Attachment 5

Rate of return

Access arrangement information

ACT and Queanbeyan-Palerang gas network 2021–26

Submission to the Australian Energy Regulator June 2020



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5 Rate of return

Key points

Evoenergy has calculated the allowed rate of return based on the AER's 2018 rate of return instrument using placeholder values for the risk free rate and the return on debt. Evoenergy has calculated the return on the projected capital base using the AER's gas post-tax revenue model (PTRM), which reflects the requirements of the Rules. The resulting allowed rate of return and the return on the projected capital base are presented in the table below.

Return on projected capital base

	2021/22	2022/23	2023/24	2024/25	2025/26
Allowed rate of return	4.68%	4.55%	4.41%	4.28%	4.15%
Return on projected capital base	17.89	17.78	17.61	17.26	16.82

5.1 Introduction

Division 2 (r.72) of the Rules sets out the specific requirements for access arrangement information relevant to price and revenue regulation. In relation to the rate of return, access arrangement information must include the allowed rate of return for each regulatory year of the access arrangement period.

In addition, Division 5 (r.87) of the Rules sets out how the return on the projected capital base should be calculated:

The return on the projected capital base for a service provider for a regulatory year of an access arrangement period for an applicable access arrangement (RPCB_t) is to be calculated using the following formula:

 $RPCB_t = a_t \times v_t$

where:

- at is the allowed rate of return for the regulatory year; and
- vt is the value, as at the beginning of the regulatory year, of the projected capital base for the regulatory year (as established under rule 78 and subject to rule 82(3)).

In accordance with the Rules, this section sets out Evoenergy's proposed allowed rate of return for each regulatory year of the access arrangement period and presents the resulting return on the projected capital base calculated using the method set out in the Rules and reflected in the AER's gas PTRM. This section also sets out Evoenergy's approach to capital raising costs.

5.2 Allowed rate of return

Evoenergy has calculated the allowed rate of return in accordance with the AER's 2018 rate of return instrument. Placeholder values have been used for the risk free rate and the return on debt. These will be replaced with final values closer to the start of the regulatory period. Confidential Appendix 5.1 sets out Evoenergy's nominated averaging periods for the final values of the risk free rate and return on debt.

For the placeholder risk free rate, Evoenergy has used an averaging period of 60 business days to 31 March 2020. The resulting risk free rate is 1.00 per cent.

For the placeholder return on debt, Evoenergy has calculated the trailing average return on debt for each year of the regulatory period by holding the 2020/21 annual return on debt constant for each year of the regulatory period. The resulting trailing average return on debt values are set out in Table 5.1.

Table 5.1 Trailing average return on debt

	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Annual return on debt	3.06%	3.06%	3.06%	3.06%	3.06%	3.06%
Trailing average return on debt	4.91%	4.69%	4.47%	4.24%	4.02%	3.80%

The resulting allowed rate of return for each year of the 2021-26 regulatory period are set out in Table 5.2.

Table 5.2 Allowed rate of return

	2021/22	2022/23	2023/24	2024/25	2025/26
Risk free rate	1.00%	1.00%	1.00%	1.00%	1.00%
Equity beta	0.6	0.6	0.6	0.6	0.6
Market risk premium	6.10%	6.10%	6.10%	6.10%	6.10%
Return on equity	4.66%	4.66%	4.66%	4.66%	4.66%
Return on debt	4.69%	4.47%	4.24%	4.02%	3.80%
Gearing	60%	60%	60%	60%	60%
Nominal vanilla rate of return	4.68%	4.55%	4.41%	4.28%	4.15%

5.3 Return on the projected capital base

Consistent with the Rules, the AER's gas PTRM calculates the return on the projected capital base by multiplying the allowed rate of return by the opening value of the projected capital base for each year of the regulatory period. These values and the resulting return on the projected capital base are presented below in Table 5.3.

Table 5.3 Return on projected capital base

	2021/22	2022/23	2023/24	2024/25	2025/26
Allowed rate of return (at)	4.68%	4.55%	4.41%	4.28%	4.15%
Value of projected capital base (vt)	382.31	391.18	399.09	403.41	405.68
Return on projected capital base (RPCBt)	17.89	17.78	17.61	17.26	16.82

5.4 Capital raising costs

The AER's gas PTRM includes an allowance for the transaction costs associated with raising debt and equity. Debt raising costs are included in the opex forecast because these are regular and ongoing costs associated with refinancing debt. Equity raising costs are included in the capex forecast as these costs are incurred once and are associated with funding particular capital investments.

Evoenergy has adopted the AER's preferred approach for estimating both debt and equity raising costs, with the exception of the benchmark arrangement fee estimated by by Chairmont.¹ In a review of the Chairmont approach undertaken by Competition Economists Group (CEG) for Jemena², CEG found some significant shortcomings with the Chairmont approach. Evoenergy has therefore adopted the CEG benchmark for direct debt raising costs. This approach results in equity raising costs of zero and debt raising costs as set out in Table 5.4 below. Evoenergy notes that the AER accepted Jemena's estimate of debt raising costs based on a revised estimate of the arrangement fee³.

Table 5.4 Debt raising costs

	2021/22	2022/23	2023/24	2024/25	2025/26
\$ million real 2020/21	0.19	0.19	0.19	0.19	0.19
\$ million nominal	0.20	0.20	0.21	0.21	0.21

¹ Chairmont 2019, Debt Raising Costs, 29 June.

² CEG 2019, The cost of arranging debt issues, December (provided as Attachment 5.7 to Jemena's response to the AER's draft decision).

³ AER 2020, Attachment 3: Rate of return | Final decision – Jemena Gas Networks (NSW) Ltd) Access arrangement 2020-25, June, p. 12-13.

Shortened forms

Term	Meaning
AA	Access Arrangement
ACT	Australian Capital Territory
ACT climate change strategy	ACT Government's Climate Change Strategy 2019-25
ACTCOSS	ACT Council of Social Service
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ANU	Australian National University
ARENA	Australian Renewable Energy Agency
BISOE	BIS Oxford Economics
CABS	A Jemena Ltd proprietary system providing retailer billing, demand customer management, network balancing and retailer nomination services.
CALD	culturally and linguistically diverse (community)
capex	capital expenditure
CCP, CCP24	the AER's Consumer Challenge Panel (number 24)
CEG	Competition Economists Group
CEPA	Centre for Efficiency and Productivity Analysis (University of Queensland)
CESS	Capital Expenditure Sharing Scheme
CIE	Centre of International Economics
CIT	Canberra Institute of Technology
CPI	consumer price index
DAE	Deloitte Access Economics
DAMS	Distribution asset management services (agreement)
DC	Demand Capacity Tariff
DT	Demand Throughput Tariff
E2G	Electricity-to-gas
EEIS	Energy Efficiency Improvement Scheme
ECM	Efficiency Carryover Mechanism
ECRC	Energy Consumer Reference Council
EGWWS	electricity, gas, water and waste services (sector)
EI	Economic Insights
EIL	Energy Industry Levy
ETC	Estimated cost of corporate income tax
EPSDD	ACT Environment, Planning and Sustainable Development Directorate

GDBs	gas distribution businesses
GN21	Evoenergy gas network access arrangement 2021–26
GJ	gigajoule = 10 ⁹ joules
GWh	gigawatt hour
I&C	Industrial and commercial
ITAUF	Information Technology Asset Utilisation Fee
km	kilometre
LPG	liquid petroleum gas
MDLs	Meter Data Loggers
NGL	National Gas Law
NGO	National Gas Objective
NSW	New South Wales
орех	operating expenditure
PFP	Partial Factor Productivity
PJ	petajoule = 10 ¹⁵ joules
PLS	Pressure Limiting Station
PPA	power purchase agreement
PTRM	post-tax revenue model
QPRC	Queanbeyan–Palerang Regional Council (local government authority)
RAB	regulatory asset base
RFM	roll-forward model
RIN	Regulatory Information Notice
Rules	National Gas Rules
SDRS	Secondary District Regulator Sets
ТАВ	tax asset base
TJ	terajoule = 10 ¹² joules
UAG	unaccounted for gas
UNFT	Utilities Network Facilities Tax
VB	Volume Boundary (tariff class)
VI	Volume Individual (tariff class)