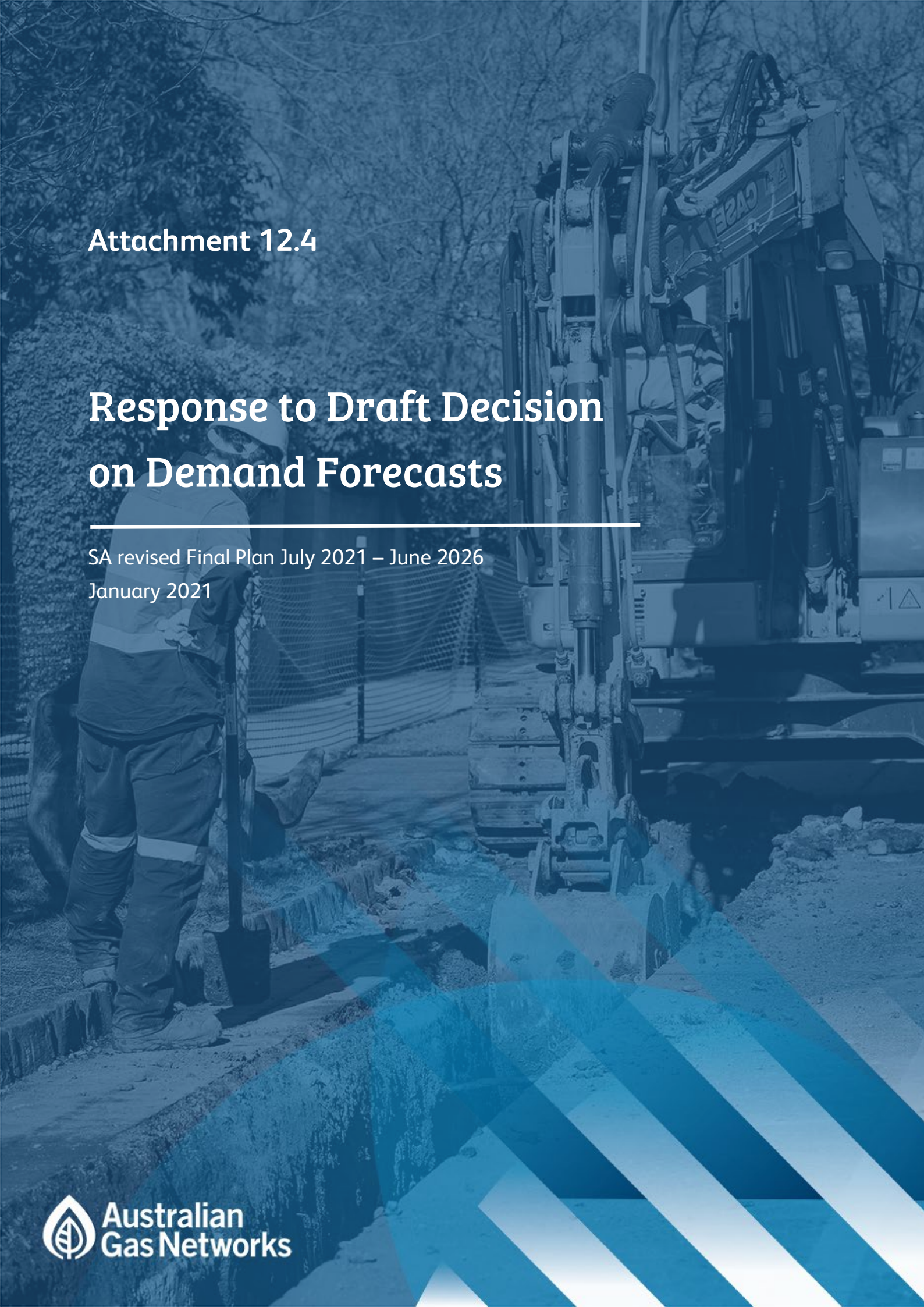

Attachment 12.4

Response to Draft Decision on Demand Forecasts

SA revised Final Plan July 2021 – June 2026

January 2021

Australian Gas Networks

1. Response to Draft Decision on Demand Forecasts

In the next AA period customers will continue to connect to our network but with lower average usage consistent with previous trends. We have updated demand forecast inputs as per the AER's Draft Decision.

1.1. Overview

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

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 consideration of submissions received by the AER on our Final Plan.

A summary of the feedback provided on our demand forecasts is provided in Table 1.1 below.

Table 1.1 Summary of customer and stakeholder feedback

Customer and Stakeholder Feedback	Our Response
The AER has principally accepted our demand forecasts for residential, small commercial, and industrial customers, pending updates to the latest source data.	We have updated the demand forecast for the latest inputs including the updated Housing Industry Association forecast of construction activity, actual 2019/20 demand data and the latest South Australian Gross State Product forecasts.

1.3. AER Draft Decision

The AER accepted our proposed approach to the demand forecast for the next AA period. The AER has accepted forecast inputs as a placeholder, and expect that these will be updated with the latest data in our revised Final Plan.

The AER considered that the demand forecast methodology and the assumptions adopted by our consultant Core Energy & Resources (Core) were arrived at on a reasonable basis for the following reasons:

- expected average consumption is based on historic trends and key drivers of demand; and
- the weather normalisation of historic data and forecasting methodology followed established forecasting methods which the AER has accepted previously for both the South Australian gas network and gas networks in other jurisdictions.

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

Table 1.2: Summary of the AER's Draft Decision on our demand forecasts

	AER Draft Decision	AER Comment
Connection Numbers		
Residential	**Accept**	Satisfied that our demand forecast for Tariff R is arrived at on a reasonable basis and represents the best forecast possible in the circumstances. Accepted our forecast as a placeholder and expects we will provide an update to our demand forecasts as part of our revised proposal.[1]
Commercial	**Accept**	Satisfied that our demand forecast for Tariff R is arrived at on a reasonable basis and represents the best forecast possible in the circumstances. Accepted our forecast as a placeholder and expects we will provide an update to our demand forecasts as part of our revised proposal.[2]
Industrial	**Accept**	Satisfied that our demand forecast for Tariff R is arrived at on a reasonable basis and represents the best forecast possible in the circumstances. Accepted our forecast as a placeholder and expects we will provide an update to our demand forecasts as part of our revised proposal.[3]
Consumption per Connection		
Residential	**Accept**	Satisfied that our commercial consumption per connection was derived on a reasonable basis.[4]
Commercial	**Accept**	Satisfied that our commercial consumption per connection was derived on a reasonable basis.[5]
Industrial	**Accept**	Satisfied that our commercial consumption per connection was derived on a reasonable basis.[6]

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] AER, Draft Decision, Attachment 12, pp. 9
[2] AER, Draft Decision, Attachment 12, pp. 9
[3] AER, Draft Decision, Attachment 12, pp. 9
[4] AER, Draft Decision, Attachment 12, p. 10
[5] AER, Draft Decision, Attachment 12, p. 10
[6] AER, Draft Decision, Attachment 12, p. 10

1.4. Our Response to the Draft Decision

Table 1.3: Summary of our response to the AER's Draft Decision on our demand forecasts:

	AER Draft Decision	Our Response	Our Comment
Connection Numbers			
Residential	**Accept**	**Accept**	We have accepted the Draft Decision and updated inputs as requested.
Commercial	**Accept**	**Accept**	We have accepted the Draft Decision and updated inputs as requested.
Industrial	**Accept**	**Accept**	We have accepted the Draft Decision and updated inputs as requested.
Consumption per Connection			
Residential	**Accept**	**Accept**	We have accepted the Draft Decision and updated inputs as requested.
Commercial	**Accept**	**Accept**	We have accepted the Draft Decision and updated inputs as requested.
Industrial	**Accept**	**Accept**	We have accepted the Draft Decision and updated inputs as requested.

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

1.4.1. Update of forecast inputs

In its Draft Decision, the AER accepted the approach to forecasting demand over the next AA period, noting that any available inputs to the forecast would be updated in our revised Final Plan.

Overall, the updated demand forecast for the residential and industrial segments are marginally higher than the Final Plan, while the commercial segment is marginally lower. These movements are explained further below.

As required by the AER, Core have updated their forecast of demand for the next AA period in respect of the following inputs:

- 2019/20 actual consumption and connections data;
- 2019/20 Bureau of Meteorology weather data sourced to update weather normalisation;
- Housing Industry Association (HIA) data with the latest available report to forecast future dwelling commencements;
- Gross State Product (GSP) forecasts from the South Australian Treasury; and
- the outlook for electricity and gas prices.

In updating their forecast, Core have observed an impact to actual demand for the final quarter of 2019/20 (April – June) when COVID-19 lockdowns commenced. In the residential segment, actual natural gas consumption was 9% higher and weather normalised consumption was 3% higher than the two-year average over the same period. Weather normalised consumption was only 3% higher than the average because 2019/20 was colder than average which means consumption is normalised down from the actuals. With more people in lockdown at home, as expected, demand for gas increased beyond what would normally occur.

In the commercial segment, again as expected, weather normalised consumption was 3% lower as many small businesses were forced to close or had restrictions imposed on their ability to trade normally.

As Core note, the impacts of COVID-19 on average consumption in both the residential and commercial segments are expected to dissipate beyond 2021/22, with average consumption largely returning to the previously forecast levels[7]. This reflects the success of the State Government in limiting the spread of COVID-19, such that significant lockdowns as those experienced in the first half of last year are less likely. It also reflects the future roll-out of various vaccines, which vaccines will be available to Australians from March 2021.

Also, Core's residential connections forecast is derived from the forecast of housing commencements produced quarterly by the Housing Industry Association (HIA). HIA forecast is for more detached dwellings (i.e. homes) and fewer attached dwellings (i.e. apartments) when compared to their earlier forecast. The key drivers of their forecast are:

- COVID –19 related government stimulus provided to the construction sector (Homebuilder incentive); and
- Ongoing impacts COVID-19 will have on consumer preferences for detached dwellings (i.e. homes) over attached dwellings (i.e. apartments).

The GSP update marginally increased demand in the Commercial and Industrial segments.

We have sought independent advice from ACIL Allen as to the reasonableness of how Core have taken account of the impacts of COVID-19. ACIL Allen consider how Core have taken into account the impacts of COVID-19 to be appropriate, noting that their 'assumption of a return to normality in 2021-22 is reasonable given the imminent rollout of an approved and effective vaccine, even if a considerable amount of uncertainty remains.'[8]

The industrial forecast has also been updated for 2019/20 actuals as well as changes in the demand outlook for a few large customers. This has resulted in an increase relative to the Final Plan of 194TJ (or 0.4%).

Finally, as per our decision not to proceed with the extension of the network to Mount Barker, we have removed the additional demand that was expected to arise from the extension.

1.5. Summary

Core have updated the demand forecast to reflect the latest available information as per the AER's Draft Decision. Core have also taken account of the impacts of COVID-19 on current gas consumption and the expected longer-term impact over the next AA period. As a result, the updated demand forecast when compared to the earlier Final Plan provides for:

[7] Attachment 12.1A, Core Energy & Resources - Gas Demand and Customer Forecast Update, p. 9
[8] Attachment 12.5, ACIL Allen – Review of COVID-19 related adjustments to AGN SA's gas demand forecasts, p. 2.

- Residential – higher demand of 408TJ (or 1.2%) on account of higher connection growth and marginally higher average consumption per connection;
- Commercial – lower demand of 61TJ (0.4%) on account of lower connection forecasts and marginally lower average consumption per connection; and
- Industrial – higher capacity MDQ on account of stronger growth for some large customers.

The Revised Final Plan demand forecasts over the next AA period are set out in Table 1.4.

Table 1.4: Summary of demand forecast (excluding Mount Barker)

	2021/22	2022/23	2023/24	2024/25	2025/26
Residential Demand					
Connections	458,300	463,996	469,359	475,055	480,977
Consumption per connection	15.5	15.2	14.8	14.3	13.9
Demand (TJ)	**7,123,430**	**7,033,271**	**6,925,431**	**6,803,579**	**6,693,881**
Commercial Demand					
Connections	11,166	11,283	11,397	11,498	11,596
Consumption per connection (GJ)	299.0	298.5	296.6	293.6	291.1
Demand (TJ)	**3,338,743**	**3,367,754**	**3,380,814**	**3,376,074**	**3,376,001**
Industrial Demand					
Connections	109	106	103	100	97
MDQ (TJ)	46,377	44,713	43,107	41,573	40,095
ACQ (TJ)	**10,329,709**	**10,027,836**	**9,732,683**	**9,445,815**	**9,165,005**