

Final decision

Multinet Gas Networks
Gas distribution access arrangement
1 July 2023 to 30 June 2028

Attachment 5 – Capital expenditure

June 2023

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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.

In this attachment, we outline our assessment of MGN’s capex proposal. Our final decision consists of two parts:

- whether capex spent in the six years before the 2023-28 access arrangement period should be added to the capital base² and
- whether MGN’s forecast of capex for the 2023-28 access arrangement period meets the conforming capex criteria in the National Gas Rules (NGR).³

We accepted MGN’s capex forecast in our draft decision and the revised proposal accepted our draft decision.

5.1 Final decision

5.1.1 Conforming capex for the 2017 and 2018–22 period, estimates for January to June 2023

We approve the actual total net capex for MGN for the years 2017 and 2018–2022 as conforming capex, made up of the following:

- 2017 capex – at the time of our last decision, actual expenditure for 2017 was not known, and an estimate was included in the capital base. We now have actual expenditure for that year and have updated the capital base accordingly⁴
- 2018–22 capex – actual expenditure is available for these years, and we have assessed whether this can be included in the capital base⁵
- 2023 six-month extension period – actual capex is not available currently. We have included an estimate in the capital base. We will update this in the next access arrangement decision, when actual capex is available.⁶ We will assess whether MGN’s actual capex for the six-month extension period is conforming capex under the NGR in the subsequent (2028–32) access arrangement review and adjust for any differences between actual and estimated capex.⁷

¹ NGR, r. 69.

² NGR, r. 77 sets out the process for determining the opening capital base.

³ These criteria are set out in NGR, r. 79.

⁴ These criteria are set out in NGR, r. 79.

⁵ We assess whether actual capital expenditure is conforming capital expenditure under the capital expenditure criteria in NGR, r. 79

⁶ This is consistent with our obligations under NGR, rr. 77(2)(b), 79.

⁷ This is consistent with our obligations under NGR, rr. 77(2)(b), 79.

5.1.2 Reasons for final decision on 2018–22 period capex

5.1.2.1 Conforming capex for 2018–22

MGN's actual capex for the current access arrangement is \$444.3 million, compared with the AER's final decision for that period of \$487.5 million. The difference was driven by lower than forecast mains replacement volumes.

We reviewed MGN's submission and supporting material to assess its proposed capex for the 2018–22 access arrangement period. Where capex was higher than accepted in our 2018–22 final decision, we scrutinised MGN's reasons for the overspend. We also had regard to the presence of the CESS, and the incentive this provides to deliver efficient capex.⁸ We used this information to identify whether capex over the 2018–22 period was conforming capex.

While we do review specific projects and the underlying costs, we do not determine which programs or projects MGN should or should not undertake. This is consistent with our incentive-based regulatory framework, which includes the capital expenditure sharing scheme (CESS). Once the forecast is established, there is an incentive for MGN to provide services at the lowest possible cost, because the actual costs of providing services will determine its returns in the short term. If it reduces its costs, the savings are shared with consumers in future regulatory control periods. This incentive-based framework recognises that MGN should have the flexibility to prioritise its capex program given its circumstances in the access arrangement period and due to changes in information and technology over time.

The framework allows regulated businesses to reprioritise capex to achieve prudent and efficient outcomes, such as response to COVID and safety priorities. We accept MGN's deferral of part of its mains replacement program. We note the overall underspend is modest.

5.1.3 Conforming capex for the 2023–28 period

We accept MGN's capex forecast of \$668.7 million (\$2022–23) total capex for the 2023–28 access arrangement period as conforming capex under the NGR.⁹

⁸ The capital expenditure sharing scheme (CESS) provides an incentive for a service provider to realise savings on its capex program by rewarding those service providers that spend less capex than forecast and penalising those that spend more than forecast. Further information can be found in the CESS section at attachment 13.

⁹ Conforming capital expenditure is defined in NGR, r. 79.

Table 5.1 sets out MGN’s proposed capex by category over the forecast period.

Table 5.1 MGN’s proposed capex by category over the 2023–28 access arrangement period (\$million, 2022–23)

Category	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Mains replacement	75.5	85.1	78.1	82.0	87.6	408.3
Meter replacement	2.8	3.6	4.0	5.5	6.5	22.4
Augmentation	0.3	0.3	0.0	0.2	0.7	1.5
Telemetry	1.2	0.9	0.9	0.8	0.8	4.5
IT	17.8	28.4	12.1	4.9	8.2	71.4
Connection assets	23.3	20.7	18.6	16.7	14.4	93.7
Other distribution assets	5.9	9.5	4.9	8.7	2.7	31.8
Escalation	0.2	0.9	1.1	1.4	1.8	5.3
Capitalised network overheads	5.9	6.3	5.8	5.8	5.9	29.7
TOTAL	132.9	155.7	125.4	126.1	128.5	668.7
Customer contributions	3.1	3.0	3.0	3.0	2.9	15.0
GROSS TOTAL	136.1	158.7	128.4	129.0	131.4	683.7

Source: AER analysis. AER, [AER - MGN 2023-28 - Draft Decision - Capex model - December 2022](#), December 2022.¹⁰

Note: Totals may not sum due to rounding.

5.1.4 Reasons for final decision on 2023–28 period capex

MGN’s revised proposal did not present any changes to our draft decision approved capex for the 2023-28 regulatory period.

In this final decision, we have approved MGN’s total capex of \$668.7 million (\$2023-28) for the reasons set out in our draft decision and having given consideration to the issues raised in submissions to the revised proposal.

We accept MGN’s capex forecast of \$668.7 million (\$2022–23) total net capex for the 2023–28 access arrangement period as conforming capex under the NGR.¹¹

We assessed MGN’s forecast capex against our alternative estimate of efficient capex, considering the available evidence, engineering advice from our consultants and

¹⁰ MGN did not submit a capex model with their revised proposal. They do, however, accept the AER’s draft decision on capex (MGN, [MGN - Revised final plan - Access Arrangement 2023–28 - January 2023](#), January 2023, p. 7). As such, we provide figures from the capex model published alongside our draft decision.

¹¹ Conforming capital expenditure is defined in NGR, r. 79.

submissions from stakeholders. Our assessment approach and detailed reasoning is set out in our draft decision at attachment 5.¹²

Overall, we found that most aspects of capex included in MGN's proposal were likely to be conforming capex. We determined an alternative forecast of \$658.1 million (\$11.6 million less than MGN's proposal) because we did not accept proposed expenditure on hydrogen readiness (\$9 million) and elements of information technology (\$2.6 million).¹³ We have accepted that MGN's forecast capex of \$668.7 million is prudent and efficient.

The increase in MGN's forecast capex is driven by its mains replacement program, which amounts to \$408 million (\$2023–24) or 61% of forecast capex. MGN's mains replacement capex is a continuation of a state-wide program to replace aging metal gas mains with modern plastic equivalents. MGN operates an aging and dense urban network. MGN has proposed capex to meet Australian Standards, its gas safety case as submitted to Energy Safety Victoria, and jurisdictional safety obligations.¹⁴

The AER's role is to examine whether the capex proposed to meet MGN's asset management plan and strategy, in accordance with its gas safety case, is prudent and efficient. To assist our assessment, we engaged consultants, Zincara, to examine MGN's proposed approach and unit rates. Zincara has advised that MGN's program to achieve its asset management plan and strategy is prudent and efficient. Based on the available information before us, we agree with this assessment.¹⁵ We accept MGN's forecast mains replacement expenditure as we are satisfied that MGN's proposed capex is prudent, the cost of the program is efficient and presents the lowest cost outcome for consumers in meeting its safety obligations.

We received only one submission which responded directly to our draft decision on capex and our consideration of those issues in reaching our final decision is discussed in section 5.2.3. In considering the issues raised in this submission, we note that many capex drivers, including investment to maintain the safety, security and reliability of the network for remaining customers, will be less impacted by demand in the short term. While MGN remains obligated to provide gas services to customers, it must continue to do so to regulated safety and reliability standards. This means that ongoing investment in capex categories such as the completion of MGN's mains replacement program, IT and meter replacement are still required over the 2023–28 access arrangement period. Forecasts of lower customer numbers and reduced throughput on the network will have minimal impact on the scope and costs of these programs in the immediate term.

¹² AER - MGN2023-28 - *Draft Decision - Attachment 5 - Capital expenditure* - December 2022

¹³ AER, AER - MGN 2023-28 - *Draft Decision - Attachment 5 - Capital expenditure* - December 2022, pp14-20

¹⁴ Gas Safety Act 1997 (Vic); Occupational Health and Safety Act 2004; Workplace Health and Safety Act 2012; NGL; NGR; Gas Distribution System Code Ver. 15.0; Pipelines Act 2005; Pipelines Regulations 2017; Gas Safety (Safety Case) Regulations 2018; MGN Gas Safety Case; AS/NZS ISO 31000 Risk Management – Principles and Guidelines; AS/NZS 4645 – Gas Distribution Network Management; AS/NZS4645.2 - Installation and maintenance of steel pipe systems for gas; AS/NZS 2885 Series – Pipelines Gas and liquid Petroleum: EP-PL-7600 – Multinet Gas Engineering Standard - Pressure Classifications and Operating Pressure Ranges.

¹⁵ Zincara report, *MGN AA*, November 2022

5.2 MGN’s revised proposal

5.2.1 Actual capex in the 2018–22 period

MGN’s actual capex for the current access arrangement is \$443.3 million, compared with the AER’s final decision estimate of \$439 million. MGN’s connections capex was higher than forecast during the period,¹⁶ leading to the overspend.

5.2.2 Forecast capex in the 2023–28 period

MGN proposed forecast net capex of \$668.7 million (\$2022–23) for the 2023–28 access arrangement period is \$225.4 million (51%) higher than its actual net capex for the 2018–22 period.¹⁷

We have assessed MGN’s forecast capex against our alternative estimate of efficient capex, considering the available evidence, engineering advice from our consultants and submissions from stakeholders. Our assessment approach and detailed reasoning is set out in our draft decision at attachment 5.¹⁸

The major components of forecast gross total capex over the period are mains replacement (61%), connection assets (14%) and information technology (11%).

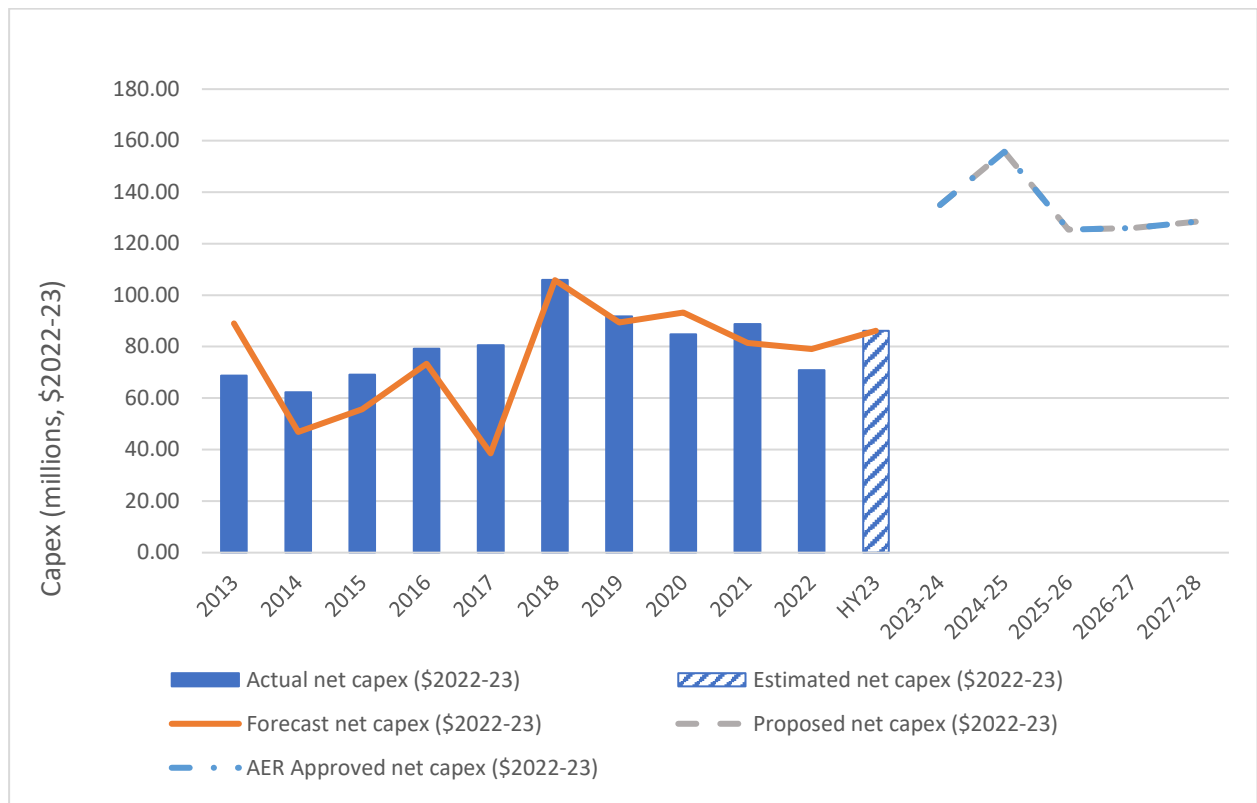
Figure 5.1 compares MGN’s capex from 2013 to 2028, and the forecasts accepted by us for the 2013–28 decisions and this final decision. The significant step up in forecast capital expenditure in the upcoming period is driven by an increase in MGN’s capex on mains replacement. This is explained in detail in the section below on mains replacement. MGN’s other capex categories are more in line with historical expenditure. We received only one submission which responded directly to our draft decision on capex and our consideration of those issues in reaching our final decision is discussed in section 5.2.3.

¹⁶ AER, *Final Decision Multinet Gas access arrangement 2018-22 – Overview*, November 2017, p. 91.

¹⁷ MGN’s capex for 2022-23 is estimate only.

¹⁸ AER - *MGN 2023-28 - Draft Decision - Attachment 5 - Capital expenditure - December 2022*, December 2022

Figure 5.1 AER’s final decision compared to MGN’s past and proposed capex (\$million, 2022–23)



Source: AER analysis. AER, *AER Final decision - Multinet gas Post tax revenue model - March 2013*, March 2013; AER, *AER - Final Decision Roll Forward Model - November 2017*, November 2017; AER, *AER - Final Decision Post Tax Revenue Model - November 2017*, November 2017; MGN, *MGN - Revised final plan - Access Arrangement 2023–28 - Attachment 1.6B - Roll forward model*, January 2023; MGN, *MGN - Revised final plan - Access Arrangement 2023–28 - Attachment 1.5B - Post tax revenue model*, January 2023.

Note: Significant step up in forecast due to MGN mains replacement program. Further, the 6-month 2023 period (HY2023) has been annualised to make it comparable and consistent with other years.

5.2.3 Submissions on MGN’s revised proposal

Of the eleven submissions to the revised proposal, we received only one submission which responded directly to our draft decision on capex. The submission from Brotherhood of St Laurence (BSL) presented significant treatment of the proposed capital expenditure.¹⁹

5.2.3.1 Brotherhood of St. Laurence submission

BSL raised a number of issues with the capex proposals, including:²⁰

- a) asset replacement programs should be re-evaluated in line with the expected decline in demand

¹⁹ Brotherhood of St. Laurence, *2023-2028 Victorian Gas Distributors’ Access Arrangement, Draft decision and Revised Proposals*, February 2023

²⁰ Brotherhood of St. Laurence, *2023-2028 Victorian Gas Distributors’ Access Arrangement, Draft decision and Revised Proposals*, February 2023

- b) before new capex is accepted, there should be an evaluation of the stranding risk of that capex and where this will fall in the network, inefficient spending may increase stranding risk
- c) growth and augmentation capex must be fully funded by new customers
- d) alternatives to network capex should be considered such as: non-network solutions; modification of reliability standards; and voluntary community disconnection
- e) the AER did not consider parts of the IT forecast and hydrogen readiness were consistent with the NGR and therefore excluded them from the alternative estimate in its draft decision; any excluded capex should not be included in our forecast of efficient capex and should not be funded

5.2.3.2 AER views on the issues raised by Brotherhood of St. Laurence

Gas networks have traditionally been run as growth assets. The networks feature high fixed costs and low variable costs. Growing the customer base spreads the fixed costs, leading to lower prices for end users. Because of this, the gas framework has been accommodating of, and to a large part, designed around, growth.

However, several factors have changed the outlook of gas, leading to uncertainty around the suitability of a growth-focussed regime in a period of declining demand. In particular:

- Natural gas is predominantly a hydrocarbon, and the consumption of natural gas is at odds with a net-zero carbon target, increasing the likelihood of policies targeted at reducing consumption
- The price of natural gas fuel has increased over time, reducing its attractiveness compared to electric alternatives
- The supply of natural gas from the Gippsland basin, which has underpinned Victoria's gas networks with relatively abundant, cheap gas, is rapidly falling. Victorian gas users are now more dependent on gas from Queensland LNG fields, which are sensitive to changes in the international price and contract volumes, along with gas from the Otway basin and the Iona and Dandenong storage facilities.

We have taken these and other factors into account in assessing the demand and customer number forecasts. These are presented in detail in the demand attachment 12 to the draft decision.²¹

We understand that BSL is concerned that the access arrangements put forward do not address the declining demand for gas or a pathway towards decommissioning that involves lower capex over time. We also appreciate BSL's concerns around stranding risk when investing in new assets and the challenges that will arise in how we regulate gas networks in the context of declining demand and increasing uncertainty.

While the factors outlined above are projected to slow demand growth and reduce the number of new gas customers, there is no policy in place aimed at the decommissioning of the gas network in the short to medium term. The Victorian gas distributors put in revised growth driven capex proposals post the Victorian Gas Substitution Roadmap to reflect the

²¹ AER – MGN 2023-28 – Draft decision – Attachment 12 – Demand – December 2022

potential impacts on demand.²² However, a substantial portion of the investment proposed relates to stay-in-business capex, the purpose of which is to allow the service provider to safely operate the network and meet its licence obligations. This means that ongoing investment in capex categories such as the completion of MGN's mains replacement program, IT and meter replacement are still required over the 2023–28 access arrangement period.

Reliability and safety of supply are paramount factors under the NGR Transportation of natural gas is subject to stringent safety requirements. Gas is a potentially dangerous fuel if it is released in an uncontrolled manner. Leaking gas pipelines pose an explosive risk and releasing natural gas into the atmosphere is a greater pollution concern than releasing carbon dioxide. The service providers all have agreed safety programs with the jurisdictional safety body, aimed at reducing the risk associated with aging and leaking infrastructure. We have accepted that it is prudent for the service providers to carry out this investment, largely relating to the replacement of old pipes, to manage risk and safely operate the network. We note that, unless safety standards are loosened, expenditure such as this will be prudent, even in the context of falling demand. In our draft decision we reviewed the cost of these programs and found them to be efficient.²³

We and our consultants have assessed the robustness of capex forecasts to make sure consumers are paying no more than necessary. On balance, we consider that growth related capex has been reduced to the extent possible given the policy framework, and that the remaining parts of MGN's capex relate to stay in business capex that it is reasonably required to spend to meet its licence and other legal obligations.

5.2.3.3 Non-conforming capex for hydrogen and excluded ICT capex

As noted above, we have determined an alternative forecast of \$658.1 million (\$2022–23) (\$11.6 million less than MGN's proposal) because we do not accept hydrogen readiness and elements of MGN's information and communication technology (ICT) proposal as being conforming capex for the reasons explained in our draft decision.²⁴ In this case, we found that our estimate of forecast capex is not materially different compared to MGN's proposed forecast.

In response to the concern raised by BSL, we note that under the incentive-based framework, our task is to set an overall capex forecast and it is up to the business how it spends this within the period to provide safe reliable services to its customers.

At MGN's next (2028-33) access arrangement review, the actual 2022-27 capex (and estimated 2027-28 capex) will be rolled into the 1 July 2028 capital base if it is assessed as conforming capex (as defined by the criteria in NGR, r. 79). Therefore, any actual/estimated capex incurred by MGN for the 2023-28 period (including any expenditure for non-conforming hydrogen readiness or elements of information technology) would be added to the 1 July 2028 capital base if it meets these criteria.

²² Victorian Government DELWP – *Gas Substitution Roadmap*, July 2022

²³ AER, [AER – MGN 2023-28 – Draft Decision – Attachment 5 – Capital expenditure – December 2022](#), December 2022.

²⁴ AER - MGN 2023-28 - *Draft Decision - Attachment 5 - Capital expenditure* - December 2022, pp13-17

In undertaking an ex-post review of conforming capex to consider what gets rolled into the capital base at the end of the period we would consider whether there has been a significant overspend overall and what are the drivers for this.

In undertaking an ex-post review of conforming capex to consider what gets rolled into the capital base at the end of the period we would consider whether there has been a significant overspend overall and what are the drivers for this.

Glossary

Term	Definition
AA	Access arrangement
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AGIG	Australian Gas Infrastructure Group
AGN	Australian Gas Networks (Victoria and Albury)
AusNet	AusNet Gas Services
Capex	Capital expenditure
I&C	Industrial and commercial
ICT	Information and communication technology
IT	Information technology
MGN	Multinet Gas Networks
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
opex	Operating expenditure
RFM	Roll forward model
RIN	Regulatory Information Notice
Roadmap	Gas Substitution Roadmap
SCADA	Supervisory Control And Data Acquisition
TP pipeline	Transmission pressure pipeline
UPS	Unprotected steel
Zincara	Zincara Pty Ltd