view that replaced HDPE mains still perform a role when delivering gas haulage services.	We have sought independent advice on the ongoing role of replaced HDPE mains and incorporated this advice into our revised Final Plan.
The AER considered we adopted a sound approach to economic lives in our Final Plan given the uncertainties of the energy transition on our network.	We have not adjusted our approach to economic lives in the revised Final Plan.
The AER applied its existing method for estimating inflation in the Draft Decision. If the approach to estimating expected inflation changes as part of the AER review into the treatment of inflation, any amendments will be applied in the AER's final decision.	We have reflected the AER's estimate of inflation as per its final position paper on inflation.[1]

[1] AER, AER - Final Position Paper – Regulatory Treatment of Inflation – December 2020, December 2020, https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-treatment-of-inflation-2020/aer-position

1.3. AER Draft Decision

The AER approved an opening capital base of $1769.3 million (nominal) as at 1 July 2021, which is $0.1 million lower than our proposed opening capital base. This slight reduction is due to the AER updating actual capex, asset disposals and capital contribution values, and the approved forecast inflation rate for 2016 to 2021 in our proposed Roll Forward Model.[2]

The AER approved a closing capital base of $2025.5 million (nominal) as at 30 June 2026, a $50.4 million, or 2.4% decrease from our Final Plan. This decrease primarily reflects the Draft Decision lower forecast capex offset by a lower forecast depreciation.[3]

The AER's Draft Decision in respect of our capital base is summarised in Table 1.2 below.

Table 1.2: Summary of the AER's Draft Decision on our Capital Base

	AER Draft Decision	AER Comment
Opening capital base as at 1 July 2021	**Modify**	A slight reduction of $0.1 million due to updates to made to actual capex, asset disposals and capital contribution values and the approved forecast inflation rate for 2016 to 2021 in our proposed RFM.[4]
Forecast Capex	**Modify**	• Accepted our proposed actual capex as conforming capex for the current AA period, noting that 2019/20 and 2020/21 approved capex are placeholder amounts. • Reduced our proposed forecast net capex for the next AA period by 17%.

Forecast Depreciation	**Modify**	• Accepted our proposed straight-line depreciation method, use of the year-by year tracking approach, subject to correcting minor input errors in the deprecation module and proposed asset classes.[5]
		• Accepted the proposed standard asset lives and considered we have taken a sound approach to the uncertainties on our network.[6]
		• Reduced the amount of depreciation by the end of the next AA period by $49 million to reflect:[7]
		  • its view that HDPE mains and inlets we have replaced or forecast to be replaced continue to provide services to consumers for the purposes of ongoing gas transportation and therefore should not be subject to accelerated depreciation (-$32.5 million)
		  • a corresponding adjustment to the residual value of assets reflecting its Draft Decision to reduce our mains replacement program capex by 29% (-$16.4 million)

[2] AER, Draft Decision, Attachment 2, p. 11.
[3] AER, Draft Decision, Attachment 2, pp. 12-13.
[4] AER, Draft Decision, Attachment 2, p. 11.
[5] AER, Draft Decision, Attachment 4, pp. 13-14.
[6] AER, Draft Decision, Attachment 4, pp. 17-19.
[7] AER, Draft Decision, Attachment 4, pp. 15-16.

	AER Draft Decision	AER Comment
		• Amended the remaining asset lives of 48.1 years and 20.8 years to the existing 'Mains' and 'Other distribution system equipment' asset classes to 37 years and 17 years respectively as this more accurately reflects the remaining assets lives of the replaced assets as at 1 July 2021.[8]
Inflation	**Accept**	Applied its current approach to estimating expected inflation with updates to the estimate made with latest information.[9] If the approach to estimating expected inflation changes as part of the AER review into the treatment of inflation, any amendments will be applied in the AER's final decision.
Capital Base as at 30 June 2026	**Modify**	A reduction of $50.4 million:[10] • reflecting the updated opening capital base as at 1 July 2021; • forecast capex for the next AA period as per the AER's Draft Decision; and • forecast straight-line depreciation amount for the next AA period.
Capital Base as at 1 July 2026	**Accept**	Accepted our proposal to establish the opening capital base as at 1 July 2026 using the approved depreciation schedules based on forecast capex over the next AA period. These schedules will be adjusted for actual inflation outcomes over the next AA period.[11]

Note: In this 'traffic light' table, green shading represents the AER's acceptance of our Final Plan, orange represents the AER's modification of our Final Plan and red shading represents the AER's rejection of our Final Plan.

1.3.1. Forecast depreciation

Ongoing role of replaced HDPE mains and services

In its Draft Decision the AER excluded our proposed amended depreciation of high-pressure HDPE mains and services which we have either already replaced, or are forecast to replace in the next AA period by insertion. Replacement by insertion is where the new main is inserted into the old main. This method of replacement can be undertaken more efficiently than direct burial of the new main and therefore is utilised wherever it is feasible.

In considering our depreciation proposal in relation to the replaced mains, the AER questioned whether some of our methods of mains replacement are more akin to asset modifications. This was particularly for the replacement of old high pressure plastic mains via insertion. As such, the AER concluded the high-pressure HDPE mains replaced via insertion were not, and will not, be

[8] AER, Draft Decision, Attachment 4, p. 16.
[9] AER, Draft Decision, Attachment 3, p. 6.
[10] AER, Draft Decision, Attachment 2, p. 11.
[11] AER, Draft Decision, Attachment 2, p. 14.

removed from the network, nor will they cease providing services to consumers for the purpose of ongoing gas transportation.

In making this decision the AER reduced the proposed value of depreciation by $32.5 million[12], $11.5 million for the amount to be replaced by 30 June 2021 and $21.0 million for the amount forecast to be replaced over the 2021/22 to 2025/26 period.

The AER has sought that we clarify whether the existing assets will not be providing any ongoing services to consumers post insertion. The AER has also sought further information on key assumptions used to derive the total residual value of replaced mains and inlets.[13]

1.4. Our Response to the Draft Decision

Table 1.3: Summary of our response to the AER's Draft Decision on our Capital Base

	AER Draft Decision	Our response	Our comment
Opening capital base as at 1 July 2021	**Modify**	**Accept**	We have updated for actual capex incurred in 2019/20 (consistent with our November RIN submission) and provided an updated forecast for 2020/21 capex to remove the capex associated with the Mt Barker extension (which is not going ahead at this time) and update the timing for a couple of IT projects that are underway in the current AA period. More information on these updates can be found in Attachments 8.11 and 8.6A.
Forecast Capex	**Modify**	**Modify**	We have revised our capex proposal for the next AA period. Further detail can be found in Attachment 8.11.
Forecast Depreciation	**Modify**	**Modify**	• We have amended the forecast depreciation to reflect our amended capex proposal, which can be found in Attachment 8.11. • We have not proposed any reduction in asset lives is response to potential changes to the future of the energy sector. However, we have been working on a framework which may assist the AER in analysing how to respond to these changes and, noting the EvoEnergy proposal and draft decision, we provide a brief outline of our views. • We continue to propose the amended depreciation of high pressure HDPE mains and inlets. More information on the ongoing role of replaced HDPE mains and inlets can be found in section 1.6.1 and Attachment 9.4.
Inflation	**Accept**	**Accept**	We have adopted the AER's final position paper on the treatment of inflation with a value of 1.95%[14].

[12] AER, Draft Decision, Attachment 4, pp. 15-16.
[13] AER, Draft Decision, Attachment 5, p. 15.
[14] AER, Final Position Paper – Regulatory Treatment of Inflation, December 2020, access here: https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/review-of-treatment-of-inflation-2020/aer-position (AER, Final position of regulatory treatment of inflation).

	AER Draft Decision	Our response	Our comment
Capital Base as at 30 June 2026	**Modify**	**Modify**	Given differences in our revised Final Plan capex, the estimate of inflation and forecast regulatory depreciation, our closing capital base is $88.4m lower than in the Draft Decision.
Standard Asset Lives	**Accept**	**Accept**	The AER accepted the standard asset lives proposed by AGN.

Note: In this 'traffic light' table, green shading represents the acceptance, orange represents a modification and red shading represents a rejection

1.5. Capital Expenditure

Our forecast capex is discussed in Attachment 8.11 of this revised Final Plan. We note that the capex rolled into the capital base includes an amount equal to half a year of return in the year the capex is incurred (and therefore is not the same as our capex forecast in Attachment 8.11). The AER makes this adjustment on account of the fact we do not earn a return on capex within the year it was spent.

1.6. Depreciation relating to replaced assets

Our revised Final Plan includes $245.2 million in depreciation relating to assets that will be replaced by 30 June 2026, which is $39.7 million ($2020/21) higher than the Draft Decision and $6.4 million (or 2.5%) lower than our Final Plan. This difference with the Draft Decision is because of:

- continuing to fully depreciate the replaced HDPE mains and inlets over the next AA period ($29.7 million); and
- corresponding adjustments to reflect our revised mains replacement program over the next AA period ($10.0 million). Refer to Attachment 8.11.

Each of these matters are explained further below.

1.6.1. Ongoing role of replaced HDPE mains and inlets

We have maintained our proposal for existing HDPE mains and inlets which have been replaced and forecast to be replaced through insertion of new HDPE mains to be fully depreciated by June 2026. This is because these assets, post insertion, will not be providing any ongoing services to our customers for the purpose of ongoing gas transportation and therefore they have no residual value.

We engaged GHD to provide an expert explanation of:

- The process of mains replacement through insertion;
- The condition of the replaced main after insertion; and
- The role, if any, the replaced main plays in the ongoing delivery of reference services, including any asset management benefit for the new mains.

Based on its review, GHD found the replaced mains play no role in the ongoing delivery of gas haulage services and do not provide any additional asset management support to the new main. The replaced main is unable to provide gas service or asset management benefits because, in summary:[15]

- The old main sections that remain has been cut out every 10 to 15 metres during the insertion process such that it is no longer a continuous main. Disconnected sections of mains cannot provide gas haulage services;
- Equipment used at inlets/service points is replaced in the process, and pipe that comprises the service connection to the customer is only used as a conduit where it is large enough for the new service pipe to be inserted (in the same way the replaced pipe is used as a conduit for the rest of the main);
- There is no additional pressure support due to the replaced mains not having sufficient ongoing structural integrity; and
- There is no change to damage tolerance from third-party excavation impacts as both HDPE materials used in the network provide no structural resistance to penetration.

GHD considered that:[16]

> *"The only function the old pipeline serves is to act as a conduit for laying the new pipeline and the benefit of this role is realised in the lower replacement costs compared to other replacement methods. As such, GHD does not consider mains replacement by insertion is a modification to the existing pipeline.*
>
> *In GHD's opinion, if AGN were to replace the mains via direct burial rather than insertion, there would be no difference to the gas haulage service being provided, the leak protection offered, the expected life or the safety rating applied to the mains. Hence, from a functional perspective, the two methods achieve the same end and are both replacements."*

GHD's Report on the ongoing role of replaced HDPE pipelines is found in Attachment 9.4.

We also engaged BDO to provide an opinion on the appropriate treatment of these assets given GHD's findings above.

Our view that these mains and inlets should be fully depreciated by the end of the next AA period is supported by BDO's opinion, which considered:

> *AGN's proposal to reduce the useful life of the high-pressure mains and services gas pipeline (classified as HDPE 575) which is being replaced during the current and next South Australian access arrangement periods through to June 2026, is reasonable.*

BDO formed this opinion from the following key points summarised below:[17]

- as per the GHD report, the replaced pipeline plays no ongoing role in the delivery of gas haulage services;

[15] AGN SA, revised Final Plan, Attachment 9.4, GHD, Ongoing role of replaced HDPE pipelines, January 2021, p. 9.
[16] AGN SA, revised Final Plan, Attachment 9.4, GHD, Ongoing role of replaced HDPE pipelines, January 2021, p. 9.
[17] AGN SA, revised Final Plan, Attachment 9.5, BDO - Review of proposed treatment for replaced HDPE Pipelines (AGN SA), p. 5.

- fully depreciating replaced assets would be in line with recent AER decisions and is consistent with relevant Australian Accounting Standards.

BDO's advice is found in Attachment 9.5.

1.6.2. Mains replacement program over the next AA period

We have made adjustments to the depreciation relating to replaced assets reflecting our revised mains replacement program over the next AA period ($10.0 million) which reflects our revised Final Plan position to:

- Replace 520 kilometres of CI/UPS mains and associated services (or inlets);
- Replace 38 kilometres of CI/UPS mains in North Adelaide and associated services (or inlets);
- Replace 198 kilometres of HDPE DN40 high pressure mains and associated services (or inlets);
- Replace 14 kilometres of HDPE 250 mains and associated services (or inlets); and
- Defer the replacement of 90 kilometres of medium pressure HDPE 575 mains and associated services (or inlets) to the subsequent AA period.

More information on our revised Final Plan mains replacement program can be found in Attachments 8.3A and 8.11.

1.7. Inflation

Our estimate of inflation reflects the AER's final position paper on the Regulatory treatment of inflation released in December 2020.[18] The two key changes made in the Final position paper were:

- the time period over which inflation is forecast is now five years, not ten years; and
- a glide path from the final available RBA forecast (usually in the second year of the forecast period) to the mid-point of the RBA's target band is now used, instead of moving straight to the mid-point in the third year.

Our revised Final Plan utilises an estimate of inflation of 1.95% as contained in the AER's final position paper.[19] This is around 0.4% lower than the estimate of inflation used in the Final Plan and Draft Decision of 2.37%. The estimate of inflation will however be updated by the AER as part of its Final Decision for our network in April 2021.[20]

1.8. Depreciation and the future of gas networks.

The future of the Australian energy sector, and of gas networks in particular, is highly uncertain, and careful planning will be required to ensure that our customers continue to pay the lowest sustainable cost for their energy. One factor driving change in the energy sector is local decarbonisation policy, as picked up by EvoEnergy in its submission and the subsequent AER Draft Decision.

[18] AER, Final position of regulatory treatment of inflation.
[19] AER, Final position of regulatory treatment of inflation.
[20] AER, Draft Decision, Attachment 3, p. 6.

However, arguably a more important factor is the declining cost of renewable electricity; our customers are embracing rooftop solar because it is an economical option for them today, and not because the South Australian Government has a net zero emissions target in 2050.

Renewable electricity matters not just because it is cheap, but also because it is a distributed technology operating at varying scales throughout the grid, from individual households up to grid-scale centralised power plants. We are already seeing how this is changing consumers into "prosumers", and we believe this is likely to have profound effects on the competitive nature of the energy sector in future.

How this evolving competitive dynamic will play out is difficult to predict, but it is not inconceivable that the market position that many networks have today may change considerably. This is something that will happen whether we are transporting methane or hydrogen.

Such change in the energy sector requires change in regulation too. Our assets are long-lived and investments made today will shape the future evolution of the energy sector for decades. We believe our assets, carrying hydrogen, will continue to play a role in whatever the future brings. However, their value may not be tied to their investment cost as under current regulatory models.

To ensure efficient investment continues to provide the lowest cost energy to customers into the future, this means that regulators will need to think not only about the current market position, but how current assets might best be stewarded into a competitive future.

This requires a framework to translate information about the future into action today in a manner which is transparent and provides confidence to all stakeholders. The first steps, as in the EvoEnergy decision, can be based on prudent regulatory judgement. However, further steps will require a more robust analytical framework. We think this framework needs to:

- develop a good understanding of the types of future scenarios which might credibly eventuate (rather than focus on which one is most likely). This enables us to meet the future with flexibility front of mind;
- develop a plan of investment and divestment actions which favours actions that would support the maximum number of future scenarios and thus favour flexibility over "picking winners"; and
- provide incentives for continued investment by ensuring that networks can still recover their efficiently invested capital, even as the market changes, whilst at the same time transparently showing that this is being done at the lowest cost to consumers today.

We have started thinking about such a framework, and present our early thoughts, along with an expansion of some of the views about future competition and the role of stewardship the AER now has, in Attachment 9.6.

1.9. Summary

The tables below show the roll forward of the Capital Base 2016/17 to 2020/21 ($nominal, million)

Table 1.4: Roll Forward of the Capital Base 2016/17 to 2020/21 ($nominal, million)

	2016/17	2017/18	2018/19	2019/20	2020/21
Opening Capital Base	1,385.6	1,454.1	1,534.7	1,614.0	1,682.1
Less Depreciation	43.8	49.0	56.3	63.2	64.8
Plus Conforming Capex	91.9	101.9	108.2	101.5	122.6
Plus Actual Inflation	20.5	27.8	27.4	29.7	33.6
Less 2015/16 Capex Adjustments					35.4
Less Funding Adjustment					10.7
Closing Value	**1,454.1**	**1,534.7**	**1,614.0**	**1,682.1**	**1727.4**

Table 1.5: Forecast Capital Base, 2021/22 to 2025/26 ($nominal, million)

	2021/22	2022/23	2023/24	2024/25	2025/26
Opening Capital Base	1,727.4	1,780.2	1,824.6	1,863.6	1,910.5
Less Straight-Line Depreciation	96.3	104.0	109.8	108.5	115.0
Plus Conforming Capex	115.4	113.7	113.2	119.0	104.4
Plus Actual Inflation	33.7	34.7	35.6	36.3	37.3
Closing Value	**1,780.2**	**1,824.6**	**1,863.6**	**1,910.5**	**1,937.1**