DRAFT DECISION
Evoenergy
Access Arrangement

2021 to 2026

Attachment 5
Capital expenditure

November 2020

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165
Email: AERInquiry@aer.gov.au

AER reference: 65197

Note

This attachment forms part of the AER's draft decision on the access arrangement that will apply to Evoenergy for the 2021–26 access arrangement period. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – Services covered by the access arrangement

Attachment 2 – Capital base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency carryover mechanism

Attachment 9 – Reference tariff setting

Attachment 10 – Reference tariff variation mechanism

Attachment 11 – Non-tariff components

Attachment 12 – Demand

Attachment 13 – Capital expenditure sharing scheme

Contents

5 Capital expenditure

Capital expenditure (capex) refers to the capital costs and expenditure incurred in the provision of pipeline services.[1] This investment mostly relates to assets with long lives and these costs are recovered over several access arrangement periods.

This attachment outlines our assessment of Evoenergy's proposed conforming capex for the 2016–21 access arrangement period, which forms part of its opening capital base.[2] It also outlines our assessment of forecast capex for the 2021–26 period, which forms part of its projected capital base.[3]

5.1 Draft decision

5.1.1 Conforming capex for 2015–16 and the 2016–21 period

Our draft decision indicates whether we would be prepared to approve the access arrangement proposal as submitted, based on the information that we have available at the time.[4] If we are not prepared to approve, we should set out what amendments or additional information we require to make the proposal acceptable. For the purpose of our draft decision, we would be prepared to approve $66.0 million ($2020–21) of total net capex for Evoenergy for the 2015–16 to 2018–19 regulatory years as conforming capex under the National Gas Rules (NGR). We note that this is a placeholder and request further information on connections and non-network in its revised proposal.

Table 5.1 shows Evoenergy's actual capex against the AER's allowance for the 2016–21 access arrangement period, by category.

1 NGR, r. 69.
2 NGR, r. 77.
3 NGR, r. 78(b).
4 NGR, r. 59(2).

Table 5.1 Evoenergy capex performance against the allowance by category for the 2016–21 access arrangement period ($2020–21, million)

Category	2016–21 Period		
	Allowance	Actual / Estimate	Difference
Market expansion (Connections)	49.6	46.0	3.6
Stay-in-business - meter renewal (Meter replacement)	18.1	17.4	0.7
Capacity development (Augmentation)	7.1	7.2	-0.1
Stay-in-business - network renewal (Mains replacement plus facilities and pipes)	16.9	8.2	8.7
Non-system (Other)	0.6	0.1	0.5
GROSS TOTAL	**92.4**	**78.9**	**13.5**
Contributions	4.5	1.7	2.8
NET TOTAL	**87.9**	**77.1**	**10.9**

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020.
Numbers include overheads and construction management fees.
AER analysis. Totals may not sum due to rounding.

Evoenergy's capex proposal includes a substantial construction management fee, paid to its related party, Jemena Asset Management Pty Ltd (JAM). Due to confidentiality claims we are unable to quantify the construction management fee. For the purposes of our draft decision, where we say direct costs, this includes an allocation of the construction management fee, but does not include capitalised overheads. We will discuss construction management fee in section 5.4.7.

We reviewed Evoenergy's submission and supporting material to assess its proposed capex for the 2021–26 period. This included information on Evoenergy's reasoning and, where relevant, business cases, responses to information requests and other relevant information. We used this information to identify whether capex over the 2016–21 period was conforming capex and, in turn, whether that capex should be included in the opening capital base.[5] Generally, we use the same approach to assess whether both historical and forecast or estimated capex conforms with the new capex criteria. We have set out this approach in more detail in section 5.3 below.

[5] NGR, r. 77(2)(b).

We consider the following when determining the opening capital base for the 2021–26 period:

- 2015–16 capex: given that the 2015–16 year was a forecast at the time we made our 2011–16 final decision, we have assessed whether this is conforming capex.[6] We have included conforming capex in the opening capital base for the 2016–21 period.[7]
- 2016–17 to 2018–19 capex: since we have actual capex for these years, we have assessed whether this is conforming capex.[8] We have included conforming capex in the opening capital base for the 2021–26 period.[9]
- 2019–20 and 2020–21 capex: since we do not yet have actual capex for 2019–20 and 2020–21, we must include an estimate in the opening capital base. We have not assessed Evoenergy's estimate of capex for 2019–20 and 2020–21. We will assess 2019–20 in our final decision for the 2021–26 access arrangement, but will assess whether Evoenergy's actual capex for 2020–21 is conforming capex under the NGR in the subsequent (2026–31) access arrangement period and adjust for any differences between actual and estimated capex.[10]

Table 5.2 shows our approved capex for the 2015–16 year and 2016–21 period by category.

6 Ibid.
7 Ibid.
8 Ibid.
9 Ibid.
10 NGR, rr. 77(2)(b), 79.

Table 5.2 AER's approved capex by category 2015–2021 ($2020–21, million)

Category	2015–16	2016–17	2017–18	2018–19	2019–20[(a)]	2020–21[(a)]
Market expansion (Connections)	7.6	9.8	8.8	10.2	7.4	7.1
Stay-in-business - meter renewal (Meter replacement)	3.6	2.5	3.0	2.9	4.4	3.7
Capacity development (Augmentation)	2.0	4.4	0.1	0.2	1.9	0.3
Stay-in-business - network renewal (Mains replacement plus facilities and pipes)	3.8	2.6	1.4	0.3	0.5	2.9
Non-system (Other)	-	0.0	0.0	0.0	-	-
Overhead	1.1	1.2	0.8	0.8	0.9	0.8
GROSS TOTAL	**18.6**	**20.5**	**14.0**	**14.4**	**15.1**	**14.8**
Contribution	0.1	0.0	0.5	1.0	0.1	0.1
NET TOTAL	**18.5**	**20.5**	**13.6**	**13.4**	**14.9**	**14.7**

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

Note: (a) We have not assessed the 2019–20 or 2020–21 amounts as approved capex under this decision. This is because these values are estimates. We will undertake an assessment of whether the 2019–20 amounts are conforming capex in our final decision and 2020–21 as part of the next access arrangement decision.

5.1.2 Forecast capex for the 2021–26 period

For the purpose of our draft decision, we accept Evoenergy's proposed $63.3 million ($2020–21) total net capex for the 2021–26 access arrangement period as conforming capex under the NGR as a placeholder and request further information on connections, augmentation, network renewal and non-system.[11]

Table 5.3 shows our approved capex for the 2021–26 period by category.

[11] NGR, r. 79.

Table 5.3 AER's approved capex by category over the 2021–26 access arrangement period ($2020–21, million)

Category	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Market expansion (Connections)	4.7	5.0	4.8	5.2	5.2	24.8
Stay-in-business - meter renewal (Meter replacement)	5.7	4.3	4.7	3.4	4.2	22.2
Capacity development (Augmentation)	0.2	0.2	0.2	0.2	0.2	0.9
Stay-in-business - network renewal (Mains replacement plus facilities and pipes)	3.8	4.6	1.9	1.6	0.4	12.2
Non-system (Other)	-	-	-	-	-	-
Overhead	0.9	0.8	0.7	0.6	0.6	3.6
GROSS TOTAL	**15.2**	**14.9**	**12.2**	**11.0**	**10.5**	**63.8**
Contribution	0.1	0.1	0.1	0.1	0.1	0.5
NET TOTAL	**15.1**	**14.8**	**12.1**	**10.9**	**10.4**	**66.3**

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

In coming to our draft decision, we assessed Evoenergy's forecast capex compared with alternative capex estimates taking into account the available evidence and submissions from stakeholders.

We accept Evoenergy's proposal as a placeholder for conforming capex. That is, the proposed expenditure is largely justified and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services.[12] We request further information from Evoenergy on its volume forecast in line with our demand decision (Demand – Attachment 12).

[12] NGR, r. 79.

5.2 Evoenergy's proposal

5.2.1 2016–21 access arrangement period

Evoenergy has proposed net capex of $77.1 million ($2020–21) for the 2016–21 access arrangement period, where capex in 2019–20 and 2020–21 are estimates.

Without the estimate of capex for 2019–20 and 2020–21, Evoenergy has proposed $47.5 million ($2020–21) as conforming capex (or $66.0 million including the 2015–16 year).

For the purpose of our draft decision, we accept $47.5 million ($2020–21) as conforming capex for the 2016–17 to 2018–19 years as a placeholder, and will assess whether capex incurred in 2019–20 is conforming in our final decision, and whether capex incurred in 2020–21 is conforming at the next (2026–31) access arrangement review.

For 2016–21, Evoenergy underspent net capex by 12.3 per cent ($10.8 million). This includes the estimates for 2019–20 and 2020–21.

Table 5.4 Evoenergy's proposed capex by category over the 2016–21 access arrangement period ($2020–21, million)

Category	2015–16	2016–17	2017–18	2018–19	2019–20[(a)]	2020–21[(a)]
Market expansion (Connections)	7.6	9.8	8.8	10.2	7.4	7.1
Stay-in-business - meter renewal (Meter replacement)	3.6	2.5	3.0	2.9	4.4	3.7
Capacity development (Augmentation)	2.0	4.4	0.1	0.2	1.9	0.3
Stay-in-business - network renewal (Mains replacement plus facilities and pipes)	3.8	2.6	1.4	0.3	0.5	2.9
Non-system (Other)	-	0.0	0.0	0.0	-	-
Overhead	1.1	1.2	0.8	0.8	0.9	0.8
GROSS TOTAL	**18.6**	**20.5**	**14.0**	**14.4**	**15.1**	**14.8**
Contribution	0.1	0.0	0.5	1.0	0.1	0.1
NET TOTAL	**18.5**	**20.5**	**13.6**	**13.4**	**14.9**	**14.7**

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

Note: (a) We have not assessed the 2019–20 or 2020–21 amounts as approved capex under this decision. This is because these values are estimates. We will undertake an assessment of whether the 2019–20 amounts are conforming capex in our final decision and 2020–21 as part of the next access arrangement decision.

5.2.2 2021–26 access arrangement period

Evoenergy proposed forecast net capex of $63.3 million ($2020–21) for the 2021–26 access arrangement period, which is $13.7 million (or 17.8 per cent) lower than its actual net capex for the 2016–21 period.[13]

Table 5.5 Evoenergy's proposed capex by category over the 2021–26 access arrangement period ($2020–21, million)

Category	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Market expansion (Connections)	4.7	5.0	4.8	5.2	5.2	24.8
Stay-in-business - meter renewal (Meter replacement)	5.7	4.3	4.7	3.4	4.2	22.2
Capacity development (Augmentation)	0.2	0.2	0.2	0.2	0.2	0.9
Stay-in-business - network renewal (Mains replacement plus facilities and pipes)	3.8	4.6	1.9	1.6	0.4	12.2
Non-system (Other)	-	-	-	-	-	-
Overhead	0.9	0.8	0.7	0.6	0.6	3.6
GROSS TOTAL	**15.2**	**14.9**	**12.2**	**11.0**	**10.5**	**63.8**
Contribution	0.1	0.1	0.1	0.1	0.1	0.5
NET TOTAL	**15.1**	**14.8**	**12.1**	**10.9**	**10.4**	**66.3**

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

The major components of forecast gross total capex over the 2021–26 period are market expansion (39.2 per cent), meter replacement (35.1 per cent) and network renewal (19.3 per cent).

[13] Evoenergy's capex for both 2019–20 and 2020–21 are estimates only.

5.3 Assessment approach

We must make two decisions regarding Evoenergy's capex.

First, we are required to assess past capex and determine whether it is conforming capex that we should add to the opening capital base.[14]

Second, we are required to assess Evoenergy's forecast of required capex for the 2021–26 access arrangement period to determine whether it is conforming capex. Capex will be 'conforming' if it meets the NGR's new capex criteria.[15]

The following sections set out our approach and the tools and techniques we employ in forming a view on these two issues. We also need to take into account timing issues associated with the lag between actual capex data being available in the last year of the 2016–21 period and the need to forecast the opening capital base for the 2021–26 period. We explain this in the next section.

5.3.1 Capex in the 2016–21 access arrangement period

We reviewed Evoenergy's submission and supporting material to assess its proposed capex for the 2016–21 access arrangement period. This included information on Evoenergy's reasoning and, where relevant, business cases, responses to information requests and other relevant information.

We used this information to identify whether capex over the 2016–21 period was conforming capex and, in turn, whether that capex should be included in the opening capital base.

Generally, we use the same approach to assess whether both historical and forecast or estimated capex conforms with the new capex criteria. We have set out this approach in more detail in section 5.3.2 below.

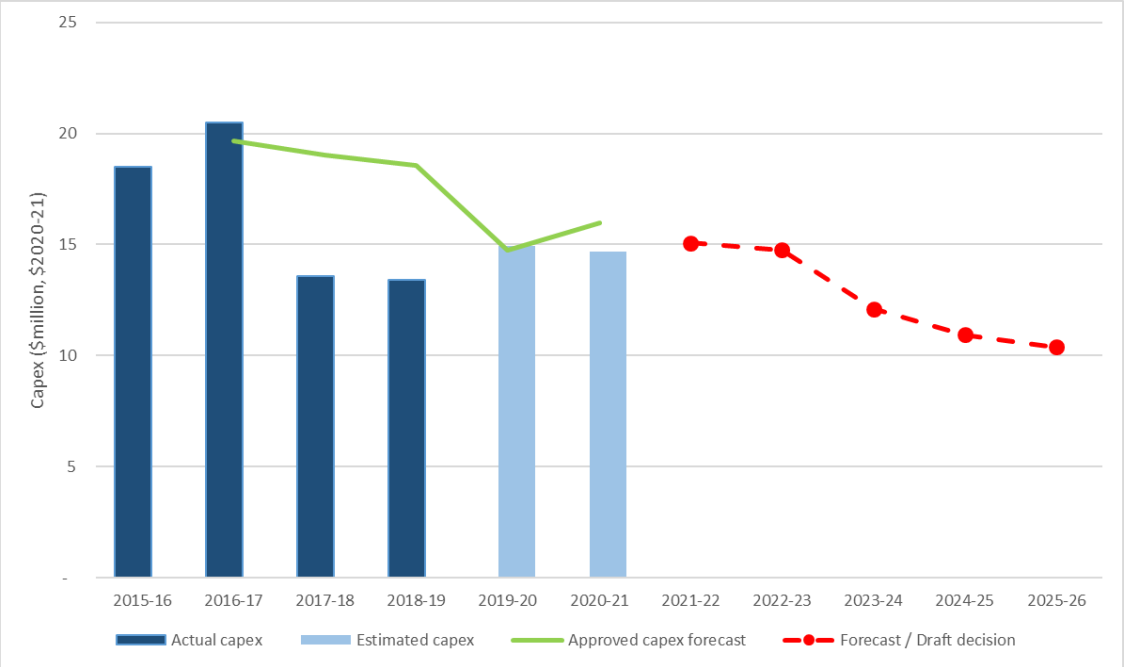
For the purpose of our draft decision, we have focused our resources on specific areas where there are significant overspends and underspends between the allowance and the expected actual. In the 2016–21 period, we have observed material underspend in the network renewal category.

[14] NGR, r. 77(2)(b).

[15] NGR, r. 79.

5.3.2 Conforming capex for the 2021–26 access arrangement period

Figure 5.1 Evoenergy capex trends



Source: AER analysis.

We have assessed the key drivers of forecast capex to consider whether Evoenergy's proposed capex complies with the new capex criteria.[16] In doing so, we relied on the following information:

- the access arrangement submission and access arrangement information, which outline Evoenergy's capex program and the main drivers of those programs
- business cases that detail the expenditure requirements for specific projects
- Evoenergy's Regulatory Information Notice (RIN) responses
- Evoenergy's capex forecast model
- responses to information requests
- engineering advice we commissioned from Zincara (our consultant) to help us assess the prudency and efficiency of selected projects
- submissions from interested parties.

For each category of capex, we considered the scope, timing and cost of the proposed capex in order to form a view on whether it complies with the new capex criteria. We

16 NGR, r. 79(1).

also considered whether cost forecasts were arrived at on a reasonable basis and represent the best forecast possible in the circumstances.[17]

Our assessment results in an alternative estimate of the business's total capex requirements in the forecast period. If we are satisfied the business's total forecast meets the NGR requirements, we accept the forecast. If we are not satisfied, we substitute the business's forecast with our alternative estimate. In making this decision, we take into account the reasons for the difference between our alternative estimate and the business's forecast, and the materiality of that difference. We also take into consideration the interrelationships between the capex forecast and other constituent components of our decision such that our decision is likely to contribute to the achievement of the National Gas Objective (NGO).[18]

5.3.3 Interrelationships

In assessing Evoenergy's total forecast capex, we took into account other components of its access arrangement proposal, including:

- possible trade-offs between capex and opex
- consistencies between demand and customer forecasts (Attachment 12 – Demand)
- growth in labour price forecasts for opex and capex (Attachment 6 – Operating expenditure).

[17] NGR, r. 74(2).

[18] NGL, s. 28(1).

5.4 Reasons for draft decision

5.4.1 Conforming capex for the 2016–21 access arrangement period

Conforming capex for 2015–16

Evoenergy has proposed net capex of $18.5 million ($2020–21) for the 2015–16 year, which we accept as conforming capex for 2015–16 as the level of expenditure is in line with its previous four years.

Conforming capex for the 2016–21 access arrangement period

Evoenergy has proposed net capex of $77.1 million for the 2016–21 period ($2020–21), where capex in 2019–20 and 2020–21 are estimates.

Without the estimate of capex for 2019–20 and 2020–21, Evoenergy has proposed $47.5 million as conforming capex.

For 2016–21 conforming capex, we accept $77.1 million ($2020–21) as a placeholder and request further information from Evoenergy in its revised proposal.

- We will assess whether capex incurred in 2019–20 is conforming in our final decision, and whether capex incurred in 2020–21 is conforming in Evoenergy's next (2026–31) access arrangement. As such, Evoenergy's proposed 2019–20 and 2020–21 expenditures are considered to be placeholders.

In reaching this view, we have considered the following factors:

- Evoenergy's capex is expected to be $77.1 million (12.3 per cent) less than the $87.9 million ($2020–21) we approved for the 2016–21 period. Evoenergy state this occurred due to the rapidly changing market environment that was not anticipated at the time of the 2016–21 access arrangement review.[19]
- the largest underspend in the 2016–21 period occurred in the network renewal category, where Evoenergy is expected to spend $8.8 million less than forecast ($2020–21, direct costs). Projects which are either not proceeding or proceeding on a smaller scale in the current period are: Watson pressure limiting station (PLS), West Belconnen secondary main, and inlet piping rectifications. [20]
- the next largest underspend was connections by $3.6 million ($2020–21). Evoenergy submitted the ACT Government and developer announcement that

[19] Evoenergy, *Attachment 3 Capital expenditure access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3-5.

[20] Evoenergy, *Attachment 3 Capital expenditure access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3-5.

Ginninderry would be a no-gas trial and have no new homes serviced by gas.[21] However, it is our understanding that capex has been incurred in this period for the Ginninderry development.

- expected nil capex spend on non-network. [22] We have previously approved $0.6 million for other capex for 2016–21. However, it is our understanding that Evoenergy is forecasting a minimal amount of capex this period and next period for non-network of $0.1 million ($2020–21).

Table 5.6 Evoenergy capex performance against the allowance by category for the 2016–21 access arrangement period ($2020–21, million)

	2016–21			
	Allowance	**Actual**	**$ Variance**	**% Variance**
Market expansion (Connections)	46.8	43.3	3.4	7.3%
Stay-in-business - meter renewal (Meter replacement)	17.1	16.5	0.7	3.9%
Capacity development (Augmentation)	6.7	6.8	-0.1	-1.2%
Stay-in-business - network renewal (Facilities and pipes)	16.0	7.7	8.3	52.0%
Non-system (Other)	0.6	0.1	0.5	86.9%
Overheads	5.2	4.5	0.7	13.5%
TOTAL GROSS CAPEX	**92.4**	**78.9**	**13.5**	**14.6%**
Customer Contributions	4.5	1.7	2.7	60.9%
TOTAL NET CAPEX	**87.9**	**77.1**	**10.8**	**12.3%**

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

5.4.2 Market expansion (connections)

Distribution businesses have a regulatory obligation to make a connection offer to residential and commercial/industrial customers making applications to connect to its distribution network.[23]

[21] Evoenergy, *Attachment 3 Capital expenditure access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3-5.

[22] Evoenergy, *Attachment 3 Capital expenditure access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3-4.

[23] NGR, r. 119S, for basic and standard connections and NGR, r. 119V, for negotiated connections.

Market expansion capex is usually forecast by categorising new connections into Tariff V (residential customers and commercial customers,[24] including volume boundary meters)[25] and Tariff D (large government and industrial customers[26]).[27] Residential customers can be disaggregated further into existing homes, new estates, and medium/high density (or multi-user) dwellings. [28]

Market expansion includes new mains along streets, services to homes and businesses, and meters to measure how much gas is used.[29] It encompasses new connecting new customers:

- low density dwellings (new homes)
- medium density and high-rise housing
- electricity to gas conversions
- industrial/commercial sites

Table 5.7 Market expansion allowance, actual and forecast expenditure for the 2016–21 and 2021–26 periods ($2020–21, million, direct cost)

	2016–21 period		2021–26 period	
	Allowance	**Actual**	**Evoenergy's proposal**	**AER's draft decision**
Market expansion (connections)	46.8	43.3	24.8	24.8
Capital Contributions	4.5	1.7	0.5	0.5
Net Market expansion	42.3	41.6	24.3	24.3

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

For the 2016–21 period, Evoenergy's capex is expected to be $43.3 million ($2020–21, direct costs) against an allowance of $46.8 million.[30] This is an underspend of

[24] Industrial and commercial customers are generally classified under Tariff V if they consume less than 10 TJ of gas per year.

[25] Volume boundary meters occur when a multi occupancy building has a single or boundary meter with the gas distribution company.

[26] Industrial and commercial customers are generally classified under Tariff D if they consume more than 10 TJ of gas per year.

[27] For clarity, industrial and commercial volume customers equate to small business customers in the Demand forecast while large industrial and commercial demand customers equate to industrial customers in the Demand forecast.

[28] Connections to existing homes are sometimes referred to as 'electricity-to-gas' connections, whereby households replace electric appliances with gas equivalents and require connection to the gas distribution network.

[29] Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, pp. 3-2 and 3-8.

[30] Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020.

$3.4 million or 7.3 per cent of the approved forecast. Offsetting this capex are capital contributions of $1.7 million, against an allowance of $4.5 million, representing a 60.9 per cent under-collection.[31]

Our draft decision for the 2016–21 access arrangement reviewed the basis of the then-proposed unit rates. At that time, we were satisfied that on balance, the unit rates were likely to lead to an amount of connections capex that a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing connections would incur. As part of the 2021–26 access arrangement, when requested Evoenergy provided six years of data (2013–14 to 2018–19) which shows some variability year-on-year, this has been explained as minor timing differences, whilst volumes were driven by factors outside the control of Evoenergy.

Given the evolving environment associated with the ACT Government's climate change strategy we have also assess its potential impacts in the 2016–21 access arrangement. In particular, we have examined recent completed and ongoing projects in new development areas.

One such project is the gas mains to the Ginninderry development. Evoenergy stated that the gas mains laid under stage 1 of the development enable the connection of a future school and commercial area. Stage 2 would involves installing backbone infrastructure to facilitate connection to green gas options if it is deemed appropriate in the future.[32] It is our understanding that no customer is connected to the gas network in the Ginninderry development at the present time.

While it is reasonable and common for distribution network assets to be installed months prior to its actual utilisation for operational and efficiency reasons, we are seeking additional information from Evoenergy on the following:

- known or committed gas connections in the Ginninderry development including their actual or expected connection year
- the likelihood of future gas connections in the Ginninderry development in the next period in light of recent commitments from the ACT Government to achieve net zero emissions[33]
- the economic test and key assumptions undertook by Evoenergy at the time of investment to demonstrate the expenditure associated with the gas mains to the Ginninderry development is conforming capex[34]

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31 Evoenergy, *Attachment 3 – Capital expenditure access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3-5.

32 Evoenergy, *Response to information request IR007*, received 7 September 2020.

33 ACT Labor and ACT Greens, "Parliamentary and Governing Agreement", 10th Legislative Assembly for the Australian Capital Territory, 2 November 2020. Available here https://www.cmtedd.act.gov.au/__data/assets/pdf_file/0003/1654077/Parliamentary-Agreement-for-the-10th-Legislative-Assembly.pdf.

34 NGR, r. 79(1).

- other developments similar to the Ginninderry development where Evoenergy has or is expected to laid gas mains to the site this period.

For the purpose of our draft decision, we accept a net capex of $41.6 million ($2020–21, direct costs), being $43.3 million, less $1.7 million capital contributions, as a placeholder and request further information from Evoenergy on Ginninderry and similar developments in the 2016–21 period.

We engaged Zincara to assist us in the technical aspects of our assessment of Evoenergy's market expansion capex proposal.

We accept Evoenergy's proposed $24.3 million ($2020–21, direct costs) of gross market expansion capex as conforming capex for the 2021–26 access arrangement period.[35]

Evoenergy's proposal for 2021-26

Evoenergy's market expansion capex forecast reflects they key underlying assumption of its proposal; the main jurisdiction in which it operates is proposing to phase out natural gas.[36]

The connection forecast undertaken by The Centre for International Economics (CIE) indicated that at June 2019, 90 per cent of residential customers are in the ACT and 10 per cent in NSW.[37] While Evoenergy is not forecasting market expansion into new developments in the ACT,[38] it is proposing to provide connections in the NSW portions of the network and to brownfield sites in ACT suburbs with existing gas reticulation.[39]

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35 NGR, r. 79(1).

36 Evoenergy, *Overview – Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 22.

37 Evoenergy, *Appendix 7.1 Final Report Forecast demand for natural gas, Prepared by CIE for Evoenergy, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, 19 June 2020,, p. 36 Table 5.1.

38 Evoenergy, *Overview – Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 23.

39 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, pp. 3-9 to 3-11.

Table 5.8 Proposed market expansion gross capex for the 2021–26 access arrangement period ($2020–21, millions, direct cost)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
New homes	1.5	1.6	1.6	1.7	1.7	8.0
Commercial tariff	1.4	1.4	1.4	1.4	1.4	6.5
Electricity to gas	0.2	0.1	0.1	0.1	0.1	0.5
Medium density / high-rise	1.0	1.1	1.0	1.1	1.2	5.5
I&C contract	0.8	0.9	0.8	0.9	0.9	4.3
Gross total	**4.7**	**5.0**	**4.8**	**5.2**	**5.2**	**24.8**

Source: AER analysis, based on Evoenergy data. Totals may not sum due to rounding.

For forecasting new customers in the ACT, dwelling approvals are projected based on the ACT Government's population growth forecasts and the observed ratio of new persons to dwelling approvals over the past eight years. For new customers in NSW, dwelling approvals are projected based on the NSW Government's dwelling projections. For a more comprehensive assessment of the forecast of new connection numbers, please refer Attachment 12 – Demand.

Evoenergy proposed $24.8 million ($2020–21, direct costs), as shown in Table 5.8, in capex for market expansion in the 2021–26 period.

Submissions

The ACT Council of Social Service (ACTCOSS) have concerns in regard to:[40]

- the long term interests of consumers in NSW if there is significant expansion in this part of Evoenergy's network while gas usage and/or customer base declines in the ACT
- new connections to medium density/high rise developments may lock occupants into gas network or make retrofit to electric more difficult for residents.

ACTCOSS support Evoenergy's capex forecast based on no expansion of the network into new ACT suburbs.[41]

The Consumer Challenge Panel (CCP24) mention concerns raised in response to the Draft Plan in regards to the ongoing connection of customers in existing network footprint in both ACT and NSW. Additionally, CCP24 encourage Evoenergy to provide a scenario counter-intuitive to the argument more customers on an existing network

[40] ACTCOSS, *Submission: Evoenergy's gas network 2021–26 access arrangement proposal to the Australian Energy Regulator,* August 2020, p. 20.

[41] Ibid., p. 20.

spread the costs so charges for all go down. This includes a simplified example about how this equation might change in the case of large accelerated depreciation and the number of users declining as users exit the network.[42]

Origin Energy questioned whether any market expansion capex is warranted given current uncertainty, although they also stated that Evoenergy "has adopted a pragmatic approach to investment in the 2021–26 period".[43]

EnergyAustralia question the prudence of capex on long lived assets, or to facilitate connections.[44]

Our assessment

Evoenergy's market expansion, or connections, capex is slightly below the allowance in the current period and is forecast to decline in the next access arrangement period. The ACT Government has ended the mandate of gas reticulation to new developments, and are promoting electric alternatives to gas appliances.[45] Further the Suburban Land Agency[46] has advised Evoenergy it will not be connecting gas in its new estates.[47]

Table 5.9 Percentage allocation of market expansion capex between ACT and NSW for the 2021–26 access arrangement period ($2020–21, millions, direct cost)

	ACT	NSW
New homes	66.3%	33.7%
Medium density / high-rise	88.4%	11.6%
Other	97.2%	2.8%
Total	85.2%	15.2%

Source: AER analysis. Totals may not sum due to rounding.

Based upon the percentages in Table 5.9, $21.2 million ($2020–21, direct cost) of market expansion capex is forecast to be spent within the ACT, and $3.8 million on connections in the NSW network.

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42 CCP24, *Advice to the Australian Energy Regulatory on Evoenergy gas network 21 plan for Evoenergy (ActewAGL) ACT, Queanbeyan and Palerang access arrangement July 2021–June 2026*, August 2020, pp. 30–31.

43 Origin Energy, *Evoenergy access arrangement proposal*, August 2020, p. 2.

44 EnergyAustralia, *Evoenergy – Proposed Access arrangement 2021–26 – 1 July 2020*, August 2020.

45 Evoenergy, *Overview – Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 8, Table 2.

46 The Suburban Land Agency is responsible for delivering the ACT Government's suburban development program, including urban renewal in established town centres and suburbs. This comprises releases for residential, commercial, industrial, mixed use and community purposes.

47 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26,* June 2020, p. 3-9.

Evoenergy's proposed forecast methodology is based on a historical revealed cost approach. For connection types, excluding commercial and industrial customers, connections capex is derived by multiplying the forecast unit rate for the connection type by the forecast volume of new connections. Commercial customer connection forecast is based on historical trends.[48] Industrial or large government customers are forecast to increase by two, who are existing commercial customers who recently increased annual volume to over 10 terajoules (TJ).[49]

Unit Rates

Zincara has reviewed Evoenergy's approach to calculating market expansion capex outlined in the connections and forecast methodology document, and consider it to be reasonable and consistent with methodologies of other distributors.[50]

In response to our information request seeking to understand whether there should be separate unit rates for the two regions, Evoenergy advises there is no significant input cost difference between NSW and ACT.[51]

Zincara sought an additional two years data (2013–14 and 2014–15) due to volatility in the four years of data used by Evoenergy to calculate average unit rates. Zincara then undertook analysis of using four, five or six year average unit rates in the calculation of the market expansion capex. The findings were only very small variations in capex.[52]

On the basis that the capex variations are immaterial, we accept Evoenergy's use of four year average.[53]

Volumes

New homes

The bulk of new home connections are due to the reticulation of new estates.[54] New homes made up about half of the market expansions capex in 2016–21. Over the forecast period, expenditure on new home connections is expected to fall to approximately one third of the market expansion capex.

Evoenergy's consultant, CIE, has forecasted new customers in the ACT, based upon the ACT Government's population growth forecasts and the observed ratio of new persons to dwelling approvals over the past eight years but excluded four postcodes

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48 Evoenergy, *Attachment 7 – Demand forecasts, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 7-3.

49 Evoenergy, *Appendix 7.1 Final Report Forecast demand for natural gas, Prepared by CIE for Evoenergy, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, 19 June 2020, p. 97.

50 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 28.

51 Evoenergy, *Response to information request IR006*, received 3 September 2020.

52 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 27.

53 NGR, r. 79(1).

54 Evoenergy, *Appendix 3.5 – Connection and metering forecast methodology, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 2.

where the majority of greenfield developments are expected to occur in the 2021–26 period. For new customers in NSW, dwelling approvals are projected based on NSW government dwelling projections.

Zincara recommend accepting the forecast connection numbers prepared by CIE based on the information available at the time.[55] However, in light of recent commitments from the ACT Government to achieve net zero emissions, we accept Evoenergy's forecast of new home connections for the purposes of forecasting market expansion capex as a placeholder in line with our demand decision (Demand – Attachment 12).

Commercial and industrial

The commercial market segment captures all non-residential volume market connections, which range from local restaurants up to large users.[56]

Zincara recommend accepting the forecast connection numbers prepared by CIE based on the information available at the time.[57] However, in light of recent commitments from the ACT Government to achieve net zero emissions, we accept Evoenergy's forecast of commercial and industrial connections for the purposes of forecasting market expansion capex as a placeholder in line with our demand decision (Demand – Attachment 12).

Electricity to gas

The electricity to gas market segment addresses connecting existing homes which do not already have a gas connection.[58]

Zincara recommend accepting the forecast connection numbers prepared by CIE based on the information available at the time.[59] However, in light of recent commitments from the ACT Government to achieve net zero emissions, we accept Evoenergy's forecast of electricity to gas connections for the purposes of forecasting market expansion capex as a placeholder in line with our demand decision (Demand – Attachment 12).

Medium density and high-rise

This market segment covers all multiple dwelling connections, including townhouses, small walk-up unit blocks and large high-rise apartment complexes.[60]

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55 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 28.

56 Evoenergy, *Appendix 3.5 – Connection and metering forecast methodology, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 2.

57 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure, 7 November* 2020, p. 25.

58 Evoenergy, *Appendix 3.5 – Connection and metering forecast methodology, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3.

59 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 25.

60 Evoenergy, *Appendix 3.5 – Connection and metering forecast methodology, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 2.

Zincara recommend accepting the forecast connection numbers prepared by CIE based on the information available at the time.[61] However, in light of recent commitments from the ACT Government to achieve net zero emissions, we accept Evoenergy's forecast of medium density and high rise connections for the purposes of forecasting market expansion capex as a placeholder in line with our demand decision (Demand – Attachment 12).

Overall

While we have accepted the use of four-year average rates as outlined above, we request further information from Evoenergy on its volume forecast in line with our demand decision (Demand – Attachment 12). For the purpose of our draft decision, we accept Evoenergy's market connection capex of $24.8 million ($2020–21, direct cost) for the 2021–26 access arrangement period as a placeholder.

Table 5.10 Allowed market expansion capex for the 2021–26 access arrangement period ($2020–21, millions, direct cost)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
New homes	1.5	1.6	1.6	1.7	1.7	8.0
Commercial	1.4	1.4	1.4	1.4	1.4	6.5
Electricity to gas	0.2	0.1	0.1	0.1	0.1	0.5
Medium density / high-rise	1.0	1.1	1.0	1.1	1.2	5.5
I&C demand	0.8	0.9	0.8	0.9	0.9	4.3
Total	**4.7**	**5.0**	**4.8**	**5.2**	**5.2**	**24.8**

Source: AER analysis. Totals may not sum due to rounding.

Contributions

Table 5.11 Capital contributions allowance, actual and forecast expenditure 2016–21 and 2021–26 access arrangement periods ($2020–21, million)

	2016–21		2021–26	
	Allowance	Actual	Evoenergy's proposal	AER's draft decision
Capital Contributions	4.5	1.7	0.5	0.5

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

[61] Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 07 November 2020, p. 25.

Our review of the capital contributions forecast of $0.5 million ($2020–21) (as shown in Table 5.11) is consistently lower than historic trends in capital contributions. However we accept the proposed contributions of $0.5 million ($2020–21) in our draft decision, as there is also a similar level of decline in market expansion capex, to which these capital contributions relate.

5.4.3 Meter replacement

Meter replacement is an ongoing capex activity that covers all metering types that require replacement either as part of a planned program or when found to be defective. Evoenergy has regulatory obligations to manage the integrity of meters and ensure they operate within the prescribed tolerance band for metering accuracy.[62]

Table 5.12 shows Evoenergy's proposed meter replacement capex for both the 2016–21 and 2021–26 periods.

Table 5.12 Metering allowance, actual and forecast expenditure 2016–21 and 2021–26 access arrangement periods ($2020–21, million, direct cost)

	2016–21		2021–26	
	Allowance	Actual	Evoenergy's proposal	AER's draft decision
Metering	17.2	16.5	22.2	22.2

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

Evoenergy is forecasting metering expenditure of $22.2 million ($2020–21, direct cost) over the 2021–26 period. In the current period (2016–21) actual expenditure is expected to be $0.7 million (or 4.0 per cent) below the allowance.

Based on the information before us, we are satisfied Evoenergy's capex forecast of $22.2 million ($2020–21, direct cost) for meter replacement is conforming capex.[63]

Evoenergy's proposal

Evoenergy states that the aim of its metering program is to maintain the performance of its fleet of gas meters to ensure it:

- replaces meters prior to failure to avoid estimating bills and to minimise the impact on customers
- meets obligations to provide at least two actual meter reads every 12 months

[62] Evoenergy, *Appendix 3.5 – Connection and metering forecast methodology, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, pp. 15–16.

[63] NGR, r. 79.

- accurately bills customers to ensure network and gas usage charges are fair.[64]

Evoenergy states that it has constrained meter replacement capex in this (2016–21) period, due to the deferral of replacements of residential and hot water meters.[65] Residential gas and hot water meter replacements make up the majority of Evoenergy's proposed capex.

Meter categories and forecast expenditure is set out in Table 5.13.

Table 5.13 Meter replacement capex ($2020–21, million, direct cost)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Residential gas and hot water meters	4.7	3.7	3.6	2.4	3.0	17.4
Industrial and commercial meters	0.8	0.6	1.1	1.0	1.2	4.7
Other	0.2	-	-	-	-	0.2
Total	**5.7**	**4.3**	**4.7**	**3.4**	**4.2**	**22.2**

Source: AER analysis. Totals may not sum due to rounding.

Submissions

EnergyAustralia questioned the creation of a 'back log' of deferred replacements and suggest there may be a reduction in the underlying trend.[66]

Our assessment

Our assessment was informed by analysis of metering by our consultant, Zincara, and our own review of the proposal. Detailed analysis of meter replacement components can be found in the Zincara report. [67]

Residential gas and hot water meters

Residential meters are tested in accordance with Australian Standards to identify the accuracy and leak tightness of meters. This involves statistical sample testing of meter families.

Zincara has reviewed Evoenergy's network asset management plan. Evoenergy sample the meters at 15 years, and again at 20 years to determine if lives can be

64 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26,* June 2020, p. 3-15.

65 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26,* June 2020, p. 3-15.

66 EnergyAustralia, *Evoenergy – Proposed Access arrangement 2021–26 – 1 July 2020*, August 2020, p. 3.

67 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 46–55.

extended. In the absence of any test results, Evoenergy has assumed that meters will be replace after 25 years.[68]

Hot water meters are generally installed together with a meter data logger to record consumption of each dwelling at a central location.

Zincara consider the residential gas and hot water meter capex, including meter data loggers, to be prudent and efficient.[69]

Industrial and commercial meters

Evoenergy supply industrial and commercial (I&C) customers with a meter which is appropriate for the volume of gas they consume. It is anticipated an increasing number of meters will reach end of life in the next access arrangement period.[70] Our consultant, Zincara, considers that Evoenergy has adopted a reasonable strategy for managing gas meters.[71]

Other metering

This category comprises reinstating boundary meters between NSW and ACT following the ACT Government's zero emissions policy. Based on advice from our consultant, Zincara, we accept expenditure in this category as prudent and efficient.[72]

Overall

A validation of the assumptions underpinning the volume forecast was undertaken by Zincara, who found it to be reasonable.[73]

Zincara reviewed annual costs over a six year period. Similar to the unit rates in connections, Zincara concluded that Evoenergy's proposed use of the latest four years was reasonable given the variation between a four, five and six year average are immaterial.[74]

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68 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 47.

69 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, pp. 51–52.

70 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3-17.

71 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 52.

72 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 54.

73 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 49.

74 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, pp. 49–51.

Table 5.14 Allowed meter replacement ($2020–21, million, direct cost)

	2021–26	
	Proposed	Allowed
Residential gas and hot water meters	17.4	17.4
Industrial and commercial meters	4.7	4.7
Other	0.2	0.2
Total	**22.2**	**22.2**

Source: AER analysis. Totals may not sum due to rounding.

We accept Evoenergy's proposed meter replacement of $22.2 million as conforming capex.[75]

5.4.4 Network Renewal

Network renewal relates to the replacement of mains (and associated services) that have significantly deteriorated with an increasing number of reported gas leaks. The replacement program manages old and deteriorating pipes so that the network is operated safely, reliably and affordably.

Table 5.15 Network renewal allowance, actual and forecast expenditure 2016–21 and 2021–26 access arrangement periods ($2020–21, million, direct cost)

	2016–21		2021–26	
	Allowance	**Actual**	**Evoenergy's proposal**	**AER's draft decision**
Network renewal	16.0	7.7	12.2	12.2

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

For the purpose of our draft decision, we accept Evoenergy's proposed forecast of $12.2 million ($2020–21, direct cost) of network renewal capex as a placeholder and request further information in its revised proposal. Evoenergy's proposed network renewal capex is $4.3 million (or 54.5 per cent) less than their 2016–21 actuals. In making this decision we have relied upon technical advice from our consultant Zincara.

[75] NGR, r. 79(1).

Evoenergy's proposal

Evoenergy submitted that its network renewal program primarily focusses on maintaining the safety of gas facilities, medium and high pressure mains and district regulators as they age.[76] Evoenergy states it has adopted a risk based approach, which prioritises safety risks to as low as reasonably practicable (ALARP).[77]

Evoenergy proposed expenditure of $12.2 million ($2020–21, direct cost) for the 2021–26 access arrangement period, which is 54.5 per cent higher than the $7.9 million it incurred in the 2016–21 period.[78]

Evoenergy's proposed plan for 2021–26 can be summarised into:

- A pressure limiting station (PLS) at Watson to allow the Canberra primary main to be operated at lower pressure to assure ongoing safety. High pressure pipeline sections between Gunghalin and Phillip were commissioned in the mid-1990s, with growth in that region dwellings are now within proximity of the pipeline. Whilst current operations comply with Australian Standards, Evoenergy state that operating at lower pressure will provide an effective long term solution to maintaining safe operations as Canberra continues to grow. To do this there is a need for a new station to receive gas at high pressures and then lower and restrict the Canberra pipeline to a pressure that is 43.5 per cent lower than the current maximum pressure.[79]
- Relocation secondary district gas regulators to ensure safety of technicians. At time of installation, the secondary district regulator sets (SDRS) were away from populated and high traffic areas. After road upgrades, there are now two SDRS which are located on median strips on major roads, which also have integrity issues needing rectification. Evoenergy plan to relocate these two SDRS to a suitable place nearby their existing locations.[80]
- Rectification of internal gas piping and regulators in shopping centres. Evoenergy attest that this work is in accordance with the relevant codes set by the Utility Technical Regulator (UTR) and Australian Standards. Nine shopping centres were identified as an issue, and six sites completed in the 2016–21 access arrangement period, leaving three sites to be upgraded in the next period.[81]

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76 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3-12.

77 Evoenergy, *Appendix 3.4 – Asset Management Plan, Prepared by Jemena for Evoenergy, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 27.

78 Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020.

79 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, pp. 3-12 to 3-13.

80 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, pp. 3-14.

81 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, pp. 3-13.

- Flow measurement which is associated with the installation of equipment in three pressure reducing stations (PRS): Phillip PRS, Gunghalin PRS and Fyshwick PRS.[82]
- Other, which includes telemetry, minor capital works and a number of miscellaneous projects.

Table 5.16 Proposed network renewal capex for the 2021–26 access arrangement period ($2020–21, millions, direct cost)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Rectification of internal gas piping and regulators	1.8	0.9	0.6	-	-	3.3
Flow measurement	0.6	0.6	-	-	-	1.2
Watson PRS	0.2	2.4	0.4	-	-	3.0
SDRS integrity and safety replacement	-	0.1	0.3	0.8	-	1.2
Other network renewal	1.2	0.5	0.6	0.9	0.4	3.5
Total	**3.8**	**4.6**	**1.9**	**1.6**	**0.4**	**12.2**

Source: AER analysis, based on Evoenergy data. Totals may not sum due to rounding.

Submissions

EnergyAustralia wants AER to give consideration to projects justified by safety and risk, as well as regulatory compliance and how this translates into maintaining or improving customer outcomes.[83]

Our assessment

Our assessment was informed by analysis of network renewal by our consultant, Zincara, and our own review of the proposal. Detailed analysis of network renewal components can be found in the Zincara report.

[82] Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, pp. 42–43.

[83] EnergyAustralia, *Evoenergy – Proposed Access arrangement 2021–26 – 1 July 2020*, August 2020.

Table 5.17 Allowed network renewal capex for the 2021–26 access arrangement period ($2020–21, millions, direct cost)

		2021–26	
Project	**Driver**	**Proposed**	**Allowed**
Rectification of internal gas piping and regulators	Technical regulator	3.3	3.3
Flow measurement	NGR, r. 112(D)	1.2	1.2
Watson PRS	Safety	3.0	3.0
SDRS integrity and safety replacement	Safety	1.2	1.2
Other network renewal		3.5	3.5
Total		**12.2**	**12.2**

Source: AER analysis. Totals may not sum due to rounding.

We accept that network renewal is justified on the grounds that it is necessary to maintain and improve the safety of services and to maintain the integrity of services.[84] Evoenergy's forecast of $12.2 million ($2020–21, direct cost) for network renewal capex over the 2021–26 access arrangement period reflects our analysis and review of the proposed projects which are largely driven by safety concerns, technical regulatory requirements or national gas rule requirements.

Included in other network renewal are two project for minor capital works each with an allocation of $0.2 million per annum, or $1.8 million in total for the 2021–26 access arrangement period. We accept this amount for unplanned projects as placeholder. We request that Evoenergy demonstrate actual expenditure trends which would support the combined $1.8 million.

5.4.5 Capacity development (Augmentation)

Network augmentation or capacity development capex is directed at increasing the capacity of the existing network to meet the demands of existing and future customers. Augmentation capex is required to maintain gas pressure and minimise the risk of gas outages.

[84] NGR, rr. 79(1)(b), 79(2)(c)(i)(ii).

Table 5.18 Capacity development allowance, actual and forecast expenditure 2016–21 and 2021–26 access arrangement periods ($2020–21, million, direct cost)

	2016–21		2021–26	
	Allowance	Actual	Evoenergy proposal	AER's draft decision
Network renewal	6.7	6.8	0.9	0.9

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

For the purpose of our draft decision, we accept Evoenergy's proposed forecast of $0.9 million ($2020–21, direct cost) of augmentation capex as a placeholder and request further information in its revised proposal. As indicated in Zincara's report, we expect Evoenergy to demonstrate that in the current five-year period, it had actually incurred expenditure for small projects that supports the forecast allocation. [85] Evoenergy's proposed augmentation capex is $5.8 million (or 86.7 per cent) less than their 2016–21 actuals.

Evoenergy's proposal

For the 2016–21 period, Evoenergy's capex is expected to be $6.7 million ($2020–21, direct costs) against an allowance of $6.8 million.[86] This is an underspend of $0.1 million or 0.8 per cent of the approved forecast.

Table 5.19 Proposed capacity development capex ($2020–21, millions, direct cost)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Minor capital works	0.2	0.2	0.2	0.2	0.2	0.9
Total	**0.2**	**0.2**	**0.2**	**0.2**	**0.2**	**10.9**

Source: AER analysis, based on Evoenergy data. Totals may not sum due to rounding.

Evoenergy has proposed $0.9 million ($2020–21, direct costs) in capex for augmentation in the 2021–26 access arrangement period. It comprises an estimate for minor capital works.[87]

85 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 29.
86 Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020.
87 Evoenergy, *Appendix 3.1 Capex Model (Confidential)*, June 2020.

Our assessment

Our assessment for augmentation consist of reviewing the reasonableness of the proposed amount.

Proposed augmentation is an estimate for minor capital works with an allocation of $0.2 million per annum, or $0.9 million in total for the 2021–26 access arrangement period. We accept this amount for unplanned capacity development projects. However, we request that Evoenergy demonstrate actual expenditure trends which would support the $0.9 million.

Table 5.20 Allowed capacity development capex for the 2021–26 access arrangement period ($2020–21, millions, direct cost)

	Evoenergy's proposal	AER's draft decision
Total	0.9	0.9

Source: AER analysis. Totals may not sum due to rounding.

5.4.6 Non-system and other capex

This category captures remaining capex that does not fall into the categories discussed above. It typically encompasses spending on items such as technology services and facilities, fleet, minor plant and equipment.

Evoenergy's proposal

Evoenergy's proposed nil conforming capex for the 2016–21 and 2021–26 periods. The AER allowed $0.6 million for other capex for 2016–21. Evoenergy is forecasting no expenditure for non-systems capex as they consider that existing information systems and equipment continue to work well. [88]

Our assessment

Evoenergy's actual/estimates for other capex for the 2016–21 period was nil against an allowance of $0.6 million for Geographic Information Systems (GIS). The Evoenergy electricity business's GIS is used to serve both gas and electricity networks.[89] From Evoenergy's response, it is not clear to us whether the allowance of $0.6 million was spent but transferred to the regulated electricity business, or if the allowance remains unspent. Evoenergy indicated future expenditure of this nature would be allocated between the gas and electricity businesses.[90] We would like Evoenergy to provide clarity regarding the allocation of GIS to their respective businesses' capital base and

[88] Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, p. 3-5.

[89] Evoenergy, *Response to information request IR008*, received 3 September 2020.

[90] Evoenergy, *Response to information request IR008*, received 3 September 2020.

whether the expenditure represented by the $0.6 million allowance for 2016–21 was incurred, and if so why nil is reported for the gas business.

It is our understanding that the Distribution Asset Management Services (DAMS) Agreement[91] between Evoenergy and JAM includes the management of non-network expenditure, and accordingly Evoenergy has not forecast expenditure in this category.[92]

However, there is a project in Evoenergy's capex model called 'SCADA RTU Project' that appears to conflict with its nil capex proposal in the 2016–21 and 2021–26 periods. This project is categorised as 'Non-Network Telemetry' in the capex model and comprises of $0.1 million in total from 2020–21 to 2025–26. Although the capex is not material, we request further information from Evoenergy in terms of volume and unit rates in line with Zincara's advice.[93]

For the purpose of our draft decision, we accept Evoenergy's proposal of nil capex for the 2021–26 period as a placeholder and request further information from Evoenergy on its revised proposal.

5.4.7 Capitalised overheads and construction management fee

Capitalised overheads

Overheads are costs that are not directly attributable to the output of distribution businesses but are necessary to support its operations. Examples of overhead costs include network planning, procurement and human resources.

In Evoenergy's regulatory accounts, capitalised overheads have not been disaggregated into subcategories such as network overheads; corporate overheads; and direct overheads. However as JAM via the DAMS Agreement manage a number of network functions, Evoenergy's network overheads are claimed to be minimal.[94]

Table 5.21 Capitalised overheads allowance, actual and forecast 2016–21 and 2021–26 access arrangement periods ($2020–21, million)

	2016–21		2021–26	
	Allowance	**Actual**	**Evoenergy's proposal**	**AER's draft decision**
Capitalised overheads	5.2	4.5	3.6	3.6

Source: Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

91 Evoenergy, *RIN 13 – Outsourcing Arrangements*, June 2020.
92 Evoenergy, *Response to information request IR008*, received 3 September 2020.
93 Zincara, AER *Access Arrangement 2020 Evoenergy Capital Expenditure*, 7 November 2020, p. 56.
94 Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020

Capex during the 2016–21 period is inclusive of corporate overheads and we need to assess whether the expenditure on capitalised overheads meets the definition of conforming capital expenditure.[95]

We examined Evoenergy's proposal and made information requests to make sure we understood the make-up of capitalised overheads.[96] We had to make these requests as we identified no separate capex attachment on capitalised overheads, and no discussion in the capex attachment.[97] We also examined Evoenergy's RIN data.

Based upon information requested, Evoenergy expects the 2016–21 access arrangement period capitalised overheads to be $0.7 million (or 13.5 per cent) below the allowance of $5.2 million. We find that the capitalised overheads estimated position to be consistent with the overall underspend in total net capex of 12.3 per cent (refer section 5.4.1). We accept the 2016–21 capitalised overhead expenditure to be conforming capex.[98]

Table 5.22 Proposed capitalised overheads in 2021–26 ($2020–21, million)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Capitalised overheads	0.9	0.8	0.7	0.6	0.6	3.8

Source: Evoenergy, *Response to information request IR012*, Received 25 September 2020 and 16 October 2020. AER analysis. Totals may not sum due to rounding.

Despite Evoenergy's advice that they consider corporate overheads to be fixed in nature,[99] our assessment reveals there is a variable component to capitalised overheads. That is, there is a decline in capitalised overheads, from $4.5 million in 2016–21 to $3.6 million in 2021–26. The decline would not occur if capitalised overheads were all fixed, and we assess this level of decline to be reasonable.

Table 5.23 Allowed capitalised overheads for the 2021–26 access arrangement period ($2020–21, millions)

	Evoenergy's proposal	AER's draft decision
Capitalised Overheads	3.9	3.9

Source: AER analysis.

95 NGR, r. 79(2).

96 Evoenergy, *Response to information request IR012*, received 25 September 2020 and 16 October 2020; Evoenergy, *Response to information request IR008*, received 3 September 2020.

97 Evoenergy, *Attachment 3 – Capital expenditure, Access arrangement information, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020.

98 NGR, r.79(1).

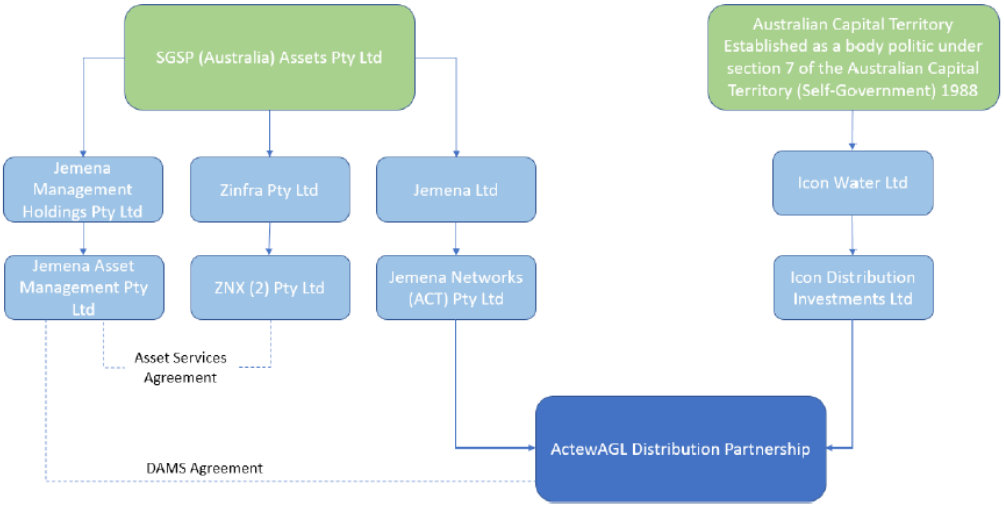
99 Evoenergy, *Response to information request IR008*, received 3 September 2020.

We accept the forecast capitalised overheads of $3.9 million as conforming capex.[100]

Construction management fee

Evoenergy operates both a regulated electricity network and a regulated gas network. The electricity network is operated and managed by Evoenergy. The gas network is operated and managed by JAM. Responsibilities for the gas network are allocated between the partners via the DAMS Agreement.[101]

Figure 5.2 Evoenergy Partnership ownership



Source: Evoenergy, *RIN 13 – Outsourcing Arrangements*, June 2020, Figure 1-1.

Note: Evoenergy is the trading name of ActewAGL Distribution Partnership.

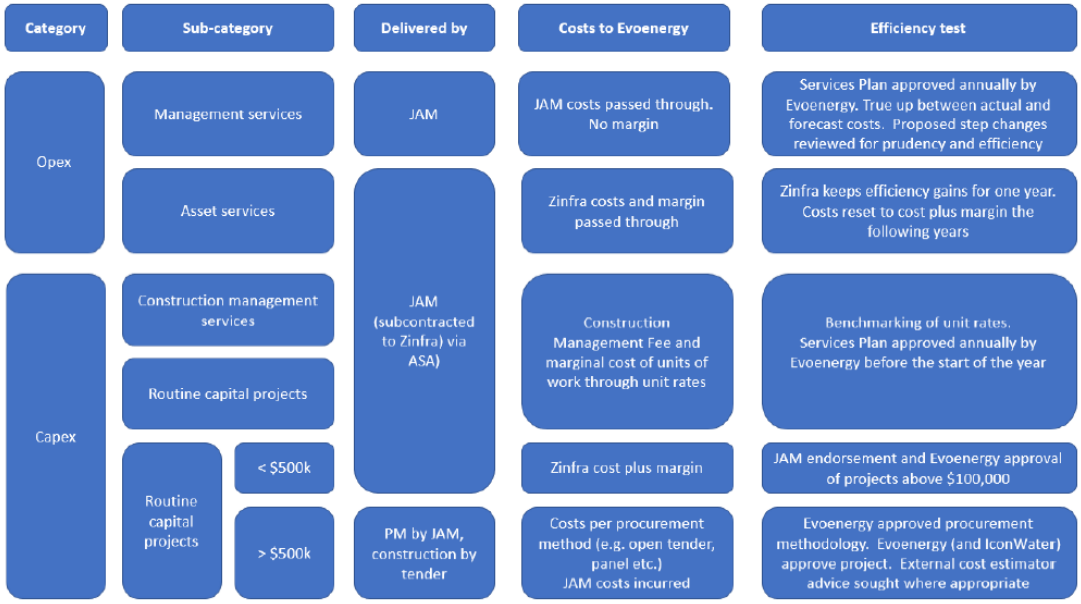
Costs payable by Evoenergy to JAM are shown in Figure 5.2. Pursuant to the DAMS Agreement, JAM must pass through costs of sub-contractors to Evoenergy with no additional mark-up or profit.[102]

[100] NGR, r. 79(1).

[101] Evoenergy, *RIN 13 – Outsourcing Arrangements*, June 2020, pp. 2–3.

[102] Evoenergy, *RIN Attachment 13 Outsourcing Arrangements, ACT and Queanbeyan-Palerang gas network 2021–26*, June 2020, pp. 9.

Figure 5.3 Costs under the DAMS Agreement



Source: Evoenergy, *RIN 13 – Outsourcing Arrangements*, June 2020, Figure 2-1.

For the purposes of this capex assessment, the construction management fee is of interest as this is allocated across direct capex to derive the numbers, described in this draft decision as direct costs. The construction management fee relates to planning and managing the capital works delivery.[103]

Despite the prohibition on JAM adding a profit component to third party costs, this does not mean there is no related party margin included within the construction management fee. JAM outsource all routine and non-routine works less than $0.5 million, being the bulk of the capital program, to Zinfra Pty Ltd another SGSP (Australia) Assets Pty Ltd subsidiary.[104] In response to our information request Evoenergy accounted for approximately 96 per cent of the construction management fee as costs incurred by Zinfra for staff at and the operation of Hume depot. The remainder of the fee is margin, presumably Zinfra margin.[105] It is noted that no third party margins were reported in Evoenergy's reset RIN.

Due to confidentiality claims we are unable to quantify the construction management fee in this draft decision, however we have undertaken an analysis of the construction management fees as shown in Figure 5.3.

Evoenergy stated that the construction management fee is a fixed fee and it does not vary with the volume of works performed.[106] As the capex program is forecast to

[103] Evoenergy, *RIN 13 – Outsourcing Arrangements*, June 2020, p. 9.
[104] Evoenergy, *Response to information request IR008*, received 3 September 2020.
[105] Evoenergy, *Response to information request IR008*, received 3 September 2020.
[106] Evoenergy, *Response to information request IR008*, received 3 September 2020.

decline, the construction management fee becomes a greater proportion of the direct capex.

Our analysis showed that the construction management fee is not completely fixed over time, and that efficiencies, other savings or variable costs mean that in real $2020–21 terms, the construction management fee is 9.6 per cent lower in 2021–26 than in 2016–21. We accept this level of decline to be reasonable.

For our draft decision, we accept the construction management fee to be conforming capex.[107] However we urge Evoenergy to consider the level of services required should its capex program continue to be forecast to decline.

5.4.8 Cost Escalation and Reconciliation

In our draft decision for the 2021–26 access arrangement period, we have considered the following inputs in regards to inflation and labour real cost escalation for the purpose of our capex draft decision:

- Actual inflation prior to 2020–21 and forecast inflation for 2020–21.
- Labour real cost escalators based on Deloitte Access Economics (DAE) and BIS Oxford Economics (BIS) forecasts (Attachment 6 – Operating expenditure).

As Evoenergy has based its forecast from historical inputs and presented its inputs in 2019–20 and 2021–20 dollar terms in its capex model, we have reviewed actual inflations prior to 2020–21 and forecast inflation for 2020–21.

We accept Evoenergy's proposed inflation for the purpose of our capex decision on the basis that it aligns with its proposed roll forward model (RFM) and our capital base decision (Attachment 2 – Capital Base). It is worth noting that our final decision will likely reflect actual inflation for 2020–21.

In terms of labour real cost escalators, while there are some differences between Evoenergy's proposed labour price movement and our alternative forecast, we found the associated capex impact to be immaterial. As such, we accept that the labour costs associated with the capex forecast to be reasonable.

[107] NGR, r. 79(1).

Shortened forms

Shortened form	Extended form
ACT	Australian Capital Territory
ACTCOSS	ACT Council of Social Service
AER	Australian Energy Regulator
BIS	BIS Oxford Economics
CAM	Cost allocation method
Capex	Capital expenditure
CCP / CCP24	Consumer Challenge Panel, sub-panel 24
CIE	The Centre for International Economics
COAG	Council of Australian Governments
DAE	Deloitte Access Economics
DAMS	Distribution Asset Management Services
GIS	Geographic Information Systems
I&C	Industrial and commercial customers
IT	Information technology
JAM	Jemena Asset Management Pty Ltd
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
NPV	Net present value
NSW	New South Wales
Opex	Operating expenditure
PLS	Pressure limiting station
PRS	Pressure reducing stations
RFM	Roll forward model
RIN	Regulatory Information Notice
SDRS	Secondary district regulator sets
TJ	Terajoules
UAG	Unaccounted for gas
UTR	Utility Technical Regulator
Zincara	Zincara Pty Ltd