DRAFT DECISION
Australian Gas Networks Access Arrangement 2016 to 2021

Attachment 8 – Corporate income tax

November 2015

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's draft decision on Australian Gas Networks' access arrangement for 2016–21. 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 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

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Attachment 13 - Demand

Attachment 14 - Other incentive schemes

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Shortened forms

Shortened form	Extended form
AA	Access Arrangement
AAI	Access Arrangement Information
AER	Australian Energy Regulator
ATO	Australian Tax Office
capex	capital expenditure
CAPM	capital asset pricing model
CCP	Consumer Challenge Panel
CESS	Capital Expenditure Sharing Scheme
CPI	consumer price index
CSIS	Customer Service Incentive Scheme
DRP	debt risk premium
EBSS	Efficiency Benefit Sharing Scheme
ERP	equity risk premium
Expenditure Guideline	Expenditure Forecast Assessment Guideline
gamma	Value of Imputation Credits
GSL	Guaranteed Service Level
MRP	market risk premium
NECF	National Energy Customer Framework
NERL	National Energy Retail Law
NERR	National Energy Retail Rules
NGL	national gas law
NGO	national gas objective
NGR	national gas rules
NIS	Network Incentive Scheme
NPV	net present value
opex	operating expenditure
PFP	partial factor productivity
PPI	partial performance indicators
PTRM	post-tax revenue model
RBA	Reserve Bank of Australia

Shortened form	Extended form
RFM	roll forward model
RIN	regulatory information notice
RoLR	retailer of last resort
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	Service Target Performance Incentive Scheme
TAB	Tax asset base
UAFG	Unaccounted for gas
WACC	weighted average cost of capital
WPI	Wage Price Index

8 Corporate income tax

When determining the total revenue for AGN, we must estimate AGN's cost of corporate income tax.[1] AGN has adopted the post-tax framework to derive its revenue requirement for the 2016–21 access arrangement period.[2] Under the post-tax framework, a separate corporate income tax allowance is calculated as part of the building blocks assessment.

8.1 Draft decision

We approve AGN's proposed approach to calculate its forecast corporate income tax allowance. AGN's proposed approach is consistent with the AER's post-tax revenue model (PTRM) for electricity service providers and the approach previously approved in gas access arrangement decisions. However, we do not approve AGN's proposed corporate income tax allowance of $38.1 million ($nominal) for the 2016–21 access arrangement period. This is mainly a consequence of our adjustments to AGN's value of imputation credits (gamma) (attachment 4) and other building block costs that affect revenues, such as the rate of return on capital (attachment 3), forecast capex (attachment 6) and forecast opex (attachment 7).[3]

We approve AGN's proposed method to roll forward the tax asset base (TAB) because it is consistent with the AER's roll forward model (RFM) for electricity service providers and the approach previously approved in gas access arrangement decisions. However, we do not approve the proposed opening TAB of $615.6 million ($nominal) as at 1 July 2016. We instead determined an opening TAB of $619.7 million ($nominal). This amendment is due to the input changes we made to AGN's proposed RFM.

We approve AGN's proposed standard tax asset lives for the 2016–21 access arrangement period. This is because they are consistent with the provisions of the *Income Tax Assessment Act* (ITAA) 1997 and the standard tax asset lives prescribed in the Tax Ruling 2015/2. Also, these proposed standard tax asset lives are consistent with the approved standard tax asset lives in the 2011–16 access arrangement period. We accept AGN's proposed weighted average method to calculate the remaining tax asset lives as at 1 July 2016. However, we do not accept AGN's proposed remaining tax asset lives as at 1 July 2016. This is mainly because we corrected some input and modelling errors in the tax asset lives roll forward calculation in AGN's proposed RFM.

We do not accept AGN's proposed tax treatment of the revenue arising from the operation of the efficiency benefit sharing scheme (EBSS) over the 2011–16 access arrangement period. We have instead amended the proposal to recognise the EBSS

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1 NGR, r. 76(c).

2 AGN, *Access arrangement information*, July 2015, p. 179.

3 Changes to other building block costs affect revenues, which also impact the tax calculation.

revenue adjustments with consistent tax status across revenues and expenses for the tax calculation in the PTRM.

In assessing AGN's proposal, we have had regard to the requirement of the NGO and the revenue and pricing principles.[4] Our draft decision on AGN's corporate income tax allowance over the 2016–21 access arrangement period is $10.8 million ($nominal), as set out in Table 8.1. This represents a reduction of $27.3 million ($nominal) or 71.7 per cent of AGN's proposed forecast corporate income tax allowance.

Table 8.1 AER's draft decision on corporate income tax allowance for AGN ($million, nominal)

	2016–17	2017–18	2018–19	2019–20	2020–21	Total
Tax payable	3.7	3.4	3.3	4.7	2.9	18.0
Less: value of imputation credits	1.5	1.4	1.3	1.9	1.1	7.2
Net corporate income tax allowance	**2.2**	**2.0**	**2.0**	**2.8**	**1.7**	**10.8**

Source: AER analysis.

8.2 AGN's proposal

AGN proposed a corporate income tax allowance of $38.1 million ($nominal) for the 2016–21 access arrangement period as set out in Table 8.2. It used the AER's PTRM to calculate the corporate income tax allowance for each year of the 2016–21 access arrangement period. In estimating its corporate income tax allowance, AGN used:

- an opening TAB of $615.6 million ($nominal) as at 1 July 2016 (as shown in Table 8.3)
- an expected statutory income rate of 30 per cent per year
- a value for the assumed utilisation of imputation credits (gamma) of 0.25
- the standard tax asset lives as approved for the 2011–16 access arrangement period
- remaining tax asset lives which are calculated using a weighted average remaining life approach as contained in its proposed RFM.

[4] NGL, s 28; NGR r. 100(1). The NGO is set out in NGL, s. 23. The revenue and pricing principles are set out in NGL, s. 24.

Table 8.2 AGN's proposed corporate income tax allowance for the 2016–21 access arrangement period ($million, nominal)

	2016–17	2017–18	2018–19	2019–20	2020–21	Total
Tax payable	12.6	8.8	10.0	11.1	8.4	50.8
Less: Value of imputation credits	3.2	2.2	2.5	2.8	2.1	12.7
Net corporate income tax allowance	**9.5**	**6.6**	**7.5**	**8.3**	**6.3**	**38.1**

Source: AGN, *Proposed PTRM*, July 2015.

AGN's proposed roll forward of its TAB over the 2011–16 access arrangement period is set out in Table 8.3.

Table 8.3 AGN's proposed tax asset base roll forward over the current 2011–16 access arrangement period ($million, nominal)

	2011–12	2012–13	2013–14	2014–15	2015–16
Opening tax asset base	269.2	309.5	372.8	448.1	523.7
Capex	55.8	81.5	98.4	104.6	128.5
Tax depreciation	–15.4	–18.3	–23.0	–29.0	–36.6
Closing tax asset base	309.5	372.8	448.1	523.7	615.6

Source: AGN, *Proposed RFM*, July 2015.

8.3 AER's assessment approach

Our approach to calculate AGN's cost of corporate income tax begins with an estimate of taxable income that would be earned by a benchmark efficient company operating AGN's pipeline. As part of this calculation, tax expenses such as interest and depreciation need to be estimated. Interest tax expense should be estimated using a benchmark 60 per cent gearing, rather than AGN's actual gearing. Tax depreciation is calculated using a separate TAB. All tax expenses (including other expenses such as operating expenditure) are offset against the service provider's forecast revenue to estimate the taxable income. The statutory income tax rate of 30 per cent is then applied to the estimated taxable income to arrive at a notional amount of tax payable. We then apply a discount to that notional amount of tax payable to account for the value of imputation credits (gamma). The value of imputation credits attachment (attachment 4) details our draft decision on gamma. The discounted nominal amount of tax payable is then included as a separate building block in determining AGN's total revenue.[5]

The corporate income tax allowance is an output of the AER's PTRM, which has been adopted by AGN. We have therefore assessed AGN's proposed corporate income tax allowance by analysing its proposed inputs to the PTRM for calculating the tax allowance. These inputs include:

- the opening TAB as at 1 July 2016
- the standard tax asset life for each asset class
- the remaining tax asset life for each asset class as at 1 July 2016
- the income tax rate
- the value of imputation credits (gamma).

In assessing AGN's proposal, we have had regard to the NGO and the revenue and pricing principles.[6]

We consider that the roll forward of the opening TAB to 1 July 2016 should be based on the approved opening TAB as at 1 July 2011 and AGN's actual capex in the 2011–16 access arrangement period. The value of the actual capex used for rolling forward the TAB is subject to our assessment of these values as discussed in attachment 6.

We assess AGN's proposed standard tax asset lives, where appropriate, by comparing them against the values approved in the 2011–16 access arrangement period as well as those prescribed by the Commissioner for taxation in tax ruling 2015/2.[7]

Our standard method for determining the remaining tax asset lives is the weighted average method. The weighted average method rolls forward the remaining tax asset life for a tax asset class from the last year of the earlier access arrangement period (in AGN's case 2010–11) in order to take into account the actual capex for that year. This approach reflects the mix of assets within that tax asset class, when they were acquired over that period (or if they were existing assets at the beginning), and the remaining value of those assets (used as a weight) at the end of the period. We will assess the outcomes of other approaches against the outcomes of this standard approach.

8.3.1 Interrelationships

The corporate income tax building block feeds directly into the annual revenue requirement. This tax allowance is determined by four factors:

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5 NGR, r. 76(c).

6 NGL, s. 28; NGR, r. 100(1). The NGO is set out in NGL, s. 23. The revenue and pricing principles are set out in NGL, s. 24.

7 Australian Taxation Office, *Taxation Ruling Income tax: effective life of depreciating assets (applicable from 1 July 2015)*: http://law.ato.gov.au/atolaw/view.htm?docid=%22TXR%2FTR20152%2FNAT%2FATO%2F00001%22.

- pre-tax revenues
- tax expenses (including tax depreciation)
- the corporate tax rate
- the value of imputation credits (gamma)—the expected proportion of company tax that is returned to investors through the utilisation of imputation credits—which offsets against the corporate income tax allowance. This is discussed further at attachment 4.

Of these four factors, the corporate tax rate is set externally by the Government. The higher the tax rate the higher the required tax allowance.

The pre-tax revenues depend on all the building block components. Any factor that affects revenue will therefore affect pre-tax revenues. Higher pre-tax revenues can increase the corporate income tax allowance.[8] Depending on the source of the revenue increase, the tax increase may be equal to or less than proportional to the company tax rate.[9]

The tax expenses depend on various building block components and their size. Some components give rise to tax expenses, such as opex, interest payments and tax depreciation of assets. However, others do not, such as increases in return on equity. Higher tax expenses offset revenues as deductions in the tax calculation and therefore reduce the tax allowance (all else being equal). Tax expenses include:

- Interest on debt – Interest is a tax offset. The size of which depends on the ratio of debt to equity and therefore the proportion of the capital base funded through debt. It also depends on the allowed return on debt and the size of the capital base.
- General expenses – In the main these expenses will match the opex allowance.
- Tax depreciation – A separate TAB is maintained for the service provider reflecting tax rules. This TAB is affected by many of the same factors as the capital base, such as capex, although unlike the capital base value it is maintained at its historical cost with no indexation. The TAB is also affected by the depreciation rate and/or asset lives assigned for tax depreciation purposes.

A ten per cent increase in the corporate income tax allowance would cause revenues to increase by about 0.3 per cent. The proposed gamma of 0.25 compared to the AER's decision of 0.4, would increase the corporate income tax allowance by 32 per cent and total revenues by about 0.8 per cent.

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8 In fact, there is an iterative relationship between tax and revenues. That is, revenues lead to tax, being applied, which increases revenues and leads to slightly more tax and so on. The revenue model should therefore be set up to run an iterative process until the revenue and tax allowances become stable.

9 For example, although increased opex adds to revenue requirement, these expenses are also offset against the revenues as deductions in determining tax, so there is no net impact in this case. A higher return on equity, in contrast, gives rise to no offsetting tax expenses and therefore increases the tax allowance in proportion to the company tax rate.

8.4 Reasons for draft decision

Our draft decision on AGN's corporate income tax allowance is $10.8 million ($nominal), which is a reduction of $27.3 million ($nominal) or 71.7 per cent of AGN's proposal.

We accept AGN's proposed approach for calculating the corporate income tax allowance. However, we adjusted several inputs in AGN's proposed PTRM for calculating the corporate income tax allowance. These relate to:

- changes to the opening TAB as at 1 July 2016 (section 8.4.1)
- changes to the remaining tax asset lives as at 1 July 2016 (section 8.4.2)
- changing the value of gamma to 0.4 from 0.25 (attachment 4)
- changes to other building block components including forecast rate of return (attachment 3), forecast capex (attachment 6) and forecast opex (attachment 7).[10]

We also made a change to AGN's proposed tax treatment of revenue adjustments associated with the EBSS.

8.4.1 Opening tax asset base as at 1 July 2016

We accept AGN's approach to determine the opening TAB. This is because AGN's proposed approach is consistent with the AER's RFM for electricity service providers and the approach previously approved in gas access arrangement decisions. However, we do not approve AGN's proposed total opening TAB of $615.6 million ($nominal) as at 1 July 2016. We determine an opening TAB value of $619.7 million ($nominal) as at 1 July 2016. This is mainly because of our amendments to the remaining tax asset lives inputs in the proposed RFM.

We assessed the inputs AGN used to roll forward the TAB over the 2011–16 access arrangement. This includes the opening TAB and remaining tax asset life values as at 1 July 2010, and actual capex for 2010–11 and 2011–16 access arrangement period.

We accept AGN's proposed opening TAB inputs as at 1 July 2010 because they reflect the approved opening TAB in the 2011–16 access arrangement. We are also satisfied the actual capex included in the TAB reflects the requirements of rule 79 of the NGR.[11] Our detailed assessment of this conforming capex is set out in attachment 6.

10 NGR, r. 87A.

11 We have updated the 2015–16 estimated capex in the draft decision RFM to be consistent with AGN's reset RIN. We note that the capex determined in this draft decision for 2014–15 and 2015–16 are estimates. Therefore the 'approved' capex in this draft decision for 2014–15 and 2015–16 are placeholder amounts. We expect AGN will provide actual capex for 2014–15 and the 2015–16 capex estimates may be revised based on more up to date information in its revised proposal. We will assess whether the actual capex for 2014–15 are conforming capex in our final decision. We will undertake the assessment of whether the 2015–16 amounts are conforming capex as part of the next access arrangement determination.

However, we have amended the remaining tax asset lives inputs as at 1 July 2010 in the RFM. We note that the RFM requires the remaining tax asset lives inputs as at 1 July 2010 as the TAB roll forward in the RFM starts from 2010–11. However, the proposed inputs reflect the approved remaining tax asset lives as at 1 July 2011. We have amended the RFM accordingly so that the tax depreciation can be calculated by referencing the correct remaining tax asset lives at 1 July 2010.

Table 8.4 sets out our draft decision on the roll forward of AGN's TAB values.

Table 8.4 AER's draft decision on AGN's tax asset base roll forward for the 2011–16 access arrangement period ($million, nominal)

	2011–12	2012–13	2013–14	2014–15	2015–16
Opening tax asset base	270.3	311.3	375.5	451.7	527.6
Capex	55.8	81.5	98.4	104.6	128.5
Tax depreciation	–14.7	–17.4	–22.1	–28.7	–36.5
Closing tax asset base	311.3	375.5	451.7	527.6	619.7

Source: AER analysis.

8.4.2 Tax asset lives

8.4.2.1 Standard tax asset lives

We approve AGN's proposed standard tax asset lives assigned to each of its asset classes for the 2016–21 access arrangement period.[12] This is because they are consistent with the statutory cap on the effective life of gas transmission assets under the *Income Tax Assessment Act (ITAA)* 1997, and with the standard tax asset lives prescribed in the Tax Ruling 2015/2.[13] The proposed standard tax asset lives are also consistent with the approved standard tax asset lives in the 2011–16 access arrangement.[14]

As part of the final decision, we expect the estimate of capex for 2014–15 to be replaced by actuals. We also expect the estimate of capex for 2015–16 to be revised based on more up to date information and that AGN would provide this revision in its revised proposal.

12 As discussed at attachment 5, our draft decision revenue modelling shows that no equity raising cost is required for the 2016–21 access arrangement period. Therefore, we do not need to assign a standard tax asset life for the 'Equity raising cost' asset class.

13 *ITAA 1997*, s. 40.102(5); Australian Taxation Office, *Taxation Ruling Income tax: effective life of depreciating assets (applicable from 1 July 2015)*: http://law.ato.gov.au/atolaw/view.htm?docid=%22TXR%2FTR20152%2FNAT%2FATO%2F00001%22.

14 AER, *Envestra SA final decision PTRM (Tribunal varied)*, January 2012.

8.4.2.2 Remaining tax asset lives as at 1 July 2016

We accept AGN's proposed weighted average method to calculate the remaining tax asset lives as at 1 July 2016. In accepting the weighted average method, we have updated AGN's remaining tax asset lives[15] as at 1 July 2016 to reflect our amendments to the remaining tax asset lives inputs as at 1 July 2010 as discussed in section 8.4.1. We also corrected modelling errors in the tax asset lives roll forward calculation in the RFM which also affected the value of the remaining tax asset lives as at 1 July 2016.

Our draft decision on AGN's standard tax asset lives and remaining tax asset lives for each of its asset classes for the 2016–21 access arrangement period is set out in Table 8.5.

Table 8.5 AER's draft decision on AGN's standard tax asset lives and remaining tax asset lives as at 1 July 2016 for the 2016–21 access arrangement period (year)

Tax asset class	Standard tax asset life	Remaining tax asset life as at 1 July 2016
Mains	20	18.8
Inlets	20	15.2
Meters	15	11.0
Telemetry	10	6.8
IT system	4	2.8
Other distribution system equipment	20	17.5
Other	10	8.4

Source: AER analysis.

n/a Not applicable.

8.4.3 Tax treatment of EBSS revenues

We do not accept AGN's proposed tax treatment of the revenue arising from the operation of the EBSS over the 2011–16 access arrangement period. AGN's proposed PTRM includes an adjustment to the AER's standard PTRM. AGN included the EBSS revenues as tax income, but excluded them from the tax expenses for the tax

15 We note that the capex determined in this draft decision for 2014–15 and 2015–16 are estimates. As part of the final decision, we expect the estimate of capex for 2014–15 to be replaced by actuals. We also expect the estimate of capex for 2015–16 to be revised based on more up to date information and that AGN would provide this revision in its revised proposal. These capex figures are used to calculate the weighted average remaining tax asset lives of the assets. Therefore, we will recalculate AGN's remaining tax asset lives using the method approved in this draft decision to reflect the updated 2014–15 and 2015–16 capex values for the final decision.

calculation.[16] This approach adds an additional tax penalty or reward to the revenues associated with the EBSS. In contrast, if the revenue adjustments are recognised in the PTRM as both income and expenses for tax purposes, no additional tax penalty or reward is calculated.[17] The size of the revenue adjustment reflects the parameters of the scheme only.

We consider that the EBSS revenues should be given identical income and expense tax status in the PTRM. We consider that such an approach:

- means that the service provider faces a constant incentive to pursue efficiency gains across the access arrangement period. That is, the service provider obtains the same reward (or penalty) from a given expenditure decrease (increase), regardless of which year of the access arrangement period it occurs.[18] A constant incentive means timing issues associated with the application of regulation do not distort expenditure decisions.
- is consistent with our recently published guidelines on incentive schemes for electricity network service providers.[19]
- is consistent with our application of incentive schemes for all other network service providers to date.[20] We applied the EBSS consistently in the past across both electricity and gas networks.[21]

These reasons were discussed in detail in our final decision for Ausgrid.[22] We do not repeat the detailed reasoning here. We have amended the proposed PTRM to recognise the revenue adjustments with consistent tax status across revenues and expenses for the tax calculation in the PTRM.

Given the overall positive EBSS revenues determined for AGN for the 2016–21 access arrangement period, the changes in this draft decision removes a small additional tax allowance (about $1.1 million) that would not have been included under AGN's proposed approach.

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16 AGN, *Proposed PTRM*, July 2015.

17 This can be done in the PTRM (version 3) by setting both the tax income and tax expense switches to 'yes'. An equivalent outcome occurs in the PTRM if the revenue adjustments are completely excluded from the tax calculation, counted as neither tax income nor tax expense. This can be done in the PTRM by setting both the tax income and tax expense switches to 'no'.

18 In contrast, AGN's proposal would distort this incentive by providing a greater reward (penalty) to the business for expenditure decreases (increases) in later years of the access arrangement period.

19 AER, *Better regulation, Efficiency benefit sharing scheme for electricity network service providers*, November 2013.

20 See for example; AER, *Final decision, New South Wales Distribution determination 2009–10 to 2013–14*, 28 April 2009, p. 208; AER, *Final decision, Australian Capital Territory distribution determination*, 28 April 2009, p. 88; AER, *Final decision, Victorian electricity distribution network service providers distribution determination 2011–2015, October 2010*, p. 520; AER, *Final decision, Queensland distribution determination 2010–11 to 2014–15*, May 2010, p. 229; AER, *Final decision, South Australia distribution determination 2010–11 to 2014–15*, May 2010, p. 163; AER, *Final distribution determination, Aurora Energy Pty Ltd 2012–13 to 2016–17*, April 2012, p. 251.

21 See for example; AER, *Final decision, Envestra Ltd Access arrangement proposal for the SA gas network, 1 July 2011 – 30 June 2016*, June 2011, p. 69.

22 AER, *Final decision, Ausgrid distribution determination 2015–16 to 2018–19, Attachment 8 – Corporate income tax*, April 2015, pp. 8–18.

8.5 Revisions

We require the following revisions to make the access arrangement proposal acceptable:

Revision 8.1 Make all necessary amendments to reflect this draft decision on the proposed corporate income tax allowance for the 2016–21 access arrangement period, as set out in Table 8.1.

Revision 8.2 Make all necessary amendments to reflect this draft decision on the opening tax base as at 1 July 2016, as set out in Table 8.4.

Revision 8.3 Make all necessary amendments to reflect this draft decision on the remaining tax asset lives for the 2016–21 access arrangement period, as set out in Table 8.5.

Revision 8.4 Make all necessary amendments to reflect this draft decision on tax treatment of the EBSS revenues.