

Attachment 3

Comparison of Assumptions

November 2018







Attachment R1: Comparison of Assumptions

The following tables summarise the assumptions used in this response to the AER's Draft Decision compared to our original application in June.

Table 1: General Assumptions

	Original application (June 2018)		This response (November 2018)	
	Assumption	Basis/Support	Assumption	Additional Basis/Support
Nominal Discount Rate	6.42%	AER's Final Decision (pre-tax nominal WACC, including 2017/18 cost of debt)	No change	No change
Tariff	Tanunda & Riverland	Residential and Commercial – Tanunda Tariff D – Riverland (based on 2017/18 tariffs)		
Incremental Opex	\$22.52/new connection (\$2017/18)	Based on Victorian Gas Distribution Code inflated to \$2017/18, as this is an independent and justifiable figure		
Overhead	4.81%	Amended to only include the variable portion of the AER approved overhead benchmark, which equates to a "rate" of 4.81% as a portion of the overhead is fixed and will not increase if this project goes ahead		
CPI	2.39%	Benchmark inflation assumption in AER's Final Decision		
X Factor	-3.8%	Benchmark price path in AER's Final Decision		
Dollar terms	\$2017/18	Consistent with timing of application		



Table 2: Domestic Revenue Assumptions

	Original appl	ication (June 2018)	This response	e (November 2018)
	Assumption	Basis/Support	Assumption	Additional Basis/Support
Annual Usage	27.3 GJ p.a.	Based on average usage of new homes (constructed 2011 onwards, usage 2012-16) in Mount Gambier (which has the most similar weather in SA to Mount Barker)	No change 27.3 GJ p.a.	Average consumption across SA in 2017 was higher than in 2016, despite being a warmer year, showing there is little evidence average gas consumption is declining.
New Dwellings Forecast	6,845 (2021-2040)	Independent forecast by Core Energy based on forecast.id new dwellings forecast for the Mount Barker Growth Area only.	11,134 total MB 10,444 MB 1,000 Apartments 530 Nairne 160 Littlehampton (2021-2050)	Based on the submission of Mount Barker District Council (MBDC), we have extended growth in the Mount Barker Growth Area out a further 10 years to the end of 2050 to match the 30-year analysis period Added 1,000 apartments within the Mount Barker township as per Council expectations Nairne new homes 530 Littlehampton new homes 160
Existing Dwellings Forecast	N/A	N/A	MB 5,442 Nairne 1,995 Littlehampton 1,171	Currently 5,442 dwellings in Mount Barker according to Council website. A penetration rate of 71% leads to 3864 dwellings connected by 2040
Penetration Rate (for new dwellings)	95%	Natural gas penetration rates at March 2018 for seven new development areas with subdivisions (totalling over 10,000 dwellings) of a comparable size and development type to Mount Barker. Penetration rate calculated by comparing the total number of dwellings to the number of residential gas connections. These areas are still being developed, therefore provide the most recent trends in residential gas connections.	No change 95%	In response to Zincara and CCP issues, we have provided the average penetration rate for new areas in Mount Gambier, which is >90% without correcting for the time lag in gas connections compared to electricity. Mount Gambier is our proxy for average consumption as it has the most similar weather in South Australia to Mount Barker. However Mount Gambier is a regional town and Mount Barker is one of the largest new development areas in Greater Adelaide. Therefore new housing development and economic activity in Mount Barker is not similar to that in Mount Gambier.



Connections (for new dwellings)	6,502	Based on the new dwellings forecast above at a penetration rate of 95%	9,922 MB 503 Nairne 152 Littlehampton	Based on the new dwellings forecast above at a penetration rate of 95%
Penetration Rate (for existing dwellings)	N/A	N/A	71%	Based on Mount Gambier average penetration rate for existing areas.
Connections (for existing dwellings)	N/A	N/A	3,864 MB 1,416 Nairne 831 Littlehampton	Based on existing dwellings numbers above at a penetration rate of 71%



Table 3: I&C Assumptions

Original application (June 2018)		This response (November 2018)		
	Assumption	Basis/Support	Assumption	Additional Basis/Support
Annual Usage	Various	 Core is forecasting three I&C Customer Types as follows: Commercial Mount Barker, 273 GJ p.a. – AER approved average I&C usage Commercial Monarto South, p.a. – estimated use of potential future sites (based on current LPG use) See customer engagement supporting information Commercial Kanmantoo, estimated use See customer engagement supporting information 	Various	As per original submission
Connections	171	 Core is forecasting the following connection numbers: Commercial Mount Barker, 165 connections at 273GJ p.a. – based on historic ratio of Tariff C to Tariff R connections in our Annual RINs Commercial Monarto South, five connections at p.a. – based on APA surveys of potential customers in Monarto South See Attachment 8: Customer Survey Summary Commercial Kanmantoo, one connection at p.a. – based on customer engagement See Attachment 8: Customer Survey Summary 	424	New area of Mount Barker 252 x 273 GJ, 7 x and 1 x Existing area of Mount Barker - 98 x 273 GJ 74 x 273 GJ Nairne and Littlehampton



Table 4: Tariff D Demand Assumptions

	Original application (June 2018)		This response (November 2018)	
	Assumption	Basis/Support	Assumption	Additional Basis/Support
Annual Usage	Various	 Core are forecasting: 50 GJ MDQ per day – represents minimum usage of a Tariff D customer. MDQ per day – Support for this reflects APA insight on current usage (if they were to connect to natural gas) 	Various	As per original submission except a new 240 GJ MDQ category has been created for additional large businesses that have contacted us recently asking about the availability of natural gas in Mount Barker.
Connections	5	 Core are forecasting: Four connections at 50 GJ MDQ per day Two for Mount Barker based on existing Industrial to Residential ratio Two for Monarto South based on customer surveys One connection at per day – based on customer surveys Support for this reflects APA insight that customer would connect per survey Summary 	8	As per original submission except for 3 additional connections in the new 240 GJ MDQ category.



Table 5: Capital Assumptions

	Original application (June 2018)		This response (November 2018)	
	Assumption	Basis/Support	Assumption	Additional Basis/Support
Supply main/headworks	\$36.3	See Attachment 3: Natural Gas to Mount Barker Headworks Summary	\$36.8	AER Draft Decision was not to approved project contingency of \$2.4m.
		Now includes detailed estimates for trunk reticulation.		Additional trunk reticulation to Nairne and Littlehampton of \$2.9m.
Domestic Reticulation per metre (new homes)		AER approved unit rate inflated to \$17/18	No change	No change
Domestic Reticulation per metre (existing homes)	N/A	N/A		AER approved unit rate inflated to \$17/18
Metres per domestic lot (new homes)	12m	Based on APA experience for recent similar sized allotments in Gawler East and Buckland Park.	No change	
I&C Reticulation per metre		As per Interim FEED Result inflated to \$17/18		
Domestic Meter		AER approved unit rate inflated to \$17/18	No change	No change
I&C Meter		AER approved unit rate inflated to \$17/18	No change	
Domestic Service (new)		AER approved unit rate inflated to \$17/18		
Domestic Service (existing)	N/A	N/A		AER approved unit rate inflated to \$17/18



I&C Service	AER approved unit rate inflated to \$17/18		
Demand Connection Cost	Based on average of historic Tariff D connection costs exclusive of contributions and overheads, analysis provided by APA.	No change	No change