



FINAL DECISION
Jemena Gas Networks (NSW)
Ltd
Access Arrangement 2015-20

Attachment 2 – Capital base

June 2015

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Note

This attachment forms part of the AER's final decision on Jemena Gas Networks' 2015–20 access arrangement. It should be read with other parts of the final decision.

The final 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 – value of imputation credits

Attachment 5 – regulatory depreciation

Attachment 6 – capital expenditure

Attachment 7 – operating expenditure

Attachment 8 – corporate income tax

Attachment 9 – efficiency carryover mechanism

Attachment 10 – reference tariff setting

Attachment 11 – reference tariff variation mechanism

Attachment 12 – non-tariff components

Attachment 13 – demand

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Shortened forms

| Shortened form | Extended form |
|----------------|---|
| AER | Australian Energy Regulator |
| capex | capital expenditure |
| CAPM | capital asset pricing model |
| CCP | Consumer Challenge Panel |
| Code | National Third Party Access Code for Natural Gas Pipeline Systems |
| CPI | consumer price index |
| DRP | debt risk premium |
| ERP | equity risk premium |
| JGN | Jemena Gas Networks (NSW) Ltd (ACN 003 004 322) |
| MRP | market risk premium |
| NGL | national gas law |
| NGO | national gas objective |
| NGR | national gas rules |
| opex | operating expenditure |
| PPI | partial performance indicators |
| PTRM | post-tax revenue model |
| RAB | regulatory asset base |
| RBA | Reserve Bank of Australia |
| RFM | roll forward model |
| RIN | regulatory information notice |
| RPP | revenue and pricing principles |
| SLCAPM | Sharpe-Lintner capital asset pricing model |
| WACC | weighted average cost of capital |

2 Capital base

The capital base roll forward accounts for the value of JGN's regulated assets over the access arrangement period. The opening capital base value for a regulatory year within the access arrangement period is rolled forward by indexing it for inflation, adding any conforming capex, and subtracting depreciation and other possible factors (for example, disposals or customer contributions). Following this process, the AER arrives at a closing value of the capital base at the end of the relevant year. The opening value of the capital base is used to determine the return of capital (regulatory depreciation) and return on capital building block allowances.

We are required to make a decision on JGN's opening capital base at 1 July 2015 for the 2015–20 access arrangement period. We are also required to make a decision on JGN's projected capital base for the 2015–20 access arrangement period. This attachment presents our final decision on these matters.

2.1 Final decision

We approve JGN's revised proposed opening capital base of \$2980.2 million (\$nominal) at 1 July 2015.¹

However, we do not approve JGN's revised proposed projected capital base roll forward over the 2015–20 period, and therefore do not approve the revised proposed closing capital base at 30 June 2020 of \$3734.2 million (\$nominal).² This is because we have not accepted JGN's inputs to the projected capital base roll forward in its revised proposal, specifically the forecast capex and depreciation. Based on our approved amounts for these inputs, we determine a projected closing capital base of \$3567.6 million (\$nominal) at 30 June 2020. This is \$166.6 million (\$nominal) less than that proposed by JGN, a reduction of 4.5 per cent.

Table 2-1 summarises our final decision on the roll forward of JGN's capital base during the 2010–15 access arrangement period. We have made all revisions necessary to give effect to this final decision in the *Approved Access Arrangement, JGN's NSW gas distribution networks 1 July 2015 – 30 June 2020* (May 2015).³

¹ Our final decision also reflects a minor update to the estimate of 2014-15 net capex submitted by JGN after the revised proposal. JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

² JGN updated its proposed projection of the capital base after the submission of its revised proposal. JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

³ NGR, rr. 64(1) & (4).

Table 2-1 AER's final decision capital base roll forward during the 2010–15 access arrangement period (\$million, nominal)

| | 2010–11 | 2011–12 | 2012–13 | 2013–14 | 2014–15 |
|--|---------------|---------------|---------------|---------------|---------------|
| Opening capital base | 2312.7 | 2456.6 | 2611.2 | 2697.1 | 2801.5 |
| Net capex at start of year | 76.2 | 82.8 | 63.5 | 69.7 | 123.0 |
| Indexation of assets | 63.4 | 78.8 | 59.0 | 75.9 | 50.2 |
| Net capex at end of year | 78.3 | 85.4 | 64.9 | 71.6 | 125.1 |
| Depreciation | –74.1 | –92.4 | –101.4 | –112.7 | –124.0 |
| Closing capital base | 2456.6 | 2611.2 | 2697.0 | 2801.5 | 2975.8 |
| Adjustment for 2009–10 capex | | | | | 4.4 |
| Opening capital base at 1 July 2015 | | | | | 2980.2 |

Source: AER analysis.

Table 2-2 sets out the projected roll forward of the capital base during the 2015–20 access arrangement period.

Table 2-2 AER final decision capital base roll forward during the 2015–20 access arrangement period (\$million, nominal)

| | 2015–16 | 2016–17 | 2017–18 | 2018–19 | 2019–20 |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|
| Opening capital base | 2980.2 | 3133.0 | 3262.6 | 3387.8 | 3481.6 |
| Net capex at start of year | 108.3 | 103.0 | 107.4 | 97.1 | 85.9 |
| Indexation of assets | 78.8 | 82.5 | 85.9 | 88.9 | 91.0 |
| Net capex at end of year | 111.1 | 105.6 | 110.1 | 99.6 | 88.1 |
| Depreciation | –145.4 | –161.5 | –178.2 | –191.8 | –179.0 |
| Closing capital base | 3133.0 | 3262.6 | 3387.8 | 3481.6 | 3567.6 |

Source: AER analysis.

2.2 JGN's revised proposal

JGN's revised proposal submitted an opening capital base at 1 July 2015 of \$2980.2 million (\$nominal).⁴ JGN did not adopt our draft decision amendment to the

⁴ JGN updated its proposed projection of the capital base after the submission of its revised proposal. JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

roll forward of the opening capital base from 1 July 2010 to 30 June 2015.⁵ The amendment relates to the adjustment for the accumulated return on capital associated with the difference between estimated and actual capex for 2009–10, the final year of the previous access arrangement period.⁶

JGN also updated its revised proposed opening capital base to reflect actual conforming capex for 2013–14, actual CPI for 2014–15 and a revised estimate of capex for 2014–15.⁷

JGN's revised proposed capital base roll forward during the 2010–15 access arrangement period is shown in Table 2-3.

Table 2-3 JGN's revised proposed capital base roll forward during the 2010–15 access arrangement period (\$million, nominal)

| | 2010–11 | 2011–12 | 2012–13 | 2013–14 | 2014–15 |
|--|---------------|---------------|---------------|---------------|---------------|
| Opening capital base | 2312.7 | 2456.6 | 2611.2 | 2697.1 | 2801.5 |
| Net capex at start of year | 76.2 | 82.8 | 63.5 | 69.7 | 123.0 |
| Indexation of assets | 63.4 | 78.8 | 59.0 | 75.9 | 50.2 |
| Net capex at end of year | 78.3 | 85.4 | 64.9 | 71.6 | 125.1 |
| Depreciation | –74.1 | –92.4 | –101.4 | –112.7 | –124.0 |
| Closing capital base | 2456.6 | 2611.2 | 2697.0 | 2801.5 | 2975.8 |
| Adjustment for 2009–10 capex | | | | | 4.4 |
| Opening capital base at 1 July 2015 | | | | | 2980.2 |

Source: JGN, *Revised access arrangement proposal, Appendix 10.1 Revenue model - updated*, February 2015.
 JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

JGN's revised proposal did not adopt our draft decision on the projected closing capital base at 30 June 2020. Instead, JGN's revised proposal submitted a projected closing capital base at 30 June 2020 of \$3734.2 million (\$nominal).⁸ This value reflects its revised proposed opening capital base at 1 July 2015, forecast capex and depreciation

⁵ JGN, *Revised access arrangement proposal*, February 2015, p. 91.
Jemena Gas Networks (NSW) Ltd Access arrangement 2015–20, Attachment 2 – Capital base, p. 14.

⁶ JGN, *Revised access arrangement proposal*, February 2015, p. 91.

⁷ JGN updated its proposed projection of the capital base after the submission of its revised proposal. JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

⁸ JGN updated its proposed projection of the capital base after the submission of its revised proposal. JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

over the 2015–20 access arrangement period. The projected roll forward of the capital base during the 2015–20 access arrangement period is shown in Table 2-4.⁹

Table 2-4 JGN's revised proposed projected capital base roll forward during the 2015–20 access arrangement period (\$million, nominal)

| | 2015–16 | 2016–17 | 2017–18 | 2018–19 | 2019–20 |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|
| Opening capital base | 2980.2 | 3160.2 | 3319.6 | 3479.2 | 3613.9 |
| Net capex at start of year | 121.9 | 118.0 | 124.9 | 118.1 | 103.9 |
| Indexation of assets | 79.0 | 83.5 | 87.8 | 91.7 | 94.7 |
| Net capex at end of year | 125.0 | 121.0 | 128.0 | 121.1 | 106.5 |
| Depreciation | -145.9 | -163.2 | -181.1 | -196.2 | -184.8 |
| Closing capital base | 3160.2 | 3319.6 | 3479.2 | 3613.9 | 3734.2 |

Source: JGN, *Revised proposal, Appendix 10.1 Revenue model - updated*, February 2015.
 JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

2.3 AER's assessment approach

We have not changed our assessment approach for the capital base from our draft decision. Section 2.3 of our draft decision details that approach.¹⁰

2.4 Reasons for final decision

We approve JGN's revised proposed opening capital base of \$2980.2 million (\$nominal) at 1 July 2015. However, we do not approve JGN's revised proposed projected closing capital base of \$3734.3 million (\$ nominal) at 30 June 2020. We instead determine a closing capital base of \$3567.6 million (\$nominal) as at 30 June 2020, a reduction of \$166.6 million (\$nominal) or 4.5 per cent from the revised proposal. The main reasons for the reduction are our adjustments to JGN's forecast net capex (detailed in capex attachment 6) and forecast depreciation (detailed in depreciation attachment 5).

We are satisfied this amendment is necessary having regard to the requirements of the NGR. The reasons for our decision are discussed below.

⁹ JGN updated its proposed projection of the capital base after the submission of its revised proposal. JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

¹⁰ AER, *Draft decision, attachment 2*, November 2014, pp. 18–20.

2.4.1 Opening capital base at 1 July 2015

We approve JGN's revised proposed opening capital base of \$2980.2 million (\$ nominal) at 1 July 2015.

In our draft decision we accepted all aspects of JGN's proposed methodology for calculating the opening capital base at 1 July 2015 except the inclusion of the adjustment for the accumulated return on capital associated with the difference between estimated and actual capex for 2009–10.¹¹ JGN's revised proposal did not adopt our draft decision on this issue, and contested our interpretation of the relevant legislation, rule 77(2)(a) of the NGR.¹²

On 2 October 2014, the AEMC released a final determination on the rule change proposal on rule 77(2)(a) of the NGR.¹³ The amended rule provides the AER with power to make a return on capital adjustment associated with the difference between the estimated and the actual capex in the capital base. The relevant issue in our draft decision was whether this amended rule could be applied to JGN's access arrangement proposal.

After reviewing submissions, we now consider the amended rule 77(2)(a) of the NGR should apply to this final decision. Although JGN's initial proposal was submitted before 2 October 2014, the key factor is that our final decision is being made after the rule amendment date.¹⁴ On this basis, our final decision is to accept the adjustment to JGN's opening capital base at 1 July 2015 reflecting the difference between estimated and actual capex for 2009–10, as well as the accumulated return on capital associated with that difference. We therefore approve JGN's revised proposed opening capital base of \$2980.2 million (\$ nominal) at 1 July 2015.

Our draft decision also noted that we would need to update the opening capital base to reflect actual conforming capex for 2013–14, actual CPI for 2014–15 and a revised estimate of capex for 2014–15. We are satisfied JGN's revised proposal (and subsequent submissions) implemented these updates.¹⁵

We are satisfied our final decision meets the requirement of rule 77(2)(a) of the NGR.

¹¹ AER, *Draft decision attachment 2*, November 2014, pp. 23–25.

¹² JGN, *Response to the AER's draft decision and revised proposal*, 27 February 2015, pp. 91–94.

¹³ AEMC, *Rule determination, National Gas Amendment (Setting the Opening Capital Base) Rule 2014*, 2 October 2014.

¹⁴ Further, all stakeholders had opportunity to comment on this issue in response to the draft decision and revised proposal. No such comments were received by the AER in response to the revised proposal.

¹⁵ JGN updated its proposed projection of the capital base after the submission of its revised proposal. JGN, *Submissions on draft decision, Attachment N - updated appendix 10.1 - JGN revenue forecast model*, 27 March 2015.

2.4.2 Projected capital base during the 2015–20 access arrangement period

We do not approve JGN's projected capital base at 30 June 2020 in its revised proposal. Instead our final decision forecasts JGN's projected capital base at 30 June 2020 to be \$3567.6 million (\$nominal), a reduction of \$166.6 million (\$nominal) or 4.5 per cent from JGN's revised proposal. This results from our final decision on the inputs to the determination of the projected capital base. We have amended the inputs in the following ways:

- Reduced JGN's revised proposed forecast net capex by \$161.1 million (\$ 2014–15) or 14.4 per cent. Our detailed assessment of the revised proposed forecast capex is set out in attachment 6.
- Reduced JGN's revised proposed forecast depreciation allowance by \$5.5 million (\$nominal) or 1.3 per cent. Our assessment of the revised proposed forecast depreciation is set out in attachment 5.
- Updated JGN's revised proposed inflation forecast using latest available information. Our assessment of the revised proposed inflation forecast capex is set out in attachment 3.

We consider the capital base at the commencement of the 2020–25 access arrangement period should be subject to adjustments consistent with the NGR.¹⁶ These adjustments include (but are not limited to):

- the difference between estimated and actual capex for 2014–15 (the final year of the 2015–20 access arrangement period), including an adjustment to remove any benefit or penalty associated with the difference between the estimated and actual capex
- actual inflation and approved depreciation over the 2015–20 access arrangement period.

We note JGN's revised proposal adopted our draft decision on the use of forecast depreciation (as approved in this final decision for the 2015–20 access arrangement period) for establishing the opening capital base at 1 July 2020.¹⁷ This approach is consistent with the approach outlined in the AER's Access Arrangement Guideline.¹⁸ We therefore maintain our draft decision position on this issue for this final decision.

¹⁶ NGR, r. 77(2).

¹⁷ JGN, *Revised proposal*, February 2015, pp. 166–167.

¹⁸ AER, *Final access arrangement guideline*, March 2009, pp. 65–66.